

# A REGIONAL PARK AND OPEN SPACE PLAN FOR SOUTHEASTERN WISCONSIN -- 2000



#### COMMISSION MEMBERS

##### KENOSHA COUNTY

Donald L. Klapper  
Donald E. Mayew  
Francis J. Pitts,  
Vice-Chairman

##### RACINE COUNTY

George C. Berteau,  
Chairman  
Raymond J. Moyer  
Earl G. Skagen

##### MILWAUKEE COUNTY

Richard W. Cutler,  
Secretary  
Evelyn L. Petshek  
Harout O. Sanasarian

##### WALWORTH COUNTY

John D. Ames  
Anthony F. Balestrieri  
Harold H. Kolb

##### OZAUKEE COUNTY

Thomas H. Buestrin  
John P. Dries  
Alfred G. Raetz

##### WASHINGTON COUNTY

Paul F. Quick  
Joseph A. Schmitz,  
Treasurer  
Frank F. Uttech

##### WAUKESHA COUNTY

Charles J. Davis  
Robert F. Hamilton  
Lyle L. Link

#### COMMISSION STAFF

Kurt W. Bauer, P.E. . . . . Executive Director

Harlan E. Clinkenbeard. . . . . Assistant Director

Philip C. Evenson . . . . . Assistant Director

John W. Ernst. . . . . Data Processing Manager

Edward G. Klein . . . . . Administrative Officer

Leland H. Kreblin . . . . . Chief Planning Illustrator

Donald R. Martinson . . . . . Chief Transportation Planner

Thomas D. Patterson . . . . . Chief of Planning Research

Bruce P. Rubin . . . . . Chief Land Use Planner

Roland O. Tonn . . . . . Chief Community Assistance Planner

Lyman F. Wible, P.E. . . . . Chief Environmental Planner

Special acknowledgement is due to SEWRPC Senior Planners Gerald H. Emmerich, Jr. and William J. Stauber for their contributions to this report.

#### TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON REGIONAL PARK AND OPEN SPACE PLANNING

Robert J. Mikula, Chairman. . . . . General Manager, Milwaukee  
County Park Commission  
Loren R. Anderson . . . . . President, Geneva Lake Development  
Corporation, Williams Bay

Anthony S. Bareta. . . . . Director, Milwaukee County Planning Commission  
Donald B. Brick . . . . . Walworth County Recreation Agent, Courthouse  
Frederick H. Chlupp . . . . . Land Use and Park Administrator,  
Washington County

Delbert J. Cook. . . . . Cedar Creek Restoration Council, Cedarburg  
Norbert Dettmann. . . . . Washington County Board Supervisor  
Arthur D. Doll . . . . . Director, Bureau of Planning,  
Wisconsin Department of Natural Resources

David F. Egelhoff . . . . . Ozaukee County Board Supervisor  
Booker Hamilton. . . . . Production Supervisor, Rexnord Corporation  
Karl B. Holzwarth . . . . . Park Director, Racine County Park Commission  
Charles O. Kamps . . . . . Attorney, Quarles and Brady, Milwaukee  
Philip H. Lewis . . . . . Professor, Department of Landscape Architecture,  
University of Wisconsin-Madison; Director,  
Environmental Awareness Center, Madison

Richard J. Lindl . . . . . Director of Parks, Kenosha  
County Park Commission

John Margis, Jr. . . . . Racine County Board Supervisor,  
SEWRPC Commissioner

Kathleen Pfister . . . . . Cultural Specialist, Milwaukee  
Department of City Development

Robert D. Ross . . . . . General Manager, The Journal Times, Racine  
Phil Sander. . . . . Executive Secretary, Southeastern  
Wisconsin Sportsmen's Federation

George L. Schlitz. . . . . Chairman, Kenosha County Park Commission  
Frederick G. Schmidt. . . . . Member, Sierra Club  
Mrs. John D. Squier . . . . . Member, Riveredge Nature Center, Inc.  
Walter J. Tarmann . . . . . Director, Waukesha County  
Park and Planning Commission

Edgar Trecker. . . . . Supervisor of Forestry, Wildlife and Recreation,  
Southeast District, Wisconsin  
Department of Natural Resources

Elwood R. Voigt. . . . . Ozaukee County Park Manager  
Joseph Waters. . . . . Proprietor, Lazy Day Campgrounds,  
Town of Farmington

Dr. Harry H. Wilkens . . . . . Outdoor Sportsman, Milwaukee  
Dr. George T. Wilson . . . . . Visiting Lecturer, Department of  
Continuing and Vocational Education,  
University of Wisconsin-Madison

Thomas N. Wright . . . . . Director of Planning, City of Racine

The Commission also would like to acknowledge the work of former Committee members who assisted in the completion of the study—these former members include the following:

William H. Claflin . . . . . Former Deputy Commissioner,  
Department of City Development, Milwaukee

Richard W. Cutler . . . . . Attorney, Quarles and Brady, Milwaukee;  
Commissioner, SEWRPC

Howard W. Gregg . . . . . Former General Manager,  
Milwaukee County Park Commission

Robert A. Gibson, Jr. . . . . Former Comptroller,  
The Abbey Hotel, Fontana

Clinton E. Rose. . . . . Former Milwaukee County Board Supervisor



Planning Report No. 27

**A REGIONAL PARK AND OPEN SPACE PLAN FOR SOUTHEASTERN WISCONSIN: 2000**

Prepared by the  
Southeastern Wisconsin Regional Planning Commission  
P. O. Box 769  
Old Courthouse  
916 N. East Avenue  
Waukesha, Wisconsin 53187

**RETURN TO**  
**SOUTHEASTERN WISCONSIN**  
**REGIONAL PLANNING COMMISSION**  
**PLANNING LIBRARY**

The preparation of this report was financed in part through a comprehensive planning grant from the U. S. Department of Housing and Urban Development and through a state planning assistance grant from the Wisconsin Department of Natural Resources.

November 1977

Inside Region    \$10.00  
Outside Region   \$20.00

(This page intentionally left blank)



# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

916 NO. EAST AVENUE

P.O. BOX 769

WAUKESHA, WISCONSIN 53187

TELEPHONE (414) 547-6721

*Serving the Counties of:*

KENOSHA  
MILWAUKEE  
OZAUKEE  
RACINE  
WALWORTH  
WASHINGTON  
WAUKESHA

November 21, 1977

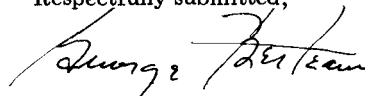
## STATEMENT OF THE CHAIRMAN

The Regional Planning Commission has since its inception set a high priority on the protection of the natural resources and the preservation of the overall environmental quality of the Region. The Commission was, therefore, particularly pleased to undertake the preparation of a regional park and open space plan at the request of the Common Council of the City of Racine and the Milwaukee County Park Commission. The regional park and open space plan presented in this report is the product of over four years of intensive cooperative planning effort conducted under the guidance of a Technical and Citizen Advisory Committee and culminating in a series of public informational meetings and hearings in which an opportunity was afforded for additional participation in the plan preparation by interested public officials and citizens. As a result of the meetings and hearings, important modifications were made in the plan as originally recommended by the Commission staff and the Advisory Committee.

The regional park and open space plan provides another important element of the evolving comprehensive plan for the physical development of the Southeastern Wisconsin Region. The plan is intended to guide the preservation, acquisition, and development of lands not only for outdoor recreation but for the protection of the natural resource base and thereby for the preservation of the overall quality of life within the Region. The plan recommends the general location, size, and type of park and open space sites and facilities required to meet the recreational needs of the resident population of the Region through the turn of the century, as well as to protect the primary environmental corridors and the prime agricultural lands of the Region for all time. The plan contains considerable information that can be used in county and local park and related open space planning and in private recreational development planning and is intended to promote coordination of public and private outdoor recreation facility development so that efforts in the two sectors complement rather than duplicate one another. Particularly important in this respect are the park and open space acquisition and development objectives set forth in this report, objectives which with their supporting principles and standards are carefully tailored to the needs of this Region and thereby represent a unique achievement.

Adoption and implementation of the regional park and open space plan will result in the provision of an integrated system of parks and open spaces within the Region, a system which can serve the dual purpose of preserving and enhancing the natural resource base while at the same time providing adequate opportunities for present and future residents of the Region to participate in a wide range of high quality recreational experiences. As is true of all Commission work, the regional park and open space plan is entirely advisory to the local, state, and federal units and agencies of government concerned, as well as to the private sector. In its continuing role of acting as a center for the coordination of plan implementation activities within the Region, the Commission stands ready to provide such assistance as may be requested of it in the implementation of the plan.

Respectfully submitted,



George C. Berteau  
Chairman

(This page intentionally left blank)



# TABLE OF CONTENTS

	Page		Page
<b>Chapter I—INTRODUCTION</b> .....	1	Structure of the Economy.....	34
Need for Regional Planning.....	1	Land Use Base.....	34
The Regional Planning Commission.....	1	Historic Growth Patterns.....	35
The Regional Planning Concept		Historic Density Trends.....	37
in Southeastern Wisconsin.....	3	Existing Land Use.....	37
The Region.....	3	Residential.....	37
Commission Work Programs.....	3	Commercial.....	39
Initial Work Programs.....	3	Industrial.....	39
Land Use-Transportation Study.....	5	Transportation, Communication, and Utility..	39
Continuing Regional Land		Governmental and Institutional.....	40
Use-Transportation Study.....	5	Recreation.....	40
Comprehensive Watershed Studies.....	5	Woodlands and Open Lands.....	40
Other Regional and Subregional		Water and Wetlands.....	40
Planning Programs.....	5	Agricultural.....	40
Regional Park and Open Space Planning Program ..	5	Public Utility Base.....	40
Need for the Study.....	6	Sanitary Sewerage Utilities.....	41
Study Objectives.....	6	Septic Tank System Development.....	41
Staff and Committee Structures.....	7	Water Utilities.....	41
Scheme of Presentation.....	8	Transportation Base.....	41
		Land Access and Collector Streets.....	41
<b>Chapter II—BASIC PRINCIPLES</b>		Arterial Street and Highway Facilities.....	43
<b>AND CONCEPTS</b> .....	9	Freeways and Expressways.....	43
Introduction.....	9	Transit Facilities.....	43
The Region as a Planning Unit		Pleasure Driving.....	46
for Parks and Open Space.....	9	Summary.....	49
Basic Concepts and Definitions.....	10		
The Regional Park and		<b>Chapter IV—DESCRIPTION OF THE</b>	
Open Space Planning Problem.....	15	<b>REGION—NATURAL ENVIRONMENT</b> .....	53
Basic Principles of the Park and		Introduction.....	53
Open Space Planning Process.....	16	The Natural Resource Base.....	53
The Park and Open Space Planning Process.....	16	Climate.....	53
Study Design.....	16	Soils.....	54
Formulation of Objectives and Standards.....	17	Intensive Play Areas.....	55
Collection of Basic Data.....	18	Extensive Play Areas.....	57
Analysis and Forecast.....	18	Bridle Paths and Nature and Hiking Trails....	57
Plan Preparation, Test, and Evaluation.....	18	Golf Course Fairways.....	57
Plan Selection and Adoption.....	19	Cottages and Service and Utility Buildings ...	57
		Tent and Trailer Campsites.....	58
<b>Chapter III—DESCRIPTION OF THE REGION:</b>		Physiography.....	58
<b>MAN-MADE ENVIRONMENT</b> .....	21	Surface Drainage.....	59
Introduction.....	21	Surface Water Resources.....	59
Demographic Base.....	21	Lakes.....	64
Population Size.....	21	Streams.....	69
Population Distribution.....	21	Floodlands.....	70
Population Characteristics.....	23	Woodlands.....	71
Age.....	23	Wetlands.....	71
Sex.....	23	Fish and Wildlife Resources.....	73
Race.....	24	Lake and Stream Fisheries.....	74
Education.....	25	Wildlife Habitat Areas.....	74
Occupation.....	27	The Environmental Corridor Concept.....	75
Income.....	27	Primary Environmental Corridors.....	76
Economic Base.....	31	Agricultural Land.....	79
Size of the Economy.....	31	Summary.....	82
Distribution of Economic Activity.....	32		

	Page		Page
<b>Chapter V—EXISTING OUTDOOR RECREATION AND OPEN SPACE SITES. . . . .</b>	<b>89</b>	Nature Study. . . . .	167
Introduction . . . . .	89	Pleasure Driving. . . . .	168
Existing General Use Outdoor Recreation Sites. . . . .	89	Ski Touring. . . . .	168
General Use Outdoor Recreation		Snowmobiling. . . . .	170
Sites—Ownership. . . . .	89	Extensive Water Based Outdoor	
General Use Outdoor Recreation		Recreation Activities. . . . .	171
Sites—Type . . . . .	90	Boat Access. . . . .	171
General Use Outdoor Recreation		Canoeing. . . . .	172
Sites—Recreation Facilities Provided. . . . .	93	Fishing . . . . .	177
General Use Outdoor Recreation Sites—		Ice Fishing. . . . .	177
Presence Within Environmental Corridors . . . . .	95	Motor Boating. . . . .	178
Existing Open Space . . . . .	97	Sailing. . . . .	178
Natural Areas—Ownership. . . . .	99	Water Skiing . . . . .	178
Natural Areas—Type and Presence		Relative Popularity of Outdoor	
within Environmental Corridors . . . . .	103	Recreation Activities. . . . .	179
Other Recreation and Open Space Sites . . . . .	105	Summary. . . . .	179
Special Use Recreation Sites . . . . .	105	<b>Chapter VII—EXISTING PARK AND OPEN SPACE LAWS, REGULATIONS, PLANS, AND ADMINISTRATION. . . . .</b>	<b>183</b>
Urban Open Areas. . . . .	110	Introduction . . . . .	183
Historic Sites. . . . .	110	Legal Framework for Park and Open Space	
Existing Outdoor Recreation and Open Space		Planning and Development . . . . .	183
Lands—Comparative Analysis . . . . .	110	Federal Level. . . . .	183
Existing Outdoor Recreation and		U. S. Department of the Interior,	
Open Space—Acres Per 1,000 Population . . . . .	113	National Park Service . . . . .	183
Existing Outdoor Recreation and		U. S. Department of the Interior,	
Open Space—Percent of County Area . . . . .	115	Fish and Wildlife Service . . . . .	183
Summary. . . . .	128	U. S. Department of the Interior,	
<b>Chapter VI—OUTDOOR RECREATION ACTIVITIES, FACILITIES, AND USE. . . . .</b>	<b>131</b>	Bureau of Outdoor Recreation . . . . .	184
Introduction . . . . .	131	U. S. Department of Agriculture,	
Outdoor Recreation Surveys . . . . .	131	Forest Service . . . . .	184
Winter Outdoor Recreation Surveys . . . . .	131	U. S. Department of Agriculture,	
Summer Outdoor Recreation Surveys. . . . .	131	Soil Conservation Service . . . . .	185
Other Surveys . . . . .	134	U. S. Department of Commerce,	
Outdoor Recreation Activities, Facilities, and Use . . . . .	134	National Oceanic and	
Intensive Resource Oriented		Atmospheric Administration. . . . .	185
Outdoor Recreation Activities. . . . .	137	U. S. Department of the Army,	
Camping . . . . .	137	Corps of Engineers . . . . .	185
Golf. . . . .	137	State Level . . . . .	186
Picnicking . . . . .	140	Department of Natural Resources. . . . .	186
Downhill Skiing. . . . .	144	State Parks . . . . .	186
Beach Swimming. . . . .	146	State Forests. . . . .	186
Intensive Nonresource Oriented		Scientific Areas. . . . .	186
Outdoor Recreation Activities . . . . .	148	State Outdoor Recreation Program . . . . .	187
Baseball. . . . .	148	Miscellaneous Outdoor Recreation	
Basketball . . . . .	150	Related Programs . . . . .	188
Ice Skating . . . . .	152	Department of Local Affairs	
Playfield Activities . . . . .	154	and Development . . . . .	188
Playground Activities . . . . .	156	The State Historical Society of Wisconsin . . . . .	188
Softball . . . . .	158	Local Level . . . . .	188
Pool Swimming. . . . .	160	Counties . . . . .	188
Tennis. . . . .	161	County Parks. . . . .	188
Concluding Remarks—Intensive Resource and		County Forests . . . . .	189
Nonresource Oriented Recreation Facilities . . . . .	164	Forest Croplands. . . . .	189
Extensive Land Based Outdoor		Woodland Tax Law . . . . .	190
Recreation Activities. . . . .	164	Inland Lake Protection	
Bicycling . . . . .	165	and Rehabilitation. . . . .	190
Hiking . . . . .	166	General County Park and	
Horseback Riding . . . . .	166	Recreational Authority . . . . .	190



	Page		Page
County Park and Recreational Planning . . .	190	Locally Appropriated Funds . . . . .	217
Funding Sources for County Recreation and Park Programs. . . . .	191	State Park and Open Space Expenditures . . . . .	218
Cities . . . . .	191	Summary. . . . .	221
Parks . . . . .	191	<b>Chapter IX—POTENTIAL PARK SITES INVENTORY. . . . .</b>	<b>223</b>
Forests . . . . .	192	Introduction . . . . .	223
Harbor Construction and Improvements . . .	192	Methodology . . . . .	223
Inland Lake Protection and Rehabilitation. . . . .	192	Potential Park Sites Reevaluation . . . . .	224
Park and Recreation Planning . . . . .	192	Potential Park Sites Committed to Recreation and Open Space Use . . . . .	229
Park and Outdoor Recreation Aid to Cities . . . . .	192	Urban Encroachment Within Potential Park Sites . . . . .	231
Villages . . . . .	193	Remaining Potential Park Sites . . . . .	231
Parks . . . . .	193	Development Possibilities . . . . .	231
Forests . . . . .	193	The Relationship of Potential Park Sites to Primary Environmental Corridors . . . . .	235
Inland Lake Protection and Rehabilitation. . . . .	193	Potential Recreation Trail Sites . . . . .	242
Recreation and Park Planning . . . . .	193	Primary Environmental Corridors . . . . .	242
Park and Recreation Aid . . . . .	193	Railroad and Electric Power Rights-of-Way . . . . .	242
Towns . . . . .	193	Summary. . . . .	242
Parks . . . . .	193	<b>Chapter X—IMPACT OF PUBLIC OPEN SPACE LANDS ON RESIDENTIAL PROPERTY VALUES BASED ON ANALYSES IN MILWAUKEE COUNTY. . . . .</b>	<b>247</b>
Forests . . . . .	193	Introduction . . . . .	247
Recreation Authority . . . . .	193	Interviews with Appraisers, Assessors, and Developers . . . . .	250
Inland Lake Protection and Rehabilitation. . . . .	194	Value of Residential Property Located Near Parks and Parkways. . . . .	252
Town Park and Recreation Planning . . . . .	194	Market Values . . . . .	252
Town Park and Recreation Aids . . . . .	194	Residential Property Value Analysis: Census Housing Value Data . . . . .	252
School Districts . . . . .	194	Residential Property Sales Analysis: Land and Improvements . . . . .	258
Local Park and Open Space Organization and Staffing . . . . .	195	Residential Sales Analysis: Lot Prices . . . . .	261
County Park and Recreation Agencies. . . . .	195	Locally Assessed Property Values . . . . .	263
City, Village, and Town Park and Recreation Agencies . . . . .	195	Survey of Households in the Vicinity of Public Open Space Land . . . . .	267
Local Park and Open Space Planning. . . . .	196	Estimated Impact of Public Open Space Lands on Residential Property Values . . . . .	270
County Park and Recreation Plans . . . . .	196	Monetary Flood Risks. . . . .	272
City, Village, and Town Park and Recreation Plans. . . . .	197	Summary. . . . .	273
Use of Land Use Controls for Park and Open Space Preservation. . . . .	198	<b>Chapter XI—REGIONAL PARK AND OPEN SPACE OBJECTIVES, PRINCIPLES, AND STANDARDS . . . . .</b>	<b>279</b>
Zoning. . . . .	198	Introduction . . . . .	279
Special Park and Recreation Districts . . . . .	198	Basic Concepts and Definitions . . . . .	279
Floodland Zoning . . . . .	199	Related Regional Development Objectives . . . . .	279
Open Space Zoning . . . . .	202	Specific Land Use Development Objectives. . . . .	280
Subdivision Control Ordinances . . . . .	203	Specific Water Control Facility Development Objectives . . . . .	280
Official Maps. . . . .	204	Specific Sanitary Sewerage System Development Objectives . . . . .	280
Summary. . . . .	205	Park and Open Space Preservation, Acquisition, and Development Objectives . . . . .	280
<b>Chapter VIII—FINANCIAL RESOURCES . . . . .</b>	<b>209</b>	Park and Open Space Principles and Standards . . . . .	281
Introduction . . . . .	209	Overriding Considerations . . . . .	281
Expenditures. . . . .	209		
Park and Recreation Expenditure Trends in the Region. . . . .	209		
County Park and Recreation Expenditures . . .	211		
Milwaukee County . . . . .	211		
City Park and Recreation Expenditures. . . . .	212		
City of Milwaukee. . . . .	212		
Village Park and Recreation Expenditures. . . .	214		
Town, Park, and Recreation Expenditures. . . .	214		
Revenues. . . . .	214		
Park and Recreation Departmental Earnings . . . .	216		
Park and Recreation Aids . . . . .	216		

	Page		Page
<b>Chapter XII—OUTDOOR RECREATION</b>			
<b>SITE AND FACILITY NEEDS</b> . . . . .	293	Recreation Corridors . . . . .	381
Introduction . . . . .	293	Type I and Type II Parks . . . . .	382
Basic Concepts . . . . .	293	Outdoor Recreation Facilities . . . . .	386
Existing and Future Population of the Region . . . . .	295	Intensive Resource-Oriented Outdoor	
Existing Population Estimates . . . . .	295	Recreation Facilities . . . . .	387
Population Forecasts . . . . .	295	Campsites . . . . .	387
Population Distribution . . . . .	296	Golf Courses . . . . .	387
Outdoor Recreation Site Requirements . . . . .	298	Resource-Oriented Picnicking . . . . .	389
Type I and Type II Park Needs . . . . .	300	Swimming Beaches . . . . .	390
Type III and Type IV Site Needs . . . . .	301	Ski Hills . . . . .	390
Recreation Corridors . . . . .	309	Nature Study Centers . . . . .	390
Outdoor Recreation Facility Needs . . . . .	311	Development Costs . . . . .	391
Intensive Resource-Oriented Outdoor		Extensive Resource-Oriented Outdoor	
Recreation Facility Needs . . . . .	311	Recreation Facilities . . . . .	393
Campsites . . . . .	312	Biking and Hiking Trails . . . . .	393
Golf Courses . . . . .	312	Horseback Riding Trails . . . . .	393
Picnic Tables . . . . .	313	Nature Study Trails . . . . .	394
Resource-Oriented Picnicking Needs . . . . .	314	Ski Touring Trails . . . . .	394
Local Picnicking Needs . . . . .	316	Snowmobiling Trails . . . . .	394
Ski Hills . . . . .	316	Development Costs . . . . .	394
Swimming Beaches . . . . .	319	Water Access Facilities . . . . .	394
Extensive Land Based Outdoor		Inland Lake Access . . . . .	395
Recreation Facility Needs . . . . .	322	River Access . . . . .	396
Intensive Nonresource-Oriented		Lake Michigan Access . . . . .	397
Outdoor Recreation Facility Needs . . . . .	322	Concluding Remarks—Accessibility	
Baseball Diamonds . . . . .	323	Based Alternative Plan . . . . .	398
Basketball Goals . . . . .	323	Resource Based Alternative Plan Description . . . . .	398
Ice Skating Rinks . . . . .	323	Recreation Corridors . . . . .	398
Playfields . . . . .	323	Type I and Type II Parks . . . . .	401
Playgrounds . . . . .	344	Outdoor Recreation Facilities . . . . .	404
Softball Diamonds . . . . .	344	Intensive Resource-Oriented Outdoor	
Tennis Courts . . . . .	344	Recreation Facilities . . . . .	404
Swimming Pools . . . . .	344	Campsites . . . . .	404
Boat Access Needs . . . . .	344	Golf Courses . . . . .	404
Inland Lakes . . . . .	344	Resource-Oriented Picnicking . . . . .	406
Rivers and Streams . . . . .	362	Swimming Beaches . . . . .	407
Lake Michigan . . . . .	362	Ski Hills . . . . .	407
Summary . . . . .	362	Nature Study Centers . . . . .	407
		Development Costs . . . . .	407
<b>Chapter XIII—OPEN SPACE PRESERVATION, URBAN OUTDOOR RECREATION, AND ALTERNATIVE RESOURCE-ORIENTED OUTDOOR RECREATION PLAN ELEMENTS</b> . . . . .	369	Extensive Resource-Oriented Outdoor	
Introduction . . . . .	369	Recreation Facilities . . . . .	408
Open Space Preservation Plan Element . . . . .	371	Biking and Hiking Trails . . . . .	408
Primary Environmental Corridor		Horseback Riding Trails . . . . .	408
Plan Component . . . . .	371	Nature Study Trails . . . . .	409
Primary Environmental Corridor Acquisition . . . . .	371	Ski Touring Trails . . . . .	409
Primary Environmental Corridor Zoning . . . . .	374	Snowmobiling Trails . . . . .	409
Prime Agricultural Land Plan Component . . . . .	374	Development Costs . . . . .	409
Concluding Remarks—Open Space		Water Access Facilities . . . . .	409
Preservation Plan Element . . . . .	375	Concluding Remarks—Resource	
Outdoor Recreation Plan Element . . . . .	377	Based Alternative Plan . . . . .	410
Resource-Oriented Outdoor		Comparative Evaluation of	
Recreation Plan Component . . . . .	377	Resource-Oriented Outdoor Recreation	
Basic Concepts . . . . .	377	Component Alternative Plans . . . . .	411
Methodology . . . . .	379	Objective 1, Part A, Standard 1 . . . . .	411
Accessibility Based Alternative		Objective 1, Part A, Standard 2 . . . . .	411
Plan Description . . . . .	381	Objective 1, Part A, Standard 3 . . . . .	415
Outdoor Recreation Sites . . . . .	381	Objective 1, Part B, Standard 1 . . . . .	415
		Objective 1, Part B, Standard 2 . . . . .	415
		Objective 1, Part B, Standard 3a . . . . .	415
		Objective 1, Part B, Standard 3b . . . . .	415
		Objective 1, Part B, Standard 4 . . . . .	415



	Page		Page
Objective 1, Part B, Standard 5 . . . . .	415	Lake Michigan Access . . . . .	453
Objective 1, Part B, Standard 6 . . . . .	417	Mass Transit Service . . . . .	454
Objective 3, Standard 1 . . . . .	417	Kenosha County . . . . .	455
Objective 3, Standard 2 . . . . .	417	Milwaukee County . . . . .	459
Objective 3, Standard 3 . . . . .	419	Ozaukee County . . . . .	461
Objective 3, Standard 4 . . . . .	419	Racine County . . . . .	463
Objective 4, Standard 1 . . . . .	419	Walworth County . . . . .	465
Objective 4, Standard 2 . . . . .	419	Washington County . . . . .	467
Objective 5, Standard 1 . . . . .	419	Waukesha County . . . . .	468
Objective 5, Standard 2 . . . . .	419	Urban Outdoor Recreation Plan Component . . .	471
Objective 5, Standard 3 . . . . .	419	Urban Outdoor Recreation Sites . . . . .	474
Concluding Remarks—Comparison of the Resource-Oriented Outdoor Recreation Component Alternative Plans . . . . .	419	Urban Outdoor Recreation Facilities . . . . .	475
Per Capita Recreation Site and Facility Standards . . . . .	420	Regional Park and Open Space Plan: An Overview . . . . .	479
Serviceability Standards . . . . .	420	Park and Open Space Plan Priorities . . . . .	482
Site Quality Standards . . . . .	420	Recommended Priorities . . . . .	483
Cost Minimization Standard . . . . .	420	Primary Environmental Corridor Plan Component Priorities . . . . .	483
Other Miscellaneous Standards . . . . .	420	Resource-Oriented Outdoor Recreation Plan Component Priorities . . . . .	483
Concluding Remarks . . . . .	420	Urban Outdoor Recreation Plan Component Priorities . . . . .	485
Urban Outdoor Recreation Plan Component . . .	421	Summary . . . . .	485
Methodology . . . . .	421	Primary Environmental Corridor Plan Component . . . . .	485
Type III Park Accessibility Standards . . . . .	423	Prime Agricultural Land Plan Component . . . . .	485
Type IV Park Accessibility Standards . . . . .	423	Resource-Oriented Outdoor Recreation Plan Component . . . . .	486
Per Capita Local Recreation Site Acreage Standard . . . . .	423	Urban Outdoor Recreation Plan Component . . .	487
Per Capita Nonresource-Oriented Outdoor Recreation Facility Standards . . . . .	424	Regional Park and Open Space Plan Priorities . .	488
Urban Outdoor Recreation Plan Component Description: Outdoor Recreation Sites . . . . .	424	Capital Costs of the Regional Park and Open Space Plan . . . . .	488
Urban Outdoor Recreation Plan Component Description: Outdoor Recreation Facilities . . . .	424	<b>Chapter XV—PLAN IMPLEMENTATION . . . . .</b>	<b>489</b>
Development Costs . . . . .	425	Introduction . . . . .	489
Concluding Remarks—Urban Outdoor Recreation Plan Component . . . . .	425	Plan Implementation Organizations . . . . .	489
Concluding Remarks . . . . .	429	Regional Park and Open Space Planning Committee . . . . .	490
Summary . . . . .	433	Local Level Agencies . . . . .	490
Open Space Preservation Plan Element . . . . .	433	County Park and Planning Agencies . . . . .	490
Resource-Oriented Outdoor Recreation Component Alternative Plans . . . . .	435	Municipal Park Agencies . . . . .	491
Urban Outdoor Recreation Plan Component . . .	436	Areawide Agency: Regional Planning Commission . . . . .	491
Capital Cost of the Park and Open Space System Plan . . . . .	437	State Level Agencies . . . . .	491
<b>Chapter XIV—RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN . . . . .</b>	<b>439</b>	Wisconsin Department of Natural Resources . .	491
Introduction . . . . .	439	Department of Local Affairs and Development . . . . .	492
Open Space Preservation Plan Element Recommendations . . . . .	440	The State Historical Society of Wisconsin . . .	492
Primary Environmental Corridor Plan Component . . . . .	440	Federal Level Agencies . . . . .	492
Prime Agricultural Land Plan Component . . . . .	443	U. S. Department of Interior, National Park Service . . . . .	492
Outdoor Recreation Plan Element Recommendations . . . . .	443	U. S. Department of Interior, Fish and Wildlife Service . . . . .	492
Resource-Oriented Outdoor Recreation Plan Component . . . . .	444	U. S. Department of Interior, Bureau of Outdoor Recreation . . . . .	492
Recreation Corridors . . . . .	444	U. S. Department of Agriculture, Forest Service . . . . .	492
Type I and Type II Parks . . . . .	447	U. S. Department of Agriculture, Soil Conservation Service . . . . .	493
Water Access Facilities . . . . .	452	U. S. Department of the Army, Corps of Engineers . . . . .	493
Inland Water Access . . . . .	452		

	Page		Page
U. S. Department of Housing and Urban Development .....	493	Inventory Findings .....	519
Plan Adoption and Integration .....	493	Socioeconomic Base .....	519
Local Agencies .....	494	Natural Resource Base .....	520
State Level Agencies .....	494	Existing Outdoor Recreation and Open Space Sites .....	521
Federal Level Agencies .....	494	Existing Outdoor Recreation Activities, Facilities, and Use .....	521
Subsequent Adjustment of the Plan .....	494	Financial Resources .....	522
Regional Park and Open Space Plan Implementation .....	495	Park and Open Space Laws, Regulations, Plans, and Administration .....	522
Zoning Ordinances .....	495	Potential Park Sites .....	523
Residential Areas .....	496	Regional Park and Open Space Objectives .....	523
Agricultural Areas .....	496	Outdoor Recreation Site and Facility Needs .....	524
Primary Environmental Corridors .....	496	Major Public Parks .....	524
Other Outdoor Recreation Sites .....	496	Local Parks .....	524
Floodlands .....	497	Recreation Corridors .....	524
Shorelands .....	497	Intensive Resource-Oriented Outdoor Recreation Facilities .....	524
Property Tax Policies .....	497	Extensive Land Based Recreation Facilities .....	524
Official Mapping .....	498	Intensive Nonresource-Oriented Recreation Facilities .....	524
Subdivision Control Ordinances .....	498	Extensive Water Based Outdoor Recreation Facilities .....	525
Land Acquisition—Open Space Preservation .....	498	Alternative Park and Open Space Plans .....	525
Open Space Preservation— State Acquisition .....	500	Recommended Regional Park and Open Space Plan .....	526
Open Space Preservation— County Acquisition .....	501	Open Space Preservation Plan Element .....	526
Land Acquisition and Development— Outdoor Recreation .....	501	Outdoor Recreation Plan Element .....	526
Major Parks .....	501	Resource-Oriented Outdoor Recreation Plan Component .....	526
Recreation Corridors .....	504	Urban Outdoor Recreation Plan Component .....	527
Local Parks .....	506	Plan Cost Analysis .....	527
Boat Access—Rivers and Inland Lakes .....	506	Public Reaction to Recommended Plan .....	527
Boat Access—Lake Michigan .....	507	Open Space Preservation Plan Element .....	528
Financial Considerations .....	508	Prime Agricultural Lands .....	528
Capital Investment Cost .....	508	Primary Environmental Corridors .....	530
Schedule of Plan Implementation Costs .....	509	Outdoor Recreation Plan Element .....	531
Financial Feasibility .....	509	Resource-Oriented Outdoor Recreation Plan Component .....	532
Local Financial Feasibility .....	509	Major Parks .....	532
State Financial Feasibility .....	513	Proposed Sugar Creek Park Site .....	533
Summary .....	514	South Kenosha Park Site .....	534
Federal Level .....	515	Bong Recreation Area .....	535
U. S. Department of Housing and Urban Development .....	515	Recreation Corridors .....	536
U. S. Department of Interior, Bureau of Outdoor Recreation .....	515	Interurban Right-of-Way in Western Waukesha County .....	537
U. S. Department of the Army, Corps of Engineers .....	515	Abandoned North Shore Railroad Right-of-Way .....	537
State Level .....	515	Abandoned Interurban Right-of-Way in Ozaukee County .....	537
Wisconsin Department of Natural Resources .....	515	Recreation Corridor Intersections .....	539
Wisconsin Department of Local Affairs and Development .....	515	Chicago and North Western Right-of-Way .....	539
State Historical Society of Wisconsin .....	516	Boat Access .....	539
Wisconsin Department of Revenue .....	516	Inland Water Access— Fast Boating Access Sites .....	539
Local Level .....	516	Inland Water Access— Slow Boating Access Sites .....	540
County Boards of Supervisors .....	516	Lake Michigan Water Access .....	541
County Park and Planning Agencies .....	516	Urban Outdoor Recreation Plan Component .....	541
Milwaukee County Transit Board .....	516	Concluding Remarks—Public Reaction .....	542
Common Councils, Village Boards, and Town Boards .....	517	Implementation .....	544
City, Village, and Town Park Boards and Commissions .....	517	Conclusion .....	546
Chapter XVI—SUMMARY AND CONCLUSIONS ..	519		
Introduction .....	519		

## LIST OF APPENDICES

Appendix	Page
A Technical and Citizen Advisory Committee on Regional Park and Open Space Planning .....	551
B Existing Park and Open Space Site Inventory Form .....	553
C Historic Site Inventory Form .....	556
D Existing Park and Open Space Sites in the Region by Planning Analysis Area: 1973.....	558
Map D-1 Park and Open Space Sites in Kenosha County: 1973.....	560
Table D-1 Park and Open Space Sites in Kenosha County by Planning Analysis Area: 1973.....	562
Map D-2 Park and Open Space Sites in Milwaukee County: 1973 .....	564
Table D-2 Park and Open Space Sites in Milwaukee County by Planning Analysis Area: 1973 .....	566
Map D-3 Park and Open Space Sites in Ozaukee County: 1973.....	576
Table D-3 Park and Open Space Sites in Ozaukee County by Planning Analysis Area: 1973.....	578
Map D-4 Park and Open Space Sites in Racine County: 1973 .....	580
Table D-4 Park and Open Space Sites in Racine County by Planning Analysis Area: 1973 .....	582
Map D-5 Park and Open Space Sites in Walworth County: 1973.....	584
Table D-5 Park and Open Space Sites in Walworth County by Planning Analysis Area: 1973 .....	586
Map D-6 Park and Open Space Sites in Washington County: 1973 .....	588
Table D-6 Park and Open Space Sites in Washington County by Planning Analysis Area: 1973.....	590
Map D-7 Park and Open Space Sites in Waukesha County: 1973.....	592
Table D-7 Park and Open Space Sites in Waukesha County by Planning Analysis Area: 1973.....	594
Map D-8 Historic Sites in Kenosha County: 1973 .....	602
Map D-9 Historic Sites in Milwaukee County: 1973 .....	604
Map D-10 Historic Sites in Ozaukee County: 1973 .....	606
Map D-11 Historic Sites in Racine County: 1973 .....	608
Map D-12 Historic Sites in Walworth County: 1973 .....	610
Map D-13 Historic Sites in Washington County: 1973.....	612
Map D-14 Historic Sites in Waukesha County: 1973 .....	614
E Winter Outdoor Recreation User Survey Form—Onsite Interview Survey .....	616
F Winter Outdoor Recreation User Survey Form—Hand-Out, Mail-Back Survey .....	617
G Winter Outdoor Recreation User Survey Form—Mail-Out, Mail-Back Survey of Registered Snowmobile Owners .....	618
H Summer Outdoor Recreation User Survey Form—Onsite Interview Survey .....	620
I Summer Outdoor Recreation User Survey Form—Mail-Out, Mail-Back Survey of Registered Boat Owners .....	622
J Outdoor Recreation Site Manager Survey Form .....	624
K Potential Park Site Evaluation Form .....	628
L Characteristics of Remaining Potential Park Sites by Planning Analysis Area: 1975 .....	630
Table L-1 Characteristics of Remaining Potential Park Sites by Planning Analysis Area in Kenosha County: 1975 .....	630
Table L-2 Characteristics of Remaining Potential Park Sites by Planning Analysis Area in Milwaukee County: 1975 .....	631
Table L-3 Characteristics of Remaining Potential Park Sites by Planning Analysis Area in Ozaukee County: 1975 .....	632
Table L-4 Characteristics of Remaining Potential Park Sites by Planning Analysis Area in Racine County: 1975 .....	633
Table L-5 Characteristics of Remaining Potential Park Sites by Planning Analysis Area in Walworth County: 1975 .....	634
Table L-6 Characteristics of Remaining Potential Park Sites by Planning Analysis Area in Washington County: 1975.....	635
Table L-7 Characteristics of Remaining Potential Park Sites by Planning Analysis Area in Waukesha County: 1975 .....	636
M Influence of Park and Open Space on Residential Land Value Survey Form—Household Interview Survey.....	638

Appendix		Page
N	Development Objectives Adopted Under Previous Common Planning Programs Which Are Relevant to Park and Open Space Planning. ....	640
O	Formulation of Per Capita Facility Standards for Intensive Outdoor Recreation Activities. ....	645
	Table O-1 Per Capita Facility Standards for Intensive Resource-Oriented Recreation Activities .....	646
	Map O-1 Areas Analyzed in the Formulation of Standards for Nonresource-Oriented Outdoor Recreation Facilities .....	648
	Table O-2 Per Capita Facility Standards for Intensive Nonresource-Oriented Recreation Activities. ....	649
P	Design of General Use Outdoor Recreation Sites by Type. ....	651
	Figure P-1 Sample Type I Park, Whitnall Park, Milwaukee County. ....	651
	Figure P-2 Sample Type II Park, Muskego Park, Waukesha County .....	652
	Figure P-3 Sample Type III Park, Regner Park, West Bend, Washington County .....	653
	Figure P-4 Typical Type IV Neighborhood Park and School Recreation Area .....	654
Q	Schedule of Costs of the Preliminary Recommended Regional Park and Open Space Plan by Level of Government by County Within the Region: 1975-2000 .....	656
	Table Q-1 Schedule of Capital and Operation and Maintenance Costs of the Recommended Regional Park and Open Space Plan by Level of Government Within Kenosha County by Year: 1975-2000 .....	656
	Table Q-2 Schedule of Capital and Operation and Maintenance Costs of the Recommended Regional Park and Open Space Plan by Level of Government Within Milwaukee County by Year: 1975-2000 .....	656
	Table Q-3 Schedule of Capital and Operation and Maintenance Costs of the Recommended Regional Park and Open Space Plan by Level of Government Within Ozaukee County by Year: 1975-2000 .....	657
	Table Q-4 Schedule of Capital and Operation and Maintenance Costs of the Recommended Regional Park and Open Space Plan by Level of Government Within Racine County by Year: 1975-2000 .....	657
	Table Q-5 Schedule of Capital and Operation and Maintenance Costs of the Recommended Regional Park and Open Space Plan by Level of Government Within Walworth County by Year: 1975-2000 .....	658
	Table Q-6 Schedule of Capital and Operation and Maintenance Costs of the Recommended Regional Park and Open Space Plan by Level of Government Within Washington County by Year: 1975-2000 .....	658
	Table Q-7 Schedule of Capital and Operation and Maintenance Costs of the Recommended Regional Park and Open Space Plan by Level of Government Within Waukesha County by Year: 1975-2000 .....	659
R	Suggested Site Locations for Proposed Type I Parks .....	660
	Map R-1 Proposed Paradise Valley Park Site Town of West Bend, Washington County .....	660
	Map R-2 Proposed Sugar Creek Park Site Town of LaFayette, Walworth County .....	661
S	A Summary of Plan Data Under the Final Recommended Regional Park and Open Space Plan for Southeastern Wisconsin: 2000 .....	662
	Table S-1 Preservation of Net Primary Environmental Corridors in the Region Under the Final Recommended Regional Park and Open Space Plan .....	662
	Table S-2 Preservation of Net Agricultural Lands in the Region Under the Final Recommended Regional Park and Open Space Plan .....	662
	Table S-3 Type I and Type II Parks in the Region Under the Final Recommended Regional Park and Open Space Plan .....	663
	Table S-4 Recreation Corridors in the Region Under the Final Recommended Regional Park and Open Space Plan .....	663
	Table S-5 Water Access Facilities in the Region Under the Final Recommended Regional Park and Open Space Plan .....	664
	Table S-6 Urban Parks Under the Final Recommended Regional Park and Open Space Plan .....	664
	Table S-7 Public Expenditures Under the Final Recommended Regional Park and Open Space Plan ...	665

T	An Environmental Assessment of the Final Recommended Regional Park and Open Space Plan for Southeastern Wisconsin: 2000 .....	666
U	An Historic Preservation Assessment of the Regional Park and Open Space Plan .....	675
V	Model Plan Adoption Resolutions. ....	681
V-1	Model Resolution for Adoption of the Regional Park and Open Space Plan for Southeastern Wisconsin by County Boards.....	681
V-2	Model Resolution for Adoption of the Regional Park and Open Space Plan for Southeastern Wisconsin .....	682

## LIST OF TABLES

Table	Chapter II	Page
1	General Use Outdoor Recreation Sites .....	13
Chapter III		
2	Population Trends in the Region, Wisconsin, and the United States: Selected Years 1850-1970.....	22
3	Population in the Region by County: Selected Years 1900-1970 .....	23
4	Age Composition of the Population in the Region by County: 1970 .....	24
5	Sex Composition of the Population in the Region by Age Group: 1960 and 1970 .....	25
6	Sex Composition of the Population in the Region by County: 1960 and 1970.....	25
7	Racial Composition of the Population in the Region: 1960 and 1970.....	25
8	Racial Composition of the Population in the Region by County: 1970.....	26
9	Spanish American Population in the Region by County: 1970 .....	26
10	Educational Attainment Levels of the Population 25 Years of Age and Older in the Region: 1960 and 1970 .....	26
11	Educational Attainment Levels of the Population 25 Years of Age and Older in the Region by County: 1970 .....	28
12	Occupational Status of the Employed Population 14 Years Old and Over in the Region: 1960 and 1970 .....	29
13	Occupational Status of the Employed Population 14 Years Old and Over in the Region by County: 1970 .....	30
14	Personal Income Trends in the Region: Selected Years 1949-1969.....	30
15	Income Levels for Households in the Region by County: 1969.....	31
16	Number of Jobs in the United States, Wisconsin, and the Region: Selected Years 1950-1970.....	33
17	Number of Jobs in the Region by County: Selected Years 1950-1970 .....	33
18	Population Density Trends in the Region: Selected Years 1850-1970.....	35
19	Distribution of Land Use in the Southeastern Wisconsin Region by County: 1970.....	39
20	Residential Land Use in the Region by Type: 1970 .....	40
21	Distribution of Street and Highway Mileage in the Region by County and Type of Facility: 1972.....	44
22	Land Area and Population Served by Local Mass Transit in the Region by Urban Area: 1972 .....	46
Chapter IV		
23	Definition of Limitations and Suitability Categories As Used in Soil Interpretations for the Southeastern Wisconsin Region .....	56
24	Lakes and Streams in the Region by County .....	65
25	Status of Existing and Proposed Sanitary Sewerage Systems for the 100 Major Lakes in the Region: 1976 .....	67
26	Woodlands in the Region by County: 1963 and 1970.....	73
27	Surface Water and Wetlands in the Region: 1963 and 1970 .....	75
28	Wildlife Habitat Areas in the Region by Value Rating by County: 1963 and 1970 .....	77
29	Distribution of Primary Environmental Corridor Lands in the Region by Major Land Use Within County: 1963 and 1970 .....	80
30	Preservation of Primary Environmental Corridor in the Region: 1973 .....	82
31	Agricultural Land Use in the Region by County: 1963 and 1970 .....	84
32	Net Prime Agricultural Land in the Region by County: Selected Years 1963-1970.....	84



Table	Chapter V	Page
33	General Use Outdoor Recreation Sites in the Region by Ownership: 1973 .....	91
34	General Use Outdoor Recreation Sites in the Region by County by Type: 1973 .....	92
35	Single Use and Multiuse Outdoor Recreation Sites by County by Ownership: 1973 .....	96
36	General Use Outdoor Recreation Sites in the Region by Presence in Primary Environmental Corridor by Type: 1973 .....	99
37	Natural Areas in the Region by County by Ownership: 1973 .....	103
38	Natural Areas in the Region by Presence in Primary Environmental Corridor by Type: 1973 .....	105
39	Special Use Outdoor Recreation Sites in the Region by County by Ownership: 1973 .....	108
40	Special Use Outdoor Recreation Sites in the Region by County by Type: 1973 .....	109
41	Urban Open Space Sites in the Region by County: 1973 .....	110
42	Historic Sites in the Region by Type of Sites by County: 1973 .....	113
43	Acreage of Outdoor Recreation and Open Space Sites per Thousand Population in the Region by County: 1973 .....	115
44	Acreage of Outdoor Recreation and Open Space Sites per Thousand Population in the Region by Planning Analysis Area by County: 1973 .....	116
45	Acreage of Outdoor Recreation and Open Space Sites As a Percentage of Total Acres in the Region by County: 1973 .....	122
46	Acreage of Outdoor Recreation and Open Space Sites As a Percentage of Total Acres in the Region by Planning Analysis Area by County: 1973 .....	123
Chapter VI		
47	Classification of Outdoor Recreation Activities .....	136
48	Distribution of Camping Areas at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	138
49	Distribution of Golf Courses at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	140
50	Distribution of Picnic Areas at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	142
51	Distribution of Ski Hills at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	144
52	Distribution of Swimming Beaches at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	146
53	Distribution of Baseball Diamonds at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	148
54	Distribution of Basketball Goals at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	150
55	Distribution of Ice Skating Rinks at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	152
56	Distribution of Playfields at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	154
57	Distribution of Playgrounds at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	156
58	Distribution of Softball Diamonds at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	158
59	Distribution of Swimming Pools at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	160
60	Distribution of Tennis Courts at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	162
61	Per Capita Provision and Use of Intensive Resource and Nonresource Oriented Outdoor Recreation Facilities at General Use Sites in the Region .....	164
62	Horseback Riding Trails at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	168
63	Nature Study Areas at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	169
64	Ski Touring Trails at General Use Outdoor Recreation Sites in the Region by County: 1973 .....	170
65	Distribution of Boat Access Sites on the Major Inland Lakes in the Region by County: 1973 .....	174
66	Relative Popularity of Outdoor Recreation Activities in Southeastern Wisconsin: 1973 .....	180

Table	Chapter VII	Page
67	Compilation of Selected County Park Planning Standards in the Region: 1975 .....	199
68	Compilation of Selected City, Village, and Town Park Planning Standards in the Region: 1975 .....	200
69	Summary of Local Subdivision Control Ordinances in the Region	
	Requiring Parkland Dedication or Fees in Lieu: 1975 .....	206
Chapter VIII		
70	Park and Recreation Expenditures for Local Units of Government in the Region by Type of Governmental Unit: 1964 and 1974 .....	211
71	Park and Recreation Departmental Earnings for Local Units of Government in the Region by Type of Governmental Unit: 1964-1974 .....	216
72	State and Federal Park and Recreation Aids to Local Units of Government in the Region by Program Type: 1964-1974 .....	218
73	State and Federal Park and Recreation Aids to Local Units of Government in the Region by Program Type and by Year: 1964-1974 .....	219
74	Comparison of Average Annual State and Federal Aids for Parks and Recreation with Average Annual Outlays for Park Acquisition and Development for Local Units of Government in the Region by Type of Governmental Unit: 1964-1968 and 1970-1974 .....	220
75	Distribution of Park and Recreation Revenue by Major Revenue Categories for Local Units of Government in the Region by Type of Governmental Unit: 1964-1968 and 1970-1974 .....	220
76	Wisconsin Department of Natural Resources Recreation and Open Space Land Acquisition: June 1974 ...	221
77	Wisconsin Department of Natural Resources Recreation and Open Space Land by County within the Southeastern Wisconsin Region: June 1974 .....	221
Chapter IX		
78	Size of Original Potential Park Sites Identified Under the Potential Park Sites Inventory and Inventory Updates in the Southeastern Wisconsin Region by County .....	226
79	Potential Park Sites Reevaluation in the Region by County: 1963-1975 .....	227
80	Potential Park Sites Committed to Recreation and Open Space Use in the Region by County: 1963-1975..	230
81	Urban Encroachment on Potential Park Sites in the Region by County: 1963-1975 .....	232
82	Specific Development Possibilities at Remaining Potential Park Sites in the Region by County: 1975 .....	233
83	Relationship of Potential Park Sites to Primary Environmental Corridors in the Region by County: 1975..	241
Chapter X		
84	Results of a Survey of Selected Appraisers, Assessors, and Developers Concerning the Fiscal Impact of Public Open Space Lands on the Value of Adjacent Residential Property .....	251
85	Value of Single-Family Owner-Occupied Housing Units by Proximity to Public Open Space Lands in Milwaukee County: 1970 .....	255
86	Detailed Results of the Analysis of Property Values Around Public Open Space Lands in Milwaukee County: 1970 .....	256
87	Estimated Value of Single-Family Housing Units by Proximity to Public Open Space Lands in Milwaukee County: 1970 .....	257
88	Average Sale Prices for Selected Residential Properties (House and Lot) Located Adjacent to and Removed from Public Open Space Lands in Milwaukee County: 1970-1974 .....	260
89	Detailed Results of the Residential Sales Analysis Conducted for Residential Properties (House and Lot) Adjacent to and Removed from Public Open Space Lands in Milwaukee County: 1970-1974 .....	260
90	Selling Price for Residential Lots in Selected Subdivisions Adjacent to Parkways in Milwaukee County ....	263
91	Assessed Value of Residential Land Surrounding Selected Public Open Space Lands in Milwaukee County: 1974 .....	265
92	Assessed Value of Residential Improvements Surrounding Selected Public Open Space Lands in Milwaukee County: 1974 .....	266
93	Percentage Distribution of Responses by a Survey Sample of Households Residing in the Vicinity of Selected Public Open Space Lands on Whether the Presence of the Open Space Area Influenced the Decision to Buy Their Homes .....	268
94	Percentage Distribution of Responses by a Sample Survey of Households Residing in the Vicinity of Selected Open Space Lands on Their General Satisfaction with a Residential Location in the Vicinity of the Public Open Space Area .....	268

Table		Page
95	Percentage Distribution of Responses by a Survey Sample of Households Residing in the Vicinity of Selected Open Space Lands on the Perceived Impact of the Open Space Land on the Value of Their Property. ....	270
96	Premium Associated with a Residential Location near Public Parks and Parkways as Estimated by a Survey Sample of Households Residing in the Vicinity of Selected Public Open Space Lands. ....	270
97	Estimated Impact of Public Open Space Lands on the Value of Adjacent Residential Property . . . . .	271
98	Monetary Flood Risks for Selected Reaches in the Menomonee River Watershed . . . . .	274

## Chapter XI

99	Outdoor Recreation and Open Space Planning Objectives, Principles, and Standards . . . . .	282
----	--	-----

## Chapter XII

100	Existing and Forecast Population of the Region Excluding Persons in Institutions: 1975 and 2000 . . . . .	296
101	Existing and Planned Population Excluding Persons in Institutions for Urban Areas in the Region: 1975 and 2000. ....	297
102	Acreage Requirements for Type I and Type II Parks in the Region: 1975 and 2000. ....	301
103	Acreage Requirements for Type III and Type IV General Use Outdoor Recreation Sites in Urban Areas in the Region: 1975 . . . . .	304
104	Acreage Requirements for Type III and Type IV General Use Outdoor Recreation Sites in Urban Areas in the Region: 2000 . . . . .	306
105	Facility Requirements for Campsites in the Region: 1975 and 2000. ....	312
106	Facility Requirements for Regulation Golf Courses in the Region: 1975 and 2000 . . . . .	314
107	Facility Requirements for Resource-Oriented Picnicking in the Region: 1975 and 2000 . . . . .	314
108	Facility Requirements for Local Picnicking in Urban Areas in the Region: 1975 and 2000 . . . . .	317
109	Facility Requirements for Ski Hills in the Region: 1975 and 2000 . . . . .	319
110	Facility Requirements for Swimming Beaches in the Region: 1975 and 2000. ....	320
111	Facility Requirements for Public Trails in Recreation Corridors in the Region: 1975 and 2000 . . . . .	322
112	Facility Requirements for Baseball Diamonds in Urban Areas in the Region: 1975 . . . . .	324
113	Facility Requirements for Baseball Diamonds in Urban Areas in the Region: 2000 . . . . .	326
114	Facility Requirements for Basketball Goals in Urban Areas in the Region: 1975 . . . . .	330
115	Facility Requirements for Basketball Goals in Urban Areas in the Region: 2000 . . . . .	332
116	Facility Requirements for Ice Skating Rinks in Urban Areas in the Region: 1975 . . . . .	334
117	Facility Requirements for Ice Skating Rinks in Urban Areas in the Region: 2000 . . . . .	336
118	Facility Requirements for Playfields in Urban Areas in the Region: 1975. ....	340
119	Facility Requirements for Playfields in Urban Areas in the Region: 2000. ....	342
120	Facility Requirements for Playgrounds in Urban Areas in the Region: 1975. ....	346
121	Facility Requirements for Playgrounds in Urban Areas in the Region: 2000. ....	348
122	Facility Requirements for Softball Diamonds in Urban Areas in the Region: 1975. ....	350
123	Facility Requirements for Softball Diamonds in Urban Areas in the Region: 2000. ....	352
124	Facility Requirements for Tennis Courts in Urban Areas in the Region: 1975 . . . . .	356
125	Facility Requirements for Tennis Courts in Urban Areas in the Region: 2000 . . . . .	358
126	Facility Requirements for Swimming Pools in Urban Areas in the Region: 1975 . . . . .	360
127	Facility Requirements for Swimming Pools in Urban Areas in the Region: 2000 . . . . .	361
128	Facility Requirements for Lake Michigan Access Facilities in the Region: 1975 and 2000 . . . . .	364

## Chapter XIII

129	Existing and Proposed Public Ownership of Net Primary Environmental Corridor Lands in the Region by County: 1973 and 2000 . . . . .	374
130	Additional Public Resource-Oriented Outdoor Recreation Sites and Facilities Required in the Region: 2000 . . . . .	379
131	Recreation Corridor Mileage in the Region Under the Accessibility Based Alternative Plan: 2000 . . . . .	383
132	Public Land Acquisition Requirements and Acquisition Costs for Recreation Corridors Under the Accessibility Based Alternative Plan: 2000. ....	383
133	Existing and Proposed Type I and Type II Parks in the Region Under the Accessibility Based Alternative Plan: 2000. ....	384
134	Existing and Proposed Type I and Type II Parks in the Region Under the Accessibility Based Alternative Plan by Relation to Primary Environmental Corridor and Proposed Public Recreation Corridor: 2000 . . . .	386
135	Public Land Acquisition Requirements and Acquisition Costs for Type I and Type II Parks Under the Accessibility Based Alternative Plan: 2000. ....	387

Table		Page
136	Existing and Proposed Intensive Resource-Oriented Outdoor Recreation Facilities Under the Accessibility Based Alternative Plan: 1973 and 2000 .....	389
137	Unit Costs for Facility Development at Proposed Type I and Type II Parks: 1975 .....	391
138	Proposed Extensive Resource-Oriented Outdoor Recreation Facilities Under the Accessibility Based Alternative Plan: 2000 .....	393
139	Unit Costs for Trail Facility Development Within the Proposed Public Recreation Corridor: 1975 .....	395
140	Public Land Acquisition Requirements and Acquisition Costs for Access Points on the Major Inland Lakes Under the Accessibility Based Outdoor Recreation Plan: 2000 .....	396
141	Estimated Unit Development Costs for the Development of Water Access Facilities on the Inland Lakes and Rivers: 1975 .....	396
142	Public Land Acquisition Requirements and Acquisition Costs Under the Accessibility Based Alternative Plan: 2000 .....	399
143	Estimated Development Costs Under the Accessibility Based Alternative Plan: 1975 .....	399
144	Recreation Corridor Mileage in the Region Under the Resource Based Alternative Plan: 2000 .....	401
145	Public Land Acquisition Requirements and Acquisition Costs for Recreation Corridors Under the Resource Based Alternative Plan: 2000 .....	402
146	Existing and Proposed Type I and Type II Parks in the Region Under the Resource Based Alternative Plan: 2000 .....	402
147	Existing and Proposed Type I and Type II Parks in the Region Under the Resource Based Alternative Plan by Relation to Primary Environmental Corridor and Proposed Public Recreation Corridor: 2000 .....	403
148	Public Land Acquisition Requirements and Acquisition Costs for Type I and Type II Parks Under the Resource Based Alternative Plan: 2000 .....	404
149	Existing and Proposed Intensive Resource-Oriented Outdoor Recreation Facilities in the Resource Based Alternative Plan: 1973 and 2000 .....	406
150	Proposed Extensive Resource-Oriented Outdoor Recreation Facilities Under the Resource Based Alternative Plan: 2000 .....	408
151	Public Land Acquisition Requirements and Acquisition Costs Under the Resource Based Alternative Plan for the Year 2000 .....	410
152	Estimated Development Costs Under the Resource Based Alternative Plan: 1975 .....	411
153	Comparison of the Relative Ability of the Resource-Oriented Outdoor Recreation Component Alternative Plans to Meet the Resource-Oriented Outdoor Recreation Related Standards of the Park and Open Space Study .....	412
154	Resource-Oriented Outdoor Recreation Plan Component Selection Criteria .....	420
155	Type III and Type IV Sites Proposed Under the Urban Outdoor Recreation Plan Component: 2000 .....	426
156	Facilities and Development Costs Proposed Under the Urban Outdoor Recreation Plan Component: 2000 .....	428
157	Unit Costs for Proposed Facility Development at Type III and Type IV Sites .....	431
158	Minimum Acreage Requirements Not Met Under the Urban Outdoor Recreation Plan Component: 2000 .....	432
159	Minimum Facility Requirements Not Met Under the Urban Outdoor Recreation Plan Component: 2000 .....	433
160	Public Outlays for Acquisition and Development Under the Regional Park and Open Space System Plan: 1975-2000 .....	434

#### Chapter XIV

160A	Preservation of Net Primary Environmental Corridor Lands Under the Recommended Primary Environmental Corridor Plan Component .....	442
161	Preservation of Prime Agricultural Lands and Agricultural Lands Surrounding Major Scientific, Educational, and Recreation Sites Under the Prime Agricultural Land Plan Component .....	444
162	Proposed Recreation Corridor Mileage Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: 2000 .....	446
163	Proposed Recreation Trails Within the Public Recreation Corridor Under the Recommended Resource-Oriented Outdoor Recreation Plan Component .....	447
164	Ownership Status of Recreation Corridor Proposed Under the Recommended Resource-Oriented Outdoor Recreation Plan Component .....	449
165	Public Land Acquisition Requirements, Acquisition Costs, and Development Costs Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: Region .....	449
166	Existing and Proposed Type I and Type II Parks in the Region Under the Recommended Resource-Oriented Outdoor Recreation Plan Component .....	450

Table		Page
167	Existing and Proposed Type I and Type II Parks in the Region Under the Recommended Resource-Oriented Outdoor Recreation Plan Component by Relation to Primary Environmental Corridor and Proposed Public Recreation Corridor .....	451
168	Publicly Owned Intensive Resource-Oriented Outdoor Recreation Facilities Existing 1973 and Proposed Under the Recommended Resource-Oriented Outdoor Recreation Plan Component for the Year 2000 .....	452
169	Existing and Planned Type I and Type II Parks in Kenosha County: 2000 .....	457
170	Type I and Type II Park Acreage in the Region by County: Existing 1973 and Proposed Under the Recommended Resource-Oriented Outdoor Recreation Plan Component for the Year 2000 .....	458
171	Trail Facilities Within the Public Recreation Corridor Proposed Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: 2000 .....	458
172	Public Land Acquisition Requirements, Acquisition Costs, and Development Costs Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: Kenosha County .....	459
173	Existing and Planned Type I and Type II Parks in Milwaukee County: 2000 .....	460
174	Public Land Acquisition Requirements, Acquisition Costs, and Development Costs Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: Milwaukee County .....	461
175	Existing and Planned Type I and Type II Parks in Ozaukee County: 2000 .....	462
176	Public Land Acquisition Requirements, Acquisition Costs, and Development Costs Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: Ozaukee County .....	463
177	Existing and Planned Type I and Type II Parks in Racine County: 2000 .....	464
178	Public Land Acquisition Requirements, Acquisition Costs, and Development Costs Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: Racine County .....	465
179	Existing and Planned Type I and Type II Parks in Walworth County: 2000 .....	466
180	Public Land Acquisition Requirements, Acquisition Costs, and Development Costs Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: Walworth County .....	467
181	Existing and Planned Type I and Type II Parks in Washington County: 2000 .....	468
182	Public Land Acquisition Requirements, Acquisition Costs, and Development Costs Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: Washington County .....	469
183	Existing and Planned Type I and Type II Parks in Waukesha County: 2000 .....	470
184	Public Land Acquisition Requirements, Acquisition Costs, and Development Costs Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: Waukesha County .....	471
185	Additional Recreation Land Proposed Under the Urban Outdoor Recreation Plan Element .....	476
186	Proposed Facilities and Development Costs Under the Recommended Urban Outdoor Recreation Plan Component .....	478
187	Open Space Preservation and Land Acquisition Costs Under the Recommended Regional Park and Open Space Plan .....	480
188	Resource-Oriented Outdoor Recreation Lands and Facilities and Acquisition and Development Costs Under the Recommended Regional Park and Open Space Plan .....	481
189	Urban Outdoor Recreation Sites and Acquisition and Development Costs Under the Recommended Regional Park and Open Space Plan .....	482
190	Public Acquisition and Development Implementation Priorities Under the Regional Park and Open Space Plan: 2000 .....	484

## Chapter XV

191	Proposed Primary Environmental Corridor Land Acquisition Responsibilities for the Wisconsin Department of Natural Resources by County .....	501
192	Proposed Major Parkland Acquisition and Development Responsibilities for County Park Agencies and the Wisconsin Department of Natural Resources .....	504
193	Proposed Recreation Corridor Land Acquisition and Development Responsibilities for County Park Agencies and the Wisconsin Department of Natural Resources .....	505
194	Capital Investment Costs Under the Regional Park and Open Space Plan for Southeastern Wisconsin .....	508
195	Schedule of Capital and Operation and Maintenance Costs of the Recommended Regional Park and Open Space Plan by Level of Government Within the Region by Year: 1975-2000 .....	510
196	Alternative Projections of Local Outlays for Park and Open Space Acquisition and Development and Local Expenses for Park and Open Space Operation and Maintenance in Southeastern Wisconsin: 1975-2000 .....	512
197	Park and Open Space Outlays and Expenses for Local Units of Government in Milwaukee County and the Remainder of the Region: Actual 1974 and Planned 1975-2000 .....	513
198	Actual (1974) and Planned Local Public Per Capita Expenditures for Parks and Open Space .....	514

Table	Chapter XVI	Page
199	Preliminary and Final Plan Recommendations for Acquisition of Primary Environmental Corridor Lands by County Park Agencies and the Wisconsin Department of Natural Resources . . . . .	532
200	Preliminary and Final Plan Recommendations for Acquisition and Development of Recreation Corridors by County Park Agencies and the Wisconsin Department of Natural Resources . . . . .	538
201	Acquisition and Development Costs Under the Preliminary and Final Recommended Regional Park and Open Space Plans . . . . .	543

## LIST OF FIGURES

Figure	Chapter I	Page
1	Southeastern Wisconsin Regional Planning Commission Organizational Structure: 1977 . . . . .	2
2	Basic Organizational Structure for the Regional Park and Open Space Planning Program . . . . .	7
Chapter II		
3	Classification of Open Space in the Regional Park and Open Space Planning Program . . . . .	14
4	General Steps in a Regional Park and Open Space Planning Program . . . . .	17
Chapter III		
5	Population Level in the Region, Wisconsin, and the United States: 1850-1970 . . . . .	22
6	Distribution of Urban and Rural Population in the Region: 1850-1970 . . . . .	22
7	Distribution of the Population in the Region by County: Selected Years 1900-1970 . . . . .	23
8	Age Composition of the Population in the Region: 1960 and 1970 . . . . .	24
9	Distribution of Educational Attainment Levels of the Population 25 Years of Age and Older in the Region: 1960 and 1970 . . . . .	27
10	Occupational Distribution of the Employed Population 14 Years of Age and Older in the Region: 1960 and 1970 . . . . .	29
11	Distribution of Households in the Region by Household Income by County: 1969 . . . . .	32
12	Percentage Distribution by Income of Black and Elderly Households in the Region: 1969 . . . . .	32
13	Relative Job Growth in the Region, Wisconsin, and the United States: 1950-1970 . . . . .	33
14	Percentage Distribution of Jobs in the Region and the United States by Major Industry Group: 1970 . . . . .	34
15	Percentage Distribution of Manufacturing Jobs in the Region and the United States by Type of Manufacture: 1970 . . . . .	34
16	Temperature Characteristics by Month at Selected Locations in the Region . . . . .	54
17	Precipitation Characteristics by Month at Selected Locations in the Region . . . . .	55
18	The Use of Soils for Recreational Developments . . . . .	56
19	Physiographic Features of the Region . . . . .	62
Chapter VI		
20	Characteristics of the Use of Camping Areas at General Use Outdoor Recreation Sites in the Region . . . . .	139
21	Characteristics of the Use of Golf Courses at General Use Outdoor Recreation Sites in the Region . . . . .	141
22	Characteristics of the Use of Picnic Areas at General Use Outdoor Recreation Sites in the Region . . . . .	143
23	Characteristics of the Use of Ski Hills at General Use Outdoor Recreation Sites in the Region . . . . .	145
24	Characteristics of the Use of Swimming Beaches at General Use Outdoor Recreation Sites in the Region . . . . .	147
25	Characteristics of the Use of Baseball Diamonds at General Use Outdoor Recreation Sites in the Region . . . . .	149
26	Characteristics of the Use of Basketball Goals at General Use Outdoor Recreation Sites in the Region . . . . .	151
27	Characteristics of the Use of Ice Skating Rinks at General Use Outdoor Recreation Sites in the Region . . . . .	153
28	Characteristics of the Use of Playfields at General Use Outdoor Recreation Sites in the Region . . . . .	155
29	Characteristics of the Use of Playgrounds at General Use Outdoor Recreation . . . . .	157
30	Characteristics of the Use of Softball Diamonds at General Use Outdoor Recreation Sites in the Region . . . . .	159
31	Characteristics of the Use of Swimming Pools at General Use Outdoor Recreation Sites in the Region . . . . .	161
32	Characteristics of the Use of Tennis Courts at General Use Outdoor Recreation Sites in the Region . . . . .	163
33	Percentage Distribution of Total Use of Designated Horseback Riding Trails in the Region During Each Month . . . . .	167

Figure		Page
34	Percentage Distribution of Total Use of Designated Nature Study Areas in the Region During Each Month .....	168
35	Percentage Distribution of Total Use of Designated Ski Touring Trails in the Region During Each Month .....	170
36	Characteristics of Participation in Snowmobiling Activity of Residents in the Region: 1974-1975 .....	171
37	Characteristics of the Use of Boat Accesses on Major Inland Lakes in the Region .....	176
38	Characteristics of Participation in Extensive Water Based Outdoor Recreation Activities in the Region: Canoeing, 1974 .....	177
39	Characteristics of Participation in Extensive Water Based Outdoor Recreation Activities in the Region: Fishing, 1974 .....	178
40	Characteristics of Participation in Extensive Water Based Outdoor Recreation Activities in the Region: Motor Boating, 1974 .....	178
41	Characteristics of Participation in Extensive Water Based Outdoor Recreation Activities in the Region: Sailing, 1974 .....	179
42	Characteristics of Participation in Extensive Water Based Outdoor Recreation Activities in the Region: Water Skiing .....	179

## Chapter VIII

43	Total Park and Recreation Expenditures for All General Purpose Units of Government in the Region: 1964-1974 .....	210
44	Per Capita Park and Recreation Expenditures for All General Purpose Units of Government in the Region: 1964-1974 .....	210
45	Park and Recreation Expenditures as a Percent of Total Expenditures for All General Purpose Units of Government in the Region: 1964-1974 .....	210
46	Total Park and Recreation Expenditures for All Counties in the Region Excluding Milwaukee County: 1964-1974 .....	212
47	Per Capita Park and Recreation Expenditures for All Counties in the Region Excluding Milwaukee County: 1964-1974 .....	212
48	Park and Recreation Expenditures as a Percent of Total Expenditures for All Counties in the Region Excluding Milwaukee County: 1964-1974 .....	212
49	Total Park and Recreation Expenditures for Milwaukee County: 1964-1974 .....	213
50	Per Capita Park and Recreation Expenditures for Milwaukee County: 1964-1974 .....	213
51	Park and Recreation Expenditures as a Percent of Total Expenditures for Milwaukee County: 1964-1974 .....	213
52	Total Park and Recreation Expenditures for All Cities in the Region Excluding the City of Milwaukee: 1964-1974 .....	213
53	Per Capita Park and Recreation Expenditures for All Cities in the Region Excluding the City of Milwaukee: 1964-1974 .....	213
54	Park and Recreation Expenditures as a Percent of Total Expenditures for All Cities in the Region Excluding the City of Milwaukee: 1964-1974 .....	213
55	Total Park and Recreation Expenditures for the City of Milwaukee: 1964-1974 .....	214
56	Per Capita Park and Recreation Expenditures for the City of Milwaukee: 1964-1974 .....	214
57	Park and Recreation Expenditures as a Percent of Total Expenditures for the City of Milwaukee: 1964-1974 .....	214
58	Total Park and Recreation Expenditures for All Villages in the Region: 1964-1974 .....	215
59	Per Capita Park and Recreation Expenditures for All Villages in the Region: 1964-1974 .....	215
60	Park and Recreation Expenditures as a Percent of Total Expenditures for All Villages in the Region: 1964-1974 .....	215
61	Total Park and Recreation Expenditures for All Towns in the Region: 1964-1974 .....	215
62	Per Capita Park and Recreation Expenditures for All Towns in the Region: 1964-1974 .....	215
63	Park and Recreation Expenditures as a Percent of Total Expenditures for All Towns in the Region: 1964-1974 .....	215
64	Park and Recreation Departmental Earnings as a Percent of Expenses for Park and Recreation Operation and Maintenance for Local Units of Government in the Region by Type of Governmental Unit: 1964-1974 .....	217

## Chapter IX

65	Reevaluation of a Sample 1963 Potential Park Site in the Region: 1975 .....	225
----	---	-----



Figure	Chapter X	Page
66	Example of City Blocks Typically Included in the Analysis of 1970 Census Housing Value Data . . . . .	253
67	Example of City Blocks Typically Excluded from the Analysis of 1970 Census Housing Value Data. . . . .	253
68	Example of Typical City Block Included in the Analysis of 1970 Census Housing Value Data . . . . .	257
69	Assessed Value of Residential Lots Surrounding Public Open Space Lands in Milwaukee County: 1974 . . .	266
70	Assessed Value of Residential Structures Surrounding Selected Public Open Space Lands in Milwaukee County: 1974 . . . . .	267

#### Chapter XIII

71	Regional Park and Open Space Plan Elements. . . . .	370
----	---	-----

#### Chapter XV

72	Local Public Expenditure Trends and Alternative Projections of Local Public Expenditures for Parks and Open Space in the Region: 1964-2000. . . . .	511
----	--	-----

### LIST OF MAPS

Map	Chapter I	Page
1	Southeastern Wisconsin Region. . . . .	4
Chapter II		
2	Planning Analysis Areas in the Region. . . . .	11
Chapter III		
3	Historical Urban Growth in the Region: 1850-1970 . . . . .	36
4	Generalized Existing Land Use in the Region: 1970 . . . . .	38
5	Sanitary Sewer Service Areas and Sewage Treatment Facilities in the Region: 1970. . . . .	42
6	Water Utilities in the Region: 1970. . . . .	43
7	Arterial Street and Highway System in the Region: 1972. . . . .	45
8	Primary and Secondary Mass Transportation Service Within the Region: 1972. . . . .	47
9	Intraregional Mass Transportation Service in the Kenosha and Racine Urbanized Areas: May 1972 . . . . .	47
10	Intraregional Mass Transportation Service in the Milwaukee Urbanized Area: May 1972 . . . . .	48
11	Scenic Drives and Parkway Drives in Southeastern Wisconsin: 1973 . . . . .	50
Chapter IV		
12	Soil Limitations for Recreational Development on Soils Demonstration Site on Waukesha County Institution Grounds. . . . .	60
13	Recreational Development Plan for Soils Demonstration Site on Waukesha County Institution Grounds. . .	61
14	Topographic Characteristics of the Region . . . . .	63
15	Watersheds and Surface Water Resources of the Region . . . . .	64
16	Delineation of Floodlands in the Region: January 1, 1977 . . . . .	72
17	Woodlands in the Region: 1970 . . . . .	74
18	Water and Wetland Areas in the Region: 1970 . . . . .	76
19	Wildlife Habitat in the Region: 1970. . . . .	78
20	Primary Environmental Corridors in the Region: 1973 . . . . .	79
21	Preservation of Primary Environmental Corridor in the Region: 1973 . . . . .	83
22	Agricultural Land Use in the Region: 1970. . . . .	85
23	Prime Agricultural Lands in the Region: 1970 . . . . .	85

Map	Chapter V	Page
24	General Use Outdoor Recreation Sites in the Region by Type : 1973.....	94
25	Multiuse Outdoor Recreation Sites in the Region by Facilities Provided: 1973.....	98
26	Single Use Outdoor Recreation Sites in the Region—Camps, Nature Study Areas, Campgrounds: 1973 ....	100
27	Single Use Outdoor Recreation Sites in the Region, Including Golf Courses, Ski Hills, Boat Launches: 1973 .....	101
28	General Use Outdoor Recreation Sites in the Region in Relation to Primary Environmental Corridors: 1973.....	102
29	Natural Areas in the Region: 1973 .....	104
30	Natural Areas in the Region by Type : 1973.....	106
31	Natural Areas in the Region in Relation to Primary Environmental Corridor: 1973 .....	107
32	Special Use Outdoor Recreation Sites in the Region: 1973.....	111
33	Urban Open Areas in the Region: 1973.....	112
34	Historic Sites in the Region: 1973.....	114

## Chapter VI

35	General Use Outdoor Recreation Sites at Which Winter User Surveys Were Conducted: 1974 .....	132
36	General Use Outdoor Recreation Sites at Which Summer User Surveys Were Conducted: 1974 .....	133
37	General Use Outdoor Recreation Sites at Which Site Manager Surveys Were Conducted: 1974.....	135
38	General Use Outdoor Recreation Sites in the Region with Developed Camping Areas by Planning Analysis Area: 1973.....	138
39	General Use Outdoor Recreation Sites in the Region with Regulation Golf Courses by Planning Analysis Area: 1973 .....	140
40	General Use Outdoor Recreation Sites in the Region with Picnic Areas by Planning Analysis Area: 1973.....	142
41	General Use Outdoor Recreation Sites in the Region with Ski Hills by Planning Analysis Areas: 1973 .....	144
42	General Use Outdoor Recreation Sites in the Region with Swimming Beaches by Planning Analysis Area: 1973 .....	146
43	General Use Outdoor Recreation Sites in the Region with Baseball Diamonds by Planning Analysis Area: 1973 .....	148
44	General Use Outdoor Recreation Sites in the Region with Basketball Goals by Planning Analysis Area: 1973 .....	150
45	General Use Outdoor Recreation Sites in the Region with Ice Skating Rinks by Planning Analysis Area: 1973 .....	152
46	General Use Outdoor Recreation Sites in the Region with Playfields by Planning Analysis Area: 1973.....	154
47	General Use Outdoor Recreation Sites in the Region with Playgrounds by Planning Analysis Area: 1973.....	156
48	General Use Outdoor Recreation Sites in the Region with Softball Diamonds by Planning Analysis Area: 1973.....	158
49	General Use Outdoor Recreation Sites in the Region with Swimming Pools by Planning Analysis Area: 1973 .....	160
50	General Use Outdoor Recreation Sites in the Region with Tennis Courts by Planning Analysis Area: 1973 .....	162
51	Bicycle Trails and Bicycle Routes in the Region: 1976 .....	165
52	Backpack Hiking Trails in the Region: 1976 .....	166
53	General Use Outdoor Recreation Sites in the Region with Horseback Riding Trails: 1973 .....	167
54	General Use Outdoor Recreation Sites in the Region with Nature Study Areas: 1973 .....	169
55	General Use Outdoor Recreation Sites in the Region with Ski Touring Trails: 1973.....	170
56	Public Snowmobiling Trails in the Region: 1976.....	172
57	Boat Access Sites in the Region: 1973 .....	173
58	Canoeable Rivers in the Region: 1973.....	177

## Chapter VII

59	Counties with Park and Recreation Agencies in the Region: 1976 .....	195
60	Local Units of Government with Park and Recreation Agencies in the Region: 1976.....	196
61	Counties and Local Units of Government with Fulltime Park and Recreation Planning, Development, and Operation Staffs in the Region: 1976 .....	197

Map		Page
62	Counties with Park and Outdoor Recreation Plans in the Region: 1976 .....	197
63	Local Units of Government with Park and Outdoor Recreation Plans in the Region: 1976. ....	198
64	County and Local Units of Government with State Certified Park and Outdoor Recreation Plans in the Region: January 1977 .....	201
65	Local Units of Government with Special Park and Recreation Zoning Districts in the Region: 1972 .....	201
66	Status of Floodland Zoning in Counties, Cities, and Villages in the Region: December 31, 1976 .....	202
67	Local Units of Government with Conservancy Zoning Districts in the Region: 1972 .....	203
68	Local Units of Government with Exclusive Agricultural Zoning Districts in the Region: 1976 .....	203
69	Local Units of Government with Country Estate Zoning Districts in the Region: 1972 .....	204
70	Local Units of Government with Subdivision Control Ordinances with Parkland Dedication Requirement: 1976 .....	205
71	Local Units of Government with Official Maps in the Region Protecting Future Parklands: 1972 .....	208

## Chapter IX

72	Potential Park Sites in Southeastern Wisconsin: 1963-1975 .....	228
73	Potential Park Sites with Favorable Development Potential for Picnicking: 1975 .....	234
74	Potential Park Sites with Favorable Development Potential for Swimming: 1975 .....	236
75	Potential Park Sites with Favorable Development Potential for Nature Study: 1975 .....	237
76	Potential Park Sites with Favorable Development Potential for Campgrounds: 1975 .....	238
77	Potential Park Sites with Favorable Development Potential for Hiking Trails: 1975 .....	239
78	Potential Park Sites with Favorable Development Potential for Golf: 1975 .....	240
79	Lands with Development Potential for Trail Facilities in the Region. ....	243

## Chapter X

80	County Owned Parks and Parkways in Milwaukee County: 1973 .....	249
81	Analysis of Residential Property Values in Milwaukee County .....	254
82	Analysis of Locally Assessed Property Values .....	264
83	Reaches Selected for Computation of Average Annual Flood Damage Risk in the Menomonee River Watershed. ....	273

## Chapter XII

84	Urban Areas in the Region Requiring Typical Urban Outdoor Recreation Sites and Facilities: 1975 .....	299
85	Urban Areas in the Region Requiring Typical Urban Outdoor Recreation Sites and Facilities: 2000 .....	299
86	Areas in the Region Not Served by a Type I Park: 1973 .....	302
87	Areas in the Region Not Served by Type I or Type II Parks: 1973 .....	302
88	Existing and Planned Urban Areas in the Region Not Served by a Type I or a Type II Park .....	303
89	Acreage Requirements for Type III and Type IV General Use Outdoor Recreation Sites in Urban Areas in the Region: 1975 .....	308
90	Acreage Requirements for Type III and Type IV General Use Outdoor Recreation Sites in Urban Areas in the Region: 2000 .....	308
91	Existing and Planned Urban Areas in the Region Not Served by a Type I, Type II, or Type III Park. ....	310
92	Existing and Planned Urban Areas in the Region Not Served by a Type I, Type II, Type III, or Type IV Park .....	310
93	Areas in the Region Not Served by a Public Campground .....	313
94	Areas in the Region Not Served by a Public Regulation Golf Course. ....	315
95	Areas in the Region Not Served by Picnic Facilities in Type I and Type II Parks .....	316
96	Areas in the Region Not Served by a Publicly Owned Ski Hill. ....	321
97	Areas in the Region Not Served by a Public Swimming Beach. ....	321
98	Facility Requirements for Baseball Diamonds in Urban Areas in the Region: 1975 .....	328
99	Facility Requirements for Baseball Diamonds in Urban Areas in the Region: 2000 .....	328
100	Facility Requirements for Basketball Goals in Urban Areas in the Region: 1975 .....	329
101	Facility Requirements for Basketball Goals in Urban Areas in the Region: 2000 .....	329
102	Facility Requirements for Ice Skating Rinks in Urban Areas in the Region: 1975 .....	338
103	Facility Requirements for Ice Skating Rinks in Urban Areas in the Region: 2000 .....	338
104	Facility Requirements for Playfields in Urban Areas in the Region: 1975. ....	339
105	Facility Requirements for Playfields in Urban Areas in the Region: 2000. ....	339
106	Facility Requirements for Playgrounds in Urban Areas in the Region: 1975. ....	345

Map		Page
107	Facility Requirements for Playgrounds in Urban Areas in the Region: 2000 . . . . .	345
108	Facility Requirements for Softball Diamonds in Urban Areas in the Region: 1975 . . . . .	354
109	Facility Requirements for Softball Diamonds in Urban Areas in the Region: 2000 . . . . .	354
110	Facility Requirements for Tennis Courts in Urban Areas in the Region: 1975 . . . . .	355
111	Facility Requirements for Tennis Courts in Urban Areas in the Region: 2000 . . . . .	355
112	Facility Requirements for Public Swimming Pools in Urban Areas in the Region: 1975 and 2000 . . . . .	360
113	Facility Requirements for Extensive Water Based Outdoor Recreation Activities . . . . .	363
114	Segments of the Lake Michigan Shoreline in Southeastern Wisconsin Lacking Boat Access Facilities in Harbors of Refuge . . . . .	365

### Chapter XIII

115	Preservation of Primary Environmental Corridor Land in the Region Under the Primary Environmental Corridor Lands Plan Component: 2000 . . . . .	373
116	Preservation of Agricultural Lands in the Region Under the Prime Agricultural Lands Plan Component: 2000 . . . . .	376
117	Significant Recreational Resource Areas and Population Distribution Within the Region: 1975 . . . . .	378
118	Areas in the Region Not Adequately Served with Public Resource-Oriented Outdoor Recreation Facilities: 2000 . . . . .	380
119	Type I and Type II Parks and Recreation Corridors Proposed Under the Accessibility Based Alternative Plan: 2000 . . . . .	385
120	Public Land Based Resource-Oriented Outdoor Recreation Facilities Proposed Under the Accessibility Based Alternative Plan: 2000 . . . . .	388
121	Boat Access Facilities Proposed Under the Accessibility Based Alternative Plan: 2000 . . . . .	392
122	Type I and Type II Parks and Recreation Corridors Proposed Under the Resource Based Alternative Plan: 2000 . . . . .	400
123	Public Land Based Resource-Oriented Outdoor Recreation Facilities Proposed Under the Resource Based Alternative Plan: 2000 . . . . .	405
124	Areas in the Region Not Adequately Served by Type I and Type II Parks Under the Resource-Oriented Outdoor Recreation Component Alternative Plans: 2000 . . . . .	414
125	Areas in the Region Not Adequately Served by the Public Recreation Corridor Network Proposed Under the Resource-Oriented Outdoor Recreation Component Alternative Plans: 2000 . . . . .	416
126	Areas in the Region Not Adequately Served by Intensive Resource-Oriented Facilities Proposed Under the Accessibility Based Alternative Plan: 2000 . . . . .	418
127	Areas in the Region Not Adequately Served by Intensive Resource-Oriented Facilities Proposed Under the Resource Based Alternative Plan: 2000 . . . . .	418
128	Urban Outdoor Recreation Sites Proposed Under the Urban Outdoor Recreation Plan Component: 2000 . .	422

### Chapter XIV

129	Preservation of Primary Environmental Corridor Lands and Prime Agricultural Lands Under the Open Space Preservation Plan Element: 2000 . . . . .	441
130	Type I and Type II Parks, Recreation Corridors, and Water Access Points Proposed Under the Recommended Resource-Oriented Plan Component: 2000 . . . . .	445
131	Facilities for Resource-Oriented Outdoor Recreation Activities Under the Recommended Resource-Oriented Outdoor Recreation Plan Component: 2000 . . . . .	448
132	Automobile Availability for Households in the Region by Census Tract: 1970 . . . . .	456
133	Type III and Type IV Sites in Urban Areas Proposed Under the Urban Outdoor Recreation Plan Component: 2000 . . . . .	472

### Chapter XV

134	Proposed Primary Environmental Corridor Lands Preservation Responsibilities for County Park Agencies and the Wisconsin Department of Natural Resources . . . . .	499
135	Proposed Major Park and Recreation Corridor Land Acquisition and Development Responsibilities for County Park Agencies and the Wisconsin Department of Natural Resources . . . . .	503

### Chapter XVI

136	Preliminary and Final Delineations of Prime Agricultural Lands in Walworth County . . . . .	530
137	High Value Potential Park Sites Within a 10-Mile Radius of the Proposed Sugar Creek Park Site . . . . .	534
138	Final Recommended Regional Park and Open Space Plan for Southeastern Wisconsin: 2000 . . . . .	545

## Chapter I

### INTRODUCTION

The regional park and open space planning program represents an attempt by the Southeastern Wisconsin Regional Planning Commission to identify the nature and extent of existing and probable future recreational and open space needs within the Region and to develop a workable plan effectively to meet these needs. The primary purpose of the regional park and open space planning program is the development of a sound and workable plan to guide the staged acquisition and development of lands needed for public park and open space purposes. The plan is intended to assure coordination of public park and open space acquisition and development with private outdoor recreational facility development while promoting implementation of the adopted regional land use plan and the protection and wise use of the underlying and sustaining natural resource base. The regional park and open space plan is intended to comprise an additional element of a comprehensive plan for the physical development of the Region. Its preparation was accomplished as an integral part of the overall work program of the Commission. An understanding is necessary, therefore, of the need for, and objectives of, regional planning and the manner in which these needs and objectives are being met in southeastern Wisconsin. This understanding will facilitate appreciation of the findings and recommendations of the regional park and open space planning program.

#### NEED FOR REGIONAL PLANNING

Regional planning may be defined as comprehensive planning for a geographic area larger than a county but smaller than a state, united by social and economic interests, geography, and common areawide developmental and environmental problems. The need for such planning arises from important social and economic changes which, while national phenomena, have had far-reaching impacts on local government. These changes include a highly diffused pattern of urbanization; increasing agricultural and industrial productivity, income levels, and leisure time; generation of mass recreational needs and pursuits; ever more intensive use and consumption of natural resources; development of private water supply and sewage disposal systems; development of extensive electric power and communications networks; and development of limited access highway systems and mass automotive transportation. Under the effects of these changes, entire regions like southeastern Wisconsin are becoming large urban complexes that create areawide environmental and developmental problems of an unprecedented scale and complexity. Rural as well as urban people increasingly must concern themselves with these problems or face irreparable damage to their land and water resources and to their communities.

The areawide problems which necessitate a regional planning effort in southeastern Wisconsin all have their source in the unprecedented areawide urbanization occurring within the Region. These areawide problems include, among others: inadequate storm water drainage and increasing flood damage, underdeveloped sewerage and inadequate sewage disposal facilities, inadequate water supply, water pollution, inadequate housing, deterioration and destruction of the natural resource base, increasing demand for outdoor recreation and for park and open space, inadequate transportation facilities, and, underlying all of the foregoing, rapidly changing land use development. These problems are all truly regional in scope. They transcend the boundaries of any one municipality and can only be resolved within the context of a comprehensive regional planning effort and through the cooperation of all levels of government concerned.

#### THE REGIONAL PLANNING COMMISSION

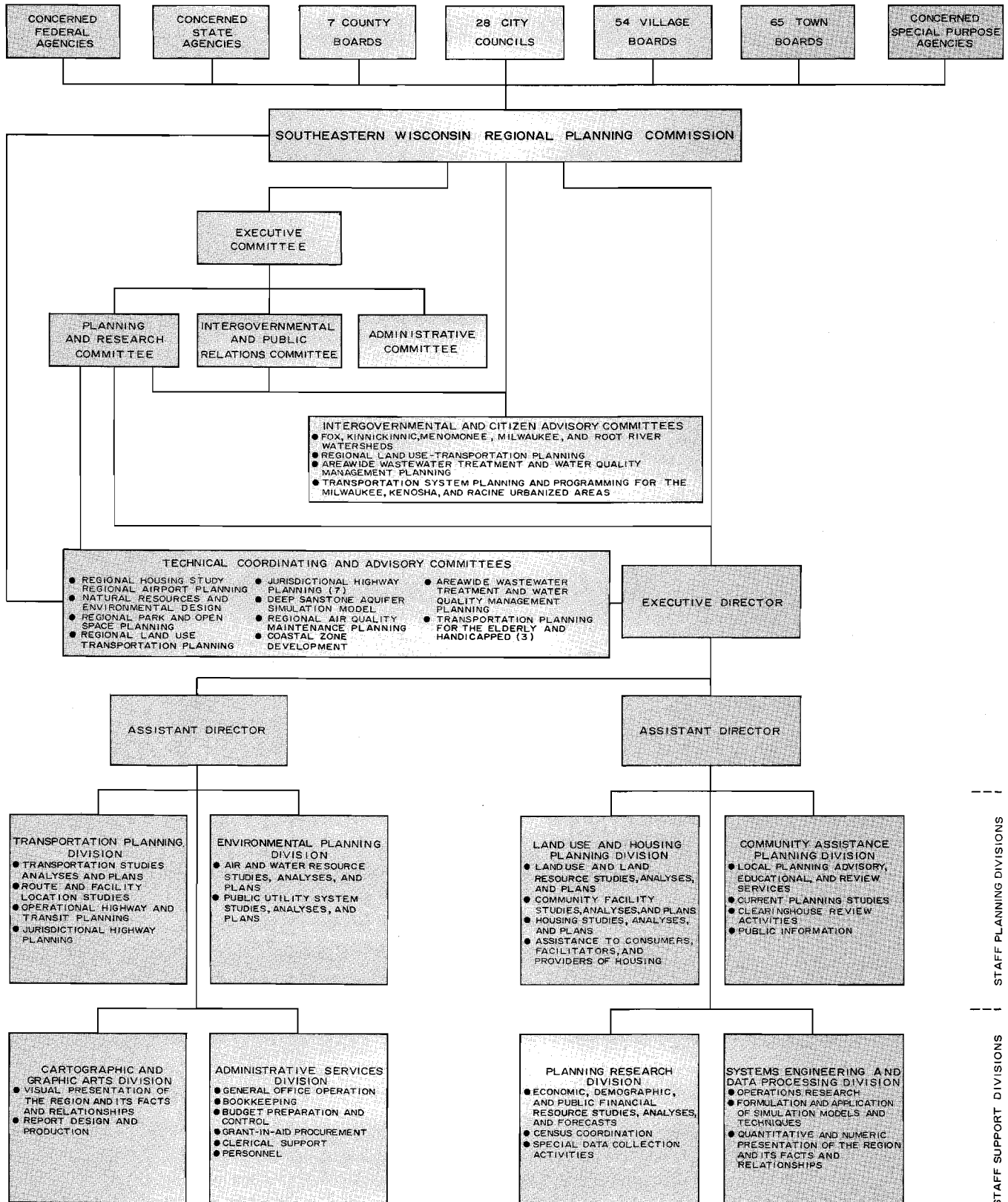
The Southeastern Wisconsin Regional Planning Commission (SEWRPC) represents an attempt to provide the necessary areawide planning services for the rapidly urbanizing seven-county Southeastern Wisconsin Region. The Commission was created in August 1960 under the provisions of Section 66.945 of the Wisconsin Statutes to serve and assist the local, state, and federal levels, units, and agencies of government in planning for the orderly and economical development of the Region. The Commission's role is entirely advisory; participation by local units of government in its work is on a voluntary, cooperative basis. The Commission is composed of 21 citizen members, three from each county in the Region, who serve without pay.

The powers, duties, and functions of the Commission and the qualifications of the Commissioners are set forth in state enabling legislation. The Commission is authorized to employ experts and a staff, as necessary, to pursue its responsibilities. Basic funds needed to support Commission operations are provided by the member counties, with the budget apportioned among the seven counties on the basis of relative equalized assessed property valuation. The Commission is authorized to request and accept aid in any form from all levels and agencies of government to accomplish its objectives and is authorized to deal directly with the state and federal governments for this purpose.

The organizational structure of the Commission and its relationship to the constituent units and agencies of government comprising or operating within the Region are shown in Figure 1.

Figure 1

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION ORGANIZATIONAL STRUCTURE: 1977



Source: SEWRPC.

## THE REGIONAL PLANNING CONCEPT IN SOUTHEASTERN WISCONSIN

Regional planning, as conceived by the Commission, is not a substitute for but a supplement to local, state, and federal planning efforts. Its objective is to assist the various levels, units, and agencies of government in finding solutions to areawide developmental and environmental problems which cannot be properly resolved within the framework of a single municipality or county. As such, regional planning has three principal functions:

1. Inventory—the collection, analysis, and dissemination of basic planning and engineering data on a uniform, areawide basis so that, with such data, governments and private investors operating within the Region can better make decisions on community development matters.
2. Plan Design—the preparation of a framework of long-range plans for the physical development of the Region, these plans being limited to functional elements having areawide significance. To this end, the Commission is charged by law with the function and duty of “making and adopting a master plan for the physical development of the Region.” The scope and content of this plan, as outlined in the enabling legislation, extend to all phases of regional development, implicitly emphasizing the preparation of alternative spatial designs for land use and for supporting transportation and utility facilities.
3. Plan Implementation—promotion of plan implementation through the provision of a center for coordinating the planning and plan implementation activities of governments operating in the Region and through the introduction into public and private decision-making processes of information relevant to areawide problems, recommended solutions to these problems, and alternatives thereto.

The work of the Commission is visualized as a continuing planning process, providing outputs of value to the making of development decisions by public and private agencies and to the preparation of plans and plan implementation programs at local, state, and federal levels. It emphasizes close cooperation between the governmental agencies and private enterprise responsible for the development and maintenance of land uses in the Region and for the design, construction, operation, and maintenance of the supporting public works facilities. All Commission work programs are part of a continuing planning program which provides for periodic reevaluation of the plans produced and for the extension of planning information and advice necessary to convert the plans into action programs at local, regional, state, and federal levels.

### THE REGION

The Southeastern Wisconsin Planning Region, as shown on Map 1, is comprised of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties.

Exclusive of Lake Michigan, these seven counties have a total area of 2,689 square miles, or about 5 percent of the total area of the State of Wisconsin. About 40 percent of the state population (1975) lives in these seven counties, which contain three of the eight and one-half standard metropolitan statistical areas (SMSA) in Wisconsin. The Region contains about 40 percent of the tangible wealth in Wisconsin as measured by equalized assessed property valuation and represents the greatest wealth-producing area of the state, with about 42 percent of the state labor force being employed within the Region. The Region contains 154 local units of government, exclusive of school and other special purpose districts, and encompasses all or parts of 11 major watersheds. It has been subject to rapid population growth and urbanization, and from 1960 to 1975 accounted for approximately 40 percent of the population increase in the state.

Geographically, the Region is located in a relatively good position with regard to continued growth and development. It is bounded on the east by Lake Michigan, which provides an ample supply of fresh water for both domestic and industrial use and also serves as an integral part of a major international transportation network. It is bounded on the south by the rapidly expanding north-eastern Illinois metropolitan region and on the west and north by the fertile agricultural lands and desirable recreational areas of the rest of Wisconsin. Many of the most important industrial areas and heaviest population concentrations in the midwest lie within a 250 mile radius of the Region, and over 31 million people reside within this radius.

### COMMISSION WORK PROGRAMS

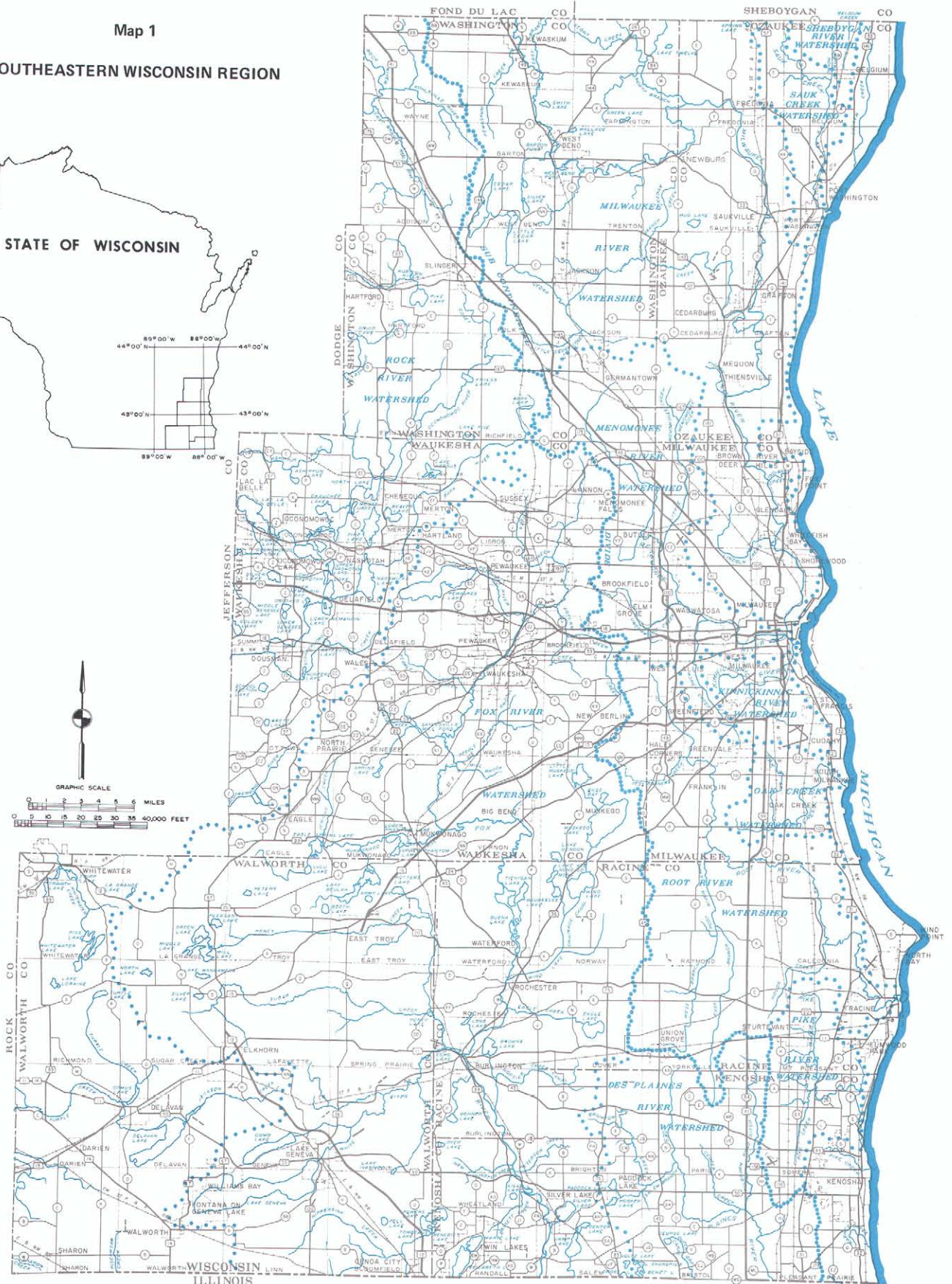
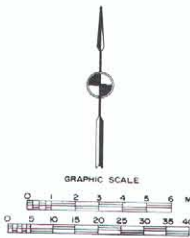
#### Initial Work Programs

The Commission's initial work program was directed entirely toward basic data collection. It included six basic regional planning studies, begun in July 1961 and completed in July 1963: a statistical program and data processing study, a base mapping program, an economic base and structure study, a population study, a natural resources inventory, and a public utilities study. These studies were directed toward providing basic planning and engineering data for regional planning and were documented in six published planning reports. None of these studies involved plan preparation, but the findings provided a valuable point of departure for all subsequent Commission work, including the regional park and open space planning program.

As part of its initial work program, the Commission also adopted a policy of community planning assistance. Under this policy functional guidance and advice on planning problems are provided to local units of government, and regional planning studies are interpreted locally so that the findings and recommendations of these studies may be incorporated into local development plans. Six local planning guides have been prepared under this program to provide information helpful in the preparation of local plans and plan implementation ordinances. The subjects of these guides are subdivision control, official mapping, zoning, organization of local planning



## SOUTHEASTERN WISCONSIN REGION



Source: SEWRPC.

agencies, floodland and shoreland development, and use of soils data. All include model ordinances and provide a framework for plan implementation through local land use control measures.

#### Land Use-Transportation Study

The first work program of the Commission directed toward the preparation of long-range development plans was a regional land use-transportation study, initiated in January 1963 and completed in December 1966. This study produced two key elements of a comprehensive plan for the physical development of the Region: a land use plan and a surface transportation plan, including highway and transit elements. The findings and recommendations of the study, which provided important inputs to the regional park and open space planning program, have been published in the three volume SEWRPC Planning Report No. 7, The Land Use Transportation Study; and in five supporting technical reports.

#### Continuing Regional Land Use-Transportation Study

Before completing the initial land use-transportation planning effort, the Commission, along with its constituent local units of government, and the affected state and federal agencies of government, acted to establish a continuing regional land use-transportation planning effort in southeastern Wisconsin. This effort provides for maintaining current the basic data forecasts on which the adopted land use and transportation plans are based and for conducting periodic reappraisals and revisions of the adopted regional land use and transportation plans based upon analyses of the results of the data maintenance activities. The surveillance activities include collection of current, definitive data on changing public attitudes and values relating to both housing and transportation data on the amount and location of changes in population and economic activity, and data on land use development, automobile and truck availability, trip generation and distribution, mode of transportation utilized, local land use and transportation plan development, and plan implementation actions.

The surveillance activities conducted under the continuing land use-transportation study revealed significant changes in both regional land use and transportation system development and in public values and attitudes toward land use and transportation development in the Region since adoption of the regional land use and transportation plans in 1966. These changing conditions indicated a need to reevaluate the adopted regional land use and transportation plans and the means of plan implementation. Accordingly, the Commission began in 1972 to undertake the basic inventories for a major plan reevaluation. These inventories were completed in 1974. This reevaluation will culminate during 1977 in the adoption of revised regional land use and transportation plans which reflect development that has occurred since adoption of the original plans in 1966; the information and recommendations provided by other regional planning programs since 1966; new employment, population, land use, and travel demand forecasts, and changing public values and attitudes concerning land use and transportation system development.

The continuing regional land use-transportation study, including the plan reevaluation effort described above, is an integral part of the overall regional planning program. Much data and plans produced by this important study are useful, if not absolutely essential, to the preparation of a sound park and open space plan.

#### Comprehensive Watershed Studies

The regional planning program recognizes the importance of existing water resource problems, including flooding and water pollution. The natural watershed was selected by the Commission as the basic water and water-related resources planning unit, and comprehensive watershed plans have been completed for the Root, Fox, Milwaukee, and Menomonee River watersheds within the Region. In addition, the Commission has initiated a comprehensive planning program for the Kinnickinnic River watershed.

The basic purpose of watershed planning programs, as developed within the overall regional planning program, is to permit public evaluation and choice of alternative water resource development policies and plans and, through preparation of a long-range plan for the development of water-related community facilities, to provide for the coordination of local, state, and federal water resource management programs within the Region and its watersheds. The more specific objectives of the watershed planning programs are the abatement of flood damage; protection of floodways and floodplains from incompatible development; abatement of water pollution and protection of water supply; preservation of land for park and related open space; preservation of woodlands, wetlands, wildlife habitat, and prime agricultural lands; and promotion of the wise use of the Region's limited land and water resources. In addition, the watershed plans serve to refine and adjust the regional land use plan, particularly in the riverine areas, and help achieve a more complete integration of land and water resource planning.

#### Other Regional and Subregional Planning Programs

Additional regional planning programs have been undertaken by the Commission, including an airport system planning program, a sanitary sewerage system planning program, a library system planning program, a housing planning program, an air quality maintenance planning program, and an areawide water quality management planning program. The Commission also has completed detailed urban development plans for certain subareas of the Region, including the Kenosha and Racine Urban Planning Districts. All of the information and plans produced by these programs have implications for park and open space planning.

#### **REGIONAL PARK AND OPEN SPACE PLANNING PROGRAM**

The U. S. Department of Housing and Urban Development (HUD) in 1972 advised the Commission that continued federal certification of the regional planning program required preparation of a regional park and open space plan as soon as possible. Certification is essential to maintain eligibility of all the constituent state, county, and local units and agencies of government operating within the Region for various federal capital grant-in-aid and operating subsidy programs. Accordingly,

the Commission on October 9, 1972, pursuant to Section 66.945(7) of the statutes, created a Technical and Citizen Advisory Committee on Regional Park and Open Space Planning to assist the Commission and its staff in the design and conduct of the required park and open space planning program. The Committee membership included citizen leaders drawn from a broad cross section of the community, among them representatives of natural resource conservation and environmental preservation groups, representatives of recreation and recreation-related business and industries, and representatives from low income and minority groups including those from core areas of the larger central cities of the Region. Members also included knowledgeable and experienced technicians in the field of recreation and resource conservation such as planners, park managers, landscape architects, and naturalists. The Committee membership is set forth in Appendix A of this report.

The Commission initially charged the Committee with the preparation of a prospectus for the required planning program. The prospectus was to document the need for the program, outline the desirable scope and content of the program, and recommend a time schedule, budget, and cost allocation for the program which could be used as a basis for obtaining the funding necessary to mount the study. The prospectus was completed by the Committee in January 1973. It was approved by the Commission on March 1, 1973, published and, in accord with the advisory role of the Commission, transmitted to the governmental agencies concerned for their consideration and action. The seven county boards concerned, the Wisconsin Department of Natural Resources, and the U. S. Department of Housing and Urban Development all acted to endorse the prospectus and provide the local, state, and federal funds necessary for executing the program. The U. S. Department of Housing and Urban Development provided two-thirds of the needed funds; the Wisconsin Department of Natural Resources provided one-sixth of the needed funds, and the seven counties provided the remaining one-sixth of the needed funds totaling \$180,000. Based on equalized assessed property valuation, the proportionate shares of total funding provided by each county were: Kenosha County, 1.0 percent; Milwaukee County, 9.5 percent; Ozaukee County, 0.7 percent; Racine County, 1.5 percent; Walworth County, 0.8 percent; Washington County, 0.7 percent; and Waukesha County, 2.5 percent.

The prospectus, as prepared by the Advisory Committee, was not a finished study design. It was a preliminary design intended to obtain support and financing necessary for the study, objectives which it successfully achieved. Major work elements, staff organization, a time schedule, and cost estimates were, however, outlined in a preliminary manner in the prospectus. Work on the regional park and open space study, as outlined in the prospectus, began in July 1973.

#### Need for the Study

In preparing the prospectus the Advisory Committee found seven major considerations that dictated the need for an areawide park and open space planning program within the Southeastern Wisconsin Region:

1. The areawide nature of the demand for and use of outdoor recreation facilities.
2. The increasing demand for outdoor recreation generated in part by an increasing population and in part by increasing mobility, leisure time, and affluence.
3. The changing character of outdoor recreation activities.
4. The massive conversion of land from rural to urban use taking place within the Region and the concomitant loss of sites having potential for public and private recreational development and use, together with the conversion of existing areas devoted to private outdoor recreational use to other urban uses.
5. The changes taking place in the planning, design, acquisition, development, and management of park and open space facilities.
6. The limited local funding available for park and open space acquisition and development.
7. The absence of adequately coordinated planning for public and private park and open space facility acquisition and development on an areawide basis which will meet the planning prerequisites of state and federal grant-in-aid programs for public park and related open space facility acquisition and development.

These considerations, which together dictated the need for undertaking a regional park and open space planning program in southeastern Wisconsin, are complex and interrelated. In recognition of some or all of these considerations, public officials and citizen leaders involved regularly in park and recreation matters acknowledge the need for a comprehensive areawide approach to identifying and fulfilling recreational needs in southeastern Wisconsin. The Commission, as the official planning and research agency for the Region, was the logical agency to undertake the required regional park and open space planning program.

#### Study Objectives

As indicated, the primary purpose of the regional park and open space planning program is the development of a plan to guide staged acquisition and development of lands for park and open space purposes, thereby producing another key element in a comprehensive plan for development of the Region. To be effective this park and open space plan must be amenable to cooperative adoption and joint implementation by all levels and agencies of government concerned and must be capable of functioning as a practical guide for the making of both public and private development decisions related to recreational facilities on a day-to-day basis.

More specifically, the regional park and open space plan should identify the need for and recommend the general location, size, and character of those park and open space



facilities having areawide significance; provide data which can contribute to sound county and local park and open space planning and development; fulfill the requirements necessary to qualify units and agencies of government within the Region for state and federal grant-in-aid programs for public park and open space facility acquisition and development; and provide a basis and framework for Commission review of federal grant applications for park and open space facility acquisition and development.

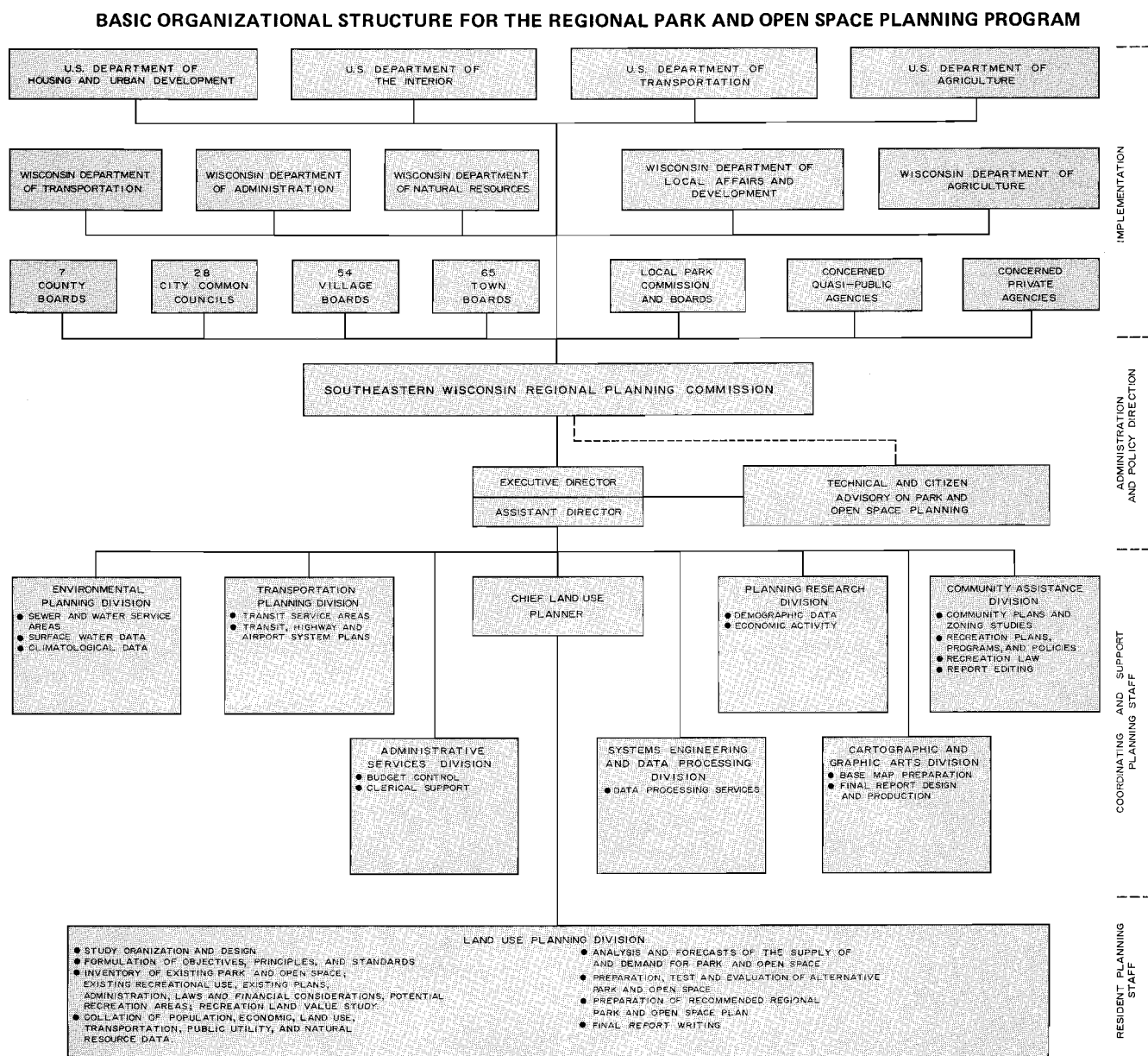
#### Staff and Committee Structures

The basic organizational structure for the study is outlined in Figure 2 and consists of the Commission staff

reporting to the Executive Director of the Commission. The Executive Director, in turn, serves as the project sponsor and reports to the Southeastern Wisconsin Regional Planning Commission which has ultimate legal authority and responsibility for the entire study. The responsibilities of the cooperating federal and state agencies and the Commission staff for various work elements of the study also are briefly outlined in Figure 2.

A regional park and open space planning program covers a broad spectrum of related governmental and private development programs; and no agency, whatever its function or authority, can "go it alone" in the conduct of

Figure 2



Source: SEWRPC.

such a study. The basic Commission organization provides for attainment of the necessary interagency coordination and citizen participation through the establishment of advisory committees, as well as through interagency staff assignments. For the regional park and open space study, a single advisory committee was created to perform both technical and lay citizen advisory functions.

The technical advisory function is intended to provide technical policy direction to the study and to place the experience, knowledge, and resources of knowledgeable technicians in the employ of private enterprise as well as of local, state, and federal agencies of government at the disposal of the study. Under this technical function committee members assist and advise the Commission staff on technical methods, techniques, and procedures; serve as a clearinghouse for the assembly and evaluation of planning and engineering data; recommend technical standards; and exchange ideas for the solutions to technical problems.

The lay citizen advisory function is intended to ensure that the park and open space study and recommendations growing out of that study are responsive to the needs and values of citizens affected. The purpose of this type of function is to provide nontechnical policy direction to the study through the active involvement of concerned citizen groups in the planning program. Under the lay citizen advisory function, committee members assist and advise the Commission in determining and coordinating basic nontechnical public objectives and policies involved in the conduct of regional planning studies and in the formulation, adoption, and implementation of regional plans. Committee members further familiarize political leadership with the Commission's research and planning efforts and generate agreement on basic objectives, service levels, standards, and plan implementation procedures among political units of the Region.

This planning effort and this report, then, are the results of the efforts of the Commission and the Technical and Citizen Advisory Committee on Regional Park and Open

Space Planning. The major work elements of the regional park and open space study included the preparation of detailed study design; collection of basic data; formulation of regional park and open space objectives, principles, and standards; analysis of the supply of and demand for recreational facilities; determination of recreational facility requirements; alternative plan design, test, and evaluation; selection of a recommended plan and means of implementation; and documentation.

#### Scheme of Presentation

The major findings and recommendations of the regional park and open space study are documented in this report. The report sets forth the basic principles and concepts underlying the study, documents the salient findings of the program inventories, sets forth the results of pertinent forecasts and analyses based on the inventories, explores alternative park and open space plans, and sets forth a recommended plan based upon regional park objectives and supporting standards adopted by the Technical and Citizen Advisory Committee. In addition, the report contains specific recommendations for plan implementation.

This report is intended to allow careful, critical review of the alternative regional park and open space plans by public officials, agency staff personnel, and citizen leaders within the Region and to provide the basis for plan implementation by the federal, state, and local agencies of government concerned. The report can only summarize briefly the information assembled in the extensive data collection, analysis, and forecasting phases of the regional park planning program. Due to its magnitude and complexity, the reproduction of all of this information in report form is impractical. All the basic data are on file in the Commission offices, available to member units and agencies of government and to the public in general upon specific request. This report, therefore, serves the additional purpose of indicating the type of data available from the Commission which may be of value in assisting federal, state, and local units of government and private investors in making better decisions concerning acquisition and development of recreational facilities in southeastern Wisconsin.

## Chapter II

### BASIC PRINCIPLES AND CONCEPTS

#### INTRODUCTION

Park and open space planning studies are not new to the Southeastern Wisconsin Region. However, previous park and open space planning efforts generally have been confined to relatively small subareas of the Region such as individual communities and counties. These planning efforts generally have been confined to a consideration of only the public sector, and generally have relied on the use of nationally promulgated standards to identify needs in the public sector. The regional park and open space planning program represents an attempt to apply comprehensive planning principles and practices to recreational and open space problems on an areawide basis. A brief exposition of the basic principles underlying the planning approach used in the regional park and open space study is, therefore, in order. This exposition should improve understanding not only of the approach taken in the regional park and open space planning program but also of the specific recreational resource and open space problems identified in the program and the solutions thereto recommended.

#### THE REGION AS A PLANNING UNIT FOR PARKS AND OPEN SPACE

Park and open space planning in a multicomunity, urbanizing Region must be conducted on an areawide basis to be fully effective. Park and open space planning cannot be effectively conducted on the basis of individual civil divisions but requires an areawide intergovernmental approach.

The demand for and use of park and outdoor recreational facilities within an urbanizing Region are generated by certain basic social and economic forces which operate over the entire Region without regard to corporate limits lines. Moreover, the supply of good recreational areas is intimately related to certain important elements of the natural resource base such as surface water, woodlands, wetlands, wildlife habitat, and rough topography. Placed by natural forces, these elements are regional in nature and not confined by jurisdictional boundaries. Residents of southeastern Wisconsin will travel relatively long distances within the Region to satisfy recreational needs. A shortage of recreational facilities in any given locality, due either to overly intensive urban development or to a less well endowed natural resource base, will cause users to seek to satisfy their recreational needs farther from home. Consequently, some areas will have a relative deficit of certain recreational resources while others will have a relative surplus of such resources; and the movement of people seeking recreational opportunities from one to the other will have impacts that dictate a coopera-

tive areawide approach to the park and open space planning problem. Thus, while city dwellers may seek the streams, lakes, woodlands, wetlands, and rough topography of the more distant parts of a Region for recreational purposes, the exurbanites may seek the zoological and botanical gardens, stadia, and more formal parks and parkways of the more highly urbanized centers of the Region. This interdependence of both supply and demand, relating both to outdoor recreation and natural resource protection, argues for an areawide approach to park and open space planning.

More specifically, five phenomena operate together to dictate the need for an areawide approach to park and open space planning within the Region: 1) the increasing diffusion of urban development and concurrent loss of good recreational and open space sites within the Region; 2) the improved quality of surface transportation within the Region; 3) the changing character of outdoor recreational activities; 4) increasing leisure time; and 5) increasing income levels. The first three phenomena operate directly to make the use of and need for park and open space lands more areawide in nature. The first does so by simultaneously bringing urban residential areas closer to once remote natural resource amenities located in outlying areas of the Region while at the same time, through the urbanization, destroying many good outdoor recreation and open space sites. The second does so by making even the most remote areas of the Region readily accessible to the highly developed urban centers of the Region within a relatively short travel time. The third does so by generating a need for more extensive outdoor recreation and open space areas than were needed for the recreational activities of even the recent past. Increasing leisure time and rising income levels, on the other hand, contribute indirectly to the increasing areawide nature of the use of outdoor recreational facilities in the Region by providing the time and money required to pursue certain types of outdoor recreation activities and to do so at considerable distances from home. It should be noted, however, that other important and in some respects counteracting factors such as the rising cost of motor fuel and rapid price inflation may adversely affect the use of the regional park and open space facilities. While the effects of these factors have not yet been measured, it appears likely that they will tend to intensify recreational use in the Region by residents of southeastern Wisconsin and northeastern Illinois. These factors may be expected, therefore, only to reinforce the need for a comprehensive areawide approach to park and open space planning. Clearly, such planning cannot be accomplished successfully within the confines of a single municipality or even a single county if that municipality or county is part of a larger urban complex.

Although the Region constitutes a sound, basic geographic unit for park and open space planning, the park and open space planning effort also must recognize existence within the Region of subareas relevant to the analysis of park and open space problems, the identification of park demands and open space needs, and the institution of action programs to meet these demands and needs. Three geographic areas were, therefore, considered in the regional park and open space planning program. The first of these planning analysis areas was the seven-county Southeastern Wisconsin Planning Region. As a true socioeconomic unit, the Region constitutes a sound basis for identifying existing and probable future park and open space requirements and the factors determining such requirements. The second of these planning analysis areas was the county. As important subregional units of government owning and operating most of the existing parks of regional significance, the counties constitute practical subareas for planning and analysis. The third of these planning analysis areas was termed local planning analysis areas.<sup>1</sup> These areas consisted of groups of minor civil divisions—cities, villages, and towns—within each of the seven counties. These planning analysis areas were delineated not only for park and open space planning purposes, but also to provide a good geographic basis within which demographic, economic, land use, transportation, water resource, and housing data could be collected, presented, analyzed, and utilized in the preparation and implementation of various kinds of regional and subregional plan elements.

The primary, secondary, and local planning analysis areas as delineated in the park and open space study are shown on Map 2. Park and open space acquisition and development in these three types of areal units must be fully coordinated if economies are to be effected in the provision of parks and open space, if land use development is to be guided and shaped in the public interest, if the underlying and sustaining natural resource base is to be

---

<sup>1</sup>The factors considered in determining the boundaries of these planning analysis areas included, in addition to the corporate limits of the minor civil divisions, such factors as the boundaries of census tracts, existing and potential central sanitary sewer and public water supply service areas, existing and potential mass transit service areas and availability of certain other urban facilities and services, residential neighborhood boundaries, travel patterns centered on major commercial and industrial land use concentration, school district boundaries, natural and man-made barriers such as environmental corridors and major transportation corridors, existing and probable future land use development, soils, and the assumed existence of a community of interest that can be marshaled in the establishment of subregional planning programs. In cases where single minor civil divisions were considered too large to constitute a meaningful local analysis area, subcommunity areas were delineated within the civil division as the local planning analysis areas.

protected and the quality of the environment enhanced, and if outdoor recreation needs within the Region are to be adequately met with a full range of outdoor recreation facilities.

## BASIC CONCEPTS AND DEFINITIONS

As a growing urban population presses on a limited natural resource base for its needs, including recreation, the task of maintaining the overall quality of the environment becomes increasingly difficult. As already noted, this difficulty is not related solely to the size of the population but also to the multiplying demands of this population, including demands for recreation.

Broadly defined, recreation is an activity or experience undertaken solely for the pleasure or satisfaction derived from it. Recreation can be experienced indoors or outdoors. It encompasses a broad range of human activities, ranging from rest and reflection to learning and teaching, from development of personal and social skills to meeting challenges and recovering from failures. Recreation is fun and enjoyment and includes both mental and physical exercise, personal and interpersonal experience, and self-provided and socially-observed entertainment; and although recreational preferences may vary from individual to individual, recreation occupies a necessary and significant place in every person's life.

For purposes of this study, recreation will be viewed in a narrower framework as including only those types of user oriented recreational activities typically carried on outdoors. An important purpose of this study is to prepare recommendations concerning areas and facilities so that adequate opportunities for outdoor leisure time activities will be available to residents of the Region, while assuring the wise and effective use of the available physical resources. In the past, public outdoor recreation facilities have generally been located in urban areas and designed to be intensively utilized both for the more active outdoor recreation activities—such as baseball, swimming, tennis and golf—and for the more passive outdoor recreation activities—such as walking, picnicking, or just contemplating.

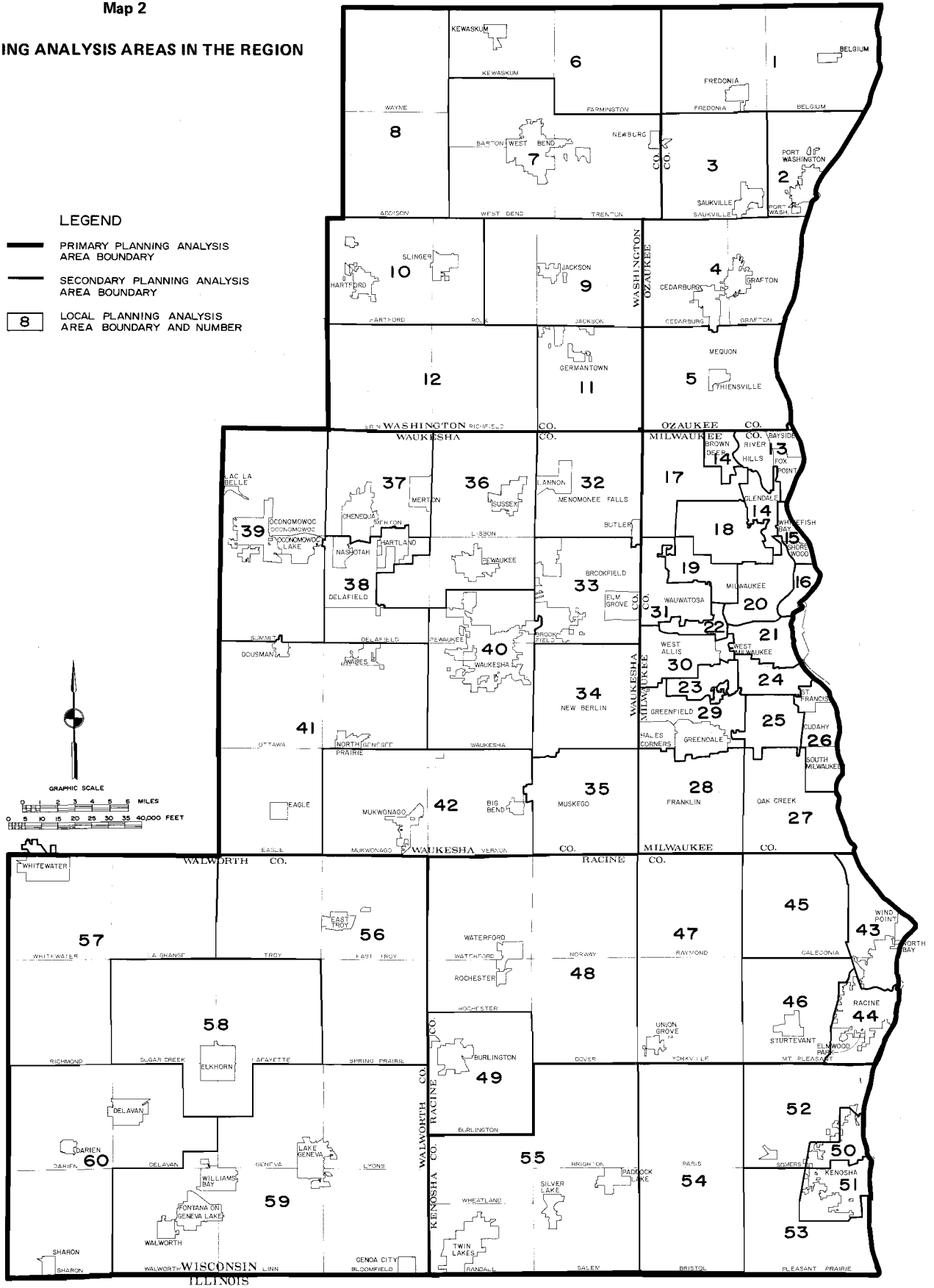
Currently, such factors as increased leisure time and increased urban development have resulted in increased demand and need for the traditional intensive use outdoor recreation areas. Additionally, these same factors have generated a need for a new type of outdoor recreation area, one which relies heavily on the extensive use and enjoyment of the underlying and sustaining natural resource base. These areas provide a setting for such relatively new outdoor recreation activities as snowmobiling and cross country skiing as well as for more passive outdoor recreation activities such as nature study and camping. These outdoor recreation activities, while relying on the use of certain elements of the natural resource base, do not require significant alteration of that base to provide a proper recreational setting, and, because some of these activities are trail oriented, may require use of linear type natural resource-oriented corridors. It may



Map 2

PLANNING ANALYSIS AREAS IN THE REGION

- LEGEND**
- PRIMARY PLANNING ANALYSIS AREA BOUNDARY
  - SECONDARY PLANNING ANALYSIS AREA BOUNDARY
  - 8 LOCAL PLANNING ANALYSIS AREA BOUNDARY AND NUMBER



While the Region is a sound, basic geographic unit for park and open space planning, the regional park and open space planning effort must also recognize the existence of subregional areas for the identification of needs and the mounting of action programs to meet these needs. Primary, secondary, and local planning analysis areas were defined under the park study. The single primary analysis area consists of the entire Region; the seven secondary analysis areas are the seven counties of southeastern Wisconsin; and the 60 local analysis areas consist of groups of minor civil divisions, individual civil divisions, or, in cases where single minor civil divisions were considered too large to constitute a meaningful local analysis area, subcommunity areas within a minor civil division.

Source: SEWRPC.

be anticipated, then, that the demand for outdoor recreational areas which can be utilized on an extensive basis for both active and passive outdoor recreation activities will increase, thereby underscoring the need for protection and enhancement of the natural resource base.

A comprehensive approach to park and open space planning requires careful consideration of a number of other concerns in addition to outdoor recreation per se, including urban beautification, noise, air, and water pollution abatement, natural resource conservation, and the general enhancement of the overall quality of the environment. Within this full range of concerns, the importance of preservation of open space becomes evident. Open space may be defined in the broadest of terms as land and water not used for buildings or structures; that is, not built upon or developed and therefore both physically and psychologically "open" in relation to other adjacent land uses. Open space may, under this broad definition, take many forms within an urbanizing Region, including agricultural land; natural areas such as woodlands, wetlands, and floodland and shoreland conservancy areas; outdoor recreation sites of various types; and other open lands including typically urban spaces such as ornamental squares and plazas and certain institutional lands such as cemeteries and school and church grounds.

For the purposes of this study, open space will be more narrowly defined as open land and water areas that possess certain features that warrant consideration for permanent preservation in an essentially open, undeveloped state for resource conservation and recreational purposes. Under this definition, open space consists of the major woodlands, wetlands and wildlife habitat areas, the lakes and streams, and the associated shorelands and floodlands of the Region. It also includes major areas covered by organic soils, major groundwater recharge and discharge areas, areas of scenic topography, and areas having scientific or cultural value. These features occur together within the Region in essentially elongated lineal patterns which have been termed environmental corridors by the Commission. Also included as open space are agricultural lands, especially prime agricultural lands which, because of their unique ability to economically produce higher than average crop yields, should continue to be preserved in an open state for agriculture. Open space as defined herein can serve three basic functions: 1) it can meet positive human needs, both physical and psychological, by providing certain recreational opportunities and aesthetic amenities; 2) it can protect and enhance the natural resource base, and 3) it can serve to enhance economic and land use development, lending form and structure to urban growth patterns.

Included within this narrower definition of open space are outdoor recreation sites, further classifiable as general use or special use sites. General use outdoor recreation sites may be defined as areas of land and water whose primary function is to provide space and facilities for use, either intensively or extensively, for active and passive outdoor recreational activities. Such general use outdoor recreation sites, when publicly owned, are commonly

known as parks. Thus, parks are a special form of publicly owned open space in which a major portion of needed outdoor recreational facilities is provided. For purposes of this study, general use outdoor recreation sites will be further grouped into the four major classifications shown in Table 1.

Special use outdoor recreational sites differ significantly from general use outdoor recreation sites insofar as the special use sites are either primarily spectator—rather than user—oriented or offer very unique recreational pursuits. These special facilities and sites for the pursuit of special recreational activities generally do not occur in the aforementioned general use outdoor recreation sites and, for purposes of this study, have been divided into two major types, namely spectator-oriented and participant-oriented sites.

Spectator-oriented sites include stadia, zoos, botanical gardens, race tracks, and fairgrounds while participant-oriented sites are devoted to special or unique recreational pursuits, such as miniature golf, gocarting, and skeet and trapshooting.

Figure 3 shows the relationships among the components of open space as previously described as well as the manner in which each component will be considered in the regional park and open space planning program. As indicated in the figure, the regional park and open space planning program will focus on three elements of the total recreational system of the Region—primary environmental corridor lands, prime agricultural land, and general use recreation sites—treating the other elements of the system more generally.

**Primary environmental corridors** contain most of the best remaining elements of the natural resource bases of the Region, perform a vital open space function, and are important to environmental health and well-being within the Region. The park and open space plan, therefore, will include specific recommendations for public acquisition of certain primary environmental corridor lands in order to protect the inherent resource values found in these corridors and to make possible the development of such areas for outdoor recreation or other compatible uses. Recommendations also will call for preservation of nonpublic primary environmental corridor lands through various land use regulatory policies.

**Prime agricultural lands** also warrant protection because of both agricultural production capabilities and open space and related recreational functions. The regional park and open space plan, therefore, will include recommendations for the protection of the prime agricultural areas of the Region through various land use regulatory policies.

**Publicly owned general use recreation sites or parks**, in addition to providing open space, assure opportunities for physical exercise and psychological release while at the same time helping to abate

Table 1

## GENERAL USE OUTDOOR RECREATION SITES

Outdoor Recreation Site Classification	Size	Typical Service Area	Typical Site Characteristics	Typical Governmental Jurisdiction <sup>a</sup>	Typical Examples
Type I	250 acres or more	Multicounty	Site location and recreational value dictated by availability of natural resource amenities; site provides space and facilities for such recreational activities as hiking, camping, picnicking, swimming, and golf.	State/County	Publicly Owned Sites - Harrington Beach State Park, Town of Belgium, Ozaukee County Nagawaukee County Park, City and Town of Delafield, Waukesha County Nonpublicly Owned Sites - Trees and Trails Campground, Town of Troy, Walworth County Bristol Oaks Country Club, Town of Bristol, Kenosha County
Type II	100-249 acres	County or Multicommunity	Site location and recreational value significantly influenced by availability of natural resource amenities; site provides space and facilities for such recreational activities as golf, picnicking, and camping.	County	Publicly Owned Sites - Muskego Park - City of Muskego, Waukesha County Jackson Park, City of Milwaukee, Milwaukee County Nonpublicly Owned Sites - Lake Park Homes Recreation Area, Village of Germantown, Washington County Eagle Springs Golf Resort, Town of Eagle, Waukesha County
Type III	25-99 acres	Multineighborhood	Site location relies primarily on the developmental characteristics of the area to be served; site provides space and facilities for such recreational activities as tennis, swimming, and softball while also providing some "green" areas for more passive recreational pursuits.	County/Municipal	Publicly Owned Sites - Regner Park, City of West Bend, Washington County Wick Field, City of Milwaukee, Milwaukee County Nonpublicly Owned Sites - Hawthorne Hollow Campground, Town of Norway, Racine County Lake Lenwood Recreation Area, Town of Barton, Washington County
Type IV <sup>b</sup>	Less than 25 acres	Neighborhood and Sub-neighborhood	Site location relies primarily on local recreational needs; site provides space and facilities primarily for active intensive recreational pursuits such as baseball, tennis, and basketball.	County/Municipal/School District	Publicly Owned Sites - Mequon City Park, City of Mequon, Ozaukee County Willowbrook Park, City of Hartford, Washington County Nonpublicly Owned Sites - Carl Schurz Park, Town of Merton, Waukesha County Rock Lake Beach, Town of Salem, Kenosha County

<sup>a</sup> Jurisdiction relates only to public recreation sites.

<sup>b</sup> Included among Type IV outdoor recreation sites are small—usually less than five acres—mini parks, tot lots, and school playgrounds which provide outdoor recreational facilities to areas smaller than an urban neighborhood. Ornamental squares and plazas which typically do not provide facilities for active outdoor recreational pursuits are classified as "urban open land" (see Figure 3).

Source: SEWRPC.

noise, air, and water pollution. These large open space areas also provide relief for population densities that may otherwise be oppressive. The park and open space plan, therefore, will include recommendations for public acquisition and development of lands for park purposes with: 1) specific site location identified for Type I park sites; 2) general site locations identified for Type II park sites and for Type III park sites; and 3) general acreage requirements within residential neighborhood units for Type IV park sites.

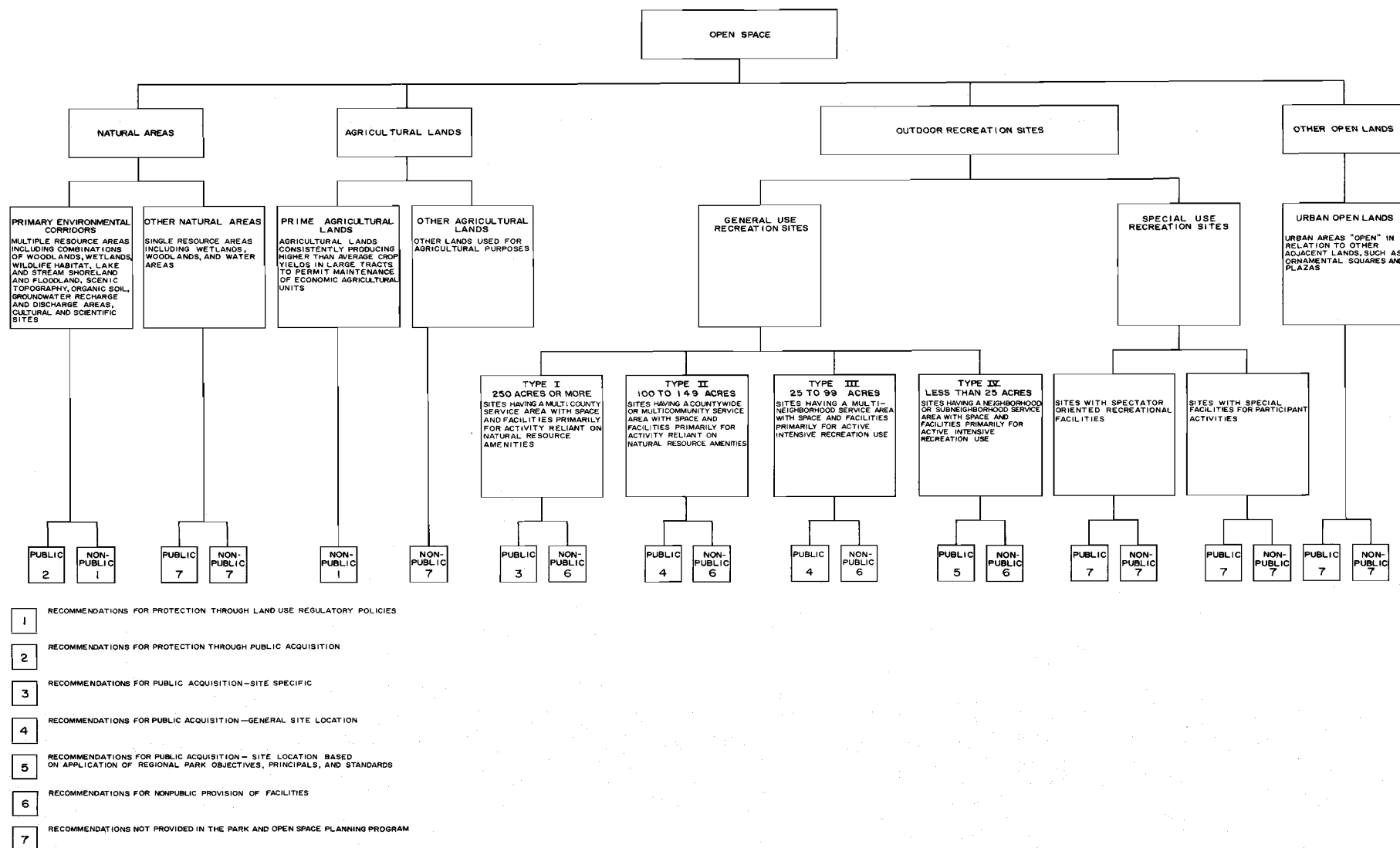
Nonpublic general use outdoor recreation sites presently meet a significant part of the outdoor recreational needs of residents of the Region and have important implications for future park and open

space acquisition and development needs. Drawing on trend analyses, the regional park and open space plan will provide estimates of the total recreational facilities which can be expected to be provided by the private sector. Data also will be provided to assist the private sector in determining suitable alternative locations for such facilities and to assist public agencies in considering proposals to convert sites with such facilities to other more intensive urban uses.

Specific recommendations concerning single natural resource areas not included as part of primary environmental corridor, agricultural lands not classified as prime agricultural lands, special use recreation sites, and other open lands will not be provided as part of the regional park and open space planning program.

Figure 3

## CLASSIFICATION OF OPEN SPACE IN THE REGIONAL PARK AND OPEN SPACE PLANNING PROGRAM



Source: SEWRPC.

## THE REGIONAL PARK AND OPEN SPACE PLANNING PROBLEM

Park and open space acquisition, development, and use have long been matters of concern to public officials and citizen leaders within the Region. In addition to providing land and facilities for outdoor recreation, parks and related open space provide a place for certain other kinds of social and cultural activities and satisfy a human psychological need for natural surroundings. Park and open space lands can protect and enhance the natural resource base of an area—the air, groundwater, surface water and associated shorelands and floodlands, soils, woodlands, and wildlife habitat areas. By protecting these elements of the natural resource base, flood damage can be reduced, soil erosion abated, water supplies protected, air cleansed, wildlife populations enhanced, and certain economic activities like logging and food production directly assisted. The size, character, and shape of park and open space lands also have a profound effect on both the economic and land use development of an area. In addition to promoting tourism and enhancing land values, park and open space lands can lend form and structure to urban development by serving as a buffer between different land uses and providing a sharp and permanent definition to the boundaries of neighborhoods and communities. Such lands can also be used to promote a sense of community and bring people together through the provision of neighborhood parks or of common open spaces in cluster subdivisions.

The park and open space planning problem can be defined as one of determining the size and location of park and open space lands required to meet the existing and probable future demand for outdoor recreation of the resident population of the Region and to protect the underlying and sustaining natural resource base. The manner in which this problem is considered and ultimately resolved involves many important public and private policy determinations. These decisions must be made in view of a constantly changing urbanizing region and, therefore, should be founded in a comprehensive planning process able to objectively measure the changing demand for park facilities and the need for open space against the available quantity of park and open space lands, and to recommend the best means for meeting these demands and needs. Only within such a planning process can the effects of different courses of action on adequate park and open space lands within the Region be properly evaluated, the best course of action intelligently selected, and the public funds available for parks and open space most effectively invested.

Accordingly, the basic purpose of the park and open space planning process should be twofold:

1. To permit broad public evaluation and choice of alternative park acquisition and development and open space protection plans, policies, and programs leading to the provision of outdoor recreation opportunities for residents of the Region and to the protection of the natural resource base.

2. To provide, through the medium of a long-range plan for park development and open space protection, full coordination of parks and open space with other functional forms of regional development such as transportation, public services, and community facility development and full coordination of local, state, and federal park and open space policies and programs within the Region, at the same time considering the role of the private sector of the economy in providing outdoor recreation facilities and protection of open space.

More specifically, the park and open space planning process should:

1. Provide a framework of agreed-upon park acquisition and development and open space protection objectives and supporting standards relevant to the needs and values of the citizens of the Region. These objectives and standards should be useful in scaling existing and probable future regional and local park demands against existing and probable future regional and local park supply and in similarly scaling open space need against existing and probable future protected lands in terms of location, quantity, quality, and cost.
2. Provide for the collection, analysis, and dissemination of uniform areawide information about the supply of and demand for parks and the supply of and need for open space within the Region. This information should include the basic economic, demographic, and land use data which ultimately determine the existing demand for recreational facilities and need for open space lands in the Region as well as data on the probable future recreational facility demands, especially for parks and open space in areas where urban development is converting prime natural resource areas to noncompatible urban land uses; data on the location and quality of lands which have the natural resource base suitable for park and open space purposes; and data on existing federal, state, and local governmental park and open space related programs. This information system should provide a single good source for obtaining relevant information by all units and agencies of government concerned with outdoor recreation in the Region and a good measure of progress toward the agreed upon park acquisition and development and open space protection objectives.
3. Provide recommendations concerning the roles of government and the private sector in meeting outdoor recreation facility needs in the Region. These recommendations should assist local units of government in considering not only public action which would add directly to the supply of parks, but also should assist the local units of government in considering all actions related to

parks and open space, such as decisions concerning the addition of recreation facilities to existing parks, the development of new facilities, and the protection of potential park sites possessing elements of the natural resource base particularly well suited to recreational use. The park and open space plan should provide a framework which all local community planning and development programs can use as they focus on meeting park and open space needs in conjunction with the resolution of other problems, and thereby provide a sound basis for proper impartial public decision making.

## BASIC PRINCIPLES OF THE PARK AND OPEN SPACE PLANNING PROCESS

Based upon the foregoing considerations, five basic principles were formulated which together form the basis for the specific park planning process applied in the study. These are:

1. Park and open space planning must be regional in scope. Outdoor recreation demands develop in response to basic social and economic forces over an entire urban Region without regard to corporate limits. Moreover, the high level of transportation service offered by the developing regional freeway system and proposed to be offered by a regional rapid transit system makes existing and potential park lands within any given subarea of the Region potentially usable by a much larger population. Park and open space planning, however, must also recognize the existence of subregional planning analysis areas and accommodate the needs and problems of these areas within a regional plan, allocating areas for outdoor recreation and open space on the basis of the location of certain elements of the natural resource base as well as on the basis of the demand for outdoor recreation.
2. Park and open space planning must be conducted concurrently with and inseparably from land use planning. The land use pattern influences the demand for outdoor recreation facilities and, therefore, the need for park and open space. Conversely, the amount and spatial distribution of park and open space lands influence the type and location of land use development and, therefore, the land use pattern.
3. Park and open space planning must recognize the existence of a limited natural resource base in the Region and seek to use those areas which will provide the opportunity for a high quality recreational experience.
4. Park and open space planning must recognize the importance of park and open space land in protecting the sustaining and underlying natural resource base and seek to properly use such lands as a form determinant and structural element of urban growth.
5. Park and open space planning must be cognizant of the needs of users and potential users regardless of their income, age group, or location in the Region, and must seek ways and means by which a broad range of outdoor recreation facilities may be made available throughout the Region.

## THE PARK AND OPEN SPACE PLANNING PROCESS

Based upon the foregoing principles, the Commission employed a six-step planning process through which the principal factors affecting park demand and open space needs within the Region could be identified and, to the extent possible, quantified, and different courses of action to meet these demands and needs formulated and evaluated. These steps are as follows: study design; formulation of objectives and standards; conduct of inventories and analyses; preparation of forecasts; preparation, test, and evaluation of alternative regional park and open space plans; and plan selection and adoption. Plan implementation, although necessarily beyond the foregoing planning process, must be considered throughout the process if the plans are to be realized.

The principal results of the above planning process are a regional park and open space plan which can meet the existing and probable future park demands and open space needs within the Region while still protecting and enhancing the natural resource base. Each step in this process includes individual operations which must be carefully designed, scheduled, and controlled to fit into the overall process. An understanding of this process is essential to appreciate and comprehend the results. Each step is diagrammed in Figure 4 and described briefly below.

### Study Design

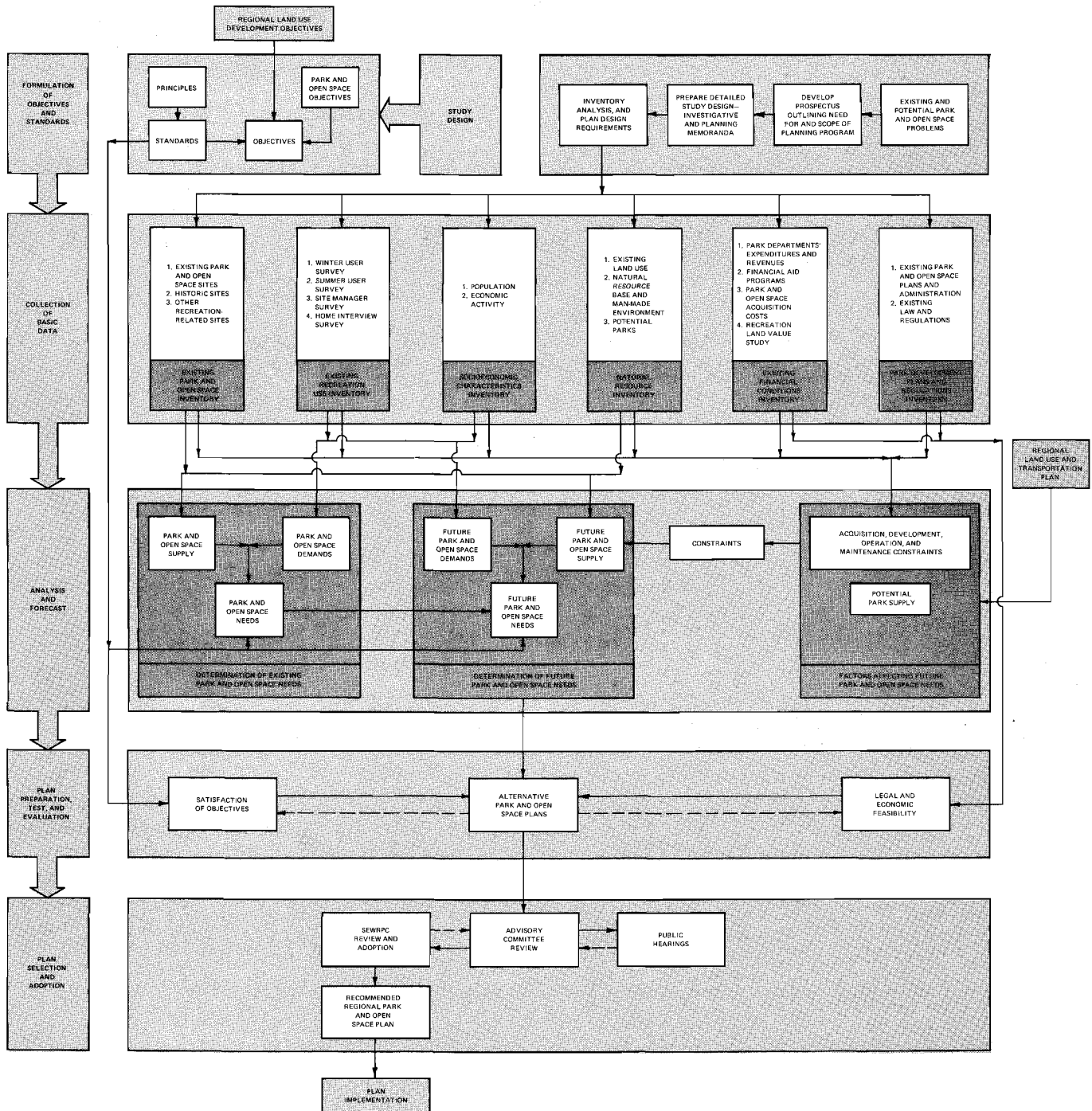
Every planning program must embrace a formal structure or study design so that the program can be carried out in a logical and consistent manner. This study design must specify the content of the fact gathering operation, define the geographic area for which data will be gathered and plans prepared, and outline the manner in which the data collected are to be processed and analyzed. The study design for the park and open space study took the form of 12 detailed staff memoranda which set forth the methods and procedures to be followed in accomplishing each work element.<sup>2</sup> All memoranda were prepared by

---

<sup>2</sup>The study design was comprised of the following Commission staff memoranda: *Regional Park, Outdoor Recreation and Related Open Space Study Design Memorandum C-1 "Mapping," C-2 "Population and Economic Activity," C-3 "Climatological Data," C-4 "Existing Land Use," C-5 "Natural Resource Base," C-6 "Existing Park, Outdoor Recreation, and Related Open Space Areas," C-7 "Existing Recreation Use," C-8 "Potential Park, Outdoor Recreation and Related Open Space Areas," C-9 "Existing Recreation Plans, Programs, Policies and Administration," C-10 "Existing Financial Condition," C-11 "Recreation Laws and Regulations," and C-12 "Special Study of Recreational Land Impact in South-eastern Wisconsin."*

Figure 4

# GENERAL STEPS IN A REGIONAL PARK AND OPEN SPACE PLANNING PROGRAM



Source: SEWRPC.

the staff of the Southeastern Wisconsin Regional Planning Commission and presented to the Technical and Citizen Advisory Committee for review and approval.

## Formulation of Objectives and Standards

In its most basic sense, planning is a rational process to establish and meet objectives. The formulation of objectives is, therefore, essential before plans can be prepared.

To be useful the objectives must be stated clearly, be sound logically, and must relate to alternative physical development proposals. It is the duty and function of the Commission to prepare a comprehensive plan for the physical development of the Region; it is the objective of the regional park and open space study to prepare one

of the key elements of such a plan; namely, a long-range plan which would seek to provide adequate outdoor recreational opportunities for every citizen of the Region and protect the underlying and sustaining natural resource base of the Region. Only if the objectives clearly relate to physical development and are subject to objective test can a choice be made from alternative plans to select the plan which best meets agreed-upon objectives. Logically conceived and well-expressed objectives must be translated into detailed standards to provide the basis for plan preparation, test, and evaluation. The planning program objectives ranged from objectives relating directly to the provision of adequate outdoor recreational opportunities to objectives relating to the protection of the natural resource base. All objectives and standards were carefully reviewed and approved by the Technical and Citizen Advisory Committee.

#### Collection of Basic Data

Reliable planning data collected on a uniform, areawide basis are essential to formulation of workable development plans. Consequently, since no intelligent forecasts can be made or alternative courses of action selected without knowledge of the current state of the system being planned, inventory becomes the first operational step in any planning process.

Parks and open space lands are elements of an overall land use pattern. A sound regional park and open space plan for the Region requires types of data similar to those used in the regional land use-transportation study. The vital data include information on the underlying natural resource base; on the kind, location, and intensity of existing land uses; on existing and proposed transportation facilities; on existing and proposed public facilities and services; on the existing economic base; and on the existing population size, distribution, and characteristics.

Certain additional data were, however, also required. To identify the nature of existing park and open space areas in the Region, the following inventories and surveys were conducted: an existing park and recreation-related open space sites inventory; a potential park and recreation-related open space sites inventory; various existing recreation use surveys, including a summer user survey, a winter user survey, and a recreation site manager survey, and a financial conditions inventory. In addition, park and open space plans, regulations, financial aids programs, and prior publications were reviewed; private citizens and public officials were interviewed; and committee meetings of staff and technical advisors were held.

To identify various characteristics and types of open space in the Region, detailed information collected as part of the continuing regional land use-transportation study was collated for use in the regional park and open space study including, specifically, data on climate, soils, surface water, floodlands and wetlands, woodlands, wildlife habitat areas, physiographic and geologic features, and other elements of the underlying and sustaining natural resource base of the Region.

#### Analysis and Forecast

While inventories provide factual information about past and present situations, analyses and forecasts provide necessary inputs to solution of the park and open space planning problem. As previously mentioned, the planning problem was one of determining the size and location of park and open space lands required to meet existing and probable future outdoor recreational demand of the resident population of the Region and to protect the underlying and sustaining natural resource base.

To determine the existing and probable future park land requirement, it was necessary to analyze existing demand data and forecast probable future demand. In so doing, it was necessary to interrelate the following factors: the existing outdoor recreation facility quantity and quality; the probable future outdoor recreational facility quantity and quality as indicated by park development plans and regulations and by park acquisition, development, operation, and maintenance costs; the quantity and quality of lands suitable for park development; the socioeconomic characteristics of current park users; the characteristics of future park users as indicated by the probable future population size, income, distribution, mobility, and outdoor recreation preferences.

To determine the existing and probable future open space requirement, it was necessary to analyze existing natural resource base and land use patterns data and approximate probable future land use patterns. The following factors were interrelated: the location and extent of environmental corridors; the location and extent of the prime agricultural lands; existing land use development plans and regulations; and existing and probable future urban growth patterns as indicated by the existing and probable future demographic, economic, land use, utility, and transportation bases.

The supply of parks and open space must be planned for anticipated need at some future point in time. The need to fully coordinate detailed park and open space plan elements with the areawide land use and transportation system plan dictated the use of the same basic forecast and design year used in the preparation of other regional plan elements, namely the design year 2000. Use of this forecast and design year provides the means for integrating the park planning with regional land use, transportation, sanitary sewerage, and other functional planning.

#### Plan Preparation, Test, and Evaluation

The inventory and analysis of park and open space data and the subsequent application of objectives and standards to such information permit identification of land requirements to meet park demands and open space needs. The next logical steps in the planning process are the preparation, test, and evaluation of alternative park and open space plans designed to meet these demands and needs.



Such plans consist essentially of alternative geographic allocations of park facilities required to accommodate demand for such facilities, and of open space lands required to protect the Region's natural resource base in a manner consistent with Commission adopted land use and transportation, as well as park and open space, objectives and standards. The alternative plans must be subjected to several levels of review and evaluation, including economic feasibility, technical feasibility, financial feasibility, legality, and citizen and political reaction. Interagency meeting and public hearings may be used as devices to test and evaluate the plans. This step should help clearly to demonstrate which alternative plan is technically sound, financially feasible, legally possible, and politically practical.

#### Plan Selection and Adoption

The general approach used for selecting the final park and open space plan from the alternatives advanced was to proceed, through presentation of the alternatives and the analyses of the technical, economic, financial, and legal feasibility of the plan and its alternatives to the Technical and Citizen Advisory Committee and to the public

at large at a series of public informational meetings and public hearings, to a final decision and adoption by the Commission in accordance with the provisions of the state regional planning legislation. The role of the Commission is solely to recommend to federal, state, and local units of government and private investors the best park and open space plan for consideration and action. The best plan, together with specific recommendations to both the public and private sectors required to implement this plan, represents the recommended regional park plan. The final decisive step to be taken in the process is the acceptance or rejection of the plan by these units of government and subsequent plan implementation by public and private action. Therefore, plan selection and adoption must be founded in the active involvement of the various governmental bodies, technical agencies, and private interest groups concerned with development throughout the Region. The use of advisory committees and both formal and informal public hearings appear to be the most practical and effective procedures for achieving such involvement in the planning process and for openly arriving at agreement on objectives and on a final plan which can be cooperatively adopted and jointly implemented.

(This page intentionally left blank)

## Chapter III

### DESCRIPTION OF THE REGION: MAN-MADE ENVIRONMENT

#### INTRODUCTION

The seven-county Southeastern Wisconsin Region is an interrelated complex of natural and man-made features which together form a rapidly changing environment for human life. The important man-made features of the Region include its land use pattern, public utility networks, and transportation systems. Together with the population residing in and the economic activities taking place in the Region, these features may be thought of as the socioeconomic base of the Region. An understanding of this base is essential to sound areawide recreation planning.

Since the primary purpose of the regional park planning program is the development of a workable plan to guide the staged acquisition and development of lands for recreational and open space needs within the Southeastern Wisconsin Region, an understanding of the present and of the probable future size, composition, and spatial distribution of the population of the Region is indispensable for sound recreation planning and development. The present and probable future size, composition, and spatial distribution of the population are greatly influenced, however, by growth and change in the economy. The present and probable future spatial distribution of the population is also directly related to trends and changes in land use development patterns, the availability of public utilities, and the characteristics of existing and planned transportation facilities.

This chapter, then, presents a description of the socioeconomic base of the Region. The first and second sections of this chapter describe the demographic and economic base of the Region in terms of historic trends as well as existing conditions with respect to population size, distribution, and composition and employment levels and distribution. The third section of this chapter describes the patterns of land use in the Region in terms of historical development and existing (1970) conditions. The final two sections of this chapter describe the public utility base and transportation facility system within the Region.

#### DEMOGRAPHIC BASE

Information concerning the demographic base of the Region and, in particular, information concerning the size, distribution, and characteristics of the regional population is important in identifying recreational facility requirements within southeastern Wisconsin. Analysis of the size and distribution of the resident population provides an indicator of the magnitude and location of those recreational requirements. Recreational activities vary considerably among the various subgroups of the popu-

lation and, accordingly, analysis of the characteristics of the population provides an indicator of the types of recreational activities that are most popular and, therefore, of the types of facilities which are in greatest demand. Those population characteristics most important for analysis are age, sex, and racial composition, educational attainment, occupational status, and income. Furthermore, historic trends in the size, distribution, and characteristics of the regional population serve as inputs into the formulation of demographic forecasts necessary for the determination of future recreational facility requirements.

#### Population Size

Recent growth in the regional population has contributed to the increasing demand for outdoor recreation in southeastern Wisconsin. The population of the Region, which in 1970 totaled nearly 1.76 million persons, grew at a rate of about 18,000 persons per year from 1960 to 1970, a rate considerably lower than the approximately 33,000 persons per year growth rate experienced from 1950 to 1960. While the population of the Region increased by 182,000 persons from 1960 to 1970, the population of the City of Milwaukee, the twelfth largest city in the nation, followed national trends, decreasing by almost 24,000 persons. Older suburbs adjacent to the City of Milwaukee also showed population decreases, while large increases in population occurred in the newer outlying suburban areas and particularly in the rural-urban fringe areas of the Region.

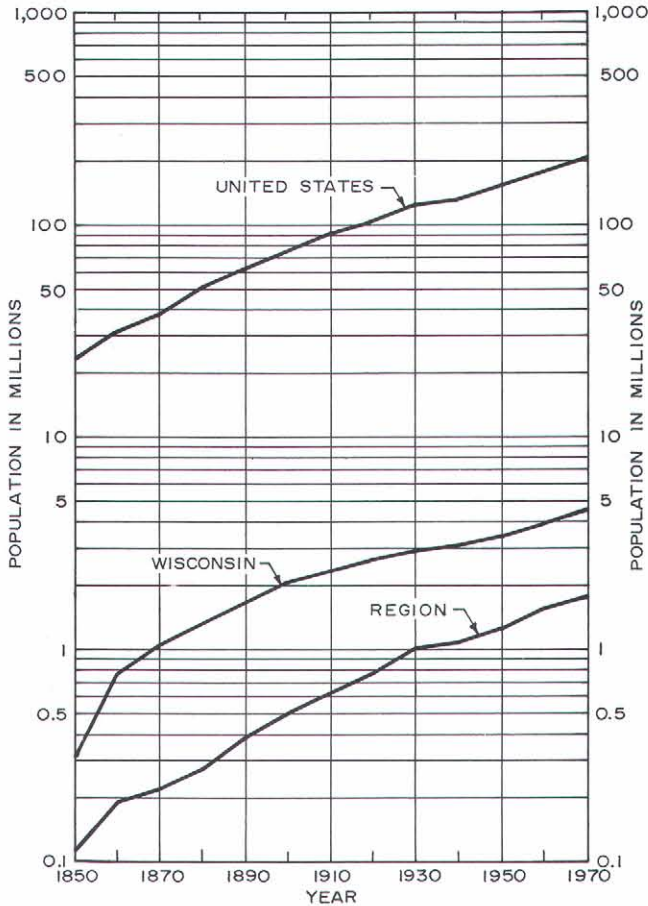
Population growth within the Region over the past century has generally occurred at a higher rate than for the state and nation (see Figure 5 and Table 2). Consequently, the regional share of the total national population increased from 0.49 percent in 1850 to 0.88 percent in 1960, while the regional share of the State population increased from 37 percent in 1850 to nearly 40 percent in 1960. Between 1960 and 1970, however, the population growth rate for the Region was somewhat lower than that for the nation and State, and, consequently, the regional share of the total population of the nation and State declined slightly over the past decade.

#### Population Distribution

The long-term growth trend in the regional population has been marked by two phenomena which are of considerable importance to understanding existing as well as future recreation needs. First, the Southeastern Wisconsin Region, like most metropolitan regions in the United States, is becoming increasingly urban. In 1850, the population of the Region was approximately 75 percent rural and 25 percent urban; by 1900, this relationship had almost reversed to 30 percent rural and 70 percent urban; and by 1970, only 2 percent of the regional

Figure 5

POPULATION LEVEL IN THE REGION,  
WISCONSIN, AND THE UNITED STATES: 1850-1970



Source: U. S. Bureau of the Census and SEWRPC.

Table 2

POPULATION TRENDS IN THE REGION, WISCONSIN,  
AND THE UNITED STATES: SELECTED YEARS 1850-1970

Year	Population			Region Population as a Percent of	
	Region	Wisconsin	United States	United States	Wisconsin
1850	113,389	305,391	23,196,876	0.49	37.1
1860	190,409	775,881	31,443,321	0.61	24.5
1870	223,546	1,054,670	38,558,371	0.58	21.2
1880	277,119	1,315,497	50,155,783	0.55	21.0
1890	386,774	1,693,330	62,947,714	0.61	22.8
1900	501,808	2,069,042	75,994,575	0.66	24.2
1910	631,161	2,333,860	91,972,266	0.69	27.0
1920	783,681	2,632,067	105,710,620	0.74	29.7
1930	1,006,118	2,939,006	122,775,046	0.82	34.2
1940	1,067,699	3,137,587	131,669,270	0.81	34.0
1950	1,240,618	3,434,575	151,325,798	0.82	36.1
1960	1,573,620	3,952,771	179,323,175	0.88	39.8
1970	1,756,086	4,417,933	203,184,772	0.86	39.7

Source: U. S. Bureau of the Census.

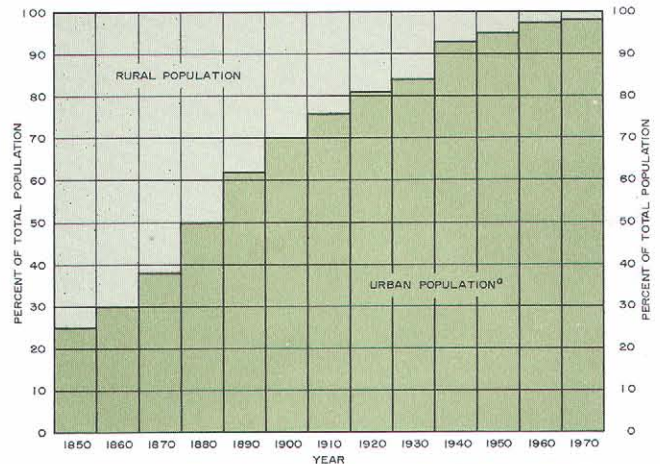
population was considered rural, while 98 percent was considered urban. The 120-year rural-urban change is shown graphically in Figure 6. The recreational facility requirements of an urban and rural population differ considerably and, accordingly, this trend toward urbanization is an important consideration in the analysis of recreational needs.

Secondly, the population within the Region is being increasingly decentralized, and attendant urban development is diffused across established municipal and county boundaries. During the 30-year period from 1900 to 1930, the highest rates of population increase within the Region occurred in the three urban counties of Kenosha, Milwaukee, and Racine. Urban decentralization over the last four decades (1930-1970) has reversed this trend. Between 1960 and 1970 rates of population growth of more than 35 percent were observed in certain outlying counties of the Region, notably Ozaukee, Washington, and Waukesha Counties, while the population increased by only 2 percent in Milwaukee County (see Table 3). One effect of this population decentralization has been to increase the demand for outdoor recreation facilities in the suburban and rural-urban fringe areas of the Region.

The varying rates of population growth have resulted in significant distributional shifts of population among the seven counties. The most dramatic distributional changes over the 70-year period have occurred in Milwaukee and Waukesha Counties (see Figure 7). The Milwaukee County proportion of the total regional population increased by about 6 percent from 1900 to 1930 and then decreased by over 12 percent from 1930 to 1970. The proportion of the total regional population in Waukesha County decreased by about 2 percent from 1900 to 1930 and then increased by about 8 percent

Figure 6

DISTRIBUTION OF URBAN AND RURAL  
POPULATION IN THE REGION: 1850-1970



<sup>a</sup>THE URBAN POPULATION IN 1950, 1960, AND 1970 INCLUDES THAT PORTION OF THE POPULATION CLASSIFIED AS BEING "URBAN" AND "RURAL NON-FARM" BY THE U.S. BUREAU OF THE CENSUS.

Source: U. S. Bureau of the Census and SEWRPC.

Table 3

## POPULATION IN THE REGION BY COUNTY: SELECTED YEARS 1900-1970

County	Population								
	Number					Percent Change			
	1900	1930	1950	1960	1970	1900-1930	1930-1950	1950-1960	1960-1970
Kenosha . . . .	21,707	63,277	75,238	100,615	117,917	191.5	18.9	33.7	17.2
Milwaukee . . .	330,017	725,263	871,047	1,036,047	1,054,249	119.8	20.1	18.9	1.8
Ozaukee . . . .	16,363	17,394	23,361	38,441	54,461	6.3	34.3	64.6	41.7
Racine. . . . .	45,644	90,217	109,585	141,781	170,838	97.7	21.5	29.4	20.5
Walworth. . . .	29,259	31,058	41,584	52,368	63,444	6.1	33.9	25.9	21.2
Washington . .	23,589	26,430	33,902	46,119	63,839	12.0	28.3	36.0	38.4
Waukesha. . . .	35,229	52,358	85,901	158,249	231,338	48.6	64.1	84.2	46.2
Region	501,808	1,005,997	1,240,618	1,573,620	1,756,086	100.5	23.3	26.8	11.6

Source: U. S. Bureau of the Census and SEWRPC.

from 1930 to 1970. The result of the most recent changes in population distribution within the Region has been an areawide diffusion of population around the central cities of Milwaukee, Racine, and Kenosha.

#### Population Characteristics

Data relating to age and sex composition, racial composition, educational attainment, occupational composition, and personal income of the regional population all are relevant to the study of recreation facility needs.

**Age:** To some extent, the age of an individual has a bearing on the type of recreational activities the individual participates in and the recreational facilities he or she utilizes. The age composition of the population in an area, therefore, has direct implications for recreation facility planning. As indicated in Figure 8, the age composition of the regional population changed significantly between 1960 and 1970. The most striking changes are the increase in the proportion of young persons between the ages of 10 and 24 years, the decrease in the proportion of children under 5 years, the decline in the proportion of adults between 30 and 39 years, and the increase in the proportion of the population age 70 and over. As indicated in Table 4, considerable variation marks the proportions of population comprised by each age group in the seven counties. For example, the proportion of young persons under 20 years of age ranged from 37 percent in Milwaukee County to 44 percent in Ozaukee, Washington, and Waukesha Counties. On the other hand, the proportion of elderly persons age 65 years and over was very low in Waukesha County (6 percent) and relatively high in Walworth County (12 percent). The variations by county in age composition are further indicated by the median age of the population in each county, which ranged from 24.9 years in Washington County to 28.6 years in Milwaukee County.

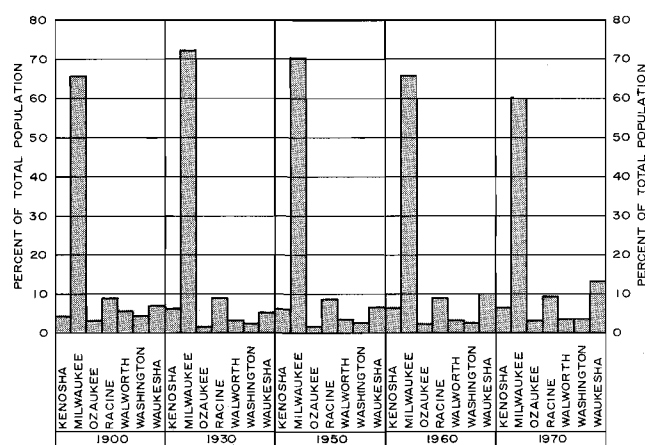
**Sex:** The sex composition of the regional population also has been changing. As indicated in Table 5, there was a significant decrease in the proportion of males in the

regional population between 1960 and 1970, with at least slight decreases being observed within each 10-year age group, except the 10-19 year group. A major cause of the increase in the proportion of females in the regional population is the fact that women have a longer life expectancy than men do. The substantial reduction in the number of males per 100 females in the 60-69 and 70 and over age groups during the past decade reflects this longer female life expectancy.

As indicated in Table 6, there was a decrease in the sex ratios (the number of males per 100 females) within each county between 1960 and 1970, with large decreases being observed in Kenosha and Milwaukee Counties. In fact, there was an absolute decrease in the number of males in Milwaukee County between 1960 and 1970. It is interesting to note that the lowest sex ratios in 1970 were

Figure 7

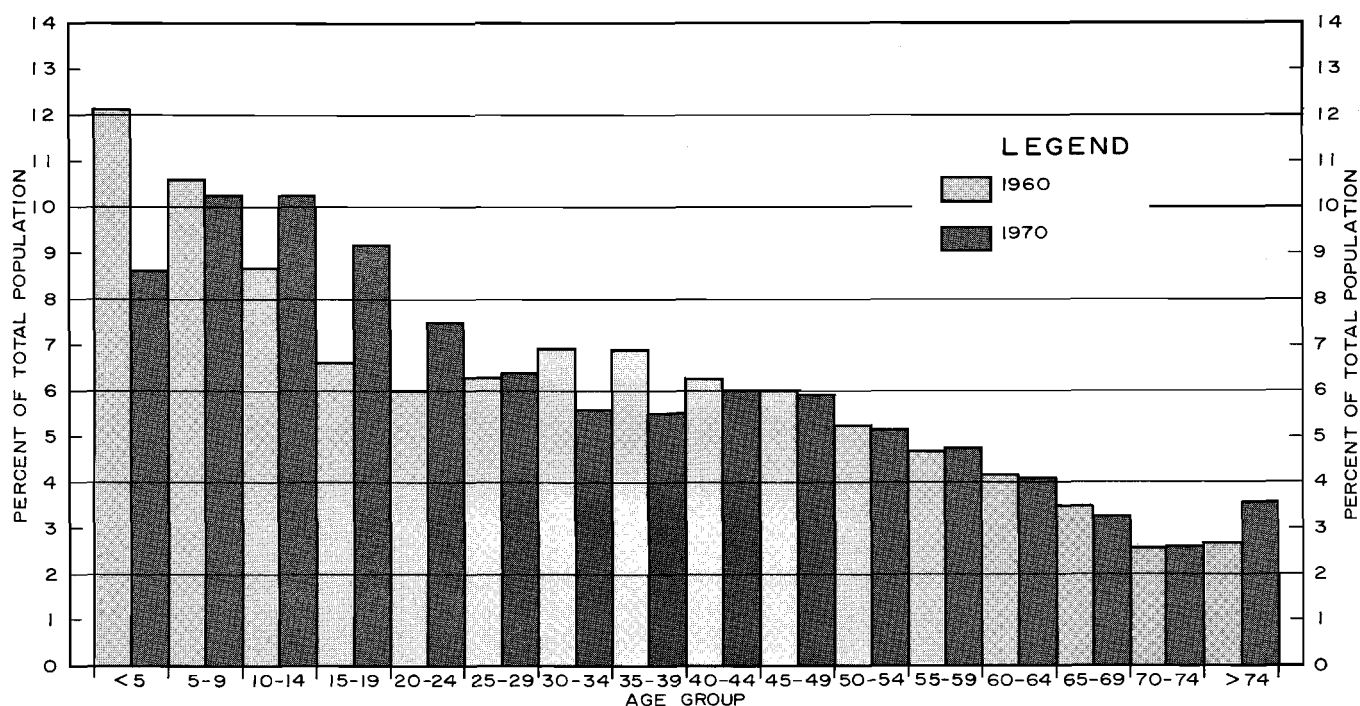
#### DISTRIBUTION OF THE POPULATION IN THE REGION BY COUNTY: SELECTED YEARS 1900-1970



Source: U. S. Bureau of the Census and SEWRPC.

Figure 8

## AGE COMPOSITION OF THE POPULATION IN THE REGION: 1960 and 1970



Source: U. S. Bureau of the Census and SEWRPC.

Table 4

## AGE COMPOSITION OF THE POPULATION IN THE REGION BY COUNTY: 1970

County	Population																	Median Age <sup>b</sup>	
	Under 10		10-14		15-19		20-24		25-34		35-44		45-64		65 and Over		Total		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number		Percent
Kenosha . . .	23,759	20.2	12,662	10.7	11,105	9.4	8,493	7.2	14,466	12.3	12,730	10.8	23,484	19.9	11,218	9.5	117,917	100.0	26.9
Milwaukee . .	190,252	18.0	104,010	9.9	94,579	9.0	86,789	8.2	126,283	12.0	116,334	11.0	224,478	21.3	111,338	10.6	1,054,063	100.0	28.6
Ozaukee . . .	11,748	21.6	6,843	12.6	5,225	9.6	2,996	5.5	6,717	12.3	6,998	12.9	9,925	18.2	3,969	7.3	54,421	100.0	25.6
Racine . . . .	35,549	20.8	19,882	11.6	16,052	9.4	11,778	6.9	20,852	12.2	19,182	11.2	32,102	18.8	15,441	9.1	170,838	100.0	26.0
Walworth . . .	10,997	17.3	6,317	10.0	7,176	11.3	6,239	9.8	6,885	10.9	6,245	9.8	12,177	19.2	7,408	11.7	63,444	100.0	26.4
Washington . .	14,672	23.0	7,629	11.9	5,781	9.1	3,949	6.2	8,347	13.1	7,269	11.4	10,945	17.1	5,247	8.2	63,839	100.0	24.9
Waukesha . . .	49,549	21.4	29,522	12.8	23,115	10.0	12,428	5.4	28,493	12.3	31,730	13.7	41,734	18.0	14,794	6.4	231,365	100.0	25.4
Region	336,526	19.2	186,865	10.6	163,033	9.3	132,672	7.6	212,043	12.1	200,488	11.4	354,845	20.2	169,415	9.6	1,755,887 <sup>a</sup>	100.0	27.6

<sup>a</sup> The 1970 regional population of 1,755,887 excludes 199 persons who were added subsequent to the 1970 census and not allocated to the various age group categories.

<sup>b</sup> The median age is that age which divides the population distribution into two equal parts, half being younger than the median age and half being older.

Source: U. S. Bureau of the Census and SEWRPC.

found in the urban counties of Kenosha, Milwaukee, and Racine, in keeping with the historical tendency for the female proportion of the population to be relatively high in urban areas and relatively low in rural areas.

**Race:** In addition to changes in the age and sex composition, the racial composition of the regional population, as indicated in Table 7, changed somewhat during the last decade. In the 1970 census, nearly 93 percent of the

regional population was reported as white while, in the 1960 census, approximately 95 percent was reported as white. The remainder of the population was nonwhite, a category which includes persons reporting their race as black, American Indian, Japanese, Chinese, Filipino, or other racial grouping. In both 1960 and 1970, the overwhelming majority—over 90 percent—of the nonwhite population in the Region was composed of persons of the black race.



Table 5

**SEX COMPOSITION OF THE POPULATION  
IN THE REGION BY AGE GROUP: 1960 and 1970**

Age Group	Sex Ratio <sup>a</sup>	
	1960	1970
Under 10 . . . . .	103.9	103.4
10-19 . . . . .	99.9	101.8
20-29 . . . . .	93.0	88.7
30-39 . . . . .	98.3	96.4
40-49 . . . . .	96.9	96.6
50-59 . . . . .	97.7	93.2
60-69 . . . . .	93.7	85.2
70 and Older . . . . .	78.0	67.3
All Ages	97.3	94.3

<sup>a</sup> The sex ratio indicates the number of males per 100 females within each age group.

Source: U. S. Bureau of the Census and SEWRPC.

Table 6

**SEX COMPOSITION OF THE POPULATION  
IN THE REGION BY COUNTY: 1960 and 1970**

County	Sex Ratio <sup>a</sup>	
	1960	1970
Kenosha . . . . .	102.0	95.9
Milwaukee . . . . .	95.7	92.0
Ozaukee . . . . .	100.0	99.6
Racine . . . . .	97.6	95.6
Walworth . . . . .	99.3	98.1
Washington . . . . .	102.3	99.9
Waukesha . . . . .	101.7	99.2
Region	97.3	94.3

<sup>a</sup> The sex ratio indicates the number of males per 100 females within each county.

Source: U. S. Bureau of the Census and SEWRPC.

As indicated in Table 8, the nonwhite population comprised about 2 percent of the total population in Kenosha County, nearly 11 percent in Milwaukee County, about 7 percent in Racine County, and less than 1 percent in the other counties in the Region. Furthermore, the nonwhite populations of the Region are concentrated in the central cities of Kenosha, Milwaukee, and Racine. In fact, nearly 96 percent of the nonwhite population in the Region and 98 percent of all blacks in the Region resided in these three cities in 1970.

Table 7

**RACIAL COMPOSITION OF THE POPULATION  
IN THE REGION: 1960 and 1970**

Race	Population			
	1960		1970	
	Number	Percent of Total	Number	Percent of Total
White . . . . .	1,499,662	95.3	1,626,056	92.6
Nonwhite . . . . .	73,952	4.7	129,831	7.4
Black . . . . .	69,591	4.4	119,321	6.8
American Indian . . . . .	2,225	0.1	4,617	0.3
Japanese . . . . .	748	0.1	1,237	0.1
Chinese . . . . .	603	0.1	1,234	.. <sup>a</sup>
Filipino . . . . .	247	.. <sup>a</sup>	693	.. <sup>a</sup>
Other . . . . .	538	.. <sup>a</sup>	2,729	0.2
Total	1,573,614	100.0	1,755,887	100.0

<sup>a</sup> The percent of the total population is less than one-tenth of 1 percent.

Source: U. S. Bureau of the Census and SEWRPC.

It should be noted that the Spanish American population is included in the white population in Tables 7 and 8 because Spanish Americans are not defined as a separate race by the U. S. Bureau of the Census. The Census Bureau, however, does enumerate Spanish Americans as a separate ethnic group. One of the three Spanish indicators used is the number of "persons of Spanish language." The results are summarized for the Region and the seven counties individually in Table 9. In 1970 there were more than 30,000 persons of Spanish language in the Region representing nearly 2 percent of the regional population. For the seven counties, the proportion of Spanish Americans ranged from less than 1 percent in Washington and Ozaukee Counties to 3 percent in Racine County. As was the case for the nonwhite population, the Spanish American population was heavily concentrated in the larger urban centers of the Region. Thus, in 1970, 77 percent of the Region's Spanish American population resided in the Cities of Kenosha, Milwaukee, Racine, and Waukesha.

**Education:** The educational level of an individual also influences, to some extent, the recreational activities which the individual pursues and the types of recreational facilities he or she utilizes most frequently. The educational attainment of the population is, therefore, an important consideration in planning efforts to meet existing and future recreation facility needs. Since most formal education is completed by the time a person reaches age 25, the statistical measure of educational attainment pertains to the population over 25 years of age. The educational attainment of the population over 25 years of age, as shown in Table 10 and Figure 9,

Table 8

### RACIAL COMPOSITION OF THE POPULATION IN THE REGION BY COUNTY: 1970

County	Population											
	White		Nonwhite								Total	
			Black		American Indian		Other		Subtotal			
	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population
Kenosha . . .	115,623	98.1	1,930	1.6	143	0.1	221	0.2	2,294	1.9	117,917	100.0
Milwaukee . .	939,989	89.2	106,033	10.1	3,717	0.3	4,324	0.4	114,074	10.8	1,054,063	100.0
Ozaukee . . .	54,197	99.6	92	0.2	61	0.1	71	0.1	224	0.4	54,421	100.0
Racine . . . .	159,511	93.4	10,572	6.2	343	0.2	412	0.2	11,327	6.6	170,838	100.0
Walworth. . .	62,879	99.1	287	0.5	56	0.1	222	0.3	565	0.9	63,444	100.0
Washington . .	63,652	99.7	45	0.1	62	0.1	80	0.1	187	0.3	63,839	100.0
Waukesha . .	230,205	99.5	362	0.2	235	0.1	563	0.1	1,160	0.5	231,365	100.0
Region	1,626,056	92.6	119,321	6.8	4,617	0.3	5,893	0.3	129,831	7.4	1,755,887	100.0

Source: U. S. Bureau of the Census and SEWRPC.

Table 9

### SPANISH AMERICAN POPULATION<sup>a</sup> IN THE REGION BY COUNTY: 1970

County	Persons of Spanish Language	
	Number	Percent of Total Population
Kenosha . . . . .	2,690	2.3
Milwaukee . . . . .	17,960	1.7
Ozaukee . . . . .	370	0.7
Racine . . . . .	5,440	3.2
Walworth . . . . .	790	1.2
Washington . . . . .	305	0.5
Waukesha . . . . .	3,272	1.4
Region	30,827	1.8

<sup>a</sup> Persons of Spanish language.

Source: U. S. Bureau of the Census and SEWRPC.

increased substantially in the Region between 1960 and 1970. The median number of years of schooling completed increased from 11.0 years in 1960 to 12.2 years in 1970. A further indication of the general rise in educational attainment is the increase in the proportion of the population over 25 who had completed high school or attended college, from nearly 44 percent in 1960 to 56 percent in 1970.

As indicated in Table 11, there was much variation in the educational attainment of the population over 25 among the counties in the Region. The proportion of the popula-

Table 10

### EDUCATIONAL ATTAINMENT LEVELS OF THE POPULATION 25 YEARS OF AGE AND OLDER IN THE REGION: 1960 and 1970

Levels of Educational Attainment	Population 25 Years of Age and Older			
	1960		1970	
	Number	Percent of Total	Number	Percent of Total
No School Years Completed . .	11,305	1.3	9,830	1.0
Some Elementary School . . . .	131,150	14.9	89,452	9.6
Completed Elementary School . .	191,349	21.7	143,104	15.3
Some High School . . . . .	162,249	18.4	170,115	18.1
Completed High School . . . . .	237,848	27.0	325,357	34.7
Some College . . . . .	79,033	9.0	99,195	10.6
Four or More Years of College .	68,016	7.7	99,936	10.7
Total	880,950	100.0	936,989	100.0
Median Number of School Years Completed <sup>a</sup>	11.0		12.2	

<sup>a</sup> The median number of school years completed is the number which divides the distribution of persons over age 25 in half; that is, half completed more years of school than the median and half completed fewer years.

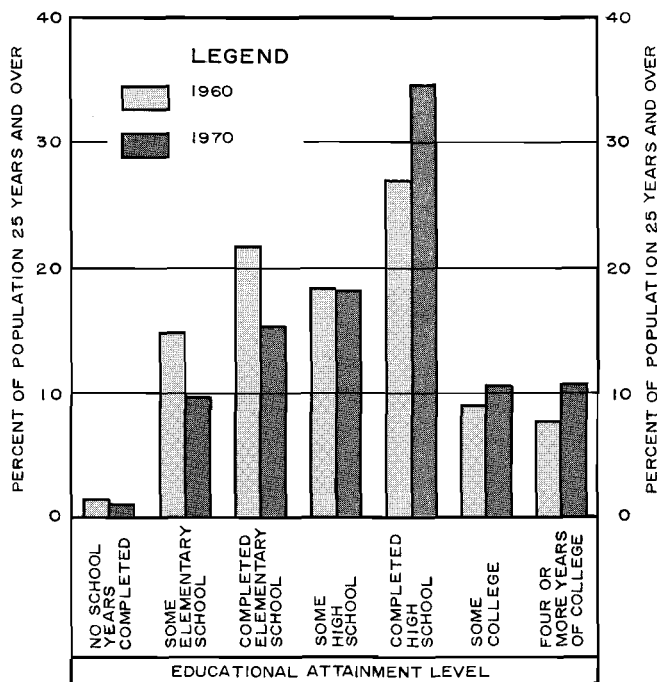
Source: U. S. Bureau of the Census and SEWRPC.

tion with some college or four or more years of college was lowest in Kenosha County (15 percent) and highest in Waukesha County (nearly 29 percent). On the other hand, the proportion of persons over 25 who had an elementary education or less was lowest in Waukesha County (nearly 18 percent) and highest in Washington County (32 percent). This variation in the educational attainment of the population among the seven counties is summarized by the median number of years of schooling completed for persons over 25 in each county, presented in Table 11. The median number of years of schooling in 1970 was highest in Waukesha County (12.5 years) and lowest in Kenosha County (11.8 years).



Figure 9

**DISTRIBUTION OF EDUCATIONAL ATTAINMENT  
LEVELS OF THE POPULATION 25 YEARS OF AGE  
AND OLDER IN THE REGION: 1960 and 1970**



Source: U. S. Bureau of the Census and SEWRPC.

**Occupation:** Occupation is an important factor in determining the amount of time and money which an individual may devote to various outdoor recreational pursuits. Thus, occupation strongly influences an individual's recreational activities and, consequently, the occupational status of the population should be considered in analyzing recreational facility requirements for an area. The Census Bureau classifies the employed population into four broad occupational areas: white collar workers, blue collar workers, farm workers, and service workers. White collar workers include professional, technical, and kindred workers; managers and administrators, except farm; and sales workers. Blue collar workers consist of craftsmen, foremen, and kindred workers; operatives; and laborers, except farm. Farm workers include farmers, farm managers, farm laborers, and farm foremen. Service workers are composed of persons employed in such activities as the cleaning, food, health, and protective services as well as private household workers. The distribution of the employed population age 14 years and over according to these occupation groups is presented for the Region in Table 12 and Figure 10.

As indicated in Table 12, the proportion of white collar workers in the Region has increased in recent times, rising from 41.6 percent of the employed population 14 years old and over in 1960 to 45.3 percent in 1970. Conversely, the proportion of blue collar workers

decreased from 42.4 percent to 36.0 percent between 1960 and 1970, with an actual decline in the number of blue collar workers occurring during this period. The proportion of farm workers also declined slightly, from 1.9 percent to 1.1 percent, between 1960 and 1970, while the proportion of service workers increased from 9.6 percent to 11.9 percent during this time.

The occupational status of the population varies considerably among the seven counties in the Region (see Table 13). As reported by the Census Bureau, white collar workers comprised varying proportions of the total employed population, ranging from a low of 36 percent in Washington County to a high of 51 percent in Waukesha County in 1970. On the other hand, among the seven counties the proportion of blue collar workers ranged from a low of 34 percent in Waukesha to a high of 44 percent in Washington. As further indicated in Table 13, Walworth County had the highest proportion of farm workers among the seven counties, 6.7 percent, while Milwaukee County had the lowest proportion, 0.2 percent. Finally, the proportion of service workers ranged from a low of 9 percent in Ozaukee County to 15 percent in Walworth County.

**Income:** The level of income is a major determinant of the types of recreational activities which an individual or household can participate in. Personal income in the Region has been increasing at a rapid rate, and in 1969 total personal income was over \$6 billion (see Table 14). From 1949 to 1969, total income in the Region increased by \$4.4 billion, or 263 percent, a rate much greater than the 54 percent increase in the cost of living during this time.<sup>1</sup> Since the increase in total income has occurred at a much faster rate than the increase in the regional population, the average per capita income in the Region increased considerably from \$1,338 in 1949 to \$3,433 in 1969, a relative increase of 157 percent. Similarly, the average per household income in the Region grew rapidly between 1949 and 1969, increasing from \$4,682 to \$11,238, or by 140 percent, during that time. It should be noted that this trend in the average household income reflects not only an increase in the earnings of the heads of each household, but also the tendency of other household members, wives in particular, to supplement household income.

Recent trends in real per capita and per household income, expressed in constant dollars, are similar to the trends in per capita and per household income expressed in actual dollars as described above.<sup>2</sup> Measured in constant 1967 dollars, real per capita income in the Region increased from \$1,858 in 1949 to \$2,954 in 1969, an

<sup>1</sup> The cost of living was measured by the consumer price index prepared by the U. S. Bureau of Labor Statistics.

<sup>2</sup> The U. S. Bureau of Labor Statistics 1967 Consumer Price Index was used to adjust actual dollar figures to constant dollars. Constant dollar figures allow comparison free of price distortion.

Table 11

**EDUCATIONAL ATTAINMENT LEVELS OF THE POPULATION 25 YEARS  
OF AGE AND OLDER IN THE REGION BY COUNTY: 1970**

County	Population 25 Years of Age and Older									
	No School Years Completed		Some Elementary School		Completed Elementary School		Some High School		Completed High School	
	Number	Percent <sup>a</sup>	Number	Percent <sup>a</sup>	Number	Percent <sup>a</sup>	Number	Percent <sup>a</sup>	Number	Percent <sup>a</sup>
Kenosha . . . .	1,004	1.6	6,557	10.6	9,446	15.3	14,685	23.7	20,830	33.7
Milwaukee . . .	6,405	1.1	60,406	10.5	88,647	15.3	107,751	18.6	195,714	33.8
Ozaukee . . . .	178	0.7	1,705	6.2	4,588	16.6	3,729	13.5	9,647	34.9
Racine. . . . .	1,311	1.5	9,019	10.3	14,101	16.1	17,587	20.0	29,940	34.1
Walworth. . . .	199	0.6	2,493	7.6	5,442	16.6	4,996	15.2	11,942	36.5
Washington . .	132	0.4	2,966	9.3	7,129	22.4	4,283	13.5	11,858	37.4
Waukesha. . . .	601	0.5	6,306	5.4	13,751	11.8	17,084	14.6	45,426	38.9
Region	9,830	1.0	89,452	9.6	143,104	15.3	170,115	18.1	325,357	34.7

County	Population 25 Years of Age and Older						
	Some College		Four or More Years of College		Total		Median Years of School Completed <sup>b</sup>
	Number	Percent <sup>a</sup>	Number	Percent <sup>a</sup>	Number	Percent <sup>a</sup>	
Kenosha . . . . .	5,109	8.3	4,216	6.8	61,847	100.0	11.8
Milwaukee . . . .	60,090	10.4	59,487	10.3	578,500	100.0	12.1
Ozaukee . . . . .	3,487	12.6	4,282	15.5	27,616	100.0	12.4
Racine. . . . .	8,079	9.2	7,723	8.8	87,760	100.0	12.1
Walworth. . . . .	3,918	12.0	3,754	11.5	32,744	100.0	12.3
Washington . . . .	2,898	9.1	2,524	7.9	31,790	100.0	12.1
Waukesha. . . . .	15,614	13.4	17,950	15.4	116,732	100.0	12.5
Region	99,195	10.6	99,936	10.7	936,989	100.0	12.2

<sup>a</sup> Percent of population 25 years of age and older in each county.

<sup>b</sup> The median number of years of school completed is the number which divides the distribution of persons over age 25 in half, with half having completed more years of school than the median and half fewer years.

Source: U. S. Bureau of the Census and SEWRPC.

increase of 59 percent. Real per household income increased from \$6,487 in 1949 to \$9,671 in 1969, an increase of 49 percent. These trends in real per capita and per household income within the Region may be assumed to have been accompanied by increases in discretionary disposable income.

As shown in Table 15 and Figure 11, there was much variation in household income among the seven counties in the Region in 1969. Household incomes were generally quite high in Ozaukee and Waukesha Counties. Thus, the proportion of households with incomes of \$15,000 or more was relatively high in both these counties (30 percent in Ozaukee and 31 percent in Waukesha) while the proportion of households with incomes less than \$7,000 in these counties was small (less than 20 percent). On the other hand, relatively low household incomes were found

in Walworth County, where 40 percent of all households had an income of less than \$7,000 and only 16 percent of all households had an income of \$15,000 or more. The median household income presented in Table 15 summarizes the variation in household income among the seven counties. As might be expected from the above discussion, the median household income ranged from a low of \$8,500 in Walworth County to over \$12,000 in Ozaukee and Waukesha Counties.

Increasing personal income has resulted in an increase in the demand for outdoor recreation facilities and has contributed to a change in the character of this demand and, therefore, to the need for different types of recreation facilities. Higher incomes permit more families to seek recreation-oriented types of urban, suburban, and rural-urban life styles throughout the Region as well as

Table 12

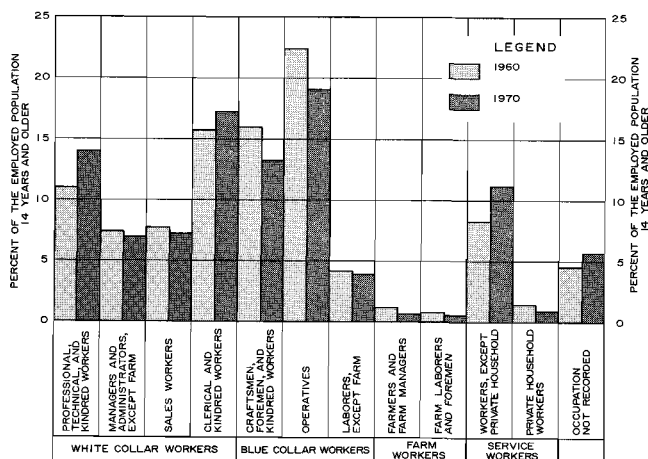
**OCCUPATIONAL STATUS OF THE EMPLOYED POPULATION  
14 YEARS OLD AND OVER IN THE REGION: 1960 and 1970**

Occupation	Employed Population 14 Years Old and Over			
	1960		1970	
	Number	Percent	Number	Percent
White Collar Workers . . . . .	254,799	41.6	324,609	45.3
Professional, Technical, and Kindred Workers . . . . .	67,085	11.0	100,506	14.0
Managers and Administrators, except Farm . . . . .	44,692	7.3	49,365	6.9
Sales Workers . . . . .	46,694	7.6	51,523	7.2
Clerical and Kindred Workers . . . . .	96,328	15.7	123,215	17.2
Blue Collar Workers . . . . .	260,073	42.4	257,849	36.0
Craftsmen, Foremen, and Kindred Workers . . . . .	97,309	15.9	94,591	13.2
Operatives . . . . .	137,543	22.4	136,081	19.0
Laborers, except Farm . . . . .	25,221	4.1	27,177	3.8
Farm Workers . . . . .	11,769	1.9	7,827	1.1
Farmers and Farm Managers . . . . .	7,566	1.2	4,604	0.6
Farm Laborers and Foremen . . . . .	4,203	0.7	3,223	0.5
Service Workers . . . . .	58,438	9.6	85,112	11.9
Workers, except Private Household . . . . .	50,176	8.2	79,672	11.1
Private Household Workers . . . . .	8,262	1.4	5,440	0.8
Occupation Not Reported . . . . .	27,644	4.5	41,024	5.7
Total	612,723	100.0	716,421	100.0

Source: U. S. Bureau of the Census and SEWRPC.

Figure 10

**OCCUPATIONAL DISTRIBUTION OF THE  
EMPLOYED POPULATION 14 YEARS OF AGE  
AND OLDER IN THE REGION: 1960 and 1970**



Source: U. S. Bureau of the Census and SEWRPC.

to acquire off-the-road motorized vehicles, power boats, camping vehicles, aircraft, and other expensive types of recreation equipment. The character of recreational demand is changing, accordingly, with accompanying problems of park acquisition, design, and management. In addition, higher incomes have contributed to an expansion of the second home market, with attendant complex effects on both the demand for, and supply of, prime recreational resources.

Despite the general increase in the level of personal income in recent times, the Region, nevertheless, contains a large number of lower income households with limited amounts of money for recreational pursuits. For example, 31 percent of all households in the Region received less than \$7,000 and 22 percent of all households received less than \$5,000 in 1969. Such households lack the purchasing power to participate in many of the newer forms of recreational activities which involve the use of expensive equipment. Furthermore, the availability of automobile transportation tends to be lower for low income households and, as a result, some of these households have limited access to the natural resource-related recreational facilities in the outlying areas of the Region.

The elderly and minority races represent two subgroups of the regional population with particularly low income distributions (see Figure 12). Because many elderly are

Table 13

## OCCUPATIONAL STATUS OF THE EMPLOYED POPULATION 14 YEARS OLD AND OVER IN THE REGION BY COUNTY: 1970

Occupation	Employed Population 14 Years Old and Over															
	Kenosha		Milwaukee		Ozaukee		Racine		Walworth		Washington		Waukesha		Region	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
White Collar Workers . . . . .	17,602	38.5	204,937	46.4	10,032	45.9	27,082	41.1	9,783	38.3	9,197	36.2	45,976	50.8	324,609	45.3
Professional, Technical, and Kindred Workers . . . . .	5,500	12.0	61,847	14.0	3,271	15.0	8,894	13.5	3,130	12.3	2,766	10.9	15,098	16.7	100,506	14.0
Managers and Administrators, except Farm . . . . .	2,844	6.2	27,406	6.2	2,171	9.9	4,195	6.4	2,130	8.3	1,612	6.3	9,007	9.9	49,385	6.9
Sales Workers . . . . .	2,475	5.4	32,960	7.5	1,632	7.5	3,826	5.8	1,286	5.0	1,416	5.6	7,928	8.8	51,523	7.2
Clerical and Kindred Workers . .	6,783	14.9	82,724	18.7	2,958	13.5	10,167	15.4	3,237	12.7	3,403	13.4	13,943	15.4	123,215	17.2
Blue Collar Workers . . . . .	19,297	42.2	153,225	34.7	8,071	36.9	26,744	40.5	8,742	34.2	11,271	44.3	30,499	33.6	257,849	36.0
Craftsmen, Foremen, and Kindred Workers . . . . .	6,857	15.0	54,879	12.4	2,999	13.7	9,772	14.8	3,116	12.2	3,891	15.3	13,077	14.4	94,591	13.2
Operatives . . . . .	10,651	23.3	81,580	18.5	4,405	20.1	14,299	21.7	4,523	17.7	6,196	24.4	14,427	15.9	136,081	19.0
Laborers, except Farm . . . . .	1,789	3.9	16,766	3.8	667	3.1	2,673	4.0	1,103	4.3	1,184	4.6	2,995	3.3	27,177	3.8
Farm Workers . . . . .	804	1.8	680	0.2	830	3.8	1,176	1.8	1,700	6.7	1,498	5.9	1,139	1.3	7,827	1.1
Farmers and Farm Managers . .	506	1.1	211	0.1	512	2.3	649	1.0	1,008	4.0	984	3.9	734	0.8	4,604	0.6
Farm Laborers and Foremen . .	298	0.7	469	0.1	318	1.5	527	0.8	692	2.7	514	2.0	405	0.5	3,223	0.5
Service Workers . . . . .	6,103	13.3	53,226	12.1	1,956	8.9	8,136	12.3	3,879	15.2	2,486	9.8	9,326	10.3	85,112	11.9
Workers, except Private Household . . . . .	5,766	12.6	50,184	11.4	1,756	8.0	7,536	11.4	3,527	13.8	2,264	8.9	8,639	9.5	79,672	11.1
Private Household Workers . . .	337	0.7	3,042	0.7	200	0.9	600	0.9	352	1.4	222	0.9	687	0.8	5,440	0.8
Occupation Not Reported . . . .	1,899	4.2	29,254	6.6	976	4.5	2,860	4.3	1,418	5.6	972	3.8	3,645	4.0	41,024	5.7
Total	45,705	100.0	441,322	100.0	21,865	100.0	65,998	100.0	25,522	100.0	25,424	100.0	90,585	100.0	716,421	100.0

Source: U. S. Bureau of the Census and SEWRPC.

Table 14

## PERSONAL INCOME TRENDS IN THE REGION: SELECTED YEARS 1949-1969

Year	Total Income (Millions of Dollars)		Per Capita Income		Per Household Income	
	Actual	Constant <sup>a</sup>	Actual	Constant <sup>a</sup>	Actual	Constant <sup>a</sup>
1949	\$1,660	\$2,299	\$1,338	\$1,858	\$ 4,682	\$6,487
1959	3,492	3,941	2,219	2,505	7,496	8,460
1969	6,029	5,189	3,433	2,954	11,238	9,671

<sup>a</sup> Adjusted for price change, base year equals 1967.

Source: U. S. Bureau of the Census and SEWRPC.

forced to live on fixed incomes, composed of social security benefits and perhaps a pension payment, the income distribution for elderly households is very low. Thus, the household income was less than \$7,000 for 58 percent of all elderly husband-wife households<sup>3</sup> in the Region and less than \$5,000 for 42 percent of these

<sup>3</sup>In the 1970 census, household income data for the elderly were provided only for husband-wife households or those elderly households in which the husband and wife were both present. Elderly husband-wife households represented 47 percent of all elderly households in the Region 1970.

households in 1969. The median household income for elderly husband-wife households was \$6,000 in 1969, substantially less than the overall median of \$10,000 for all households in the Region. Similarly, the income distribution of the black population in the Region is also relatively low. Thus, 54 percent of all black households in the Region had a household income of less than \$7,000 in 1969, while 39 percent had an income of less than \$5,000. The median household income for all black households in the Region was \$6,500 in 1969. The recreational needs of the lower income population should be an important consideration in the formulation of a regional park, outdoor recreation, and related open space plan for southeastern Wisconsin.

Table 15

INCOME LEVELS FOR HOUSEHOLDS IN THE REGION BY COUNTY: 1969<sup>a</sup>

County	Income Level							
	Less Than \$3,000		\$3,000-4,999		\$5,000-6,999		\$7,000-9,999	
	Number	Percent <sup>b</sup>	Number	Percent	Number	Percent	Number	Percent
Kenosha . . . . .	4,720	13.3	3,216	9.1	3,787	10.7	7,580	21.4
Milwaukee . . . . .	48,554	14.3	32,341	9.6	33,330	9.8	65,591	19.4
Ozaukee . . . . .	1,189	8.1	808	5.5	906	6.1	2,414	16.4
Racine . . . . .	6,110	12.3	4,337	8.7	4,679	9.4	10,069	20.2
Walworth . . . . .	3,381	18.2	2,081	11.2	1,964	10.6	3,771	20.3
Washington . . . . .	1,782	10.2	1,386	8.0	1,273	7.3	3,547	20.4
Waukesha . . . . .	4,592	7.4	3,472	5.6	3,588	5.8	9,493	15.3
Region	70,328	13.1	47,641	8.9	49,527	9.2	102,465	19.1

County	Income Level						Total Households		Median Household Income <sup>c</sup>
	\$10,000-14,999		\$15,000-24,999		\$25,000 or More				
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Kenosha . . . . .	10,368	29.2	4,942	13.9	855	2.4	35,468	100.0	\$ 9,400
Milwaukee . . . . .	94,071	27.8	52,065	15.4	12,653	3.7	338,605	100.0	9,500
Ozaukee . . . . .	5,007	33.9	3,279	22.2	1,150	7.8	14,753	100.0	12,100
Racine. . . . .	15,190	30.5	7,614	15.3	1,797	3.6	49,796	100.0	9,900
Walworth. . . . .	4,353	23.5	2,391	12.9	603	3.3	18,544	100.0	8,500
Washington . . .	5,436	31.3	3,159	18.2	802	4.6	17,385	100.0	10,600
Waukesha. . . . .	21,588	34.9	15,004	24.2	4,198	6.8	61,935	100.0	12,300
Region	156,013	29.1	88,454	16.5	22,058	4.1	536,486	100.0	\$10,000

<sup>a</sup> The household income excludes the incomes of persons living in the unit but not related to the head of the household.

<sup>b</sup> Percent refers in each citation to percent of total households in county.

<sup>c</sup> The median household income is that income which divides the distribution of households into two equal parts, half having a higher income than the median and half having a lower income.

Source: U. S. Bureau of the Census and SEWRPC.

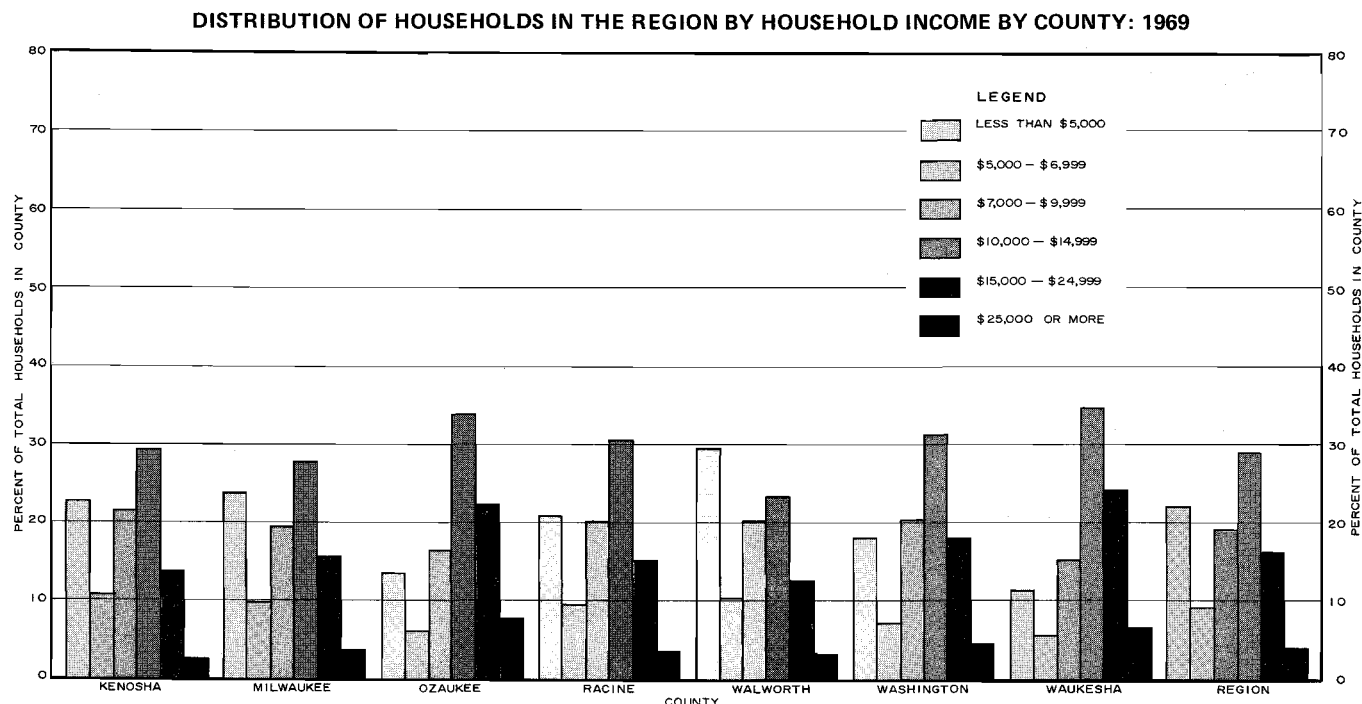
## ECONOMIC BASE

As previously indicated, the demand for outdoor recreational facilities in an area is closely related to the size and characteristics of the population in that area. The size and characteristics of the population in an area are, in turn, somewhat dependent on the amount and type of economic activity in that area. Within a given area, then, the demand for recreational facilities is related to the amount and type of economic activity and, accordingly, an understanding of the size and structure of an area's economy is useful in the analysis of the area's recreational facility requirements. A description of the size and structure of the regional economy as well as of the distribution of economic activity within the Region is presented in this section.

## Size of the Economy

One of the best measures of economic activity is the number of employment opportunities, or jobs, available within the planning area. Table 16 and Figure 13 show the absolute and relative changes in the number of jobs within the United States, the State of Wisconsin, and the Region from 1950 to 1970. The amount of economic activity in the Region, as measured by the number of jobs available, has increased at varying rates in the recent past. From 1950 to 1957, there was a rapid increase in the number of jobs available, followed by a sharp decline in 1958 corresponding with a general recession in the national economy. From 1958 to 1960, there was again a rapid increase, followed by another sharp decline in 1961, again corresponding with another national recession. Since 1961 there has been a more moderate but

Figure 11



Source: U. S. Bureau of the Census and SEWRPC.

steady increase in jobs within the Region, except for a slight economic recession during 1966 and 1967 and the recent recession of 1970.

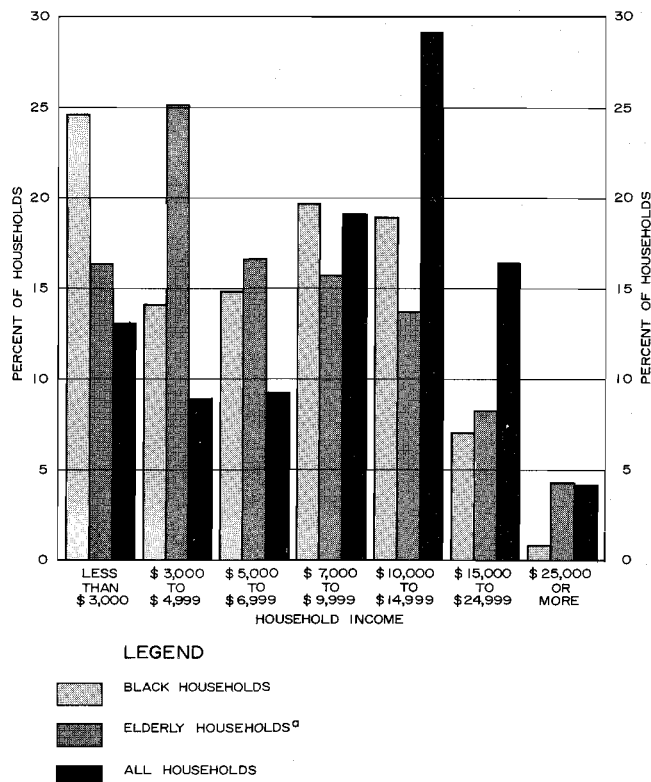
The recent trend in regional economic activity has paralleled the trend in national economic activity. However, fluctuations in periods of expansion and recession are much greater for the Region than for the nation due to the high concentration of regional economic activity in the production of capital goods. As a derived demand, these goods are highly responsive to small fluctuations in consumer demand for goods and services. In addition, the growing divergence in the growth rates in economic activity in the Region and the nation, as measured by jobs, reflects to a certain extent the increasing difficulty of the Region in competing for industrial development with other parts of the nation.

#### Distribution of Economic Activity

Nearly 69 percent of the economic activity of the Region, as measured by jobs, was located in Milwaukee County in 1970. An additional 14 percent was located in Racine and Kenosha Counties combined. Approximately 83 percent of the regional jobs are, therefore, located in these three counties. The remaining 17 percent of the regional jobs is distributed as follows: Waukesha County, about 9 percent; Walworth County, about 3 percent; Washington County, about 3 percent; and Ozaukee County, about 2 percent (see Table 17).

Figure 12

#### PERCENTAGE DISTRIBUTION BY INCOME OF BLACK AND ELDERLY HOUSEHOLDS IN THE REGION: 1969



\* IN THE 1970 CENSUS, HOUSEHOLD INCOME DATA FOR THE ELDERLY WERE PROVIDED ONLY FOR HUSBAND-WIFE HOUSEHOLDS, OR THOSE ELDERLY HOUSEHOLDS IN WHICH THE HUSBAND AND WIFE WERE BOTH PRESENT.

Source: U. S. Bureau of the Census and SEWRPC.

Table 16

## NUMBER OF JOBS IN THE UNITED STATES, WISCONSIN, AND THE REGION: SELECTED YEARS 1950-1970

Geographic Area	Number of Jobs			Percent Change	
	1950	1960	1970	1950-1960	1960-1970
United States . . . . .	58,911,000	65,798,500	78,662,000	11.7	19.5
Wisconsin . . . . .	1,348,100	1,582,800	1,842,400	17.4	16.4
Region . . . . .	552,700	647,900	741,600	17.2	14.5

Source: Wisconsin Department of Industry, Labor, and Human Relations; U. S. Department of Labor; and SEWRPC.

Table 17

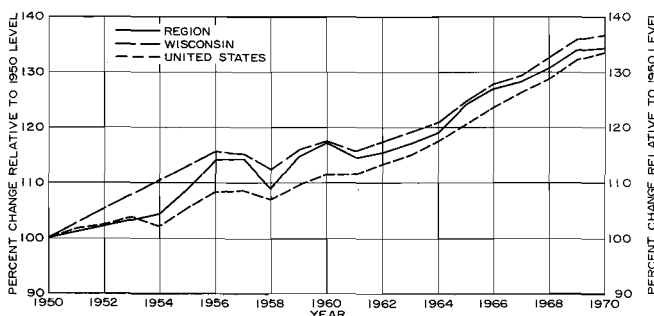
## NUMBER OF JOBS IN THE REGION BY COUNTY: SELECTED YEARS 1950-1970

County	1950		1960		1970		Percent Change	
	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	1950-1960	1960-1970
Kenosha . . . . .	27,700	5.0	40,100	6.2	39,200	5.3	44.8	- 2.2
Milwaukee . . . . .	438,100	79.3	486,400	75.1	510,900	68.9	11.0	5.0
Ozaukee . . . . .	6,200	1.1	9,700	1.5	17,900	2.4	56.5	84.5
Racine . . . . .	43,200	7.8	49,500	7.6	61,900	8.3	14.6	25.1
Walworth . . . . .	12,300	2.2	19,000	2.9	24,200	3.3	54.5	27.4
Washington . . . . .	9,700	1.8	12,400	1.9	20,300	2.7	27.8	63.7
Waukesha . . . . .	15,500	2.8	30,800	4.8	67,200	9.1	98.7	118.2
Region	552,700	100.0	647,900	100.0	741,600	100.0	17.2	14.5

Source: Wisconsin Department of Industry, Labor, and Human Relations; and SEWRPC.

Figure 13

## RELATIVE JOB GROWTH IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1950-1970



Source: Wisconsin Department of Industry, Labor, and Human Relations; U. S. Department of Labor; and SEWRPC.

As further indicated in Table 17, significant changes in the distribution in economic activity within the Region have occurred in the past 20 years. The number of jobs in the Region increased 34 percent, from 552,700 in 1950 to 741,600 in 1970. During the 1950s the number of jobs in the Region increased by 17 percent. The counties which experienced the largest relative job growth rates during the 1950s were Kenosha, Ozaukee, Walworth, Washington, and Waukesha Counties. The growth rates in these counties, which were greater than the regional average, indicate a general shift in economic activity toward the suburban and rural counties of the Region. The exception to this type of shift can be seen in Kenosha County, where job growth was directly related to prosperity in the transportation equipment industry in that county. Conversely, Milwaukee and Racine Counties both experienced job growth from 1950 to 1960 at a lower rate than the regional average, indicating a shift of economic activity out of these areas.

The number of jobs in the Region increased 15 percent from 1960 to 1970. During this period, the largest relative job growth occurred in Ozaukee, Racine, Walworth, Washington, and Waukesha Counties, indicating a further shift in economic activity toward the suburban and rural

areas of the Region and away from the urban areas. These shifts are a continuation of the economic activity location trends identified in the initial economic studies of the Commission.<sup>4</sup>

### Structure of the Economy

The character of the regional economy can best be described in terms of its industrial structure, since the number and types of industry directly affect land use and transportation needs. In this regard, economic activity within the Region can be classified into nine major industry groups: agriculture; mining; construction; manufacturing; transportation, communication, and utilities; trade; finance, insurance, and real estate; services; and government.

Economic activity within the Region is heavily concentrated in manufacturing (see Figure 14). In 1970 approximately 34 percent of the total jobs in the Region was in manufacturing compared to 26 percent nationally. The proportion of economic activity in all other industry groups within the Region except private services, as measured by jobs, was less than the national averages.

The structure of economic activity within the regional manufacturing industry, which is important in the regional economy, is also quite different from the structure of the manufacturing industry nationally (see Figure 15). In contrast to the manufacturing industry of the United States, the manufacturing industry in the Region is more heavily concentrated in the production of durable goods, particularly machinery, and electrical equipment. In 1970, about 43 percent of the total manufacturing jobs within the Region were in these industries compared to about 20 percent nationally. Compared to the national distribution, there is also a concentration of fabricated metal product manufacturing activities. On the other hand, there is a relatively low concentration of activity associated with the production of nondurable goods, such as textile, apparel, leather, paper, wood, chemical, petroleum, rubber, and plastic products.

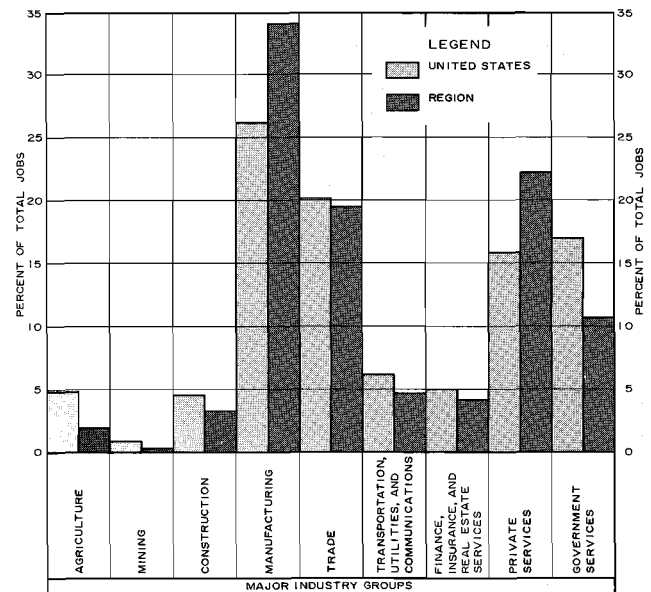
### LAND USE BASE

Land use is an important determinant of both the supply of, and demand for, recreational facilities. An understanding of the amount, type, intensity, and spatial distribution of urban and rural land uses within the Region is essential to the derivation of park and open space needs. Furthermore, such an understanding of existing land use patterns as well as of historical patterns and trends of development is important in the formula-

<sup>4</sup> The results of this work were published in SEWRPC Planning Report No. 3, *The Economy of Southeastern Wisconsin*, June 1963; and SEWRPC Planning Report No. 7, Volume 2, *Forecasts and Alternative Plans—1990*, June 1966.

Figure 14

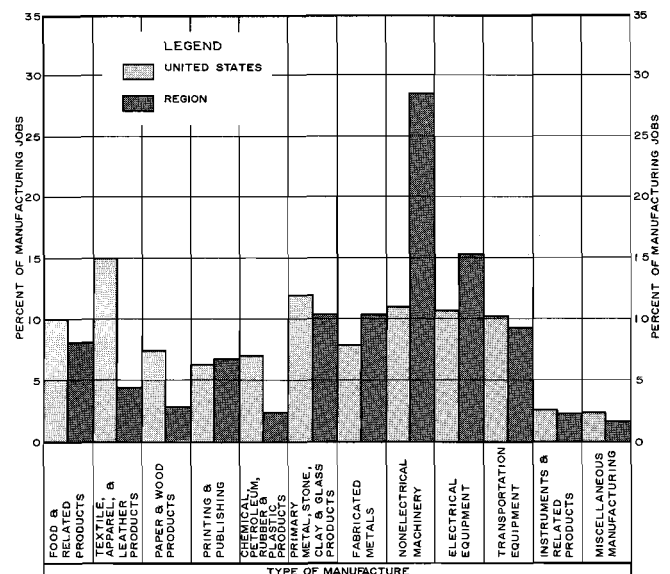
PERCENTAGE DISTRIBUTION OF JOBS IN THE REGION AND THE UNITED STATES BY MAJOR INDUSTRY GROUP: 1970



Source: U. S. Department of Labor, Bureau of Labor Statistics; Wisconsin Department of Industry, Labor, and Human Relations; and SEWRPC.

Figure 15

PERCENTAGE DISTRIBUTION OF MANUFACTURING JOBS IN THE REGION AND THE UNITED STATES BY TYPE OF MANUFACTURE: 1970



Source: U. S. Department of Labor, Bureau of Labor Statistics; Wisconsin Department of Industry, Labor, and Human Relations; and SEWRPC.



tion of a plan to meet the identified recreational needs. Accordingly, attention is focused herein upon historical as well as existing land use development and upon region-wide factors influencing land use.

#### Historic Growth Patterns

The first permanent European settlement in the Region was established in 1795 as a trading post on the east side of the Milwaukee River, just north of what is now Wisconsin Avenue in the City of Milwaukee. The origins of most of the other major cities and villages within the Region can be traced to the establishment of certain types of agricultural services such as saw and grist mills. The location of these earliest urban activities was heavily influenced by water power and water transportation needs. The rapid settlement by Europeans of what is now the Southeastern Wisconsin Region had its beginning following the Indian cessions of 1829 and 1833, which transferred to the federal government ownership of all of the lands that now comprise the State of Wisconsin south of the Fox River and east of the Wisconsin River. Federal land surveyors, after the close of the Blackhawk War of 1832, began to survey, subdivide, and monument the federal lands; and by 1836 the U. S. Public Land Survey in the Region and subsequent sale of the public lands brought many settlers from New England, Germany, Austria, and Scandinavia. Initial urban development occurred along the Lake Michigan shoreline at the ports of Milwaukee, Port Washington, Racine, and Southport (now Kenosha) as these settlements became more directly accessible to immigration from the east coast through the Erie Canal-Great Lakes transportation route. By 1850 there were more than 113,000 people in the Region, and the accompanying historic development map indicates the many scattered urban developments existing in the Region at the time (see Map 3).

Changes over time in the amount of land devoted to urban use within the Region are indicated in Table 18, while the historic urban growth pattern is indicated on Map 3. The amount of land devoted to urban development within the Region has increased steadily since 1850. Over the 100-year period extending from 1850 to 1950, urban development within the Region occurred in relatively tight, concentric rings outward from the established urban centers of the Region, a pattern resembling the annual growth rings of a tree. A very dramatic change in the pattern of urban development within the Region occurred, however, in about 1950. From 1950 to 1963, while the regional population increased by about 35 percent, the amount of land devoted to urban use increased by almost 150 percent, or by about 202 square miles. Urban development became discontinuous and highly diffused, the term "urban sprawl" being quite descriptive of this more recent pattern of urban development within the Region. This pattern continued from 1963 to 1970, in which period an additional 57 square miles of land were converted from rural to urban use within the Region. Under this type of urbanization, the entire seven-county Region is becoming a single mixed rural-urban complex. Many once isolated and independent communities are growing together, and urban development is spilling over the sub-continental divide, which traverses the Region, into the Fox-Illinois River Valley.

Map 3 also indicates that much of the dispersed urban development is being attracted by the prime recreational resources of the Region, clustering around the many inland lakes within the Region, spreading out along the Lake Michigan shoreline, and intruding into the riverine areas of the streams and watercourses and into the Kettle Moraine Forest areas of the Region. The resultant loss to

Table 18

#### POPULATION DENSITY TRENDS IN THE REGION: SELECTED YEARS 1850-1970

Year	Urban Population		Rural Population		Total Population	Area (Square Miles)		Persons Per Square Mile	
	Number	Percent of Total	Number	Percent of Total		Urban	Total	Urban	Total
1850	28,623	25.2	84,766	74.8	113,389	4	2,689	7,155.8	42.2
1880	139,509	50.3	137,610	49.7	277,119	18	2,689	7,750.5	103.1
1900	354,082	70.6	147,726	29.4	501,808	37	2,689	9,569.8	186.6
1920	635,376	81.1	148,305	18.9	783,681	56	2,689	11,346.0	291.4
1940 <sup>a</sup>	991,535	92.9	76,164	7.1	1,067,699	90	2,689	11,017.1	397.1
1950 <sup>a</sup>	1,179,084	95.0	61,534	5.0	1,240,618	138	2,689	8,544.1	461.4
1963 <sup>a</sup>	1,634,200	97.6	40,100	2.4	1,674,300	340	2,689	4,806.5	622.6
1970 <sup>a</sup>	1,728,949	98.5	27,137	1.5	1,756,086	397	2,689	4,355.0	653.1

<sup>a</sup> The "rural-nonfarm" population is included in the urban total.

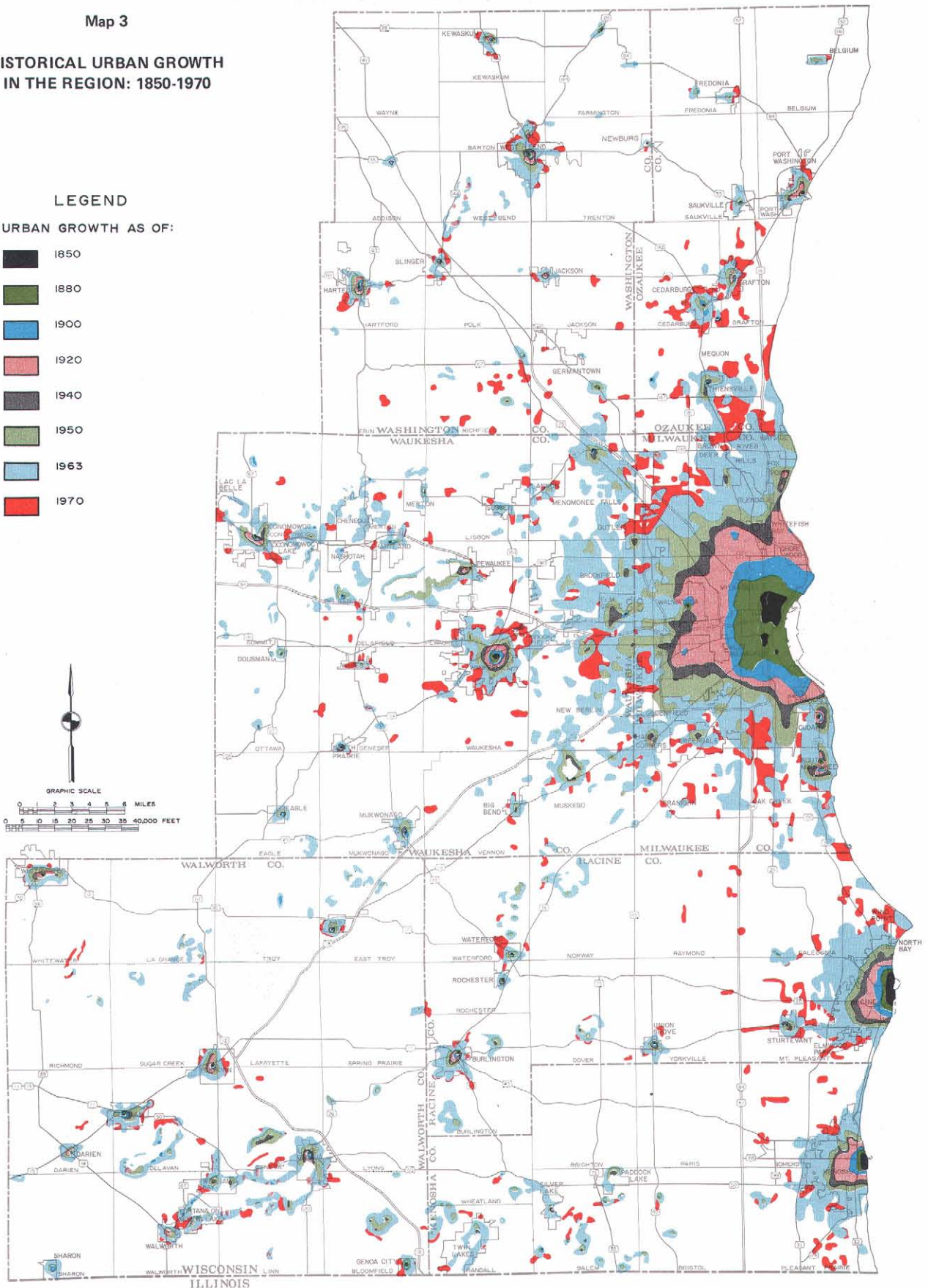
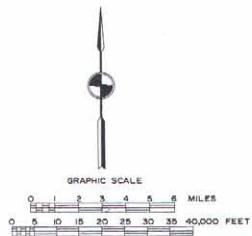
Source: U. S. Bureau of the Census and SEWRPC.

Map 3

# HISTORICAL URBAN GROWTH IN THE REGION: 1850-1970

### LEGEND

#### URBAN GROWTH AS OF:



Urban development within the Region occurred in a fairly regular pattern until about 1950, forming concentric rings of relatively high density urban development contiguous to, and outward from, the existing urban areas and long-established mass transit, utility, and community facility systems. Soon after World War II, however, the character of urban growth in the Region began to change to a much more diffused pattern of development with relatively low densities and a high proliferation of clusters of noncontiguous development. Much of the dispersed urban development is being attracted by the prime recreational resources of the Region, clustering around its many inland lakes, spreading out along the Lake Michigan shoreline, and intruding into the riverine areas of the streams and water-courses and into the Kettle Moraine Forest areas of the Region. The resultant loss to urban development includes the potential park, outdoor recreation, and related open space sites necessary not only to maintain good outdoor recreation opportunities within the Region but also to preserve the overall quality of the environment within the Region.

Source: SEWRPC.

urban development includes the potential park, outdoor recreation, and related open space sites necessary not only to maintain good outdoor recreation opportunities within the Region but also to preserve the overall quality of the environment within the Region.<sup>5</sup> Unless steps are taken to protect the remaining prime potential park, outdoor recreation, and related open space sites within the Region, many more of these sites will be lost to urban development. Not only is such loss unnecessary, since other equally suitable sites for urban development are available, but the loss may require the creation at great public expense of inferior recreation facilities to serve the outdoor recreation needs of the growing urban area.

#### Historic Density Trends

The changes in population density within the Region from 1850 to 1970 are also shown in Table 18. During this 120-year period, the population of the Region increased nearly 15-fold, from 113,400 persons to 1,756,100 persons, while the amount of land devoted to urban use increased almost 100-fold, from 4 square miles to 397 square miles. Overall population densities within the Region increased steadily from 42 persons per square mile in 1850 to 653 persons per square mile in 1970. Overall population densities within the developed urban area of the Region, however, have exhibited a quite different trend. Such population densities increased steadily from 7,156 persons per square mile in 1850 to a peak of 11,346 persons per square mile in 1920. Urban population densities then began a steady decline to a level of 8,544 persons per square mile in 1950. After 1950, urban population densities declined even more sharply to 4,807 persons per square mile in 1963, and continued to decline to 4,355 persons per square mile in 1970. It should be noted, however, that although overall population densities within the developed urban areas of the Region have been steadily declining since 1920, this decline has been accompanied by localized increases in population densities. Such localized population increases may be the result of urban renewal activities or, in isolated instances, of what in effect constitutes new community development. For example, the Northridge Lakes community development within the northwestern portion of the City of Milwaukee will have population densities of about 15,000 persons per square mile when fully developed. Similarly, the redevelopment of certain older residential areas of the central cities and older suburbs within the Region, which replace single family, duplex, or flat type residential development with apartment development—often high-rise apartment development—may result in population density increases in localized areas. With respect to overall population densities within the Region, however, such high-density development and redevelopment are offset by large areas of new suburban and exurban development which, even when it involves apartment projects, results overall in

relatively low urban population density. This continued overall decline in urban population density, accompanied however by localized increases, has important implications for the provision of many public facilities and services, including the provision of park, outdoor recreation and related open spaces, and complicates the planning and design for such facilities.

#### Existing Land Use

The amount and spatial distribution of land uses existing within the Region in April 1970 are summarized graphically on Map 4. This map provides a picture of existing regional development at a given time, and its study can provide many valuable insights into an understanding of regional activity and development and of the areawide problems related thereto. The absolute and proportional areas presently devoted to each major land use category within the Region are summarized by county in Table 19.

Although southeastern Wisconsin is a highly urbanized Region, less than 20 percent of its total area is presently devoted to urban type land uses. The largest land use category within the Region is still agriculture, which presently occupies about 60 percent of the total area of the Region. The next largest land use category is the water and wetland group, which occupies about 10 percent of the total area, and woodlands and open lands, which presently occupy another 10 percent of the total area of the Region. Therefore, more than 80 percent of the Region is presently devoted to agriculture, woodlands, other open lands, or lies under water.

The "urban" type land use occupying the greatest area is residential which presently accounts for about 9 percent of the total area of the Region. A close second is the use category of transportation, utilities, and communications, which accounts for about 6 percent of the total area. The very small amount and proportion of land presently devoted to urban economic activities, so important to the support of regional growth and development, are surprising and significant. The total land area presently devoted to commercial, manufacturing, and wholesaling functions within the Region (minus onsite parking) amounts to only about 16,500 acres, or 1 percent, of the total land area, yet this small area provides the basis for more than 212,900 commercial, 252,100 manufacturing, and 32,000 wholesale jobs, or in all, about two-thirds of the total jobs in the Region.

Residential: The residential land use category of the inventory included and identified both land occupied by a residence of some kind and vacant land which was either under development for residential use or immediately available for such use. The latter category included vacant building sites between existing residences and improved but still vacant residential subdivisions.

At the time of the 1970 land use inventory, there were about 152,260 acres of residential land in the Region, or about 9 percent of the regional total devoted to this land use. Table 20 details the amounts and relative proportions of land devoted to the different types of residen-

<sup>5</sup> A quantitative description of the recent loss of potential park, outdoor recreation, and related open space sites to urban development is presented in Chapter IX of this report.

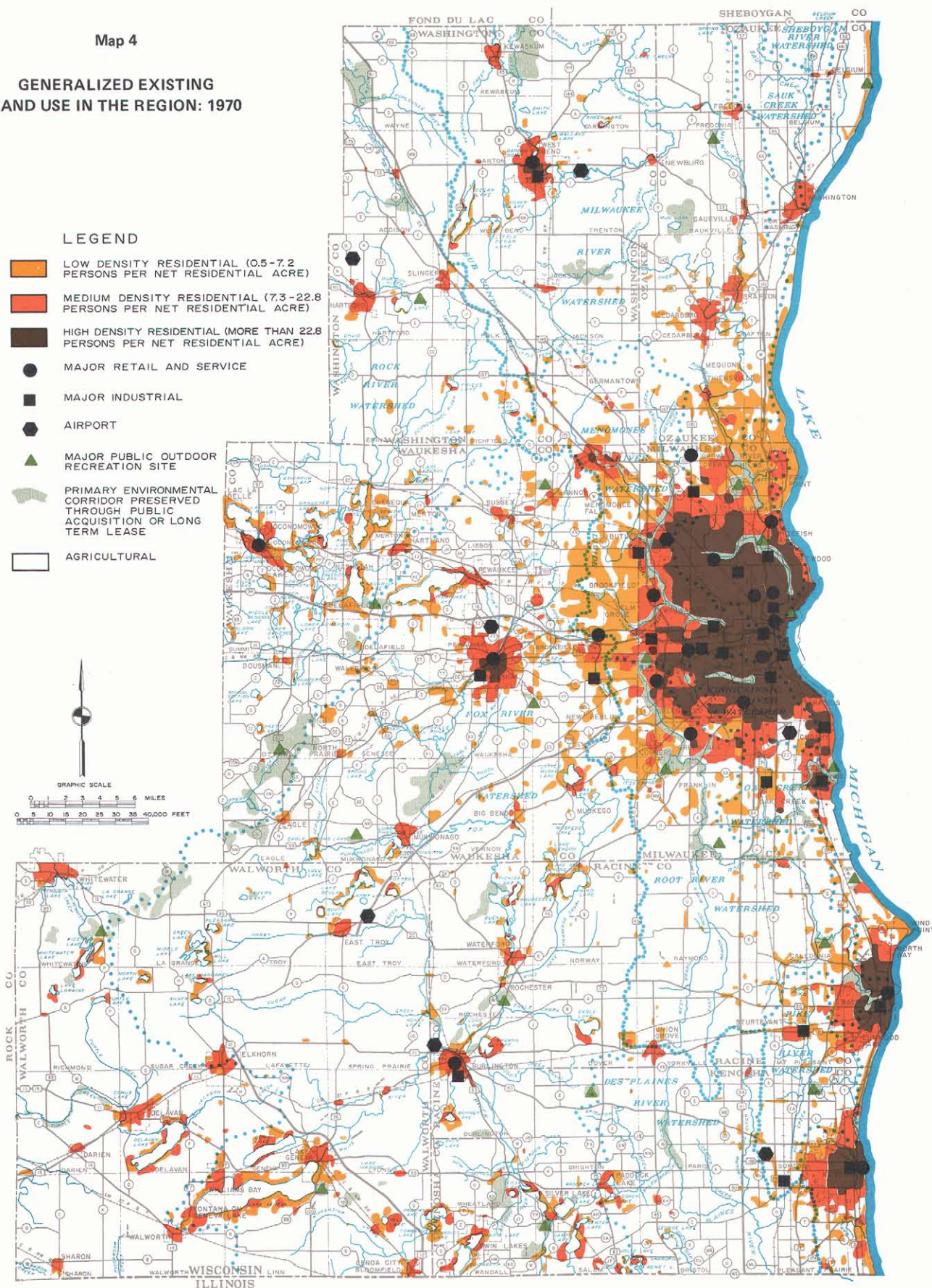
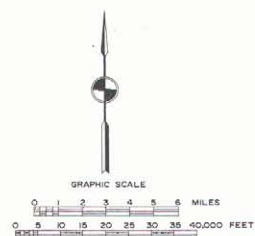


Map 4

# GENERALIZED EXISTING LAND USE IN THE REGION: 1970

## LEGEND

- LOW DENSITY RESIDENTIAL (0.5-7.2 PERSONS PER NET RESIDENTIAL ACRE)
- MEDIUM DENSITY RESIDENTIAL (7.3-22.8 PERSONS PER NET RESIDENTIAL ACRE)
- HIGH DENSITY RESIDENTIAL (MORE THAN 22.8 PERSONS PER NET RESIDENTIAL ACRE)
- MAJOR RETAIL AND SERVICE
- MAJOR INDUSTRIAL
- AIRPORT
- MAJOR PUBLIC OUTDOOR RECREATION SITE
- PRIMARY ENVIRONMENTAL CORRIDOR PRESERVED THROUGH PUBLIC ACQUISITION OR LONG TERM LEASE
- AGRICULTURAL



The spatial distribution of land uses existing within the Region as of April 1970 is summarized on this map. Although southeastern Wisconsin is a highly urbanized Region, less than 20 percent of its total area is presently devoted to urban-type land uses. Agriculture, while declining in economic importance within the Region, still occupies 60 percent of the total land area within the Region, with the remaining 20 percent of the area occupied by water, wetlands, and woodlands.

Source: SEWRPC.

Table 19

## DISTRIBUTION OF LAND USE IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 1970

County	Land Use									
	Residential <sup>a</sup>	Commercial	Industrial <sup>b</sup>	Transportation <sup>c</sup>	Government <sup>d</sup>	Recreation	Water and Wetlands	Open Lands <sup>e</sup>	Agricultural	Total
Kenosha Acres . . . Percent . .	13,477 7.6	504 0.3	811 0.5	8,927 5.0	1,324 0.7	2,672 1.5	19,445 10.9	17,010 9.5	113,930 64.0	178,100 100.0
Milwaukee Acres . . . Percent . .	45,632 29.4	2,875 1.9	4,899 3.2	35,431 22.9	7,490 4.8	9,924 6.4	4,207 2.7	15,999 10.3	28,607 18.4	155,064 100.0
Ozaukee Acres . . . Percent . .	12,321 8.2	330 0.2	444 0.3	8,054 5.4	940 0.6	1,657 1.1	14,879 9.9	10,897 7.3	100,491 67.0	150,013 100.0
Racine Acres . . . Percent . .	16,625 7.6	575 0.3	1,099 0.5	12,442 5.7	1,744 0.8	2,585 1.2	17,712 8.1	17,572 8.1	147,207 67.7	217,561 100.0
Walworth Acres . . . Percent . .	13,408 3.6	593 0.2	827 0.2	12,020 3.3	1,192 0.3	4,275 1.2	39,160 10.6	36,763 9.9	261,744 70.7	369,982 100.0
Washington Acres . . . Percent . .	11,525 4.1	299 0.1	434 0.2	11,286 4.1	919 0.3	1,664 0.6	35,638 12.8	30,503 10.9	186,466 66.9	278,734 100.0
Waukesha Acres . . . Percent . .	43,278 11.6	1,341 0.4	1,525 0.4	21,247 5.7	3,009 0.8	6,219 1.7	49,789 13.4	43,562 11.7	201,676 54.3	371,646 100.0
Region Acres . . . Percent . .	156,266 9.1	6,517 0.4	10,039 0.6	109,407 6.3	16,618 1.0	28,996 1.7	180,830 10.5	172,306 10.0	1,040,121 60.4	1,721,100 100.0

<sup>a</sup> Includes all residential areas, developed and under development.

<sup>b</sup> Includes all manufacturing, wholesale, and storage.

<sup>c</sup> Includes off-street parking of more than 10 spaces.

<sup>d</sup> Includes institutional uses.

<sup>e</sup> Includes woodlands, unused lands, and quarries.

Source: SEWRPC.

tial use. The largest land consumer in this group is the single family detached residence, which occupies about 78 percent of the total residential land area in the Region. Lands under residential development accounted for about 16 percent of the total, while two-family residences accounted for about 4 percent of the total. Mobile homes and multifamily residences combined consumed approximately 2 percent of the total residential land in the Region.

**Commercial:** The commercial land use category includes all retail and service-type commercial uses, including both local and regional shopping centers, highway-oriented commercial areas, and professional and executive offices, excluding, however, onsite parking of more than 10 spaces. There are presently 6,517 acres of land, or less than 1 percent of the regional total, devoted to this land use category.

**Industrial:** This land use category includes all manufacturing activities, wholesaling offices, warehouses, and storage yards but excludes onsite parking of more than 10 spaces. There are presently about 10,000 acres of land, or less than 1 percent of the regional total, devoted to this land use category.

**Transportation, Communication, and Utility:** The transportation, communication, and utility land use category includes all street and highway rights-of-way; railroad rights-of-way and yards; airport, rail, ship, bus, and truck terminals; communications facilities, such as radio or television stations, and transmission communications facilities, such as radio or television stations and transmission towers; utility rights-of-way and plants, such as sewage disposal and water treatment and storage facilities; and all off-street parking areas containing more than

Table 20

## RESIDENTIAL LAND USE IN THE REGION BY TYPE: 1970

Type of Residential Use	Acres	Percent
Single-Family . . . . .	122,507	78.4
Two-Family . . . . .	5,573	3.6
Multifamily (Less Than 4 Stories) . . . . .	2,970	1.9
Multifamily (4 or More Stories) . . . . .	118	0.1
Mobile Homes . . . . .	515	0.3
Residential Land Under Development . . . . .	24,583	15.7
Total	156,266	100.0

Source: SEWRPC.

10 parking spaces. There are presently about 109,400 acres of land, or about 6 percent of the regional total, devoted to this land use category.

**Governmental and Institutional:** The land areas devoted to governmental and institutional uses are classified according to local or regional service orientation. If the service emphasis of a governmental or institutional use was oriented toward more than one community, it is classified as regional. If such service emphasis was oriented toward a single community or neighborhood, except for high schools in the City of Milwaukee, it was classified as local. Regional uses include colleges and universities, high schools, large central libraries, museums, hospitals, nursing homes, county courthouses, welfare agencies, military installations, and others. Local uses include elementary schools, churches, branch libraries, and fire stations as well as city, village, and town halls. At the time of the land use inventory in 1970, more than 16,600 acres of land in southeastern Wisconsin were devoted to governmental and institutional uses, representing 1 percent of the total area of the Region. Government and institutional land with a local service orientation comprised 5,479 acres of 33 percent of this category; the large balance of government and institutional land had a regional orientation.

**Recreation:** The active recreational land use category includes lands devoted to recreational uses such as playgrounds, parks, golf courses, zoos, campgrounds, picnic areas, marinas, and others. In conducting land use inventories, all recreational facilities were further classified as public and nonpublic. The 1970 land use inventory reported a total of about 28,990 acres of active recreational lands in southeastern Wisconsin, representing 1.7 percent of the total area of the Region. Public recreational areas comprised 13,373 acres, or 46.1 percent of this total, while the remainder of the active recreational areas in the Region was privately owned. A detailed analysis of recreation facilities and their use is presented in Chapters V and VI of this report.

**Woodlands and Open Lands:** This land use category includes all land areas presently containing trees or heavy brush; lands which are not presently devoted to urban use, cropped, or grazed; land areas presently devoted to

such temporary uses as open pits for trash or garbage disposal; and quarries either operating or nonoperating. There are presently about 172,300 acres of land, or about 10 percent of the regional total, devoted to this land use category. Approximately 73 percent of this area is devoted to woodlands, with most of the remaining area, 22 percent, classified as unused land. Only 5 percent, or 8,348 acres, is classified as quarries or pits.

**Water and Wetlands:** The water and wetland use category includes all inland lakes excluding Lake Michigan; all streams, rivers, and canals more than 50 feet in width; and open lands which are intermittently covered with water or which are wet because of a high water table. Presently there are about 180,800 acres of water and wetland areas in the Region, or about 10 percent of the regional total.

**Agricultural:** The agricultural land use category includes all croplands, pasturelands, orchards, nurseries, and fowl and fur farms. Farm dwelling sites were classified as residential land and assigned a site area of 20,000 square feet. All other farm buildings were included in the agricultural land use. Agriculture is the singularly largest land use in the Region, and about 60 percent of the total area of the Region, or about 1,040,000 acres, is devoted to this use.

## PUBLIC UTILITY BASE

Urban development today is highly dependent upon public utility systems which serve individual land uses with power, light, communications, heat, water, and sewerage. How well the Region and its principal parts can sustain urban development depends to a considerable extent upon the location and capacities of utility facilities. Particularly important to recreation planning are those utility facilities which are closely linked to the surface and ground water resources of the Region and which may, therefore, greatly affect the overall quality of the regional environment. This is particularly true of sanitary sewerage and water supply facilities which are, in a sense, modifications of, or extensions to, the natural lake, stream, and watercourse system of the Region and which may, consequently, influence its potential for water-related recreational activities. A knowledge of the location and existing service areas of water supply and sanitary sewerage systems within the Region is essential to intelligent recreation planning.

The majority of water and sewerage utilities in the Region is organized as water and sewer departments of incorporated municipalities and serves only those areas within the political boundaries of that municipality. Where sanitary districts have been organized, sewer and water service areas often will tend to approximate one another. Therefore, a general pattern of water and sewer service areas following political boundary lines rather than natural topographic boundaries, such as watershed boundaries, exists within the Region. The governing bodies of these existing utilities tend to be concerned primarily, if not solely, with the problems existing within



the individual political subdivisions served, rather than with problems affecting the area as a whole and the individual political subdivisions in part. The artificial limitations thus placed on sewerage system planning and development at the local level make it extremely difficult to realize the benefits which may be available.

#### Sanitary Sewerage Utilities

Virtually all sanitary sewer service within the Region is provided by publicly owned agencies. These agencies generally take the form of commissions in the case of utilities providing areawide sewer service; a department in the case of utilities providing sewer service to an incorporated municipality; or a town sanitary or utility district in the case of a utility sewer service to an unincorporated area. Inventories conducted under the regional sanitary sewerage system planning program revealed that 91 centralized public sanitary sewerage systems presently (1970) are operated by utilities within the Region. These 91 systems serve a total area of about 300 square miles, or about 11 percent of the total area of the Region, and a total population of about 1.5 million persons, or about 85 percent of the total population of the Region. A total of 64 sewage treatment facilities currently is operated by the utilities owning, operating, and maintaining the 91 public sanitary sewerage systems, with many of the utilities contracting with adjacent utilities for sewage treatment purposes. In addition, there are 59 privately owned sewage treatment plants presently in operation within the Region. These generally serve isolated land use enclaves, mainly for industrial, commercial, and recreational enterprises. In all, then, there are 123 sewage treatment facilities in the Region. Existing (1970) public sanitary sewerage service areas along with the location of the existing sewage treatment facilities within the Region are shown on Map 5.

Septic Tank System Development: The construction of public sanitary sewerage facilities has not fully kept pace with the rapid urbanization of the Region, and this lag has contributed to the widespread use of onsite soil absorption sewage disposal systems. An estimated total of 268,000 persons in the Region, or about 15 percent of the total regional population, relies on such septic tank sewage disposal systems for domestic sewage disposal. About 27,000 of these persons live on farms. The remaining 241,000 persons are urban dwellers generally living in scattered fashion throughout the rural and rural-urban fringe areas of the Region. About 139,000 of the 241,000 urban dwellers live within urbanizing areas of the Region, however, and within potential service areas of centralized sanitary sewer systems. The area presently devoted to urban land uses within the Region but unserved by sanitary sewerage facilities is estimated to total from 61 to 85 square miles, or from 23 to 21 percent of the presently urbanized area of the Region, depending upon the definition of the term "urban development" used.

#### Water Utilities

Most of the water supply service within the Region is provided by public water utilities. There are 67 publicly owned water utilities in the Region. Of these, all but

one—the North Shore Water Utility in Milwaukee County—provide retail water service to consumers. The North Shore Water Utility provides only wholesale water service to three other water utilities: the Glendale Water Utility, the Village of Whitefish Bay Water Utility, and the Water Utility of the Village of Fox Point. Together, these 67 publicly owned water utilities serve an area of almost 260 square miles, or about 10 percent of the total area of the Region, and about 1.4 million persons, or about 80 percent of the total 1970 resident population of the Region. The existing (1970) service areas of these 67 publicly owned water utilities are shown on Map 6.

In addition to the publicly owned water utilities, there are at least 59 private or cooperatively owned water systems throughout the Region. Many of these small water systems serve isolated residential enclaves, while some serve summer residents only and suspend operations during cold weather. Very few of these private systems have standby supply or storage facilities, and the great majority does not keep detailed records or file annual reports with state or regulatory bodies. Many of these systems are expected eventually to be absorbed into publicly owned municipal water utilities. The location of these 59 privately owned water utilities also is shown on Map 6.

#### TRANSPORTATION BASE

A very important factor affecting the use of a park or other outdoor recreation area is its accessibility to the resident population. Accordingly, an important consideration in outdoor recreation planning for southeastern Wisconsin is the level of accessibility which the transportation system provides to local and regional recreation areas, both existing and potential, within the Region. Surface transportation is supplied within southeastern Wisconsin primarily by a highly improved, widespread system of streets and highways and by a more limited system of mass transit buses. The streets and highway system consists of three subsystems: land access and collectors; surface arterial streets and highways; and freeways and expressways. A brief discussion of each of the four major types of existing surface transportation facilities in southeastern Wisconsin follows.

#### Land Access and Collector Streets

Land access and collector streets provide access to the individual neighborhoods of the urban area and to the individual building sites of these neighborhoods, and comprise the majority of the land area devoted to surface transportation use. These land access and collector streets also serve as rights-of-way for community utilities, such as sanitary sewers, water mains, storm drains, and gas and electric power lines. In addition, land access streets and collector streets assure light and air for the building sites comprising the urban area and provide the overland drainage system for that area. As indicated in Table 21, there was a total of 6,700 miles of local access and collector streets in the Region in 1972, representing 68 percent of the total street and highway mileage in the Region at that time.



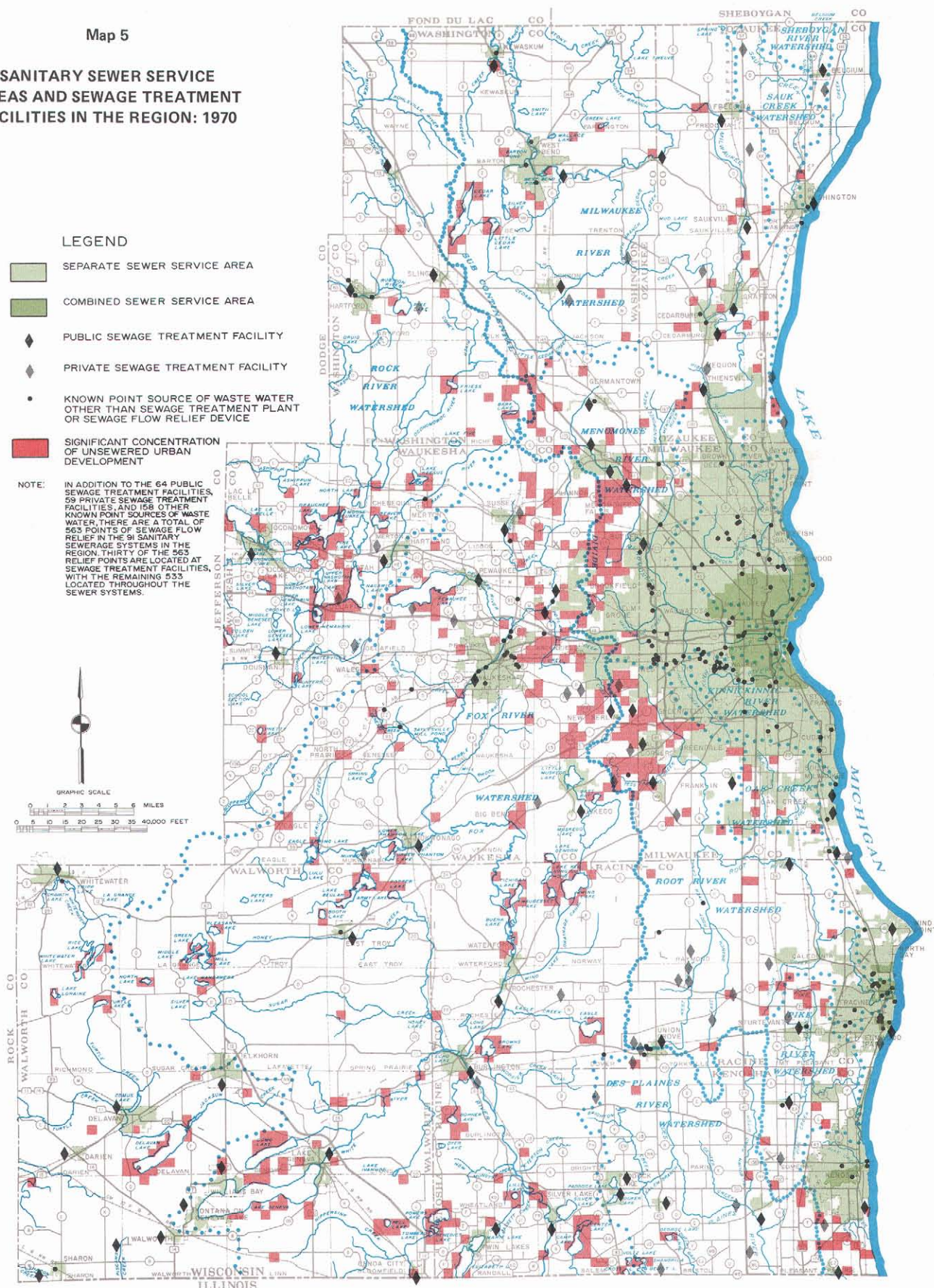
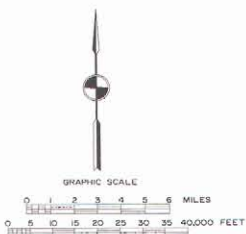
Map 5

# **SANITARY SEWER SERVICE AREAS AND SEWAGE TREATMENT FACILITIES IN THE REGION: 1970**

## **LEGEND**

- SEPARATE SEWER SERVICE AREA
- COMBINED SEWER SERVICE AREA
- PUBLIC SEWAGE TREATMENT FACILITY
- PRIVATE SEWAGE TREATMENT FACILITY
- KNOWN POINT SOURCE OF WASTE WATER OTHER THAN SEWAGE TREATMENT PLANT OR SEWAGE FLOW RELIEF DEVICE
- SIGNIFICANT CONCENTRATION OF UNSEWERED URBAN DEVELOPMENT

NOTE: IN ADDITION TO THE 64 PUBLIC SEWAGE TREATMENT FACILITIES, 59 PRIVATE SEWAGE TREATMENT FACILITIES, AND 158 OTHER KNOWN POINT SOURCES OF WASTE WATER, THERE ARE A TOTAL OF 563 POINTS OF SEWAGE FLOW RELIEF IN THE 91 SANITARY SEWERAGE SYSTEMS IN THE REGION. THIRTY OF THE 563 RELIEF POINTS ARE LOCATED AT SEWAGE TREATMENT FACILITIES, WITH THE REMAINING 533 LOCATED THROUGHOUT THE SEWER SYSTEMS.



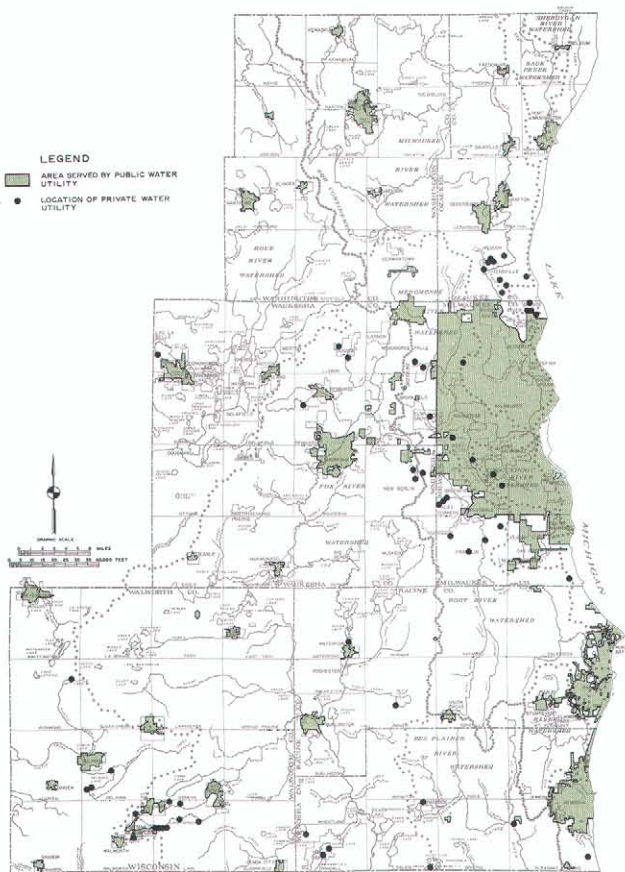
Centralized public sanitary sewer service in the Region is provided by 91 public sewerage systems to an area of about 309 square miles, or 11 percent of the total area of the Region. These 91 systems serve nearly 1.5 million persons or about 85 percent of the total population of the Region.

Source: SEWRPC.



Map 6

## WATER UTILITIES IN THE REGION: 1970



Most of the water supply service in the Region is provided by 67 publicly owned water utilities. Together, these 67 publicly owned water utilities serve an area of about 259 square miles, or about 10 percent of the total area of the Region, and about 1.4 million persons, or about 80 percent of the regional population. In addition, there are at least 59 privately or cooperatively owned water supply systems in the Region which provide water service generally to individual subdivisions. The location of these private systems also is shown on this map.

Source: SEWRPC.

### Arterial Street and Highway Facilities

Arterial streets and highways in an urban area serve to link the various neighborhoods comprising the community and, in a highly urbanizing area such as southeastern Wisconsin, also serve to link one community with another within the metropolitan Region and the metropolitan Region with other adjacent regions. The major transportation network within the Region, as shown on Map 7, consists of a radial pattern of state trunk and county trunk highways interconnecting the urban and rural areas of the Region. As indicated in Table 21, there was a total of 3,119 miles of arterial streets and highways in the Region in 1972, consisting of 2,814 miles of ordinary surface arterial streets and highways and

305 miles of freeways and expressways. Arterial street and highway utilization within the Region, as measured in vehicle miles of travel on the average weekday, was about 20 million vehicle miles in 1972.

### Freeways and Expressways

The data clearly indicate that the freeway system is the backbone of the regional arterial street and highway system. In 1963 freeways and expressways carried only slightly more than 11 percent of the total vehicle miles of arterial travel within the Region. By 1967, this percentage had increased to nearly 24 percent; by 1970, to nearly 32 percent; and by 1972, slightly over 33 percent of all arterial travel occurred on freeways. That freeways are not only highly efficient but heavily used carriers of arterial traffic is indicated by the fact that in 1972 the freeway system comprised only 10 percent of the total arterial street and highway system mileage, yet carried nearly one-third of the total vehicle miles of travel. The shift in travel patterns from surface arterial to freeway facilities has been the greatest in Milwaukee County, where total vehicle miles of travel carried by the freeway system have increased more than sevenfold, from about 531,000 in 1963 to nearly 4.0 million in 1972, while the total vehicle miles of travel carried by standard surface arterials in the county have actually decreased from about 6.8 million in 1963 to nearly 6.7 million in 1972. Thus, all the growth in arterial travel in Milwaukee County has in effect been absorbed by the freeway system. At the same time, travel times and traffic congestion have been reduced on the standard surface arterials which serve local businesses and residential areas.

### Transit Facilities

A network of mass transit facilities complements and supplements the surface transportation service provided by the regional arterial street and highway network. Indeed, in many instances the only means of affordable transportation, especially for low- and moderate-income households, is that made available through mass transit facilities.

Mass transportation may be defined as the transportation of relatively large groups of people by relatively large, generally publicly or quasi-publicly owned vehicles routed between or along significant concentrations of related trip origins and destinations. Some form of mass transportation is essential in any sizeable urban area, not only to meet the needs of that segment of the population unable to command direct use of personalized transportation but also to provide an alternative, more efficient mode of travel for certain types of trips within and between urban areas.

The supply and use of mass transit are discussed fully in other Commission publications.<sup>6</sup> Of importance to the regional park and open space planning program, however,

<sup>6</sup> See SEWRPC Planning Report No. 25, *A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin—2000, Volume I, Inventory Findings*.

Table 21

## DISTRIBUTION OF STREET AND HIGHWAY MILEAGE IN THE REGION BY COUNTY AND TYPE OF FACILITY: 1972

County	Mileage by Type of Facility—1972						
	Arterial				Collector and Minor Streets	Total <sup>a</sup>	Arterial Miles As Percent of Total
	Freeway and Expressway	Freeway and Expressway Ramps	Other	Total			
Kenosha . . . . .	12.0 <sup>b</sup>	7.4	267.7	287.1	593.4	880.5	32.6
Milwaukee . . . .	64.5	61.5	669.7	795.7	1,851.7	2,647.4	30.1
Ozaukee . . . . .	13.0	3.2	237.3	253.5	466.7	720.2	35.2
Racine . . . . .	12.0 <sup>b</sup>	6.0	337.4	355.4	728.0	1,083.4	32.8
Walworth . . . . .	19.1	3.8	389.1	412.0	846.9	1,308.9	31.5
Washington . . . .	28.5	5.6	310.7	344.8	821.1	1,165.9	29.6
Waukesha . . . . .	46.4	21.7	602.1	670.2	1,342.5	2,012.7	33.3
Region	195.5	109.2	2,814.0	3,118.7	6,700.3	9,819.0	31.8
Percent of Total	6.3	3.5	90.2	100.0	68.2	100.0	--

<sup>a</sup> Total street and highway mileage does not include private streets and roads or roads in public park and institution lands.

<sup>b</sup> The arterial link data cards from which arterial street and highway mileage is computed were recoded in 1970 to more precisely determine actual freeway mileage within Kenosha and Racine Counties by recoding 0.4 mile of freeway from Kenosha County to Racine County.

Source: Wisconsin Department of Transportation and SEWRPC.

is a determination of the extent to which intraregional common carrier fixed route transit service is provided in the Region and the relationship of this transit service to existing park and recreation areas in the Region.

The intraregional common carrier fixed route service may be subdivided into primary, secondary, and tertiary levels of service. The primary level of service is intended to facilitate transregional, or intercommunity, travel by connecting the various major activity centers and communities of the Region. Primary level service consists of service provided by those mass transportation facilities which join the major regional activity centers—such as regional commercial, industrial, institutional, and recreational centers—to each other and to the residential communities comprising the Region. The major purpose of the primary level of mass transportation service is to provide a network of relatively highspeed lines which serve and connect these kinds of centers and residential communities. Primary level mass transportation service may be characterized as having relatively high operating speeds and relatively low accessibility.

Primary transit service may be further subdivided into rapid and modified rapid transit subcategories. Rapid transit service can be defined as service provided at relatively high operating speeds over exclusive, fully grade separated rights-of-way with station stops, if any, between terminals generally located no less than one mile or more apart. Rapid transit service may, thus, be provided by commuter rail facilities, by "heavy" rail transit facilities, or by motor buses operating on exclusive

busways. Modified rapid transit may be provided by motor buses operating in mixed traffic on freeways and by "light" rail facilities if such facilities are provided with an exclusive but not necessarily fully grade separated right-of-way.

The secondary level of intraregional common carrier fixed route service consists of express service. This is defined as service provided over arterial streets with stops generally located at intersecting transit routes and major traffic generators, generally no less than 1,200 feet apart. The secondary mass transportation system may provide "feeder" service to the primary system as well as greater depth and breadth of access from subregional areas. Secondary express service could be provided by motor bus or by light rail cars when such vehicles are operated in mixed traffic on shared rights-of-way. The operation of motor buses or light rail vehicles over exclusive lanes within an otherwise shared right-of-way would constitute a high level of secondary service. In general, secondary mass transit service may be distinguished from primary mass transit service in that it provides a greater degree of accessibility at somewhat slower operating speeds.

The tertiary level of fixed route common carrier mass transportation service is characterized by a high degree of accessibility and a relatively low operating speed. This tertiary level may be subdivided into two categories: local and collection-circulation-distribution. Local service may be defined as service provided primarily over arterial and collector streets with stops for passenger pickup and discharge located no more than 1,200 feet apart. Such



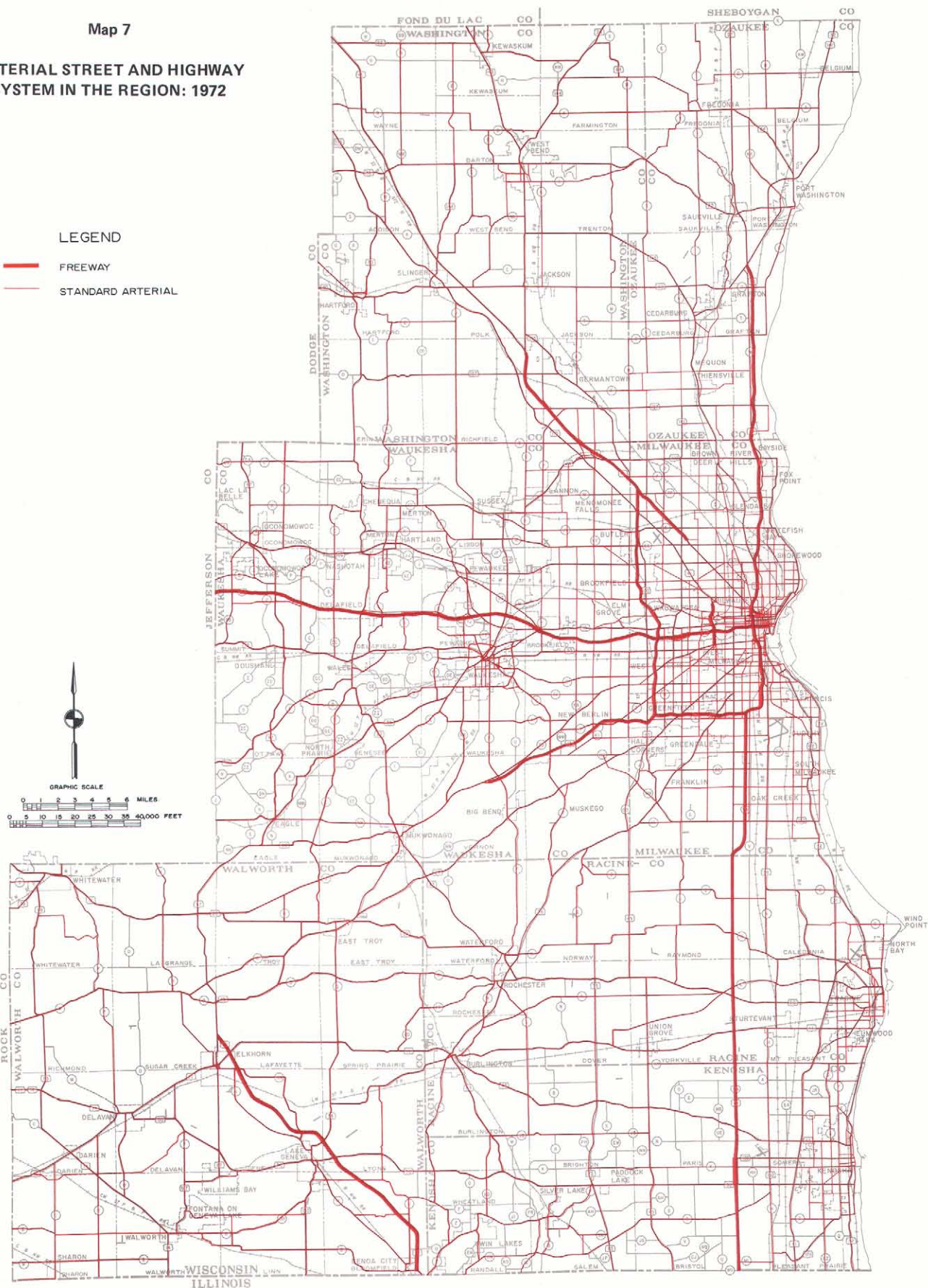
Map 7

# ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION: 1972

LEGEND

— FREEWAY

— STANDARD ARTERIAL



An important consideration in outdoor recreation planning for southeastern Wisconsin is the level of accessibility which the transportation system provides to local and regional recreation areas, both existing and potential, within the Region. The streets and highway system in southeastern Wisconsin consists of three subsystems: land access and collector streets, surface arterials, and freeways and expressways. Local access and collector streets totaled 6,700 miles, or 68 percent of the total street and highway mileage in the Region in 1972. In addition, there were 2,814 miles of ordinary surface arterial streets and highways and 305 miles of freeways and expressways. In 1972 the freeway system comprised only 10 percent of the total arterial street and highway system mileage, yet carried one-third of the total vehicle miles of travel.

Source: SEWRPC.

service could be provided by motor bus, trolley bus, or light rail vehicles. Collection-circulation-distribution service may be defined as service provided for the movement of passengers within major activity centers by motor bus or van, trolley bus, light rail vehicles, automated guideway vehicles, and other types of people movers such as moving ramps.

Intraregional fixed route mass transit service was provided within the Region in 1972 in each of the three categories of primary, secondary, and tertiary levels of service. Primary service consisted entirely of the modified rapid transit "freeway flyer" motor bus service provided in the Milwaukee urban area by the Milwaukee and Suburban Transport Corporation (see Map 8).

Secondary intraregional mass transit service in the Region for the year 1972 also is shown on Map 8. Such service is largely composed of express bus lines operated by Wisconsin Coach Lines, Inc., and by the Milwaukee and Suburban Transport Corporation. The secondary service provided by the Transport Corporation consists of two express bus lines, one from the Milwaukee Central Business District (CBD) south toward the southerly lake-shore suburbs of Milwaukee and the other from the Milwaukee CBD west and north to the Washington Park area of Milwaukee. Secondary mass transit service provided by Wisconsin Coach Lines, Inc., was found in the Milwaukee-Waukesha corridor with 17 eastbound trips and 20 westbound trips per weekday. Secondary service between Milwaukee and Port Washington, Watertown, Racine, and Kenosha also was provided.

Tertiary mass transportation service was provided in the Kenosha, Milwaukee, and Racine urbanized areas in 1972. The Kenosha Transit-Parking Commission provided tertiary service in the Kenosha urbanized area; the Milwaukee and Suburban Transport Corporation provided

such service within Milwaukee County; Wisconsin Coach Lines, Inc., provided such service in the City of Waukesha; and Flash City Transit Company provided such service in the Racine urbanized areas. In addition, a tertiary level collection-circulation-distribution system was operated by the University of Wisconsin-Parkside in Kenosha County. The tertiary mass transportation service provided within the Kenosha and Racine urbanized areas in 1972 is shown on Map 9 while the tertiary mass transportation service provided within the Milwaukee urbanized area is shown on Map 10.

As shown in Table 22, about 36 percent of the land area and approximately 82 percent of the resident population of the Milwaukee urbanized area was found to be within the tertiary, or local, mass transportation service area in 1972. In the Kenosha urbanized area, the local mass transit service area exceeded the urbanized area boundaries in places so that approximately 115 percent of the land area and about 97 percent of the resident population were served. This high proportion of area and population served in the Kenosha area is due primarily to extensions of local mass transit service to outlying industries and enclaves of senior citizen housing.

It should be noted that 716 existing park and outdoor recreation sites totaling about 8,770 acres are located within the local mass transit service area in the Milwaukee, Racine, and Kenosha urbanized areas. This represents about 40 percent of the 1,773 park and outdoor recreation sites and 18 percent of the 49,200 acres of park and recreation lands in the Region.

Pleasure Driving: The existing transportation system within southeastern Wisconsin serves to connect the various land uses within the Region, thereby providing the accessibility essential to the support of these activities. In addition, the existing surface transportation net-

Table 22

LAND AREA AND POPULATION SERVED BY LOCAL MASS TRANSIT IN THE REGION BY URBAN AREA: 1972

Urban Area	Urban Area Size (Acres)	Area Served by Local Transit <sup>a</sup> (Acres)	Percent of Total Urban Area Served	Urban Area Population <sup>b</sup>	Population Served by Local Transit <sup>a</sup>	Percent of Total Population Served
Milwaukee <sup>c</sup> . . . .	292,100	105,500	36	1,267,400	1,043,600	82
Racine. . . . .	18,000	11,200	62	115,200	100,600	88
Kenosha <sup>d</sup> . . . . .	11,200	12,900	115	86,500	83,900	97
Total	321,300	129,600	40	1,469,100	1,228,100	84

<sup>a</sup> Area of U. S. Public Land Survey quarter sections within one-quarter mile of transit route.

<sup>b</sup> SEWRPC estimate.

<sup>c</sup> Includes Milwaukee and Waukesha transit systems (excludes school "trippers" in the City of Waukesha and includes primary and secondary transit service provided by the Milwaukee and Suburban Transport Corporation).

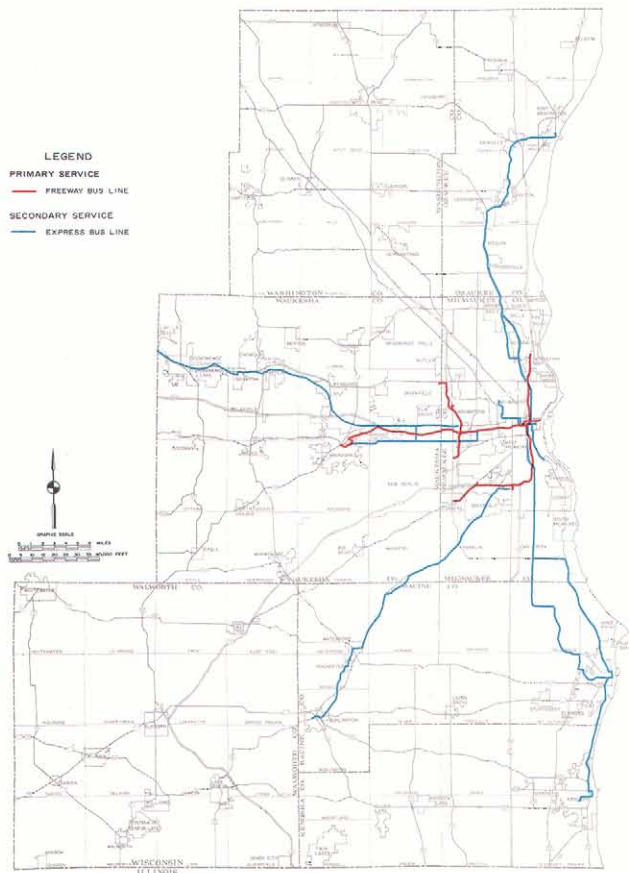
<sup>d</sup> Excludes school trippers.

Source: SEWRPC.



Map 8

**PRIMARY AND SECONDARY MASS  
TRANSPORTATION SERVICE WITHIN THE REGION: 1972**



In 1972 primary intraregional mass transportation service existed in the form of modified rapid transit freeway flyer bus service. Such service in 1972 consisted of seven lines operated over 45 miles of streets and highways. Secondary level service consisted of five lines operated over 175 miles of streets and highways by Wisconsin Coach Lines, Inc., and two lines operated over eight miles of streets and highways by the Milwaukee and Suburban Transport Corporation.

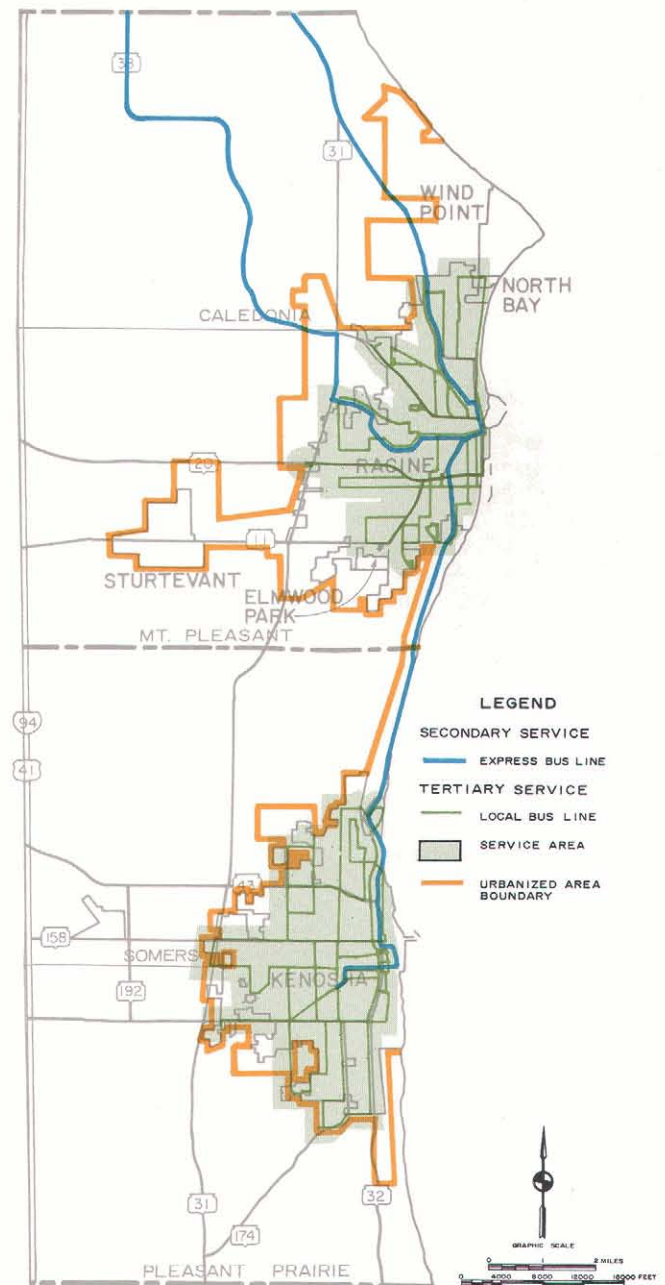
Source: SEWRPC.

work also provides facilities for one of the most popular outdoor recreational activities in the Region, namely, pleasure driving. Those segments of the surface transportation system which are most suitable for pleasure driving are identified in this section.

Pleasure drives consist of both scenic drives and parkway drives. A scenic drive is defined as a marked and signed route that traverses particularly pleasing landscapes, including areas of topographic, vegetative, and geologic interest and areas containing sites of scientific, cultural, or historic interest and which, together with other scenic drives, constitutes a network, or system, providing con-

Map 9

**INTRAREGIONAL MASS TRANSPORTATION SERVICE  
IN THE KENOSHA AND RACINE URBANIZED AREAS  
MAY 1972**

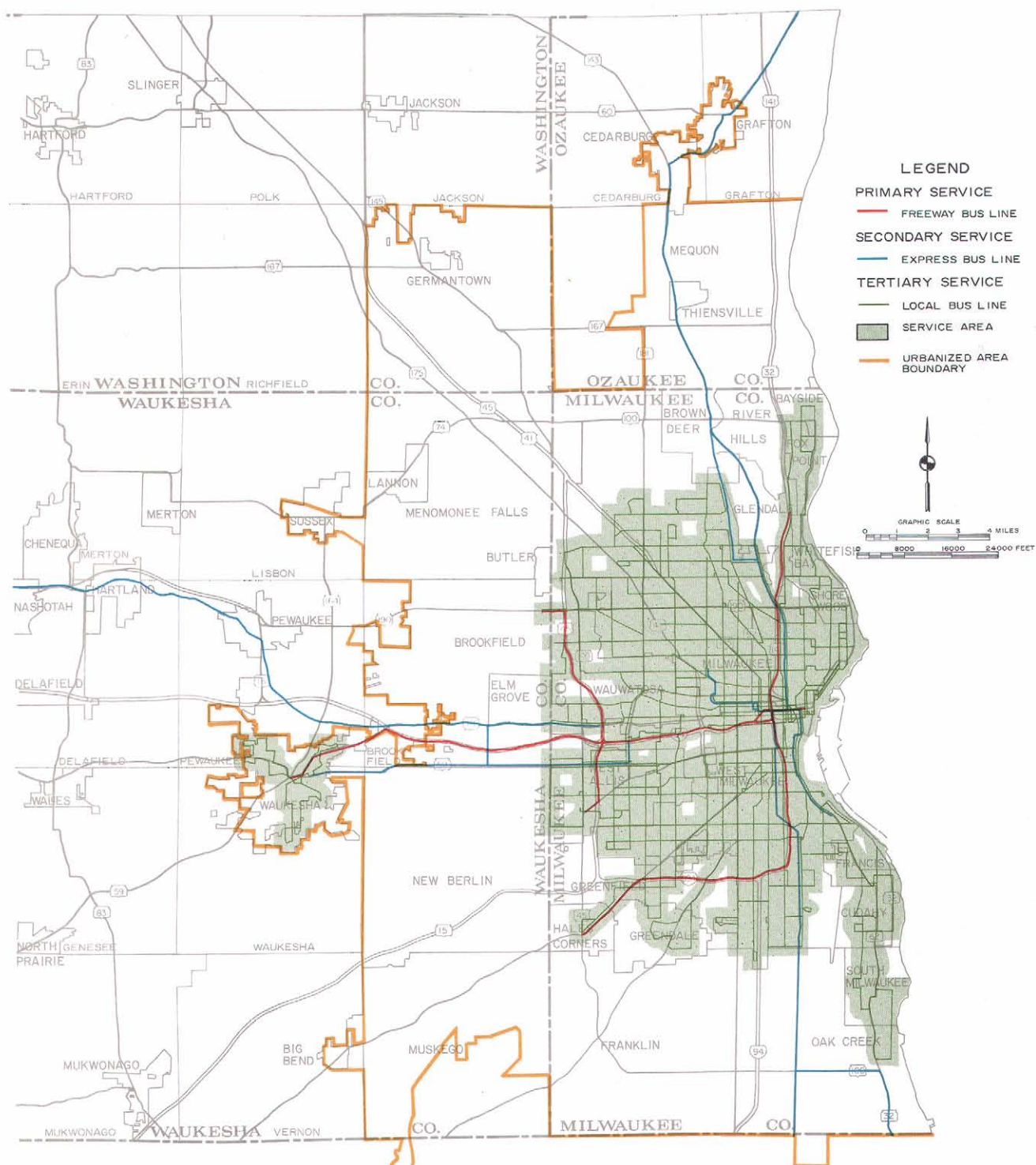


Approximately 100,000 persons lived within one-quarter mile of local transit lines in the Racine urbanized area. This represented about 88 percent of the urban area population. In Kenosha about 83,900 persons lived within one-quarter mile of local transit lines, representing about 97 percent of the urban area population.

Source: SEWRPC.

Map 10

INTRAREGIONAL MASS TRANSPORTATION SERVICE IN THE MILWAUKEE URBANIZED AREA: MAY 1972



In 1972, both the Milwaukee and Suburban Transport Corporation and Wisconsin Coach Lines, Inc., provided local mass transit service in the Milwaukee urbanized areas. Approximately 1.04 million persons resided within one-quarter mile of local transit lines, representing 82 percent of the urbanized area populations.

Source: SEWRPC.



tinuity for pleasure driving, bicycling, and hiking. Because of the need for continuity, the facilities comprising a scenic drive network may include certain relatively high volume, high speed arterial, as well as low volume, low speed nonarterial streets and highways. Considered part of the scenic drive network is a special category of pleasure drives known as rustic roads. A rustic road is a low volume nonarterial street or highway possessing outstanding scenic, natural, and cultural features along its borders, including native trees, shrubs, wildflowers, grasses, and ferns, as well as open areas with rustic or natural vistas. A rustic road should be maintained essentially in its existing state and not be improved for traffic safety or capacity purposes. Operating speeds should be severely restricted and the facility may have to accommodate pedestrian, equestrian, and bicycle as well as motor vehicle traffic. It should be noted that while a system of scenic drives may encompass sections of rustic roads, all scenic drives are not rustic roads. A parkway drive is defined as a nonarterial roadway usually established in an elongated area of publicly owned park land along lakeshore, stream valley, or ridge lines and intended to link major outdoor recreation areas within a total park and recreation system, while at the same time preserving in open space uses lands having unique environmental values, such as natural floodlands, which should not be developed for intensive urban uses. In general, scenic drives are appropriately established in rural areas, while parkway drives are more appropriately established in urban areas.

As part of its jurisdictional highway and watershed planning programs, the Commission has identified scenic routes and recommended their marking as scenic drives in each county of the Region except Walworth.<sup>7</sup> Under these programs, 719 miles of streets and highways have been recommended for marking as scenic drives with the distribution among the six counties as follows: Kenosha—136 miles; Milwaukee—14 miles; Ozaukee—108 miles; Racine—160 miles; Washington—199 miles; and Waukesha—102 miles. The proposed scenic drive network would connect nearly all the state and county parks as well as many of the identified sites of historical, cultural, or scientific interest within these six counties (see Map 11). It should be noted that the Commission has made no recommendations with respect to the marking

of scenic drives in Walworth County. It should also be noted, however, that the Kettle Moraine Scenic Drive, a signed scenic drive traversing the western portion of the Region, does include approximately 12 miles of existing streets and highways in northwestern Walworth County.

Also shown on Map 11, is the system of parkway drives planned for Milwaukee County by the Milwaukee County Park Commission. At its completion, the parkway network would include about 85 miles of parkway drives, 14 of which have been included above as part of the Menomonee River watershed plan recommendations. Approximately 51 miles, or 60 percent, of the proposed parkway system have not yet been constructed.

## SUMMARY

The seven-county Southeastern Wisconsin Region is an interrelated complex of natural and man-made features which together form a rapidly changing environment for human life. The most important man-made features of the Region include its land use pattern, its public utility networks, and its transportation system. Together with the population residing in and the economic activities taking place within the Region, these features may be thought of as the socioeconomic base of the Region. An understanding of this base is essential to sound areawide recreation planning, and to this end this chapter constitutes a description of the socioeconomic base of the region. The most important aspects of that description are summarized below.

1. The population of the Region increased at an average rate of about 18,000 persons per year from 1960 to 1970, and as of 1970 totaled 1,756,086 persons. This rate of population growth is lower than state and national growth rates, and it is considerably lower than the approximately 33,000 persons per year growth rate experienced within the Region from 1950 to 1960.
2. The changes in population size have been accompanied by marked changes in population distribution. The Southeastern Wisconsin Region, like most metropolitan regions in the United States, is becoming increasingly urban. By 1970, 98 percent of the regional population was urban, while only 2 percent was rural. The regional population is also becoming increasingly decentralized, spreading out across established city and county boundaries. The most dramatic distributional changes over the 70 year period from 1900 to 1970 occurred in Milwaukee and Waukesha Counties. From 1900 to 1930, the Milwaukee County portion of the regional population increased by about 6 percent, but then decreased by over 12 percent from 1930 to 1970. Waukesha County, on the other hand, decreased by about 2 percent from 1900 to 1930 and then increased by about 8 percent from 1930 to 1970.

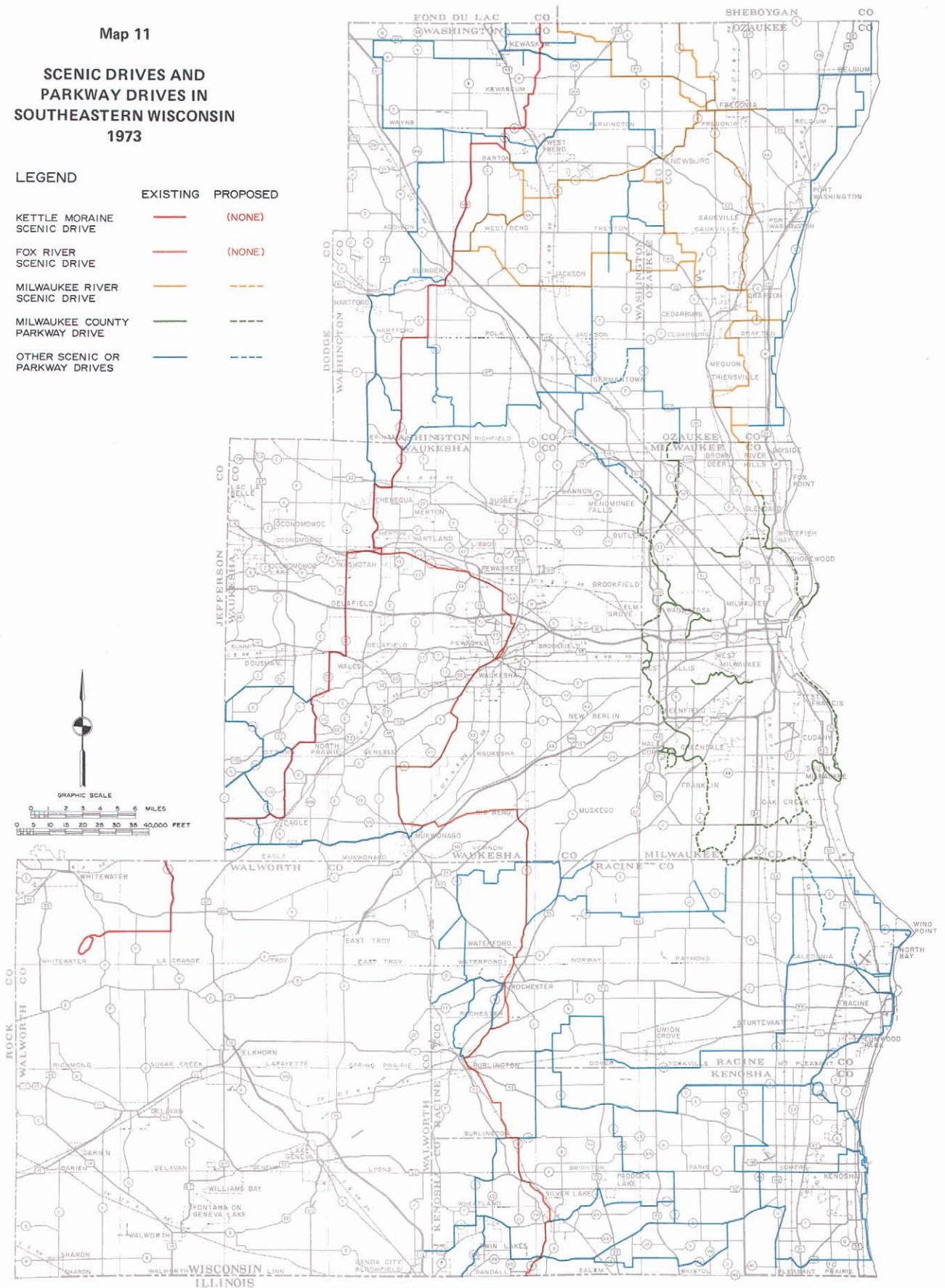
<sup>7</sup> The recommended scenic drives are contained in *Planning Report No. 12, A Comprehensive Plan for the Fox River Watershed*; *Planning Report No. 13, A Comprehensive Plan for the Milwaukee River Watershed*; *Planning Report No. 17, A Jurisdictional Highway System Plan for Ozaukee County*; *Planning Report No. 18, A Jurisdictional Highway System Plan for Waukesha County*; *Planning Report No. 22, A Jurisdictional Highway System Plan for Racine County*; *Planning Report No. 23, A Jurisdictional Highway System Plan for Washington County*; *Planning Report No. 24, A Jurisdictional Highway System Plan for Kenosha County*; and *Planning Report No. 26, A Comprehensive Plan for the Menomonee River Watershed*.

Map 11

# SCENIC DRIVES AND PARKWAY DRIVES IN SOUTHEASTERN WISCONSIN 1973

## LEGEND

	EXISTING	PROPOSED
KETTLE MORaine SCENIC DRIVE	<span style="color: red;">—</span>	(NONE)
FOX RIVER SCENIC DRIVE	<span style="color: red;">—</span>	(NONE)
MILWAUKEE RIVER SCENIC DRIVE	<span style="color: orange;">—</span>	<span style="color: orange;">- - -</span>
MILWAUKEE COUNTY PARKWAY DRIVE	<span style="color: green;">—</span>	<span style="color: green;">- - -</span>
OTHER SCENIC OR PARKWAY DRIVES	<span style="color: blue;">—</span>	<span style="color: blue;">- - -</span>



Over 700 miles of existing streets and highways have been identified and recommended for marking as scenic drives as part of Commission-adopted jurisdictional highway and watershed planning programs. In addition, the Milwaukee County Park Commission has recommended the development of a network of about 85 miles of parkway pleasure drives. More than 30 miles, or about 40 percent of the recommended total length of such drives, have already been constructed. The proposed scenic and parkway drive network would connect nearly all of the state and county parks—as well as many of the sites of identified historical, cultural, or scientific interest within six counties of the Region. To date no recommendation on the marking of scenic drives has been made for Walworth County, the seventh County of the Region.

Source: SEWRPC.

3. The characteristics of the regional population, including the composition by age, sex, and race, the educational attainment, and the occupational status also changed significantly between 1960 and 1970. With respect to the age composition, the most striking changes are the increase in the proportion of young persons between the ages of 10 and 24 years and the decreases in the proportion of children under five years and in the proportion of adults between 30 and 39 years. The sex composition of the regional population also changed in that there was a significant decrease in the proportion of males between 1960 and 1970, with at least slight decreases being observed within each 10-year age group except the 10-19 group. In addition to these population characteristic changes, the racial composition of the regional population changed somewhat during the last decade. The 1970 census indicated that 92.6 percent of the regional population was white, while in 1960 the percentage of white population was 95.3. The balance of the population was non-white, and in both 1960 and 1970 the vast majority of this group was composed of persons of the black race.
4. Educational attainment of the population over 25 years of age increased substantially between 1960 and 1970. The median number of years of schooling completed increased from 11.0 years in 1960 to 12.2 years in 1970. Also in 1960, about 44 percent of the population over 25 had completed high school or attended college, while in 1970 this number had increased to 56 percent.
5. Between 1960 and 1970, the occupational status of the regional population also changed somewhat. Thus, the proportion of white collar workers in the Region increased, rising from 41.6 percent of the employed population 14 years old and over in 1960 to 45.3 percent in 1970. Conversely, the proportion of blue collar workers decreased from 42.4 percent to 36.0 percent between 1960 and 1970, with an actual decline in the number of blue collar workers occurring during this period. The proportion of farm workers also declined slightly, from 1.9 percent to 1.1 percent between 1960 and 1970, while the proportion of service workers increased from 9.6 percent to 11.9 percent during this time.
6. The level of income is a major determinant of the types of recreational activities in which an individual or household can participate. Personal income in the Region has been increasing at a rapid rate. In 1969, total personal income was over \$6 billion. From 1949 to 1969, total income in the Region increased by \$4.4 billion, or 263 percent. Since the increase in total income has occurred at a much faster rate than the increase in the regional population, the average per capita income in the Region increased considerably from \$1,338 in 1949 to \$3,433 in 1969, a relative increase of 157 percent. Similarly, the average per household income in the Region grew rapidly between 1949 and 1969, increasing from \$4,682 to \$11,238, or by 140 percent, during that time.
7. Economic activity within the Region, as measured in jobs, increased moderately between 1960 and 1970. Employment opportunities increased at a rate of approximately 9,370 jobs per year during that time to a current (1970) level of about 741,600 jobs. A general trend toward the decentralization of manufacturing, distribution, and service activities from highly urbanized areas to more suburban and rural-urban fringe areas is taking place within the Region.
8. Land within the Region has been undergoing a particularly rapid conversion from rural to urban use. Recent urban development within the Region has been discontinuous and highly diffused, consisting primarily of many scattered, low-density, isolated enclaves of residential development located away from established urban centers. Urban population densities within the Region, which peaked in 1920 at a level of about 11,000 persons per square mile, have been steadily declining since then to a level of about 4,300 persons per square mile in 1970. Much of the new dispersed urban development is being attracted by the prime recreational resources of the Region, clustering around the many inland lakes, spreading out along the Lake Michigan shoreline, and intruding into the riverine areas of the streams and watercourses and into the Kettle Moraine Forest areas of the Region. The resultant loss to urban development includes not only the potential park and recreation sites but also the related open space necessary to maintain good outdoor recreation opportunities within the Region and to preserve the overall quality of the environment within the Region.
9. The Southeastern Wisconsin Region is the most highly urbanized area within the State; yet less than 20 percent of its total area is presently devoted to urban type land uses. The largest single land use category within the Region is still agriculture. It occupies about 60 percent of the total area. The next largest single land use category is the water and wetland group, which occupies about 10 percent of the total area; and woodlands and open lands, which presently occupy another 10 percent of the total area of the Region. The "urban" type land use occupying the greatest area is residential, which presently accounts for about 9 percent of the total area of the Region.
10. Public utility systems are among the most important and permanent elements of urban growth and development. The majority of sanitary sewerage and water supply services within the Region is

provided by publicly owned agencies. A total of 91 centralized public sanitary sewerage systems presently is operated by utilities within the Region. These 91 systems serve a total area of about 309 square miles, or about 11 percent of the total area of the Region, and a total population of about 1.5 million persons. Sixty-seven publicly owned water utilities are operating in the Region and serve about 1.4 million persons.

11. Surface transportation facilities are of four basic types: land access and collector streets, ordinary surface arterial streets and highways, freeways and expressways, and mass transit facilities. There were 9,819 miles of surface transportation facilities in the Region in 1972. Land access and collector streets accounted for 6,700 miles, or more than 68 percent of the total miles; ordinary surface arterial streets and highways accounted for 2,814 miles, or about 29 percent of the total miles; and freeways and expressways totaled about 305 miles, or about 3 percent of the total miles of surface transportation facilities in the

Region. Freeways and expressways form the backbone of the regional arterial street and highway system. In 1963, freeways and expressways carried about 11 percent of the total vehicle miles or arterial travel within the Region; by 1972, this percentage had increased to slightly over 33 percent. In other words, freeways and expressways, which comprised one-tenth of the total arterial street and highway system mileage in 1972, carried one-third of the total vehicle miles of travel.

12. Mass transit facilities complement and supplement surface transportation provided through the regional arterial street and highway network. Over 40 percent of the urban area and 84 percent of population are served by local transit in the Milwaukee, Racine, and Kenosha urbanized areas. Also, 40 percent of the parks and outdoor recreation sites and 18 percent of park and recreation land acreages in the Region are accessible by means of the local mass transit facilities provided in the Milwaukee, Racine, and Kenosha urbanized area.

## Chapter IV

### DESCRIPTION OF THE REGION—NATURAL ENVIRONMENT

#### INTRODUCTION

The Southeastern Wisconsin Region may be viewed as a complex of natural and man-made features which interact to comprise a changing environment for human life. The natural resource base of the Region is the primary determinant of its development potential and its ability to provide a pleasant and habitable environment for all forms of life. Consideration of the natural resource base in any areawide planning effort is particularly important in southeastern Wisconsin where an increasing number of urbanites are becoming year-round residents of outlying areas of the Region, seeking not only the varied outdoor recreational opportunities that are offered by these areas, but also the open space which these areas provide to residential development. The principal elements of the natural resource base particularly important to park and open space planning are the climate, soils, physiography, surface water resources and associated shorelands and floodlands, woodlands, wetlands, fish and wildlife habitat areas, and agricultural lands. Definitive knowledge of these elements is necessary if the park and related open space facilities are to meet the outdoor recreational needs of the residents of the Region in an effective manner and, additionally, if such facilities are to contribute to the protection of the natural resource base and the enhancement of the overall quality of life within the Region. Accordingly, the data presented in this chapter will be used directly in identifying potential park and related open space sites, in the design of alternative regional park and open space system plans, and in the selection of a recommended plan from among those alternatives.

#### THE NATURAL RESOURCE BASE

##### Climate

Climate, especially the extreme variations in the three principal elements of climate—temperature, precipitation, and snow cover—directly influences recreation. Specifically climate influences the type, diversity, intensity of and the seasonal variation in recreational activities. Numerous recreational interests and pursuits can be followed by residents of the Region, ranging from swimming, boating, and other summer activities to skiing, snowmobiling, and ice skating in winter. The changing seasons, while allowing for great diversity in recreational activities, somewhat restrict the time available to participate in such activities, thus resulting in some recreational areas being very intensively utilized during part of the year and virtually unused at other times. An important aspect of recreation and open space planning, therefore, will be the determination of efficient and economical ways of providing needed recreational and open space areas that can be effectively utilized throughout the entire year.

The Region has a continental type climate which spans four seasons, one season succeeding the other through varying time periods of unsteady transition. Summer generally spans the months of June, July, and August. The summers are relatively warm, with occasional periods of hot, humid weather and sporadic periods of very cool weather. Winter generally spans the months of December, January, and February but it may, in some years, be lengthened to include all or parts of the months of November and March. Winters tend to be cold, cloudy, and snowy. There is often a short midwinter thaw occasioned by brief periods of unseasonably warm weather. Streams and lakes begin to freeze over in November, with the larger and deeper bodies of water usually being covered with ice by mid-December. Lake and stream ice breakup occurs in late March or early April due to increasing solar radiation.

Autumn and spring in the Region are transitional times of year between the dominant seasons and are usually periods of unsettled weather conditions. Temperatures are extremely varied, and long periods of precipitation are common. Early spring is marked by a moderation of the low temperature of winter; by late March, rainfall replaces snow as the predominant form of precipitation. Typical spring weather may extend from March through May and is characterized by cool, wet weather. Typical autumn weather may extend from September through November and is characterized by pleasant, mild, sunny days and cool nights.

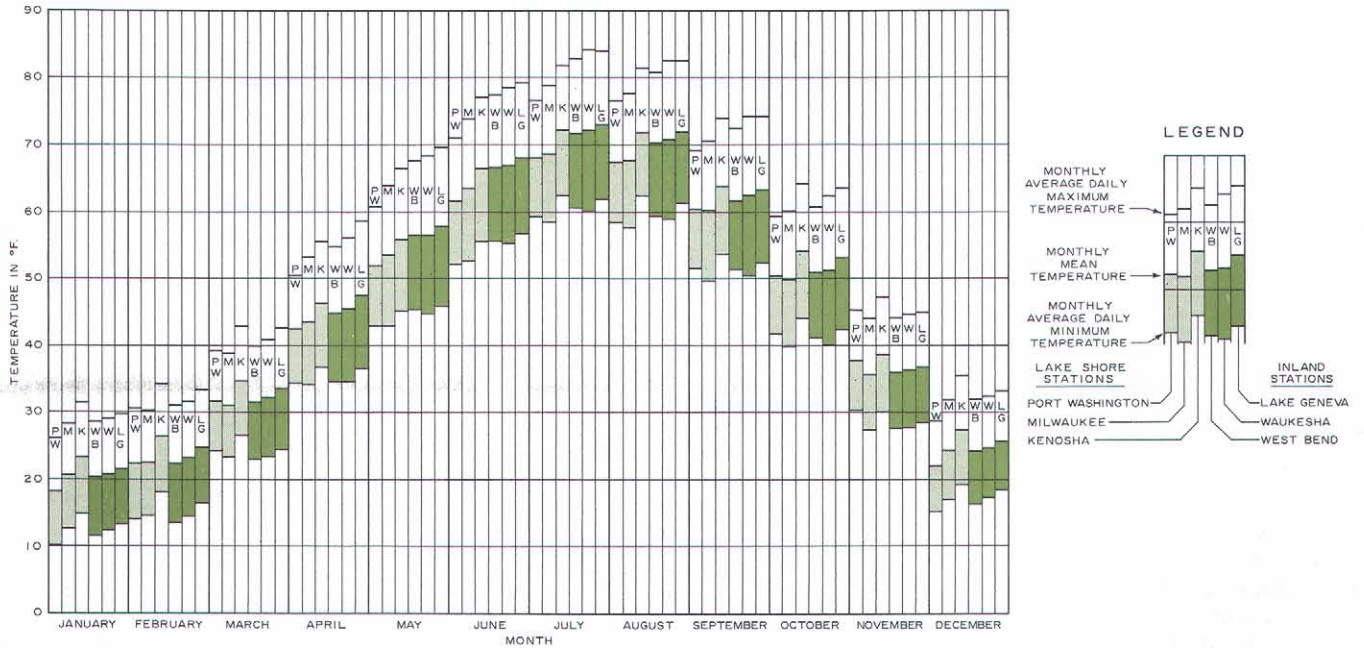
Air temperatures within the Region are subject to great seasonal change and yearly variations and, to a large extent, determine the kinds and intensities of recreational pursuits in the Region. Data for six selected temperature observation stations in southeastern Wisconsin are presented in Figure 16. Three of these temperature observation stations—Port Washington, Milwaukee, and Kenosha—are located on the Lake Michigan shoreline, and three of these—West Bend, Waukesha, and Lake Geneva—are located at least 15 miles inland. These data, which encompass periods of record ranging from 10 to 30 years for the various observation stations in the Region, indicate the temporal and spatial variations in temperature ranges which may be anticipated within the Region. Summer temperatures throughout the Region, as reflected by monthly means for July and August, range between 67.5°F and 73.0°F, with northerly lakeshore locations exhibiting lower monthly mean summer temperatures than southerly inland locations. Winter temperatures range between 18.0°F to 26.0°F for all stations.

Precipitation and snowfall data for the six geographically representative observation stations in the Region are shown in Figure 17. The average annual total precipita-



Figure 16

## TEMPERATURE CHARACTERISTICS BY MONTH AT SELECTED LOCATIONS IN THE REGION



Source: Wisconsin Statistical Reporting Service and National Weather Service.

tion based on the six observation stations is 30.3 inches, expressed as water equivalent. Monthly averages range from a February low of 1.32 inches to a June high of 3.86 inches. Snow is most likely to occur in southeastern Wisconsin during the months of December, January, and February and averages 43.2 total inches annually, or 4.3 inches of precipitation. The percentage of maximum possible sunshine in the Region ranges from a low of about 40 percent from November through February to a high of 60 percent or greater from May through September.

### Soils

The nature of soils in southeastern Wisconsin has been determined primarily by the interaction over time of the parent glacial deposits covering the Region with topography, climate, plants, and animals of the Region. Soil characteristics resulting from the interaction of soil-forming factors and processes are an important consideration in park and open space planning. Failure to take the capabilities and limitations of soils into consideration during the planning stage of any recreational development proposal may not only increase the cost of facility development and maintenance and affect the quality of the recreational experience but may result also in serious and costly health, safety, and water pollution problems. These problems may arise from malfunctioning onsite soil sewage disposal (septic tank) systems, flood damage, footing and foundation failures, and soil erosion and sedimentation. Knowledge of the soil resource and its ability to sustain recreational devel-

opment, therefore, can help avoid the above problems, and also reduce the costs of recreational facility development and maintenance.

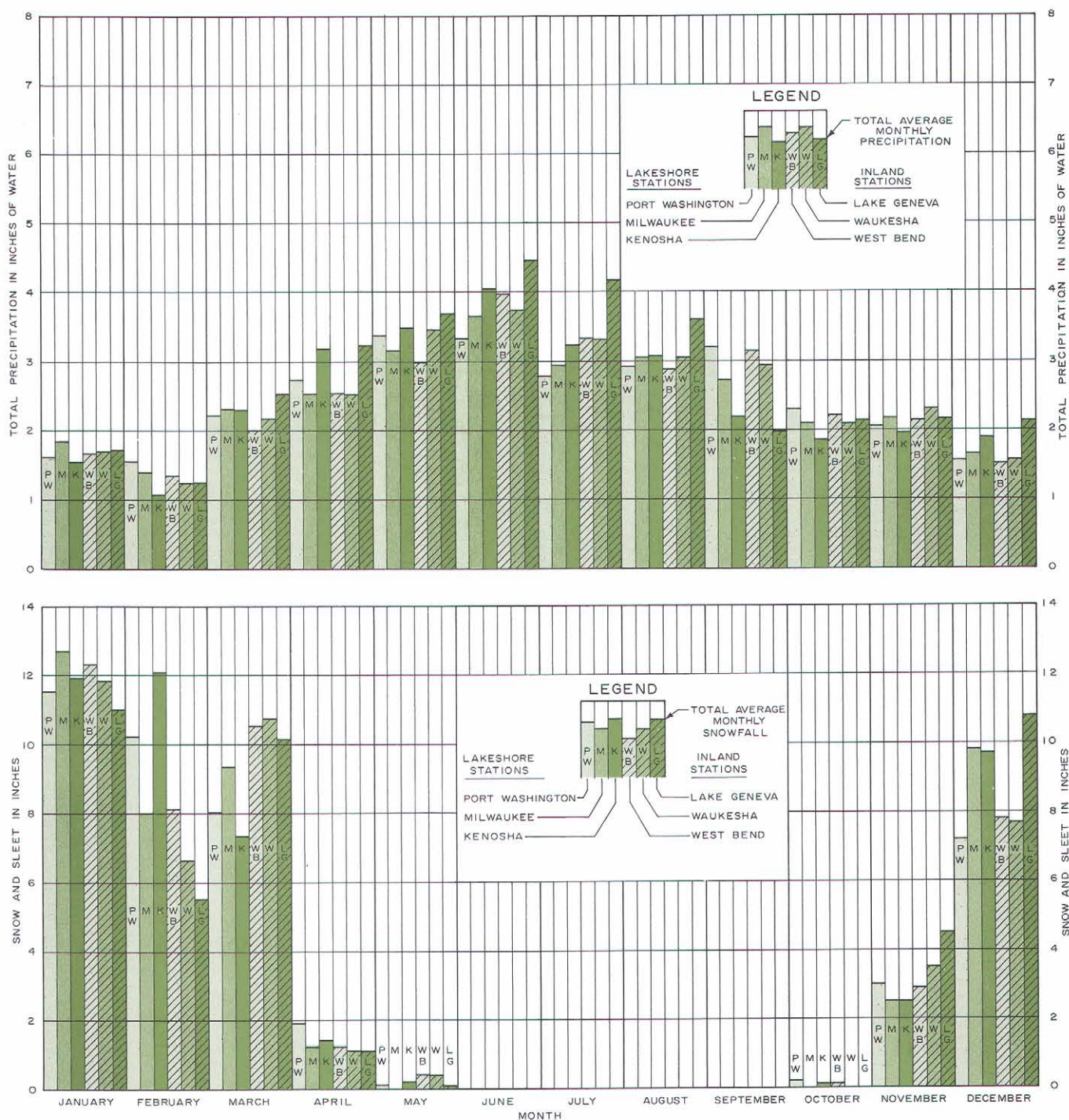
To assess definitively the significance of the unusually diverse soil types to sound regional development, the Commission in 1963 negotiated a cooperative agreement with the U. S. Soil Conservation Service under which detailed operational soil surveys were completed for the entire planning Region. The findings of the soil surveys have been published in SEWRPC Planning Report No. 8, *Soils of Southeastern Wisconsin*. In addition to detailed information on the physical, chemical, and biological properties of soils mapped, the report contains interpretations of these data for specific engineering purposes, selected urban and rural uses, agricultural and woodland uses, shrub and tree planting to assist in programs of beautification and soil stabilization, wildlife habitat improvement and, especially important to this study, recreational developments.

The six recreational development interpretations include soil limitation and suitability ratings for playgrounds, athletic fields, and other intensive play areas; picnic areas, park, and other extensive use areas; bridge paths, and nature and hiking trails; golf course fairways; cottages, service, and utility buildings; and tent and trailer camp sites. Table 23 defines limitation and suitability categories as used in the soil survey interpretations for the Southeastern Wisconsin Region, while Figure 18—an excerpt from Table 17 of the SEWRPC Planning



Figure 17

PRECIPITATION CHARACTERISTICS BY MONTH AT SELECTED LOCATIONS IN THE REGION



Source: Wisconsin Crop Reporting Service, National Weather Service, and SEWRPC.

Report No. 8—presents examples of the suitability rating of selected soils for the six types of recreational developments. A discussion of soils as they relate to the six types of recreational developments follows.

Intensive Play Areas: A distinction is made between intensive play areas and extensive play areas. Playgrounds and athletic fields are examples of intensive play areas. These areas are used mainly for organized games. They



Table 23

**DEFINITION OF LIMITATIONS AND SUITABILITY CATEGORIES AS USED IN  
SOIL INTERPRETATIONS FOR THE SOUTHEASTERN WISCONSIN REGION**

Interpretive Categories		Definition
Limitations	Suitability	
Very slight	Very good or excellent	Few or no limitation for use.
Slight	Good	Slight limitations that are easy to overcome.
Moderate	Fair	Moderate limitations that can normally be overcome with proper planning, careful design, and average management.
Severe	Poor	Limitations that are difficult to overcome. Careful planning and above average design and management are required.
Very severe	Very poor or unsuitable	Problems and limitations are very difficult to overcome and costs are generally prohibitive. Major soil reclamation work is generally required.

Source: U. S. Soil Conservation Service and SEWRPC.

Figure 18

**THE USE OF SOILS FOR RECREATIONAL DEVELOPMENTS<sup>a</sup>**

Map Number and Soil Name	Playgrounds, Athletic Fields and Other Intensive Play Areas	Picnic Areas, Parks and Other Extensive Use Areas	Bridle Paths, Nature and Hiking Trails	Golf Course Fairways	Cottages, Service and Utility Buildings	Tent and Trailer Camp Sites
47 Yahara loam	MODERATE - seasonal high water table; needs water management; erosive on slopes.	MODERATE - seasonal high water table; needs water management; heavy foot traffic may damage sod in wet seasons.	SLIGHT - trails and paths remain wet for short periods during seasonal high water table; sloping areas have an erosion hazard.	MODERATE - will support a firm turf; low relief; seasonal high water table; needs water management.	VERY SEVERE - sewage disposal questionable due to periodic high water table; low bearing capacity when wet; liquefies easily.	MODERATE - surface tends to remain wet for short periods; areas may need drainage.
47Z Same as No. 370, Mosel sandy loam						
48 Keowns silt loam	SEVERE - high water table; needs drainage; limited in vegetation it will support; compacts easily when wet.	SEVERE - high water table; needs drainage; limited in vegetation it will support.	SEVERE - trails and paths are often wet for long periods due to high water table; muddy and slippery when wet; may need surfacing.	SEVERE - high water table; needs drainage; very low relief; turf easily damaged when wet.	VERY SEVERE - high water table; sewage disposal difficult; liquefies easily; low bearing capacity when wet.	SEVERE - high water table; sites remain wet and soft for long periods; poor trafficability when wet; walk and roads need surfacing.
48Z Same as No. 340, Navan silt loam						
49 Keowns fine sandy loam	SEVERE - high water table; needs drainage; limited in vegetation it will support.	SEVERE - high water table; needs drainage; sod is easily damaged unless soils are drained; limited in vegetation it will support.	MODERATE - trails and paths are often wet for long periods due to high water table.	SEVERE - high water table; needs drainage; heavy traffic during periods of high water table may damage turf; very low relief.	VERY SEVERE - high water table; sewage disposal difficult; liquefies easily; low bearing capacity when wet.	SEVERE - high water table; sites remain wet for long periods; areas need drainage or fill.
49Y Same as No. 49, Keowns fine sandy loam						
51 Aztalan loam	MODERATE - seasonal high water table; needs water management; erosive on slopes.	MODERATE - seasonal high water table; needs water management; heavy foot traffic may damage sod in wet seasons unless drained.	MODERATE - trails may be wet during periods of seasonal high water table.	MODERATE - seasonal high water table; needs water management; low relief; turf easily damaged when wet.	VERY SEVERE - sewage disposal is difficult; seasonal high water table; high shrink-swell potential.	MODERATE - surface tends to remain wet for short periods; areas may need drainage.
52 Aztalan sandy loam	MODERATE - seasonal high water table; needs water management; erosive on slopes.	MODERATE - seasonal high water table; needs water management; heavy foot traffic may damage sod in wet seasons unless drained.	SLIGHT - trails may be wet during periods of seasonal high water table.	MODERATE - low relief; seasonal high water table; needs water management; erosive on slopes.	VERY SEVERE - sewage disposal is difficult; seasonal high water table; high shrink-swell potential.	MODERATE - surface tends to remain wet for short periods; areas may need drainage.

<sup>a</sup>An excerpt from Table 17 of SEWRPC Planning Report No. 8.

Source: U. S. Soil Conservation Service and SEWRPC.

are subject to relatively heavy foot traffic and should be nearly level with no rocks, stones, or gravel on the soil surface. Soils used for this purpose should be well drained, with a texture and structure usually associated with moderate or moderately rapid permeability. Preferably the soils should not be subject to overflow, but occasional

overflow during periods of nonuse can be tolerated. Examples of soils with few or no limitations for use as intensive play areas are nearly level Fox loam, Warsaw loam, Lapeer sandy loam, and Knowles loam. Gently sloping (2 to 6 percent) areas of these soils are somewhat limited for use. Slopes of 6 to 12 percent are too steep

for playgrounds or athletic fields. Colwood silt loam, Sebewa silt loam, and Poygan silt loam are examples of soils with high water tables that restrict their use for intensive play areas. Rodman gravelly loam is undesirable because it is drouthy, steep, and has stones and gravel on the soil surface. Some well-drained soils, such as Kewaunee silt loam or Saylesville silt loam, dry slowly because of moderately slow permeability, and thus have moderate limitations for use as intensive play areas.

Extensive Play Areas: Extensive play areas include picnic areas and parks that normally receive much less foot traffic than do athletic fields and playgrounds. Deep, well-drained, loamy, moderately permeable soils have slight limitations for this use because vegetative cover is relatively easy to maintain, the surface soil is usually dry, and water does not pond on the surface soil after rains. Occasional flooding is not a severe hazard in the well-drained soils because use of the areas will be lost for a short time only. Gentle slopes have slight limitations because gradients up to 6 percent do not restrict activities related to picnic areas and parks.

A comparison of interpretations for soils used as examples for intensive play areas show that there are few or no limiting factors in use of gently sloping soils of the Fox, Warsaw, Lapeer, and Knowles, nor are there substantial limiting factors in use of the nearly level soils as extensive play areas. Sloping soils of these series are only moderately limited for extensive use, such as picnic areas, but are severely limited for intensive play areas. High water tables in poorly drained soils restrict use of these soils for both intensive and extensive play areas. Sloping soils of Kewaunee, Saylesville, and Lorenzo series have moderate limitations for extensive play areas. Occasional flooding somewhat limits use of soils for extensive play areas but is not a serious problem.

Bridle Paths and Nature and Hiking Trails: Criteria for determining limitations of soils for bridle paths and nature and hiking trails include soil texture, natural drainage, flood hazard, erosion hazard, and presence of stones. Ideally, the paths and trails are located in well-drained areas that are not slippery when wet, that do not have a severe erosion hazard, and that have few stones and rock outcrops. The gradient should be less than 12 percent for both paths and trails.

Soil texture is the principal factor that affects trafficability of soils when wet. Silty surface soils usually are slippery and wet after rains and they dry more slowly than do loam or sandy loam soils. Silty soils also are dusty when dry. Steep gradients usually are not satisfactory for either paths or trails because most users prefer less than 12 percent slopes. Where soil slopes are steep, the paths and trails can be placed on contour or near contour lines to prevent excessive erosion. A path or trail with excessive gradient could be the beginning of a gully if not properly maintained. Occasional flooding of short duration, although a limitation, is not severe because use of the facility can generally be resumed within a short time after recession of the water. Frequent

flooding, however, will restrict use of the paths or trails. Stones and rock outcrops are undesirable. Poorly drained soils generally are too wet for satisfactory hiking or riding. Somewhat poorly drained sandy loam soils with seasonal high water tables have slight limitations because they usually are dry during the peak use period. The somewhat poorly drained soils with silt loam and loam surface soils have moderate limitations.

Golf Course Fairways: Golf course fairways require well-drained, nearly level, or gently sloping soils with no stones or gravel and little flood hazard during the period of use. Soils that provide firm footing and will grow good turf are most desirable. Sandy loam, loam, or silt loam soils have fewer limitations than other soils because they are generally relatively firm and hold sufficient moisture and fertility to grow good turf. Slopes greater than 6 percent may be considered excessive because they could cause difficult walking, although short reaches of such slopes on a course may be desirable to lend variety to the play. Well-drained soils with moderate or moderately rapid permeability are desirable for golf course fairways. These kinds of soils dry quickly after rains and provide a high proportion of playing time during the season. Occasional flooding can be tolerated on the well-drained bottom land soils. Frequently flooded soils, however, have severe limitations. Stones or rocks are undesirable because of the possibility of diverting the direction of the roll of the ball. Soils such as nearly level or gently sloping Warsaw loam, Dodge silt loam, Sisson silt loam, and Mayville silt loam have few limitations for golf course fairways. Soils such as Keown's fine sandy loam, Sebewa sandy loam, and Brookston silt loam have severe limitations because of the wetness that accompanies a high water table. Soils of the Spinks and Boyer series have a low available water capacity, are drouthy, and will not grow adequate turf without supplemental irrigation.

Cottages and Service and Utility Buildings: The interpretations for the buildings connected with recreational development include limitations for septic tank filter fields because many such developments do not have access to public sewerage systems. The interpretations for septic tank filter fields for soils near the buildings have been combined with interpretations for soils upon which building foundations are resting. Some soils may have favorable characteristics for building foundations but, because of high water tables or steep slopes, may have severe limitations for onsite sewerage systems. In addition to factors that affect sewage disposal, such as natural drainage and flood hazard, the interpretations include such factors as bearing capacity, stability, shrink-swell potential, and frost heave at the building site.

Examples of soils with few limitations for buildings in recreational developments include nearly level and gently sloping soils of the Casco, Warsaw, and Miami series. The permanent high water tables in poorly drained soils, such as Navan silt loam, Ashkum silty clay loam, Matherton silt loam, and Brookston silt loam, severely restrict the use of onsite sewage disposal systems and construction

of buildings. Some soils, such as Boyer loamy sand and Spinks fine sand, are drouthy; and groundwater contamination from onsite sewage is likely.

**Tent and Trailer Campsites:** Campsites that are suitable for either tents or trailers should be located on nearly level, relatively deep, well-drained soils that are free of stones and do not flood. The presence of gravel is a limitation for tent campsites but can be tolerated for trailer campsites. These sites are appraised in their natural conditions without benefit of a hard surface cover. The soils should not be slippery when wet. Vegetative cover should be easy to maintain. Wetness or flooding are severe limitations because these factors prevent use of the sites during part of the use season. Silty soils such as McHenry silt loam, Dodge silt loam, or Warsaw silt loam have moderate limitations because the surface is slippery when wet and very dusty when dry. Loam or sandy loam soils do not have this limitation. Examples of soils with few or no limitations are Casco sandy loam, and Lapeer sandy loam. Wetness severely restricts use of soils of the Colwood, Sebewa, and Poygan series for campsites.

The specific nature of soils data greatly assists in the selection of sites for recreational developments, especially in areas near new residential developments or where part of a farm is to be converted to recreational use. The high cost of land, the need to place homes on the most favorable sites, and the less demanding requirements of areas to be used for recreational purposes make the soil survey a valuable tool in selection of sites and in the design of site improvements. The soil surveys indicate areas subject to occasional flooding that are still suitable for uses such as playfields, or areas with severe limitations for use as campgrounds which may be suitable for the location of hiking paths and trails. Although a greater latitude of limitations can be permitted for most recreational developments, certain requirements should be met. Soil surveys can be used to determine how well an area meets the needs of a particular recreational development by showing the kind of soils in the area and the limitation of the soil for the proposed use.

Map 12 shows the soil limitations for a 160 acre soils demonstration site as interpreted for suitability for outdoor recreational development. Nearly one-third of the site is covered by soils having severe or very severe limitations for certain types of intensive and extensive recreational uses, such as parks, playgrounds, athletic fields, picnic areas, and golf courses. The remainder of the site is covered by soils with moderate limitations for such development. The Ehler (212 and 213) and Brookston (231) silt loams have a high water table, require drainage, remain wet for long periods after rains, and have low trafficability. The Larmartine (364) silt loam is subject to sod damage during wet periods from intensive foot traffic. The Tichigan (42) silt loam is subject to sod damage unless drained.

A suggested park development layout for the soils demonstration site is shown on Map 13. The detailed soils data have been used in the design of this layout, in that certain

soils have been proposed for recreational uses within their capabilities or for such complementary uses as wildlife areas, ponds, arboreta, and park drives. Specifically, the soils analyses were used in the following ways:

1. The location of recreational areas—namely, intensive and extensive play areas, camp areas, and service and utility buildings—was guided by considerations of the suitability of soils for such uses.
2. The selection of arboretum areas was guided by consideration of the suitability of soils for woodlands.
3. The location of park drives and trails was guided by the known limitation of soils for vehicular and pedestrian traffic; such soil analyses also may indicate the need for removal of certain soils and replacement with more stable materials.
4. The use of certain soil types for wildlife areas was guided by consideration of their limitations for the production of habitat for selected wildlife species.
5. The selection of tree species for arboretum areas and herbaceous plantings for wildlife habitat improvement was guided by consideration of woodland suitability groups and wildlife land capability units.

Additional information on the use of detailed soil survey data and its accompanying interpretive analysis in other planning programs is provided in SEWRPC Planning Guide No. 6, Soils Development Guide.

#### Physiography

The land forms and physical features of the Region, such as the topography and drainage pattern, are important considerations in park and open space location and development. Topographic and drainage factors determine the suitability of a site for specific recreational uses, provide for interesting and attractive vistas, and influence the cost of park development and maintenance.

The Southeastern Wisconsin Planning Region is located in the upper Midwest between Lake Michigan on the east, the Green Bay-Lake Winnebago lowlands on the north, the Rock River basin on the west, and the low dunes and swampland at the headwaters of the Illinois River on the south. The seven-county Region extends for approximately 52 miles from east to west at its widest point, and approximately 72 miles from north to south. The Region encompasses approximately 2,621 square miles of land area and 68 square miles of inland water area exclusive of Lake Michigan, or a total gross land and water area of approximately 2,689 square miles or 1,720,000 acres. Topographic elevations range from a low of approximately 580 feet above sea level at the Lake Michigan shore to a high of about 1,320 feet above mean sea level at Holy Hill in southwestern Washington County.

The Region lies astride a major subcontinental divide which separates the upper Mississippi River and the Great Lakes-St. Lawrence River drainage basins.

Glaciation has largely determined the physiography and topography as well as the soils of this part of the state. There is evidence of four major stages of glaciation in the Region. The last and most influential in terms of present physiography and topography was the Wisconsin stage, which is believed to have ended about 11,000 years ago. The major physiographic features, or surficial land forms, of southeastern Wisconsin resulting from this glaciation are shown in Figure 19. Variations in topographic elevation within the Region are shown in generalized form on Map 14.

One of the dominant physiographic and topographic features of the Region is the Kettle Moraine, an interlobate glacial deposit, or moraine, formed between the Green Bay and Lake Michigan tongues, or lobes, of the continental glacier which moved in a generally southerly direction from its point of origin in what is now Canada. Topographically high points in the Kettle Moraine include areas around Lake Geneva in Walworth County, areas in southwestern Waukesha County north of Eagle, areas in central Waukesha County around Lapham Peak, and areas around Holy Hill and Hartford in southwestern and western Washington County. The Kettle Moraine, which is oriented in a general northeast-southwest direction across western Washington, Waukesha, and Walworth Counties, is a complex system of kames, or crudely stratified conical hills; kettle holes marking the site of glacial ice blocks that become separated from the ice mass and melted to form depressions; and eskers, consisting of long, narrow ridges of drift deposited in abandoned drainageways. The Kettle Moraine forms some of the most attractive and interesting landscapes within the Region, as well as providing the area of the highest elevation and the area of greatest local elevation difference, or relief, within the Region. The Kettle Moraine of Wisconsin, much of which lies within the Region, is considered one of the finest examples of glacial interlobate moraine in the world. Because of its still predominantly rural character and its exceptional natural beauty, the Kettle Moraine and the surrounding area is and may be expected to continue to be subjected to increasing pressure for urban development.

The remainder of the Region is covered by a variety of glacial land forms and features, including kames, ground moraine or heterogeneous material deposited beneath the ice; recessional moraines consisting of material deposited at the forward margins of the ice sheet; lacustrine basins, or former lake sites; outwash plains formed by the action of flowing glacial meltwater; eskers, or elongated meandering ridges of rudely stratified waterlain sand and gravel deposits; and drumlins, or elongated mounds of drift molded by and parallel to the advancing glacier.

Glacial land forms are of economic significance because some are prime sources of sand and gravel for highway and other construction purposes. Many of the larger topographic depressions of the Region, including the

kettle holes, have developed into the numerous lakes which dot large areas of western Washington, Waukesha, and Walworth Counties, and which are becoming increasingly popular both as recreational areas and as residential centers.

Surface Drainage: Surface drainage is poorly developed but highly diverse within the planning Region due to the effects of the relatively recent glaciation. The land surface is complex as a result of being covered by glacial drift, containing many closed depressions that range in size from small "pots" to large "kettles." Significant areas of the Region are covered by wetlands, and many streams are mere threads of water through these wetlands. The 11 major watersheds of southeastern Wisconsin are depicted on Map 15 along with the surface drainage pattern as represented by the major perennial stream system.

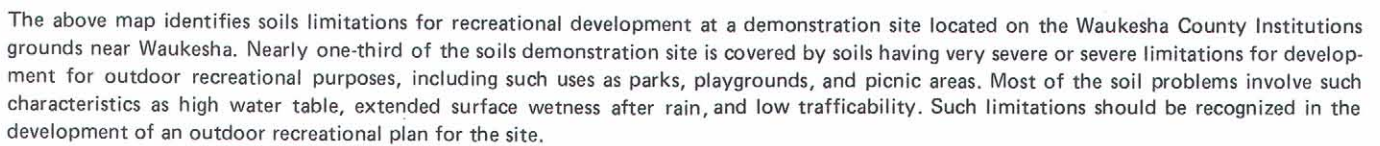
A major subcontinental divide, oriented in a generally northwesterly-southeasterly direction, transects the Region so that about 1,685 square miles lying west of the divide, or 63 percent of the Region, drains to the Mississippi River system, while the remaining 1,004 square miles, or 37 percent, drains to the Great Lakes-St. Lawrence River system. The surface water drainage pattern of southeastern Wisconsin may be further subdivided so as to identify 11 major watersheds, five of which—the Root River, Menomonee River, Kinnickinnic River, Oak Creek, and Pike River watersheds—are wholly contained within the Region. In addition to these 11 major watersheds, there are numerous small catchment areas contiguous to Lake Michigan that drain directly to the Lake by local natural watercourses and artificial drainageways. These areas together may be considered as comprising a twelfth watershed. The drainage in the Region tends to exhibit a disordered dendritic pattern except for a small area of trellised or rectangular drainage evident in the Des Plaines River watershed and in the Racine County portion of the Root River watershed. The Fox River watershed and the headwaters of the Rock River and Des Plaines River watersheds within the Region drain to the south and southwest towards their confluences with the Illinois River, a tributary of the Mississippi River. The remainder of the Region drains in a generally easterly direction towards Lake Michigan by way of the Milwaukee, Menomonee, Root, and other drainages.

#### Surface Water Resources

Lakes and streams constitute a particularly valuable part of the natural resource base of southeastern Wisconsin. Inasmuch as they are focal points for water-related recreational activities popular with the inhabitants of the Region, they provide very attractive sites for properly planned residential development, and when viewed as open space, greatly enhance the aesthetic quality of the environment. The lakes particularly are under intensive recreational use by both residents and nonresidents of the Region. The recreational value of the lakes and streams is highly susceptible to deterioration from human activities. Water quality can be degraded as a result of excessive nutrient loads from malfunctioning or improperly placed septic tank systems, inadequate waste treatment facilities, careless agricultural practices,



## SOIL LIMITATIONS FOR RECREATIONAL DEVELOPMENT ON SOILS DEMONSTRATION SITE ON WAUKESHA COUNTY INSTITUTION GROUNDS

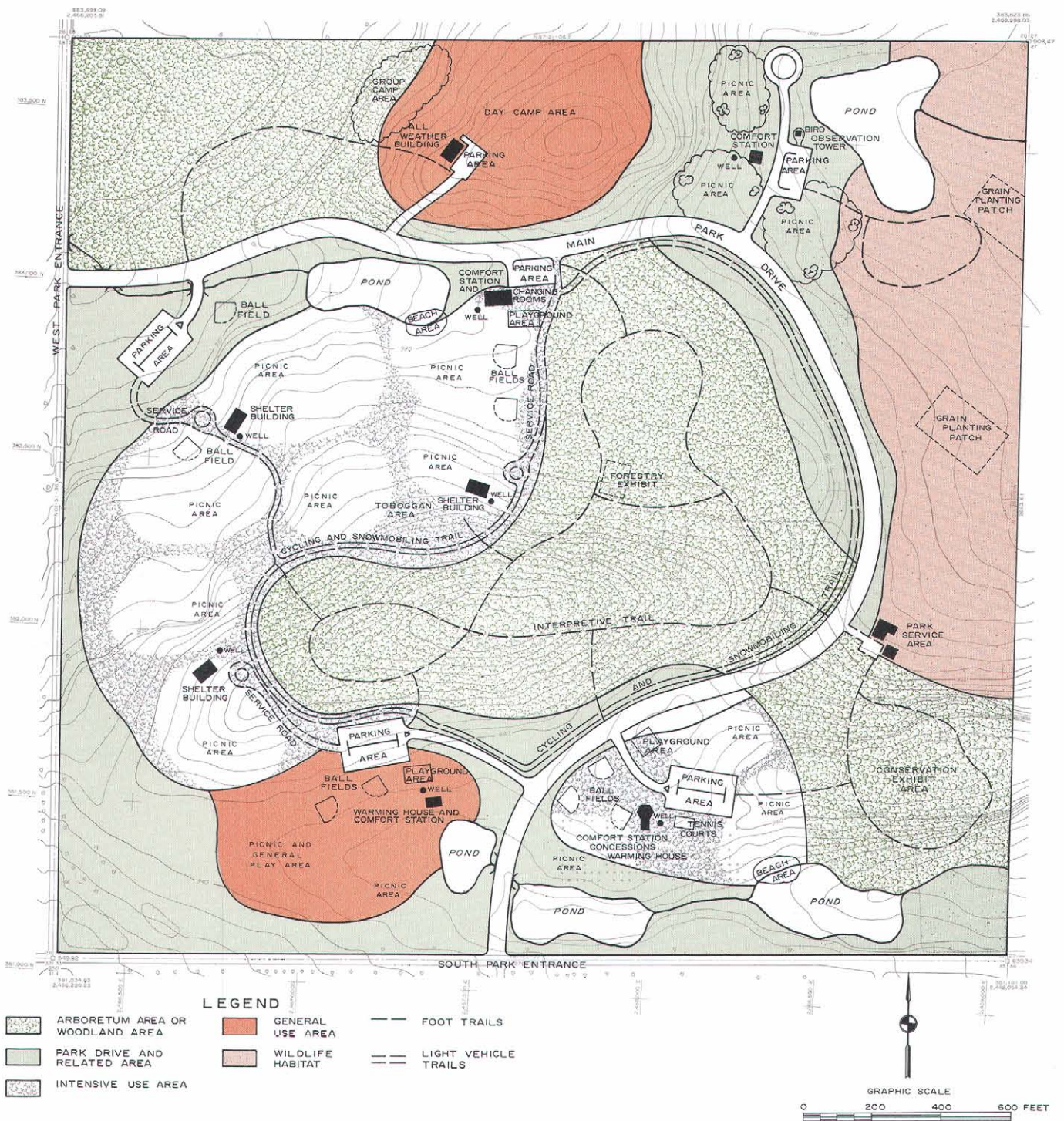


60



Map 13

RECREATIONAL DEVELOPMENT PLAN FOR SOILS DEMONSTRATION SITE ON WAUKESHA COUNTY INSTITUTION GROUNDS

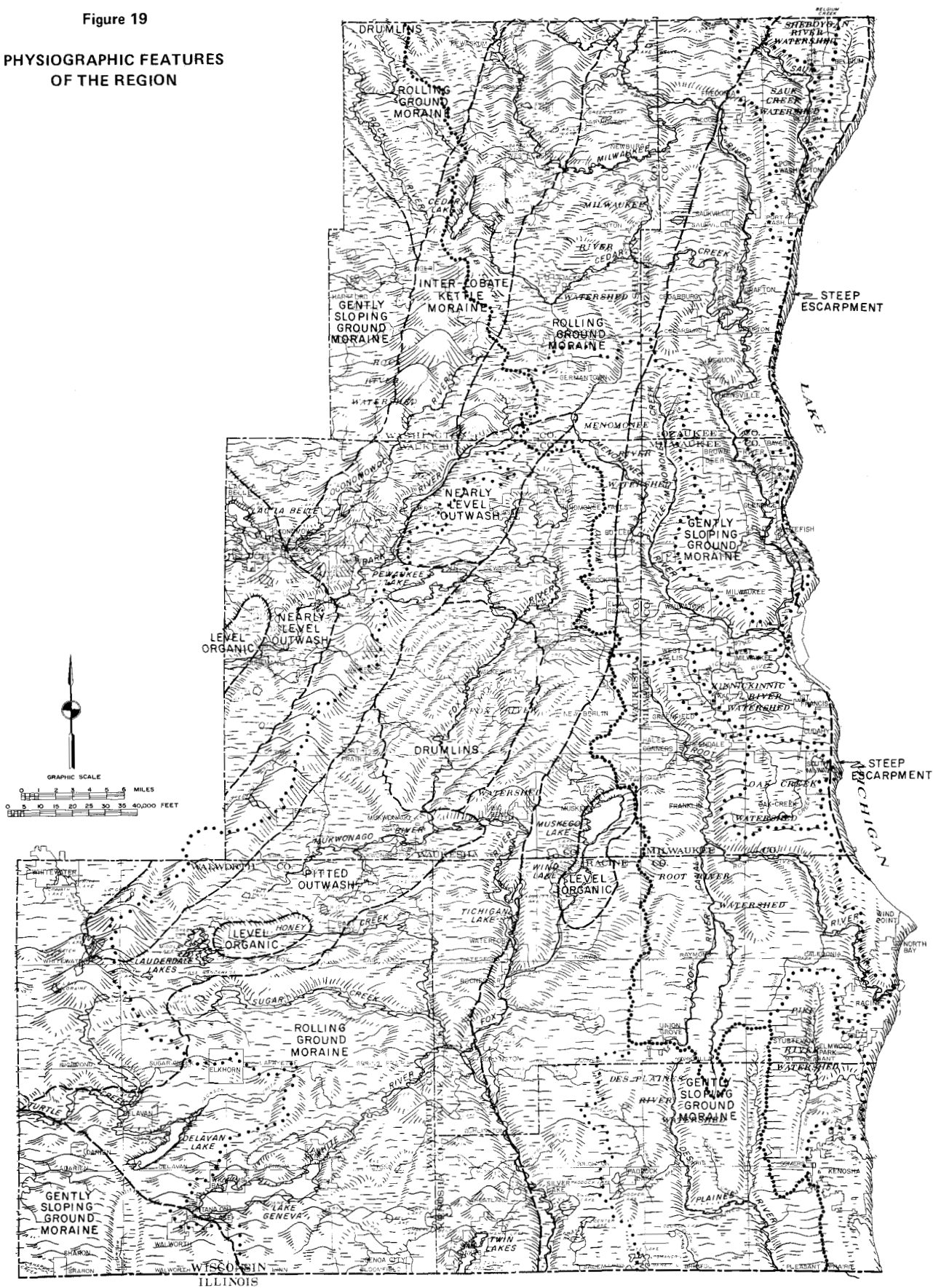


The above recreational development layout for the soils demonstration site identified in Map 12 is based, in part, upon the detailed soils data and interpretive analyses. Certain soil limitations such as high water table, surface wetness, permeability, and soil texture should be recognized in the design of park and other outdoor recreation areas. Woodland suitability ratings can be used in the development of arboreta while the planting guides can be used in the improvement of wildlife habitat areas.

Source: SEWRPC.



**Figure 19**



Source: SEWRPC.

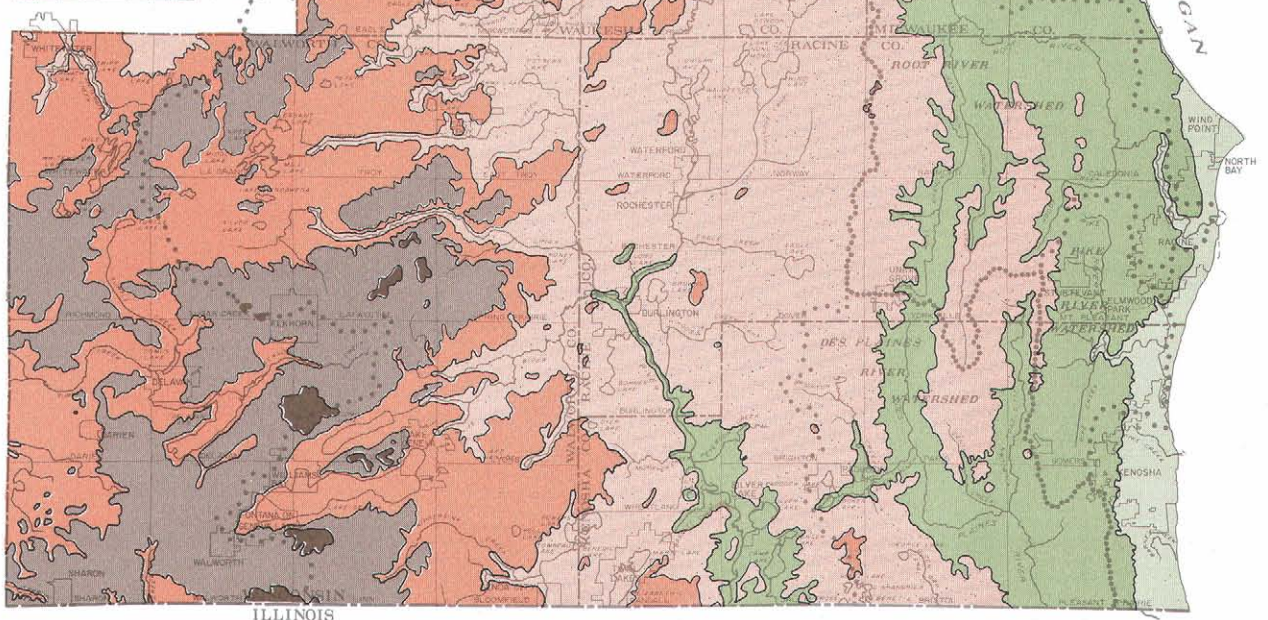
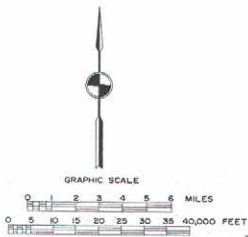


Map 14

# TOPOGRAPHIC CHARACTERISTICS OF THE REGION

## LEGEND

ELEVATION IN FEET ABOVE  
MEAN SEA LEVEL



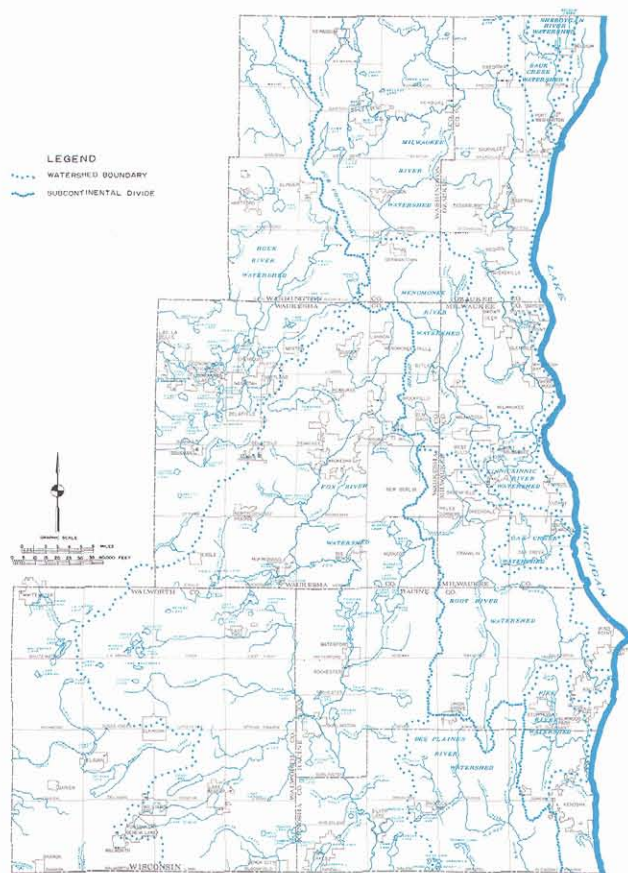
The topography, or relative elevation of the land surface throughout the Region, is determined by the configuration of the bedrock geology in combination with overlying glacial deposits. Elevations within southeastern Wisconsin range from a low of about 580 feet MSL on the Lake Michigan shore to a high of 1,320 feet MSL at Holy Hill in southwestern Washington County. Topographic highs and some of the most attractive landscapes and scenic vistas in the Region are coincident with the interlobate Kettle Moraine area in the western part of the Region. Variations in topographic elevation within the Region are shown above in generalized form.

Source: SEWRPC.



Map 15

# WATERSHEDS AND SURFACE WATER RESOURCES OF THE REGION



A subcontinental divide traverses the Southeastern Wisconsin Region. That part of the Region lying east of the divide is tributary to the Great Lakes-St. Lawrence River drainage system, while that part of the Region lying west of this divide is tributary to the Mississippi River drainage system. This subcontinental divide has certain important implications for water resources planning and management since major diversions of water across this divide are restricted by law and interstate and international compacts. The generally dendritic surface water drainage pattern of the Region, which is the result of the glacial land forces and features, divides the Region into 11 individual watersheds, depicted above along with the surface drainage pattern as represented by the major perennial stream system. Three of the 11 watersheds—the Des Plaines, Fox, and Rock River watersheds—lie west of the subcontinental divide. In addition to the 11 watersheds, there are numerous small catchment areas along the Lake Michigan shoreline that drain directly to the lake. These areas together may be considered to comprise a twelfth watershed.

Source: SEWRPC.

and inadequate soil conservation practices. Lakes and streams also may be adversely affected by the excessive development of lakeshore and riverine areas in combination with the filling of peripheral wetlands which remove valuable nutrient and sediment traps while adding nutrient and sediment sources. Surface water

resources must be protected from both a depletion in quantity and a degradation in quality if these resources are to retain a high recreational value.

**Lakes:** Major lakes are defined herein as those having 50 acres or more of surface area, a size capable of supporting reasonable recreational use with relatively little degradation of the resource. There are 100 major lakes within the Region, the locations and relative sizes of which are shown on Map 15. A tabular summary, by county, of the surface water resources of southeastern Wisconsin is presented in Table 24.<sup>1</sup> Major lakes in the Region have a combined surface water area of 57 square miles, or about 2 percent of the area of the Region, and provide a total of 448 miles of shoreline. The number of major lakes per county ranges from none in Milwaukee County to 33 in Waukesha County. The remaining five counties of Walworth, Kenosha, Washington, Racine, and Ozaukee contain, respectively, 25, 15, 15, 10, and 2 major lakes. Lake Geneva is by far the largest lake in southeastern Wisconsin, having a surface area of 5,262 acres, and is more than twice as large as Pewaukee Lake which, with an area of 2,493 acres, is the second largest lake in the Region.

The lakes of southeastern Wisconsin are almost exclusively of glacial origin, being formed by depressions in outwash deposits, terminal and interlobate moraines, and ground moraines. Some lakes, such as Green Lake in northeastern Washington County or Browns Lake in southwestern Racine County, owe their origins to kettles, that is, depressions formed in the glacial drift as a result of the melting of ice blocks that became separated from the melting continental ice sheet, and the subsequent subsidence of sand and gravel contained on and within those blocks. By virtue of their origin, glacially formed lakes are fairly regular in shape, with their deepest points located predictably near the center of the basin, or near the center of several connected basins. The beaches are characteristically gravel or sand on the windswept north, east, and south shores, while fine sediments and encroaching vegetation are common on the protected west shores and in the bays.

There are 228 lakes and ponds in the Region of less than 50 acres in surface water area, and these are considered in this report as minor lakes. These minor lakes, the regional distribution of which also is summarized in Table 24, have a combined surface water area of four square miles, or about 0.15 percent of the area of the Region, and provide 141 miles of shoreline. These small lakes generally have few riparian owners and only marginal fisheries. In most cases, the value of the minor lakes

<sup>1</sup> See Appendix C, SEWRPC Planning Guide No. 5, *Floodland and Shoreland Development Guide*, for a detailed tabulation, by county, of lakes and ponds in southeastern Wisconsin. This report indicates the location of each lake and pond, and summarizes pertinent morphometric parameters for major lakes which have been studied under Commission watershed studies.

Table 24

## LAKES AND STREAMS IN THE REGION BY COUNTY

County		Lakes <sup>a</sup>									
		Major <sup>b</sup>						Minor <sup>c</sup>			
		Number	Total Surface Area		Total Shoreline Length (miles)	Largest Lake		Number	Total Surface Area		Total Shoreline Length (miles)
			Square Miles	Percent of County		Name	Area (acres)		Square Miles	Percent of County	
Name	Area (square miles)										
Kenosha . . . .	278.28	15	5.06	1.82	48.62	Elizabeth Lake	637.80	9	0.27	0.10	5.85
Milwaukee . . .	242.19	--	--	--	--	--	--	40	0.26	0.11	14.99
Ozaukee . . . .	234.49	2	0.47	0.20	4.75	Mud Lake	245.40	36	0.63	0.27	25.40
Racine . . . . .	339.87	10	5.48	1.61	59.52	Wind Lake	936.20	7	0.17	0.05	4.59
Walworth . . . .	578.08	25	19.52	3.38	131.40	Lake Geneva	5,262.40	9	0.35	0.06	9.10
Washington . . .	435.50	15	4.22	0.97	40.59	Big Cedar	932.00	43	0.70	0.16	24.32
Waukesha . . . .	580.66	33	22.07	3.80	162.89	Pewaukee	2,493.00	84	1.62	0.28	57.08
Region	2,689.07	100	56.82	2.11	447.77	--	10,506.80	228	4.00	0.15	141.33

County		Lakes <sup>a</sup>				Major Streams <sup>d</sup>			
		Total							
		Number	Total Surface Area		Total Shoreline Length (miles)	Number	Total Length (miles)	Total Surface Area	
			Square Miles	Percent of County				Square Miles	Percent of County
Name	Area (square miles)								
Kenosha . . . .	278.28	24	5.33	1.92	54.47	19	106.40	0.73	0.03
Milwaukee . . .	242.19	40	0.26	0.11	14.99	15	102.99	0.62	0.03
Ozaukee . . . .	234.49	38	1.10	0.47	30.15	29	112.20	1.25	0.05
Racine . . . . .	339.87	17	5.65	1.66	64.11	14	100.55	0.96	0.01
Walworth . . . .	578.08	34	19.87	3.44	140.50	29	173.00	0.58	0.01
Washington . . .	435.50	58	4.92	1.13	64.91	38	219.80	1.03	0.02
Waukesha . . . .	580.66	117	23.69	4.08	219.97	50	333.30	1.31	0.02
Region	2,689.07	328	60.82	2.26	589.10	194	1,148.24	6.48	0.02

<sup>a</sup> Appendices B, C, and D to SEWRPC Planning Guide No. 5, *Floodland and Shoreland Development Guide*, contain detailed tabulations, by county, of all streams, lakes, and ponds in the Southeastern Wisconsin Region. These appendices indicate the location of each stream, lake, and pond and summarize pertinent morphometric parameters. Surface areas and shoreline lengths for some of the major lakes have been revised under the Commission Fox and Milwaukee River watershed studies, documented in SEWRPC Planning Report No. 12, *A Comprehensive Plan for the Fox River Watershed*, Volumes 1 and 2, and SEWRPC Planning Report No. 13, *A Comprehensive Plan for the Milwaukee River Watershed*, Volumes 1 and 2. Entries in this table reflect the revised figures for major lakes.

<sup>b</sup> A major lake is defined as one having 50 acres or more of surface water area.

<sup>c</sup> A minor lake is defined as one having less than 50 acres of surface water area.

<sup>d</sup> A major stream is defined as one which maintains, at a minimum, a small, continuous flow throughout the year except for unusual drought conditions.

Source: Wisconsin Department of Natural Resources and SEWRPC.

is primarily aesthetic, and even this value is threatened when the lakes are subjected to any degree of improper shoreland development.

The 694 square mile Milwaukee River watershed, 430 square miles of which lie within the Region, contains 21 major lakes. The 942 square mile Fox River watershed contains 45 major lakes. These two watersheds were the subject of SEWRPC comprehensive watershed studies which included the collection, collation, and analysis of data on lake water quality for the purpose of assessing pollution problems in the major lakes and of developing plan elements to solve those problems. Since these two watershed studies were completed recently, and since the in-Region portions of these watersheds comprise just over 50 percent of the 2,689 square mile area of the Region and contain 57 of the 100 major lakes in southeastern Wisconsin, the quality characteristics of the major lakes in the Milwaukee and Fox River watershed studies may be considered representative of regional lake water quality conditions and trends.

At least 13 of the 57 major regional lakes in these two watersheds were found to be in advanced stages of eutrophication as indicated by high phosphorus concentrations, low dissolved oxygen contents, and excessive growths of algae and aquatic weeds. Fifty-three of 57 major lakes within the Fox and Milwaukee River watersheds were found to be receiving nutrients at such rates that nuisance growths of algae and aquatic weeds may be expected in the near future. In general, some indication of overfertilization was found in all major lakes in the Fox and Milwaukee River watersheds with only four lakes exhibiting truly limiting phosphorus levels.

Domestic sewage pollution, as indicated by measured coliform levels and chloride concentrations, was found to constitute a potential health hazard in several of the lakes, in both the Milwaukee and Fox River watersheds. High pesticide levels were encountered in the two watersheds, indicating another form of surface water contamination.

The available data indicate that many of the major lakes of southeastern Wisconsin are being degraded as a result of human activities to the point where they now have, or soon will have, greatly reduced value for recreational purposes and for properly planned and controlled lake-oriented residential development.

Although surface water quality within the Region is in a generally degraded condition, steps are being taken to correct past abuses and restore the surface waters of the Region to a condition which will generally support a healthy fishery and a full range of recreational uses. The Commission in its comprehensive watershed plans for the Root, Fox, Milwaukee, and Menomonee River watersheds and in its regional sanitary sewerage system plan has recommended specific measures to abate the pollution of streams and inland lakes of the Region.

As for the restoration of inland lake water quality, these plans have recommended such measures as the installation of sanitary sewerage systems to eliminate pathogenic

and nutrient pollution that presently exists in the lakes as the result of inadequate or malfunctioning onsite sewage disposal systems; the institution of good soil and water conservation practices, including the construction of bench terraces, to reduce the organic and nutrient pollution and sediment contribution from agricultural areas; and algae control and mechanical weed harvesting operations to alleviate nuisance conditions caused by algae blooms and excessive aquatic weed growths.

Since the publication and adoption of these plans, several important inland lake water pollution abatement efforts have been implemented within the Region. In accordance with recommendations contained in the adopted Milwaukee River watershed plan that sanitary sewer service be provided to urban areas around Big Cedar, Little Cedar, Silver, and Wallace Lakes in Washington County, a facility plan for enlarging and improving the West Bend sewage treatment plant has been prepared and approved, and the design of the necessary plant additions which incorporate the needed sanitary sewage treatment capacity for these four lake areas is proceeding. Of the nine lake areas recommended to receive sanitary sewer service under the Fox River watershed plan, facility plans have been prepared for three—Eagle, Camp, and Center Lakes. Such facility plans also have been prepared and approved for Tichigan Lake, and construction plans and specifications for these facilities are presently under preparation. Both treatment plant and sewage collection facilities have been designed and the construction project is in the bid stage for Wind Lake. A sanitary sewerage system is under construction to serve urban development around Pewaukee Lake. A sanitary sewerage system to serve Little Muskego Lake has been completed as has such a system for Browns Lake, all as recommended in the Fox River watershed plan. Table 25 indicates more completely the status of existing or proposed sanitary sewerage systems for the 100 major lakes of the Region.

To implement other recommended water quality enhancement measures such as the institution of sound soil and water conservation practices, algae control, and mechanical weed harvesting, a number of inland lake protection and rehabilitation districts or lake associations have been formed within the Region. With local, state, and federal funding assistance—including such assistance from the Commission under its areawide water quality management planning program—such lake associations or districts are conducting studies to assess the specific causes of the water quality problems affecting given lakes and are preparing alternative lake rehabilitation plans. Of the 20 such studies currently underway for major inland lakes within the Region, 11 are being carried out by water resource consultants under contract to established inland lake protection and rehabilitation districts. The studies for seven of these 11 lakes—Big Cedar, Little Cedar, and Silver in Washington County; Marie and Elizabeth in Kenosha County; and Potter and Como in Walworth County—are being funded by the local lake protection and rehabilitation districts and the Wisconsin Department of Natural Resources, utilizing inland lake renewal funds. Studies for the remaining four of the 11 lakes—George and Paddock in Kenosha County,

Table 25

## STATUS OF EXISTING AND PROPOSED SANITARY SEWERAGE SYSTEMS FOR THE 100 MAJOR LAKES IN THE REGION: 1976

Lake by Watershed	Existing Sanitary Sewerage System <sup>a</sup>	Proposed Sanitary Sewerage System		
		Expansion of Existing Service Area or Upgrading of Existing Treatment Facilities	Provision of New Sewerage Facilities	Facility Plans or Detailed Design Specification in Progress
<b>Des Plaines River Watershed</b>				
Benet-Shangrila . . . . .			X	X
George . . . . .	X			
Hooker . . . . .	X	X		X
Paddock . . . . .	X	X		X
<b>Fox River Watershed</b>				
Army . . . . .				
Benedict . . . . .				
Beulah . . . . .				
Big Muskego . . . . .	X	X		X
Bohner . . . . .				
Booth . . . . .				
Brown . . . . .	X			
Buena . . . . .			X	X
Camp . . . . .			X	X
Center . . . . .			X	X
Como . . . . .			X	
Cross . . . . .			X	X
Denoon . . . . .			X	
Dyer . . . . .				
Eagle . . . . .			X	X
Eagle Springs . . . . .				
Echo . . . . .	X	X		X
Elizabeth . . . . .	X	X		X
Geneva . . . . .	X	X		X
Green . . . . .				
Kee nong Go mong . . . . .			X	X
Lilly . . . . .				
Little Muskego . . . . .	X	X		X
Long . . . . .				
Lower Phantom . . . . .	X	X		X
Lulu . . . . .				
Marie . . . . .	X	X		X
Middle . . . . .				
Mill . . . . .				
North . . . . .				
Pell . . . . .				
Peters . . . . .				
Pewaukee . . . . .	X	X		X
Pleasant . . . . .				
Potter . . . . .	X	X		X
Powers . . . . .				
Saylesville . . . . .				
Silver (Walworth) . . . . .				
Silver (Kenosha) . . . . .	X	X		X
Spring . . . . .				
Tichigan . . . . .			X	X
Upper Phantom . . . . .	X	X		X
Voltz . . . . .			X	X
Wandawega . . . . .				
Waubeesee . . . . .			X	X
Wind . . . . .			X	X

Table 25—continued

Lake by Watershed	Existing Sanitary Sewerage System <sup>a</sup>	Proposed Sanitary Sewerage System		
		Expansion of Existing Service Area or Upgrading of Existing Treatment Facilities	Provision of New Sewerage Facilities	Facility Plans or Detailed Design Specification in Progress
Rock River Watershed				
Ashippun . . . . .				
Bark . . . . .				
Beaver . . . . .			X	
Comus . . . . .				
Cravath . . . . .		X	X	
Crooked . . . . .				
Delavan . . . . .			X	X
Druid . . . . .				
Fowler . . . . .	X	X		
Friess . . . . .				
Golden . . . . .				
Hunter . . . . .				
Keesus . . . . .				
LaGrange . . . . .				
Lac La Belle . . . . .	X	X		X
Lake Five . . . . .				
Loraine . . . . .				
Lower Genesee . . . . .				
Lower Nashotah . . . . .			X	X
Lower Nemahbin . . . . .			X	X
Middle Genesee . . . . .				
Moose . . . . .			X	
Nagawicka . . . . .			X	X
North . . . . .				
Oconomowoc . . . . .	X	X		X
Okauchee . . . . .	X	X		X
Pike . . . . .			X	X
Pine . . . . .			X	
Pretty . . . . .				
Rice . . . . .				
School Section . . . . .				
Silver . . . . .			X	
Tripp . . . . .		X	X	X
Turtle . . . . .				
Upper Nashotah . . . . .			X	X
Upper Nemahbin . . . . .			X	X
Waterville . . . . .				
Whitewater . . . . .				
Upper Milwaukee River Watershed				
Barton . . . . .	X	X		X
Big Cedar . . . . .			X	X
Green . . . . .				
Little Cedar . . . . .			X	X
Lucas . . . . .			X	X
Mud . . . . .				
Silver . . . . .			X	X
Smith . . . . .				
Spring . . . . .				
Twelve . . . . .				
Wallace . . . . .			X	X
West Bend Pond . . . . .	X	X		X

<sup>a</sup> Includes lakes with construction of sewerage facilities currently underway.

Source: SEWRPC.



Ashippun in Walworth County, and Okauchee in Waukesha County—are being funded jointly by the local lake district; the Wisconsin Department of Natural Resources, utilizing the inland lake renewal funds, and the Southeastern Wisconsin Regional Planning Commission. Studies of the remaining nine lakes—Pike and Friess in Washington County; North, Pewaukee, Oconomowoc, and Lac La Belle in Waukesha County; Geneva and Wandawega Walworth County; and Eagle in Racine County—are being carried out by the Southeastern Wisconsin Regional Planning Commission in cooperation with the Wisconsin Department of Natural Resources. Thus, through the preparation of Commission watershed, sanitary sewerage, and areawide water quality management plan reports and through implementation of the various water quality enhancement recommendations set forth in such reports, positive steps are being taken to improve the water quality of the inland lakes of southeastern Wisconsin so that those lakes can continue to serve as important recreational assets.

Streams: As already noted, and as shown on Map 15, the surface drainage system of southeastern Wisconsin may be viewed as existing within 12 individual watersheds, five of which—the Root River, Menomonee River, Kinnickinnic River, Oak Creek, and Pike River watersheds—are contained entirely within the Region. The Region contains only a very small part of the Wisconsin portion of the large Rock River watershed, the streams of that watershed within the Region being limited to the headwater portions of such tributaries to the Rock as the Bark and Oconomowoc Rivers and Turtle Creek. Three of the 12 watersheds contained wholly or partly in southeastern Wisconsin—the Fox, Rock, and Des Plaines River watersheds, which have a combined area of 1,685 square miles, or 63 percent of the area of the Region—lie west of the subcontinental divide.

Major streams are defined herein as perennial streams which maintain at least a small, continuous flow throughout the year except under unusual drought conditions. Within the Region, there are approximately 1,148 miles of such major streams. The distribution of these streams by county is summarized in Table 24. The length of major streams per county ranges from a low of 100 lineal miles in Racine County to a high of 333 lineal miles in Waukesha County. The latter County also has the largest number of major lakes and is, therefore, particularly well endowed with surface water resources.

During a 14-month period extending from January 1964 through February 1965, the Commission conducted an extensive stream water quality sampling program during which 3,933 water samples were collected at 87 sampling stations established on 43 streams in the Region. The samples were analyzed for 32 chemical, physical, biochemical, and bacteriological water quality indicators for the purpose of assessing the then-existing condition of stream water quality in relation to pollution sources, land use, and population distribution and concentration. Data developed during this regional stream water quality study were used to forecast probable future stream water quality conditions. Regional stream water quality data

as of 1964 and 1965, interpretations of that data, and forecasts of future stream water quality conditions were published in 1966 in SEWRPC Technical Report No. 4, Water Quality and the Flow of Streams in Southeastern Wisconsin.<sup>2</sup>

The study found that the original naturally high quality of the streams in the Region had been markedly deteriorated by human activities, as indicated by such key indicators of pollution as chlorides, dissolved solids, dissolved oxygen, and coliform bacteria. This deterioration may be attributed to the failure to properly adjust both rural and urban development within the Region to the capability of streams and watercourses to assimilate the pollution loadings attendant to such development. Evidence of occasional or persistently severe stream pollution was found in all of the 12 watersheds contained wholly or partly in the seven-county planning Region. The regional stream water quality study also revealed that not only has stream water quality markedly deteriorated as a result of human activities, but that the deteriorated stream water quality has, in turn, impaired or prohibited the very aesthetic amenities and recreational uses sought by the expanding urban population of the Region. Of the 43 streams sampled in the Region, 21 were found to be unsuitable for the preservation and enhancement of aquatic life, with 32 found to be unsuitable for any recreational activities in all or portions of the stream.

In 1967 the Commission undertook a comprehensive study of the Fox River watershed.<sup>3</sup> It included a determination of existing stream water quality conditions in the watershed and the development of a stream water quality simulation model to be used as a tool in producing a comprehensive watershed development plan that would include as a major element a stream water quality management plan. In general, the findings of this study indicated that stream water pollution was evident in most parts of the upper Fox River watershed, and was forecast in the absence of the implementation of a watershed plan to increase as urbanization of this upper watershed area proceeded. The study concluded that pollution in the Fox River watershed rendered four of the 13 major stream reaches unsuitable for the preservation and enhancement of aquatic life; the remaining nine were unsuitable for any recreational activities either in some sections of the stream or throughout the entire stream.

---

<sup>2</sup>Surface water quality conditions since the publication of Technical Report No. 4 have been monitored on an annual basis and will be the subject of SEWRPC Technical Report No. 17, Water Quality of Lakes and Streams in Southeastern Wisconsin: 1964-1975.

<sup>3</sup>The findings and recommendations of the Fox River watershed study are documented in SEWRPC Planning Report No. 12, A Comprehensive Plan for the Fox River watershed.



In 1968 the Commission undertook a comprehensive study of the Milwaukee River watershed.<sup>4</sup> In addition to utilizing all of the pertinent available stream water quality data previously collected, a special stream water quality sampling program was mounted as a part of the Milwaukee River watershed study. This special study was designed to provide definitive data which would permit a more thorough analysis to be made of the existing stream water quality conditions in the watershed and a stream water quality simulation model to be developed and calibrated.

The data collected from the previous regional stream water quality study, together with the additional data collected under the Milwaukee River watershed study, indicated the following grave finding: that although water quality varied greatly from the upper to the lower reaches of the watershed, pollution, as indicated by coliform count and phosphorus concentration, was a serious problem throughout almost all of the watershed. Organic pollution, as indicated by low dissolved oxygen levels, was not found to be so critical a problem in the Milwaukee River watershed as it was in the Fox River watershed. Nevertheless, in relatively long reaches of the Milwaukee River, dissolved oxygen levels fell below the minimum levels required to sustain fish life. Aesthetic pollution was clearly visible, particularly in the lower reaches of the watershed.

Municipal sewage treatment plant discharges were found to constitute the major cause of water pollution in the middle and upper reaches of the Milwaukee River watershed, while sanitary and combined sewer overflows were found to be the major cause in the lower reaches of the watershed. Over 84 miles of the main stem of the Milwaukee River, or about 85 percent of its total length, did not meet the standards for the established stream water use objectives. About 20 percent of the total length of the 29 major tributaries of the Milwaukee River, or about 44 miles, similarly did not meet the standards for the established water use objectives. In general, the Milwaukee River and its tributaries in the lower reaches were considered to be grossly polluted.

In 1968 the Commission entered into a cooperative agreement with the Wisconsin Department of Natural Resources whereby that Department and the Commission undertook a continuing stream water quality monitoring program within the Region. The objective of the program was to build upon the bench mark water quality data initially collected under the regional stream water quality study and the Milwaukee River watershed study by providing, on a continuous basis, the water quality information necessary to permit assessment of the long-term trends in stream water quality within the Region. Although the stream water quality data collected

under this continuing program have not yet been analyzed in detail, review of the data on a selected basis indicates that no significant, long-term changes in stream water quality conditions within the Region are as yet apparent. Consequently, although localized changes in water quality conditions undoubtedly have occurred since the initial 1964-1965 sampling period, the general conclusions of the Commission's regional stream water quality survey remain essentially valid.

In general, it is apparent from the available stream water quality data that many miles of major streams in southeastern Wisconsin are being degraded so that they are unsafe for most recreational activities and have a greatly reduced aesthetic value. The available data also clearly indicate the very basic relationship which exists between land use and stream water quality, and thereby emphasize the need for concurrent areawide planning of land use and water quality management measures.

**Floodlands:** The floodlands of a river or stream are the wide, gently sloping areas contiguous to, and usually lying on both sides of, a river or stream channel. Rivers and streams occupy their channels most of the time. During even minor runoff events, stream discharges increase markedly and the channel is not able to convey all the flow. As a result, stages increase and the river or stream spreads laterally over its floodlands. The periodic occupation by a river of its floodlands is a normal phenomenon and, in the absence of major flood control works, will occur regardless of whether or not urban development occurs on the floodlands.

For planning and regulatory purposes, floodlands are normally defined as the areas subject to inundation by the 100-year recurrence interval flood event. This is the event that would be reached or exceeded in severity once on the average of every 100 years. Stated another way, there is a 1 percent chance that this event will be reached or exceeded in severity in any given year. Commission studies indicate that about 6 to 10 percent of the total land area of any given watershed lies within the 100-year floodlands. Obviously, the 100-year recurrence interval floodland contains within its boundaries the areas inundated by floods of less severe but more frequent occurrence such as the 50-, 25-, and 5-year recurrence interval events.

Floodland areas are generally not well suited to urban development not only because of the flood hazard, but because of high water tables and presence of soils poorly suited to urban use. These floodland areas, however, generally contain such important elements of the natural resource base as high value woodlands, wetlands, and wildlife habitat and, therefore, constitute prime locations for needed park and open space areas. Every effort should be made, therefore, to discourage indiscriminate and incompatible urban development on floodlands while encouraging compatible open space uses.

Flood hazard data for the numerous streams of the southeastern Wisconsin Region, and particularly data on the limits of the natural floodlands of the streams for a flood's

---

<sup>4</sup>The findings and recommendations of the Milwaukee River watershed study are documented in SEWRPC Planning Report No. 13, A Comprehensive Plan for the Milwaukee River Watershed.

specified recurrence intervals, are important inputs to the regional planning process. Due to the importance of floodland data, the Commission, as an integral part of its comprehensive watershed studies, delineates the limits of the floodlands for the 10- and 100-year recurrence interval floods for most of the perennial streams in each watershed.

The status of existing flood hazard data in the Region as of January 1, 1977, is summarized on Map 16. The Commission, as of this date, has completed comprehensive watershed studies for the Root, Fox, Milwaukee, and Menomonee River watersheds resulting in the delineation of floodlands for about 530 miles of major stream channel not including stream channels in the Milwaukee River watershed lying outside of the Region in Sheboygan and Fond du Lac Counties. Both 10- and 100-year recurrence interval floodland limits have been established for the indicated stream reaches in these watersheds by the Commission.

While the Commission is the only agency which has developed flood hazard data for the Region on the basis of comprehensive watershed studies, other federal and local agencies have developed flood hazard data for additional stream reaches within the Region. These are also indicated on Map 16.

Various studies are underway to develop additional flood hazard data for stream reaches in the Region. The Commission has underway a comprehensive watershed study for the Kinnickinnic River watershed. The U. S. Soil Conservation Service is conducting detailed floodland information studies in the Pike River watershed and along the Bark River at the request of the Village of Dousman. Finally, as a result of increased flood insurance activity in the Region, numerous studies are being undertaken by the U. S. Department of Housing and Urban Development to provide supplemental flood hazard data to be used in identifying flood-prone areas for flood insurance purposes. In areas where detailed flood hazard data already exist, these studies utilize the existing data and may include the development of flood hazard data for small, previously unstudied tributaries. In areas where no flood hazard data exist, these studies develop the data necessary to determine flood hazard areas.

#### Woodlands

Woodlands in the Region have both economic and ecologic value and under good management can serve a variety of uses providing multiple benefits. The quality of life within an area is greatly influenced by the overall condition of the environment, as measured by clean air, clean water, scenic beauty, and ecological diversity. Primarily located on ridges and slopes, along lakes and streams, and in wetlands, woodlands provide an attractive natural resource of immeasurable value. Not only is the beauty of the lakes, streams, and glacial land forms of the Region accentuated by woodlands, but woodlands are essential to maintain the overall quality of the environment. In addition to contributing to clean air and water,

the maintenance of woodlands within the Region can contribute to the parallel maintenance of a diversity of plant and animal life in association with human life, and can provide important recreational opportunities. The existing woodlands of the Region, which required a century or more to develop, can be destroyed through mismanagement, however, within a comparatively short time. The deforestation of hillsides contributes to the siltation of lakes and streams and the destruction of wildlife habitat. Woodlands can and should be maintained for their total values: scenic, wildlife, educational, recreational, and watershed protection, as well as for their forest products. Under balanced use and sustained yield management, woodlands can serve many of these benefits simultaneously.

Six forest types are recognized within the Region: northern upland hardwoods, southern upland hardwoods, northern lowland hardwoods, southern lowland hardwoods, northern lowland conifers, and northern upland conifers. The northern and southern upland hardwood types are the most common in the Region. The two upland hardwood types are most utilized for production of commercial forest products.

Natural stands of trees within the Region consist largely of even-aged mature or nearly mature specimens with insufficient reproduction and saplings to maintain the stands when the old trees are harvested or die of disease or age. This lack of young growth is an unnatural condition brought about by mismanagement and is associated with many years of excessive grazing by livestock.

Inventories of woodlands within the Southeastern Wisconsin Region were conducted by the Commission in 1963 and 1970. As indicated in Table 26 and on Map 17, woodlands in the Region in 1970 covered a total combined area of about 125,300 acres, or approximately 7 percent of the total area of the Region, with over 91,700 acres, or 73 percent, located in Walworth, Washington, and Waukesha Counties. Milwaukee County, with about 3,200 acres of woodlands, had the smallest amount of any county in the Region.

Woodlands in the Region in 1963 covered a combined area of about 130,400 acres. Between 1963 and 1970 losses of woodlands were incurred in certain areas of the Region, due largely to the conversion of woodlands to intensive urban and agricultural land uses. Some of these losses were offset in other areas of the Region as a result of reforestation activities. The overall effect of these changes in woodlands between 1963 and 1970 was a net loss of about 5,100 acres of woodlands, representing a 4 percent decrease in the total amount of woodlands since 1963.

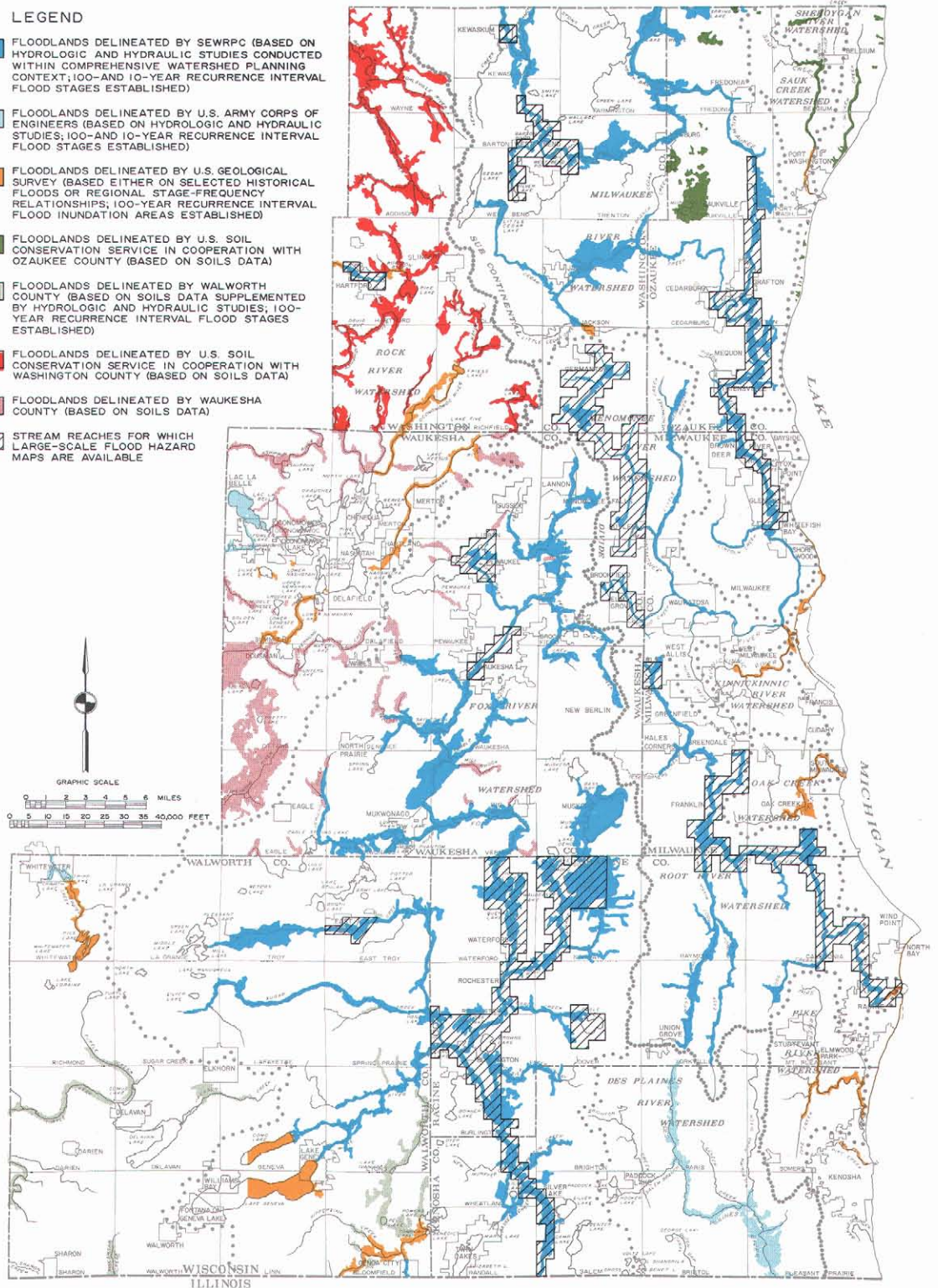
#### Wetlands

Water and wetland areas probably provide the singularly most striking feature of the regional landscape, and can serve to enhance the setting of proximate uses. Wetlands serve important environmental and recreational functions and, like woodlands, also contribute directly and indi-

# DELINEATION OF FLOODLANDS IN THE REGION JANUARY 1, 1977

## LEGEND

- FLOODLANDS DELINEATED BY SEWRPC (BASED ON HYDROLOGIC AND HYDRAULIC STUDIES CONDUCTED WITHIN COMPREHENSIVE WATERSHED PLANNING CONTEXT; 100- AND 10-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED)
- FLOODLANDS DELINEATED BY U.S. ARMY CORPS OF ENGINEERS (BASED ON HYDROLOGIC AND HYDRAULIC STUDIES; 100- AND 10-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED)
- FLOODLANDS DELINEATED BY U.S. GEOLOGICAL SURVEY (BASED EITHER ON SELECTED HISTORICAL FLOODS OR REGIONAL STAGE-FREQUENCY RELATIONSHIPS; 100-YEAR RECURRENCE INTERVAL FLOOD INUNDATION AREAS ESTABLISHED)
- FLOODLANDS DELINEATED BY U.S. SOIL CONSERVATION SERVICE IN COOPERATION WITH OZAUKEE COUNTY (BASED ON SOILS DATA)
- FLOODLANDS DELINEATED BY WALWORTH COUNTY (BASED ON SOILS DATA SUPPLEMENTED BY HYDROLOGIC AND HYDRAULIC STUDIES; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED)
- FLOODLANDS DELINEATED BY U.S. SOIL CONSERVATION SERVICE IN COOPERATION WITH WASHINGTON COUNTY (BASED ON SOILS DATA)
- FLOODLANDS DELINEATED BY WAUKESHA COUNTY (BASED ON SOILS DATA)
- STREAM REACHES FOR WHICH LARGE-SCALE FLOOD HAZARD MAPS ARE AVAILABLE



Delineation of the floodlands of southeastern Wisconsin is extremely important for sound local as well as regional planning and development. The above map summarizes the status of floodland data in the Region as of January 1, 1977. The Commission itself, as an integral part of its comprehensive watershed studies, provides definitive data on the 10- and 100-year recurrence interval floods for most of the perennial streams in each watershed studied. Other agencies which have to date made flood hazard data available for various stream reaches in the Region are the U. S. Army Corps of Engineers, the U. S. Geological Survey, and the U. S. Soil Conservation Service, acting in cooperation with the Commission and with county zoning and planning staffs in Ozaukee, Washington, Waukesha, and Walworth Counties. In addition to identifying the stream reaches for which existing flood hazard data in the Region are available and the agency from which the data are available, the above map shows those stream reaches for which detailed, large-scale flood hazard maps, prepared to SEWRPC recommended specifications, are available from the Commission. These maps are available at scales of 1" = 100' with 2' contour intervals, or 1" = 200' with 2'-4' contour intervals, and enable precise delineations of the floodplains to be accomplished.

Source: SEWRPC.



Table 26

## WOODLANDS IN THE REGION BY COUNTY: 1963 and 1970

County	Woodlands					
	1963 <sup>a</sup>		1970		Change: 1963-1970	
	Acres	Percent	Acres	Percent	Acres	Percent
Kenosha . . . . .	9,616	7.4	9,112	7.3	504	5.2
Milwaukee . . . . .	3,455	2.6	3,213	2.6	242	- 7.0
Ozaukee . . . . .	8,550	6.6	8,272	6.6	- 278	- 3.3
Racine . . . . .	13,709	10.5	12,927	10.3	- 782	- 5.7
Walworth . . . . .	32,750	25.1	31,755	25.3	- 995	- 3.0
Washington . . . . .	27,855	21.4	27,410	21.9	- 455	- 1.6
Waukesha . . . . .	34,482	26.4	32,597	26.0	- 1,885	- 5.5
Region	130,417	100.0	125,286	100.0	- 5,131	- 3.9

<sup>a</sup> Identification and quantification of woodlands in the Region was based upon aerial photo interpretation completed as part of the regional land use inventories conducted in 1963 and 1970. The 1963 woodland acreage data differ slightly from the 1963 forest and woodlands acreage data presented in SEWRPC Planning Report No. 7, *The Land Use and Transportation Study, Volume One, Inventory Findings*, since the latter acreage was determined by the Wisconsin Conservation Commission for SEWRPC and included swamp woodlands and wet mesic woodlands, which were considered wetlands in the SEWRPC land use inventories, and also included only those woodlands 20 acres or over in area.

Source: SEWRPC.

rectly to the regional economy. Wetlands have important ecological value in a natural state. Wetlands contribute to flood control since such areas naturally serve temporarily to store excess runoff and thereby reduce peak flood flows. Wetlands also contribute to the maintenance of good water quality except during unusual periods of high runoff following prolonged drought; wetlands act as "traps" retaining nutrients and thereby preventing such nutrients from reaching streams and lakes. Wetlands with standing water are a suitable habitat for waterfowl and marsh furbearers, while relatively drier types of wetlands support upland game because of the protection afforded by vegetation cover. In recognition of the many valuable attributes of wetland areas, continued efforts should be made to protect this resource by discouraging costly—both in monetary and environmental terms—wetland draining, filling, and conversion to other more intensive rural and urban uses.

Wetlands represent a variety of stages in the natural filling of lake and pond basins as well as floodland areas. Wetlands are defined for the purposes of this report as areas with the water table located at or near the land surface and, therefore, generally unsuited or poorly suited for most agricultural or urban uses. Wetlands may be within or exist independently of floodlands; conversely, floodlands may also exist independently of wetlands.

Inventories of water and wetland areas within the South-eastern Wisconsin Region were conducted by the Commission in 1963 and 1970. Water and wetland areas were defined to include all inland lakes, excluding Lake Michigan; all streams, river, and canals over 50 feet in width; and all open lands which are intermittently covered with water or which are wet due to the presence of

a high water table. As indicated in Table 27 and on Map 18, water and wetland areas in the Region in 1970 covered about 180,800 acres, or about 10 percent of the area of the Region, with over 124,500 acres, or 69 percent, being located in Walworth, Washington, and Waukesha Counties.

Of the total water and wetland area, only 48,000 acres, or 27 percent, actually consisted of surface water. The remaining 132,800 acres consisted of swamps, marshes, and other wetland areas. Large amounts of surface water areas are located in northwestern Waukesha County, southern Walworth County, and southwestern Kenosha County, while concentrations of wetland areas occur in the Cedarburg Bog in Ozaukee County, the Jackson and Theresa Marshes in Washington County, and the Menomonee Falls Tamarack Bog and the Vernon Marsh in Waukesha County.

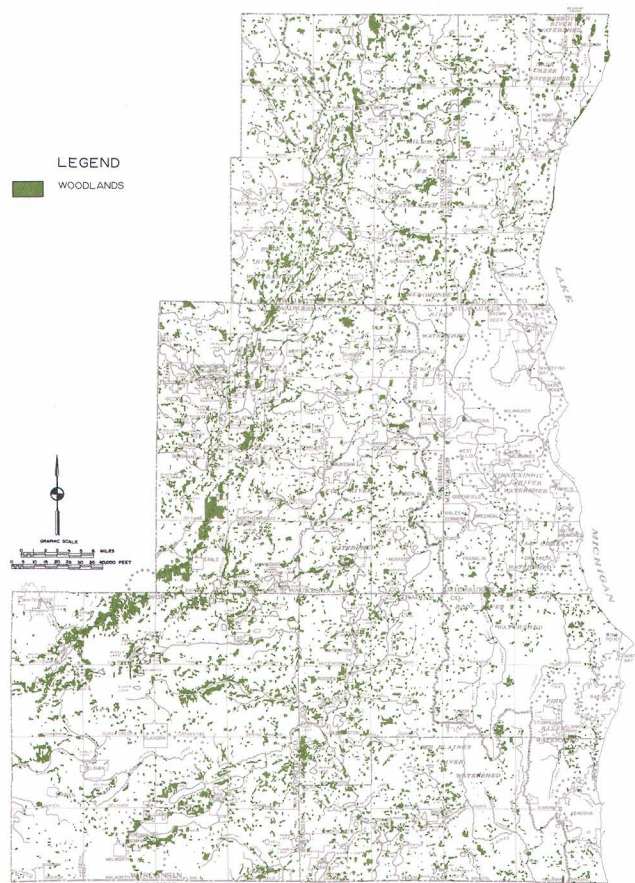
The extent of water and wetland areas may change slightly in a given area over time as a result of drainage and landfill operations, as well as the construction of new impoundment areas. Furthermore, variations in precipitation may cause the boundaries of wetland areas to fluctuate from time to time. As a result of these phenomena, a net decrease of about 1,600 acres, or approximately 1 percent, in the water and wetlands category was recorded in the Region between 1963 and 1970.

#### Fish and Wildlife Resources

Fish and wildlife are particularly valuable recreational assets of the Region. The variety and relative abundance of wildlife in the Region provide numerous recreational

Map 17

# WOODLANDS IN THE REGION 1970



Woodlands currently occupy about 125,300 acres, or about 7 percent of the total land area of the Region. Woodlands have much value beyond monetary return for forest products. The maintenance of woodlands contributes to clean air and water and to the maintenance of a diversity of plant and animal life. Woodlands also provide an attractive natural resource of immeasurable value. Significant concentrations of woodlands are located in the Kettle Moraine State Forest and in several major stream valley areas in Walworth and Waukesha Counties. Together, these areas contain about 64,000 acres of woodlands, representing slightly over one-half of the remaining woodlands in the Region.

Source: SEWRPC.

pursuits and pleasures for fishermen, hunters, and nature enthusiasts, and also contribute to the regional economy.

**Lake and Stream Fisheries:** As already noted, water quality data for 57 of the 100 major lakes in the Region were obtained under the Commission's Fox and Milwaukee River watershed studies. Only four of these 57 lakes were considered incapable of supporting significant populations of desirable fish under existing conditions. Assuming that the foregoing 57 lakes are representative of the 100 major lakes in the Region, it may be

concluded that most of the major lakes in southeastern Wisconsin are capable of supporting significant fish populations under existing conditions.

The earlier discussion of water quality in major lakes also noted, however, that 13 of the 57 major regional lakes were found to be in advanced stages of eutrophication as indicated by excessive phosphorus concentrations, low dissolved oxygen content, and excessive algae and aquatic weed growths. Thus, while most of the 100 major lakes in the Region are currently capable of supporting significant fish populations, a decline in water quality in general and fishery suitability in particular is occurring. This decline may be expected to continue in the absence of sound water quality management plans and proper implementation of such plans.

Dominant fish species in lakes of the Region in order of importance to its fishery are bluegill, largemouth bass, northern pike, walleye, bullhead, black crappie, yellow perch, and carp. Other fish species existing in the lakes, but of lesser importance to the fisherman, are punkinseed, warmouth, white sucker, and sunfish. A few of the lakes also support good muskellunge, cisco, and trout populations.

Lake fisheries are sustained primarily by natural spawning areas within the lakes. Presently, there are adequate shallow weedbed areas available for fish spawning within most major lakes. Other factors, however, such as deteriorating water quality, fluctuating water quality, and the lack of adequate boating regulations to protect spawning areas tend to limit the effectiveness of these areas for natural spawning. In many instances, therefore, lake fisheries must be sustained by fish stocking procedures.

Only limited quality stream fisheries are available within the Region. The Commission Fox and Milwaukee River watershed studies found, for example, that stream fisheries were generally limited in that only some of the relatively large stream reaches in these two watersheds are capable of supporting self-sustaining populations of walleye, smallmouth bass, northern pike, or panfish. Very few stream reaches presently support trout populations. It is recognized that not every stream in the Region can, or should, be of such quality that it can support walleye, smallmouth bass, or trout. These species, however, are important indicators of environmental quality and should be maintained or restored in selected suitable streams within the Region.

**Wildlife Habitat Areas:** Wildlife in southeastern Wisconsin is composed primarily of small upland game such as rabbit and squirrel; some predators such as fox and raccoon; and game birds, including water fowl. Deer also are found in some areas, but the herds are small when compared with other regions of the State.

Inventories of land and inland water in the Region known to be inhabited by various forms of wildlife were carried out cooperatively by the Wisconsin Department of Natural Resources and the Southeastern Wisconsin Regional Planning Commission in 1963 and 1970. As



Table 27

## SURFACE WATER AND WETLANDS IN THE REGION: 1963 and 1970

County	Surface Water and Wetlands					
	1963 <sup>a</sup>		1970		Change: 1963-1970	
	Acres	Percent	Acres	Percent	Acres	Percent
Kenosha . . . . .	19,584	10.7	19,445	10.8	- 139	0.7
Milwaukee . . . . .	4,522	2.5	4,207	2.3	- 315	- 7.0
Ozaukee . . . . .	15,083	8.3	14,879	8.2	- 204	- 1.4
Racine . . . . .	17,218	9.4	17,712	9.8	494	2.9
Walworth . . . . .	39,164	21.5	39,160	21.7	- 4	<sup>b</sup>
Washington . . . . .	36,032	19.7	35,638	19.7	- 394	- 1.1
Waukesha . . . . .	50,871	27.9	49,789	27.5	- 1,082	- 2.1
Region	182,474	100.0	180,830	100.0	- 1,644	- 0.9

<sup>a</sup> The 1963 water and wetland acreage data differ slightly from the data presented in SEWRPC Planning Report No. 7, *The Land Use Transportation Study, Volume One, Inventory Findings*, because the availability of more detailed information since 1963 permitted a refinement of water and wetland delineation for that year.

<sup>b</sup> Less than 0.1 percent.

Source: SEWRPC.

indicated in Table 28 and on Map 19, wildlife habitat areas in 1970 covered approximately 259,800 acres or 15 percent of the total area of the Region. The overwhelming majority of this area, over 192,500 acres, or 74 percent, occurred in Walworth, Washington, and Waukesha Counties. It should be noted that over 77,900 acres, or 76 percent of the total high value wildlife habitat areas, and over 70,000 acres, or 75 percent of the total medium value wildlife habitat areas, occur in these counties as well. Significant concentrations of high value wildlife habitat occur in the Kettle Moraine area in northwestern Walworth County, western Waukesha and Washington Counties, and in a band 12 to 16 miles wide along the Fox River in eastern Walworth County and western Racine and Kenosha Counties.

Wildlife habitat areas in 1963 covered 261,200 acres of the Region. This indicates a net loss of about 1,300 acres of wildlife habitat areas in the Region for the 1963 to 1970 period. While this loss of 1,300 acres of wildlife habitat may appear insignificant, careful review of Table 28 indicates a decrease of over 3,000 acres, or about 3 percent, of high value wildlife habitat areas in the Region during this same period. Walworth County experienced a decrease of over 1,800 acres, or almost 7 percent, of its total high value wildlife habitat areas during this period. Kenosha County, with an increase of about 120 acres of high value wildlife habitat areas, is the only county to experience such an increase during this period.

The destruction of wildlife habitat areas is primarily a result of urbanization. While some wildlife habitat areas are lost due to widening or new construction of transportation facilities, most such area losses are a result of residential development.

Wildlife habitat must furnish food, cover, and protection. Consequently, areas of the Region having large proportions of forest, wetland, pasture land, and cropland and small proportions of land devoted to urban development have the largest areas and highest quality of the remaining wildlife habitat. If the remaining wildlife habitat in the Region is to be preserved, the forest lands, wetlands, and related surface water, together with the proximate crop and pasture lands, must be protected from mismanagement and continued urban encroachment.

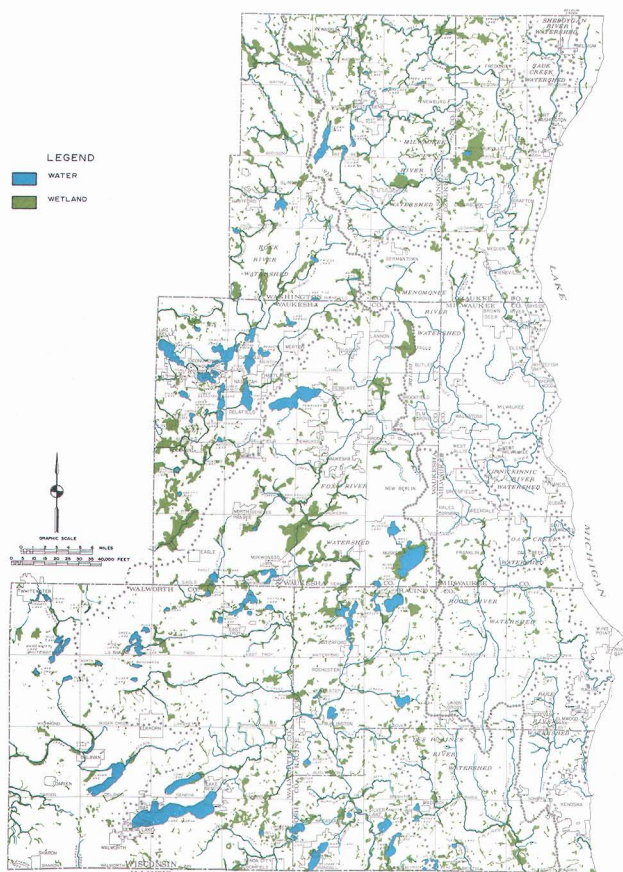
#### The Environmental Corridor Concept

One of the most important tasks undertaken by the Commission as part of its initial regional land use-transportation planning effort was the identification and delineation of those areas of the Region in which concentrations of scenic, recreational, and historic resources occur and which, therefore, should be preserved and protected in order to maintain the overall quality of the environment. Such areas normally include one or more of the following seven elements of the natural resource base which are essential to the maintenance of both the ecological balance and natural beauty of the Region: 1) lakes, rivers, and streams and the associated undeveloped shorelands and floodlands, 2) wetlands, 3) woodlands, 4) wildlife habitat areas, 5) rugged terrain and high-relief topography, 6) significant geological formations and physiographic features, and 7) wet, poorly drained, and organic soils.

The foregoing seven elements comprise integral parts of the natural resource base. Four additional elements are not a part of the natural resource base per se but are closely related to or centered on that base and so are important considerations in identifying and delineating areas with scenic, recreational, and educational value.

Map 18

**WATER AND WETLAND AREAS  
IN THE REGION: 1970**



About 180,800 acres, or approximately 10 percent of the area of the Region, was covered by water and wetlands in 1970. These wetlands constitute a valuable resource, supporting wide varieties of desirable forms of plant and animal life; assisting in reducing storm water runoff, stabilizing streamflows, and enhancing stream water quality by functioning as nutrient and sediment traps; and providing aesthetically pleasing vistas on the landscape. The extent of water and wetlands may change slightly over time as a result of drainage and landfill operations, as well as the construction of new impoundment areas. Furthermore, variations in precipitation may cause the boundaries of wetland areas to fluctuate. As a result of these changes, there was a net decrease of about 1,600 acres, or approximately 1 percent, in the water and wetland category in the Region between 1963 and 1970.

Source: SEWRPC.

These additional elements are: 1) existing outdoor recreation sites, 2) potential outdoor recreation and related open-space sites, 3) historic sites and structures, and 4) significant scenic areas and vistas.

The delineation of these 11 natural resource and natural resource-related elements on a map of the Region results in an essentially lineal pattern of relatively narrow, elongated areas which have been termed "environmental

corridors" by the Commission. Primary environmental corridors are defined as those areas which encompass three or more of the aforementioned 11 environmental elements. Secondary environmental corridors are contiguous areas encompassing one or two of the 11 elements.

It is important to point out that, because of the many interlocking and interacting relationships existing between living organisms and their environment, the destruction or deterioration of one element of the total environment may lead to a chain reaction of deterioration and destruction. The drainage of wetlands, for example, may have far-reaching effects, since such drainage may destroy fish spawning grounds, wildlife habitat, groundwater recharge areas, and natural filtration and flood water storage areas of interconnecting lake and stream systems. The resulting deterioration of surface water quality may, in turn, lead to a deterioration of the quality of the groundwater which serves as a source of domestic, municipal, and industrial water supply and on which low flows in rivers and streams may depend. Similarly, the destruction of woodland cover, which may have taken a century or more to develop, may result in soil erosion and stream siltation and in more rapid runoff and increased flooding, as well as destruction of wildlife habitat. Although the effects of any one of these environmental changes may not in and of itself be overwhelming, the combined effects must lead eventually to serious deterioration of the underlying and supporting natural resource base, and of the overall quality of the environment for life. The need to maintain the integrity of the remaining environmental corridors within the Region thus becomes apparent.

#### Primary Environmental Corridors

The primary environmental corridors of southeastern Wisconsin generally lie along major stream valleys, around major lakes, and in the Kettle Moraine area, and contain almost all of the remaining high value woodlands, wetlands, and wildlife habitat areas within the Region; all of the major bodies of surface water and related undeveloped floodlands and shorelands; and important recharge areas for the groundwater aquifers underlying the Region. These corridors also contain many of the best remaining potential park sites. The primary environmental are, in effect, a composite of the best of the individual elements of the natural resource base of southeastern Wisconsin and have truly immeasurable environmental and recreational value.

Primary environmental corridors were identified within the Region in 1963 as part of the original regional land use-transportation planning program of the Commission. The corridor delineation has since been refined, primarily as a result of the Commission watershed studies but also because of the availability of more detailed information which permitted a more definitive delineation of these lands.

The location of the primary environmental corridors of the Region is shown on Map 20, while the composition of the corridors in terms of basic land uses is indicated in Table 29. The gross primary environmental corridor area,

Table 28

WILDLIFE HABITAT AREAS IN THE REGION BY VALUE RATING<sup>a</sup> BY COUNTY: 1963 and 1970

County	Value <sup>a</sup>	1963 <sup>b</sup>		1970		Change: 1963-1970	
		Acres	Percent	Acres	Percent	Acres	Percent
Kenosha	High	9,965	44.4	10,083	44.0	118	1.2
	Medium	6,285	28.0	6,136	26.8	- 149	- 2.4
	Low	6,189	27.6	6,683	29.2	494	8.0
	Total	22,439	100.0	22,902	100.0	463	2.1
Milwaukee	High	0	0.0	0	0.0	0	0.0
	Medium	1,251	66.6	1,225	68.9	- 26	- 2.1
	Low	626	33.4	553	31.1	- 73	- 11.7
	Total	1,877	100.0	1,778	100.0	- 99	- 5.3
Ozaukee	High	6,082	38.4	6,033	38.1	- 49	- 0.8
	Medium	8,422	58.1	8,310	52.4	- 112	- 1.3
	Low	1,341	8.5	1,512	9.5	171	12.8
	Total	15,845	100.0	15,855	100.0	10	0.1
Racine	High	9,044	23.8	8,945	33.4	- 99	- 1.1
	Medium	8,177	30.5	8,015	30.0	- 162	- 2.0
	Low	9,553	35.7	9,803	36.6	250	2.6
	Total	26,774	100.0	26,763	100.0	- 11	.. <sup>c</sup>
Walworth	High	28,754	45.2	26,890	42.7	- 1,864	- 6.5
	Medium	20,272	31.9	20,775	32.9	503	2.5
	Low	14,593	22.9	15,368	24.4	775	5.3
	Total	63,619	100.0	63,033	100.0	- 586	- 0.9
Washington	High	19,844	38.3	19,340	37.2	- 504	- 2.5
	Medium	21,380	41.2	21,414	41.2	34	0.2
	Low	10,623	20.5	11,240	21.6	617	5.8
	Total	51,847	100.0	51,994	100.0	147	0.3
Waukesha	High	32,421	41.1	31,710	40.9	- 711	- 2.2
	Medium	28,809	36.6	28,255	36.5	- 554	- 1.9
	Low	17,559	22.3	17,542	22.6	- 17	- 0.1
	Total	78,789	100.0	77,507	100.0	- 1,282	- 1.6
Region	High	106,100	40.6	103,001	39.6	- 3,109	- 2.9
	Medium	94,596	36.2	94,130	36.3	- 466	- 0.5
	Low	60,484	23.2	62,701	24.1	2,217	3.7
	Total	261,190	100.0	259,832	100.0	- 1,358	- 0.5

<sup>a</sup> High value wildlife habitat areas have a high diversity of species. The territorial requirements of the major species are met, in that minimum population levels are possible. The structure and composition of the vegetation provide for nesting, travel routes, concealment, and modification of weather impact. Also, such areas have experienced little or no disturbance as a result of man's activities and are located in close proximity to other wildlife habitat areas.

Medium value wildlife habitat areas maintain all of the criteria described for a high value habitat, but at a lower level. The species diversity may not be as high as in the high value areas. The territorial requirements of the major species may not be adequately met, in that minimum population levels are not possible or are just barely met. The structure and composition of the vegetation may not adequately provide for nesting, travel routes, concealment, or modification of weather impact. The areas may have undergone disturbance as a result of man's activities, and also may not be located in close proximity to other wildlife habitat areas.

Low value wildlife habitat areas are of a supplemental or remnant nature. They are usually considerably disturbed but are included in the inventory since they provide the only available range in the vicinity, supplement areas of a higher quality, or they provide corridors linking higher habitat areas.

<sup>b</sup> The 1963 wildlife habitat acreage data differ slightly from the data presented in SEWRPC Planning Report No. 7, The Land Use-Transportation Study, Volume One, Inventory Findings, because the availability of more detailed information since 1963 permitted a refinement of the wildlife habitat delineation for that year.

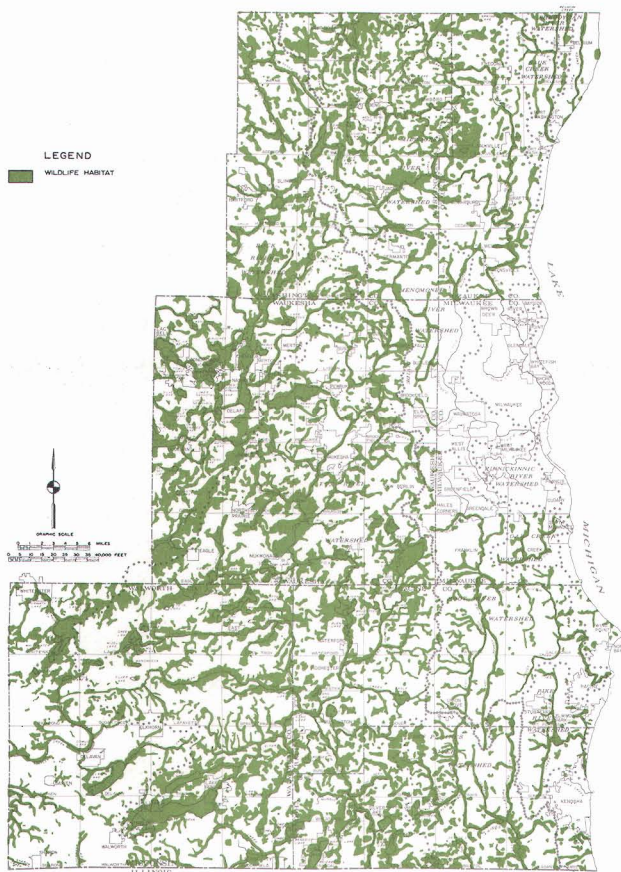
<sup>c</sup> Less than 0.05 percent.

Source: Wisconsin Department of Natural Resources and SEWRPC.



Map 19

**WILDLIFE HABITAT  
IN THE REGION: 1970**



The remaining wildlife habitat areas and the wildlife therein provide an important recreational resource and constitute a valuable aesthetic asset of southeastern Wisconsin. As of 1970, approximately 261,000 acres, or 15 percent of the area of the Region, were identified as wildlife habitat.

Source: SEWRPC.

defined as including all land uses, both urban and rural, within the corridor configuration delineated on Map 20, totaled 347,000 acres, or about 20 percent of the total area of the Region. Net primary environmental corridor areas are defined as the gross corridor acreage less the noncompatible urban land use acreages in the corridor. Net corridor areas, therefore, include recreational land use, agricultural and related land use, water, wetlands, and woodlands uses and other open space land uses. The net corridor areas total over 322,200 acres, or about 18.7 percent of the total area of the Region.

Of particular importance to park and open space planning is an analysis of changing land uses within the net primary environmental corridors since 1963 and a quantification of the extent to which the corridors have been protected

or preserved through public and private action. The majority of net corridor acreage in 1970 consisted of agricultural and related land (92,800 acres), wetlands (90,700 acres), and woodlands (64,900 acres). The 322,200 acres of net corridor within the Region in 1970 represented a decrease of about 3,800 acres from the 326,000 acres of net corridor which existed within the Region in 1963. Decreases in net corridor acreage in the Region were primarily due to losses in agricultural use (5,100 acres) and, to a lesser extent, to losses in woodlands (1,600 acres) and wetlands (1,400 acres). While some of the losses in agricultural, woodland, and wetland uses may have resulted in gains in recreational land use, which is also considered part of the net environmental corridor area, much of this land loss was attributable to urban encroachment, especially residential land use, which increased by 2,900 acres, and transportation uses, which increased by 700 acres. Increases in commercial and industrial land uses in the corridor during the 1963 through 1970 period totaled only about 220 acres.

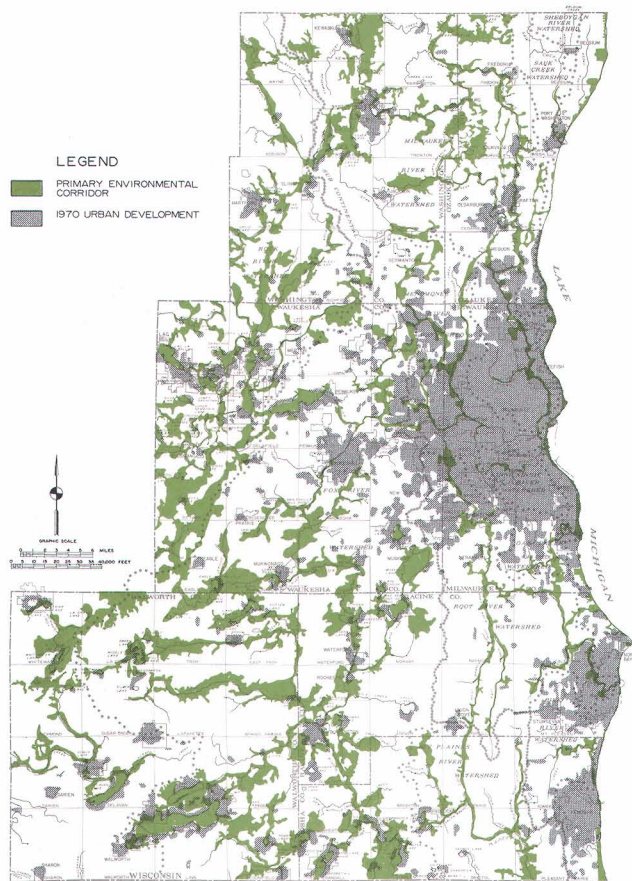
The loss of net primary environmental corridor acreage was not uniform within all counties of the Region. Waukesha County experienced the largest loss of net corridor acreage, over 1,600 acres, with the loss occurring primarily as a result of a decrease in the agricultural and wetlands land use categories. Walworth County lost almost 900 acres of net environmental corridor, primarily in the agricultural and woodland categories. Losses in the net corridor acreage were less than 500 acres for Milwaukee, Ozaukee, Racine, and Washington Counties while a slight increase in net corridor occurred in Kenosha County. It appears that recent trends within southeastern Wisconsin have resulted in the encroachment of urban development into the primary environmental corridors. Unplanned or poorly planned intrusion of urban development into these corridors not only tends to destroy the very resources and related amenities sought by the development but tends to create severe environmental and developmental problems as well.

Significant progress has been made, however, toward preserving the remaining primary environmental corridors. Table 30 quantifies the amount and Map 21 indicates the spatial distribution of primary environmental corridor lands that were protected against incompatible uses as of 1973. Primary environmental corridors were considered permanently preserved if they were publicly owned as park, outdoor recreation, or related open space lands; if they were publicly leased on a long-term basis (25 years or more) for park, outdoor recreation, or open space; or if they were protected through a locally enacted floodland zoning ordinance which substantially carries out the Commission plan recommendation regarding preservation of floodland areas. Primary environmental corridors were considered temporarily preserved if they were protected through a locally enacted conservancy district zone; if they were part of a private park, outdoor recreation, or open space area; if they were protected through a locally enacted public or private park and outdoor recreation zone; or if they were part of an exclusive agricultural or country estate zoning district which required a lot size of five acres or more per farm or dwelling unit.



Map 20

**PRIMARY ENVIRONMENTAL  
CORRIDORS IN THE REGION: 1973**



Approximately one-fifth of the Region lies within primary environmental corridors, which encompass almost all of the best remaining woodlands and wetlands, the best remaining wildlife habitat areas, almost all of the streams and lakes and associated undeveloped floodlands and shorelands, as well as many of the significant topographical, geological, and historical features remaining in the Region. The preservation of these corridors in compatible open uses is essential to maintaining the overall quality of the environment within the Region.

Source: SEWRPC.

As indicated in Table 30, 130,600 acres, or 38 percent, of the 347,100 gross primary environmental corridor acreage had been permanently preserved as of 1973. The majority of this area—82,700 acres, or 63 percent—is preserved through floodland zoning. Over 47,000 acres, or 14 percent, of the gross corridor acreage have been temporarily preserved, with the majority of this area—24,000 acres, or 51 percent—being protected through conservancy zoning districts. In total, over 178,000 acres, or 51 percent, of the gross primary environmental corridors in the Region were either permanently or temporarily preserved as of 1973.

The preservation of the primary environmental corridors from degradation should be one of the principal objectives of any regional park and open space plan. The corridors should be considered inviolate. Their preservation in an essentially natural state—including park and related open space uses, limited agricultural uses, and country estate types uses—will serve to maintain a high level of environmental quality in the Region, protect its unique natural beauty, and provide valuable recreational opportunities.

### Agricultural Land

Agricultural lands are a most important part of the natural resource base of the Region. Agricultural areas in addition to providing food and fibre, contribute significantly to the maintenance of an ecological balance between plants and animals; provide locations proximal to urban centers for the production of certain food commodities which may require nearby population concentrations for an efficient production-distribution relationship; and particularly important to park and open space planning, contribute to wildlife habitat and provide open spaces which give form and structure to urban development.

Inventories of agricultural land use were conducted by the Commission in 1963 and 1970. The agricultural land use category was defined to include all croplands, pasturelands, orchards, nurseries, and fowl and fur farms. Farm dwelling sites were classified as residential land and assigned a nominal site area of 20,000 square feet. All other farm buildings were included in the agricultural land use category.

Agriculture is the singularly largest land use in the Region, with 60 percent of the total area of the Region being devoted to this use in 1970. This land use activity, comprised principally of dairy, livestock, and field crop farms, presently generates more than \$113 million of income annually within the Region. The average farm size in the Region is 147 acres, somewhat smaller than the state average of 183 acres.

Table 31 indicates the distribution of farmland within the Region by county. Walworth County ranks first in land devoted to agricultural uses, containing 25 percent of the total regional agricultural land. Waukesha County ranks second and Washington County third. Highly urbanized Milwaukee County still contains approximately 28,607 acres of agricultural land, about 3 percent of the regional total. Nearly all of this agricultural land is located in the Cities of Franklin and Oak Creek and in the northwestern area of the City of Milwaukee.

The spatial distribution of agricultural land is shown on Map 22. Major concentrations of agricultural land use occur in northeastern Ozaukee County and in east central Racine and Kenosha Counties. More scattered concentrations occur in Waukesha and Washington Counties.

Between 1963 and 1970, substantial urban development occurred in many areas previously used for agricultural purposes. Due largely to this conversion of farmland to

Table 29

**DISTRIBUTION OF PRIMARY ENVIRONMENTAL CORRIDOR LANDS  
IN THE REGION BY MAJOR LAND USE WITHIN COUNTY: 1963 and 1970**

County	Year	Gross Primary Environmental Corridor													
		Total		Urban Development										Subtotal	
				Residential		Commercial		Industrial		Transportation		Governmental and Institutional			
		Acres	Percent of Region	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent of Gross Corridor
Kenosha	1963	30,663	8.8	1,610	5.3	40	0.1	39	0.1	737	2.4	152	0.5	2,578	8.4
	1970	30,663	8.8	1,608	5.2	41	0.1	44	0.2	694	2.3	155	0.5	2,542	8.3
	Change 1963-1970	0	--	- 2	.. <sup>c</sup>	1	.. <sup>c</sup>	5	.. <sup>c</sup>	- 43	- 0.1	3	.. <sup>c</sup>	- 36	- 0.1
Milwaukee	1963	18,038	5.2	1,577	8.7	51	0.3	375	2.1	1,507	8.3	250	1.4	3,760	20.8
	1970	18,111 <sup>b</sup>	5.2	1,583	8.7	110	0.6	334	1.8	1,610	8.9	291	1.6	3,928	21.7
	Change 1963-1970	73	.. <sup>c</sup>	6	.. <sup>c</sup>	59	0.3	- 41	- 0.3	103	0.6	41	0.2	168	0.9
Ozaukee	1963	25,135	7.3	1,652	6.6	48	0.2	28	0.1	669	2.6	39	0.2	2,436	9.7
	1970	25,135	7.3	1,959	7.8	47	0.2	27	0.1	745	3.0	63	0.3	2,841	11.3
	Change 1963-1970	0	--	307	1.2	- 1	.. <sup>c</sup>	- 1	.. <sup>c</sup>	76	0.3	24	0.1	405	1.6
Racine	1963	34,251	9.9	1,111	3.2	15	0.1	52	0.2	761	2.2	174	0.5	2,113	6.2
	1970	34,277 <sup>b</sup>	9.9	1,344	3.9	22	0.1	65	0.2	836	2.4	194	0.6	2,461	7.2
	Change 1963-1970	26	.. <sup>c</sup>	233	0.7	7	.. <sup>c</sup>	13	.. <sup>c</sup>	75	0.2	20	0.1	348	1.0
Walworth	1963	88,527	25.5	1,975	2.2	81	0.1	39	.. <sup>c</sup>	1,429	1.6	148	0.2	3,672	4.1
	1970	88,527	25.5	2,630	2.9	105	0.1	47	0.1	1,616	1.8	145	0.2	4,543	5.1
	Change 1963-1970	0	--	655	0.7	24	.. <sup>c</sup>	8	.. <sup>c</sup>	187	0.2	- 3	.. <sup>c</sup>	871	1.0
Washington	1963	56,285	16.2	988	1.8	37	0.1	42	0.1	1,107	2.0	39	0.1	2,213	3.9
	1970	56,285	16.2	1,360	2.4	41	0.1	61	0.1	1,156	2.1	67	0.1	2,685	4.8
	Change 1963-1970	0	--	372	0.6	4	.. <sup>c</sup>	19	.. <sup>c</sup>	49	0.1	28	.. <sup>c</sup>	472	0.9
Waukesha	1963	94,110	27.1	1,816	2.0	82	0.1	191	0.2	1,904	2.0	203	0.2	4,196	4.5
	1970	94,110	27.1	3,119	3.3	116	0.1	281	0.3	2,140	2.3	226	0.2	5,882	6.3
	Change 1963-1970	0	--	1,303	1.3	34	.. <sup>c</sup>	90	0.1	236	0.3	23	.. <sup>c</sup>	1,686	1.8
Region	1963	347,009	100.0	10,729	3.1	354	0.1	766	0.2	8,114	2.3	1,005	0.3	20,968	6.0
	1970	347,108 <sup>b</sup>	100.0	13,603	3.9	482	0.1	859	0.2	8,797	2.5	1,141	0.3	24,882	7.2
	Change 1963-1970	99	.. <sup>c</sup>	2,874	0.8	128	.. <sup>c</sup>	93	.. <sup>c</sup>	683	0.2	136	.. <sup>c</sup>	3,914	1.2

urban uses, the agricultural land use base of the Region declined by 43,679 acres, or 4 percent, between 1963 and 1970, representing an average annual loss of 6,240 acres, or 9.8 square miles, during this period. Each county experienced significant losses of agricultural lands between 1963 and 1970, with the absolute changes ranging from 2,824 acres in Kenosha County to 14,365 acres in Waukesha County. The unusually large loss of agricultural lands in Waukesha County reflects a rapid increase of residential and related urban development during this period.

A major recommendation of the adopted regional land use plan is the preservation in essentially agricultural use of most of the remaining prime agricultural lands of southeastern Wisconsin, the most productive farming areas of the Region. Gross prime agricultural land includes all land use, both urban and rural, within the prime agricul-

tural land configurations delineated on Map 23.<sup>5</sup> For the purposes of this report, however, attention is focused on net prime agricultural lands, that is, lands which are

<sup>5</sup> The gross prime agricultural areas of the Region include about 467,700 acres of land, of which approximately 446,500 acres are recommended for preservation under the adopted regional land use plan. The portion of the gross prime agricultural area of the Region which is actually farmed is termed the net prime agricultural land. Net prime agricultural lands comprised 405,204 acres, or 87 percent, of the gross prime agricultural area of the Region in 1970. The balance included woodlands, water and wetlands, and other open lands, as well as various types of urban development within the gross prime agricultural areas.

Table 29 (continued)

County	Year	Gross Primary Environmental Corridor															
		Total		Net Primary Environmental Corridor													
				Recreation		Agriculture and Related		Water		Wetlands		Woodlands		Other Open Lands		Subtotal	
		Acres	Percent of Region	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent of Gross Corridor
Kenosha	1963	30,663	8.8	1,290	4.2	9,694	31.7	3,474	11.3	9,047	29.5	2,958	9.6	1,622	5.3	28,085	91.6
	1970	30,663	8.8	1,770	5.8	9,864	32.2	3,577	11.6	8,727	28.5	2,673	8.7	1,510	4.9	28,121	91.7
	Change																
	1963-1970	0	--	480	1.6	170	0.5	103	0.3	- 320	- 1.0	- 285	- 0.9	- 112	- 0.4	36	0.1
Milwaukee	1963	18,038	5.2	6,039	33.5	2,823	15.7	865	4.8	1,517	8.4	1,249	6.9	1,785	9.9	14,278	79.2
	1970	18,111	5.2	6,638	36.7	2,209	12.2	918	5.1	1,461	8.1	1,193	6.5	1,764	9.7	14,183	78.3
	Change																
	1963-1970	73	.. <sup>c</sup>	599	3.2	- 614	- 3.5	53	0.3	- 56	- 0.3	- 56	- 0.4	- 21	- 0.2	- 95	- 0.9
Ozaukee	1963	25,135	7.3	910	3.6	6,597	26.2	1,514	6.0	8,871	35.3	3,838	15.3	969	3.9	22,699	90.3
	1970	25,135	7.3	952	3.7	6,307	25.1	1,541	6.1	8,783	34.9	3,721	14.8	990	3.9	22,294	88.7
	Change																
	1963-1970	0	--	42	0.1	- 290	- 1.1	27	0.1	- 88	- 0.4	- 117	- 0.5	21	.. <sup>c</sup>	- 405	- 1.6
Racine	1963	34,251	9.9	1,024	3.0	13,824	40.4	3,791	11.0	7,166	20.9	5,132	15.0	1,201	3.5	32,138	93.8
	1970	34,277	9.9	1,167	3.4	13,255	38.7	3,976	11.6	7,187	21.0	4,943	14.5	1,288	3.8	31,816	92.8
	Change																
	1963-1970	26	.. <sup>c</sup>	143	0.4	- 569	- 1.7	185	0.6	21	0.1	- 189	- 0.5	87	0.3	- 322	- 1.0
Walworth	1963	88,527	25.5	2,679	3.1	27,709	31.3	13,496	15.2	17,106	19.3	21,391	24.2	2,474	2.8	84,855	95.9
	1970	88,527	25.5	4,030	4.6	25,952	29.3	13,747	15.5	17,037	19.2	20,779	23.5	2,439	2.8	83,984	94.9
	Change																
	1963-1970	0	--	1,351	1.5	- 1,757	- 2.0	251	0.3	- 69	- 0.1	- 612	- 0.7	- 35	.. <sup>c</sup>	- 871	- 1.0
Washington	1963	56,285	16.2	629	1.1	14,819	26.3	3,413	6.1	21,585	38.4	12,574	22.3	1,052	1.9	54,072	96.1
	1970	56,285	16.2	803	1.4	14,251	25.3	3,450	6.1	21,423	38.1	12,574	22.3	1,099	2.0	53,600	95.2
	Change																
	1963-1970	0	--	174	0.3	- 568	- 1.0	37	.. <sup>c</sup>	- 162	- 0.3	0	--	47	0.1	- 472	- 0.9
Waukesha	1963	94,110	27.1	3,606	3.8	22,464	23.9	15,258	16.2	26,760	28.4	19,406	20.6	2,420	2.6	89,914	95.5
	1970	94,110	27.1	4,224	4.5	20,924	22.2	15,320	16.3	26,065	27.7	19,037	20.2	2,658	2.8	88,228	93.7
	Change																
	1963-1970	0	--	618	0.7	- 1,540	- 1.7	62	0.1	- 695	- 0.7	- 369	- 0.4	238	0.2	- 1,686	- 1.8
Region	1963	347,009	100.0	16,177	4.7	97,930	28.3	41,811	12.0	92,052	26.5	66,548	19.2	11,523	3.3	326,041	94.0
	1970	347,108	100.0	19,584	5.6	92,761	26.7	42,529	12.3	90,684	26.1	64,920	18.7	11,748	3.4	322,226	92.8
	Change																
	1963-1970	99	.. <sup>c</sup>	3,407	0.9	- 5,169	- 1.6	718	0.3	- 1,368	- 0.4	- 1,628	- 0.5	225	0.1	- 3,815	- 1.2

<sup>a</sup> The primary environmental corridor acreage differs from data presented in SEWRPC Planning Report No. 7, *The Land Use-Transportation Study, Volume One, Inventory Findings-1963*, and in SEWRPC Planning Report No. 25, *A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin-2000, Volume One, Inventory Findings*, due to the availability of more detailed natural resource base information permitting a refinement of primary environmental corridor delineation.

<sup>b</sup> Average totals for both Milwaukee and Racine County increased between 1963 and 1970 as a result of fill being added in Lake Michigan in each respective county.

<sup>c</sup> Less than 0.05 percent.

Source: SEWRPC.

actually used as farmland and which have been determined to be highly productive for agricultural purposes on the basis of soils, the size and extent of the area farmed, and the historical capability of the area to consistently produce better than average crop yields. The preservation of these prime agricultural lands is necessary for economic reasons as well as to maintain the natural beauty and unique cultural heritage of southeastern Wisconsin, thereby ensuring the future environmental wholesomeness of the Region.

In 1970, net prime agricultural lands covered about 405,200 acres, or 24 percent of the area of the Region (see Table 32). Over 112,000 acres, or almost 28 percent of prime agricultural lands in the Region, are located in Walworth County. Significant quantities of prime agricultural lands also exist in Kenosha, Racine, and Waukesha Counties, each of which contained more than 60,000 acres of prime agricultural land in 1970. Milwaukee County, with approximately 7,200 acres, had less than 2 percent of the prime agricultural acreage in 1970.

Table 30

## PRESERVATION OF PRIMARY ENVIRONMENTAL CORRIDOR IN THE REGION: 1973

County	1970 Gross Primary Environmental Corridor (acres)	Primary Environmental Corridor Preserved													
		Permanent Preservation				Temporary Preservation								Total	
		Public Parks Owned (acres)	Floodland Zoning (acres)	Subtotal		Conservancy Zoning (acres)	Private Recreation (acres)	Park Zoning (acres)	Exclusive Agriculture Zoning (acres)	Country Estate Zoning (acres)	Subtotal				
				Acres	Percent of Gross Corridor						Acres	Percent of Gross Corridor	Acres	Percent of Gross Corridor	
Kenosha . . . .	30,663	3,232	6,193	9,425	30.7	239	1,194	0	580	0	2,013	6.6	11,438	37.3	
Milwaukee . . .	18,111	9,618	1,072	10,690	59.0	62	777	7	0	85	931	5.2	11,621	64.2	
Ozaukee . . . .	25,135	2,642	7,547	10,189	40.5	3,168	603	54	3,387	0	7,212	28.7	17,401	69.2	
Racine. . . . .	34,277	4,191	13,564	17,755	51.8	739	632	75	2,474	0	3,920	11.4	21,675	63.2	
Walworth. . . .	88,527	7,319	22,981	30,300	34.2	2,061	5,517	2	0	0	7,580	8.6	37,880	42.8	
Washington . .	56,285	7,243	62	7,305	13.0	4,502	2,183	22	3,288	0	9,995	17.7	17,300	30.7	
Waukesha. . . .	94,110	13,593	31,335	44,928	47.8	13,004	1,712	7	610	471	15,804	16.7	60,732	64.5	
Region	347,108	47,838	82,754	130,592	37.6	23,775	12,618	167	10,339	556	47,455	13.7	178,047	51.3	

Source: SEWRPC.

Between 1963 and 1970, the net prime agricultural acreage in the Region decreased by 8,381, or about 2 percent, due primarily to urban development. The losses of prime agricultural land were largest in Racine County—2,263 acres—and in Waukesha County—2,128 acres. The loss in these two counties comprised more than half of the total decline in prime agricultural land in the Region during this time. The reduction in prime agricultural land was less than 1,000 acres for each of the other counties except Ozaukee County, which experienced a loss of 1,049 acres.

While it is apparent that prime agricultural lands have been and are continuing to be converted to urban uses, some communities in the Region, cognizant of the growing value and importance of such lands, have instituted zoning at the local level to preserve prime agricultural lands in agricultural use. Analysis of community zoning ordinances revealed that as of 1972 of the 446,460 acres of prime agricultural lands in the Region which have been recommended for preservation under the adopted regional land use plan, 60,540 acres, or about 14 percent, have actually been reserved for agricultural use through exclusive agricultural zoning. It should be noted, however, that exclusive agricultural zoning does not guarantee that such lands are permanently preserved for agricultural use since such zoning can be readily changed to permit intensive urban uses.

## SUMMARY

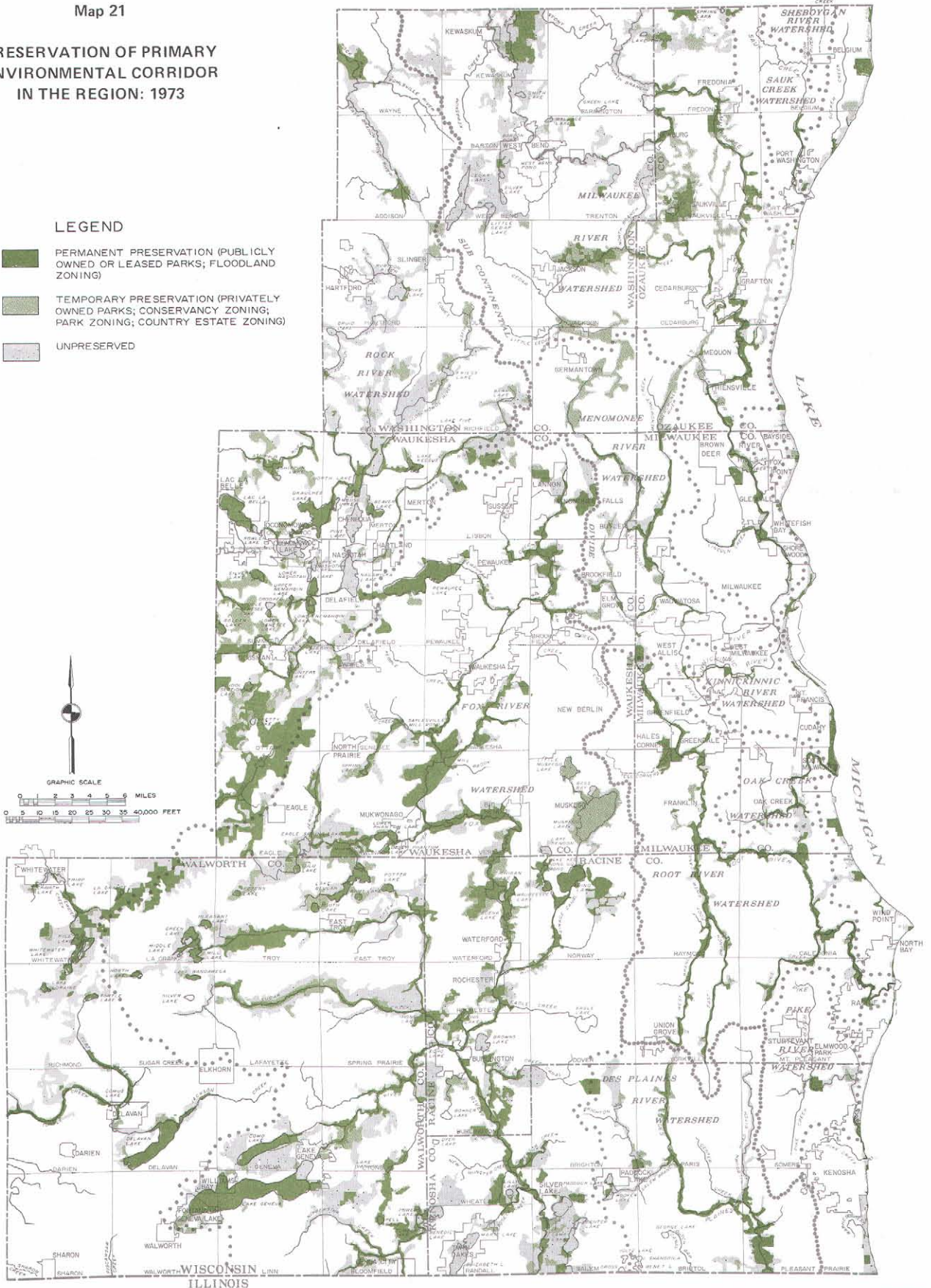
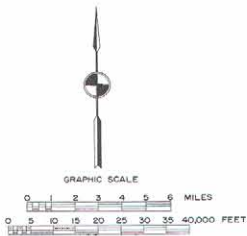
This chapter has described the natural resource base of the Region. A proper understanding of that base and its importance to recreational pursuits and to the maintenance of the overall quality of the environment for life is essential to any park and open space planning effort. The following findings with respect to the natural resource base have particular significance for regional park and open space planning.

1. The extreme variations experienced within the Region in the three principal elements of climate—temperature, precipitation, and snow cover—directly influence the diversity, intensity, and seasonal nature of recreational activities within the Region. Summer temperatures, reflected by monthly means for July and August, range between 68°F and 73°F and allow for a variety of recreation activities including swimming, boating, and picnicking. Winter temperatures which range between 18°F and 26°F allow for such activities as skiing, snowmobiling, and ice skating. The changing seasons, while allowing for a great diversity in types of recreation activity, also limit to some extent the time available to participate in such activities, resulting in patterns of intensive use and in some cases overutilization of recreational facilities during certain times of the year and underutilization of the same facilities at other times.
2. Knowledge of the physical, chemical, and biological properties of soils in the Region is an important consideration in properly locating and developing recreational facilities. Failure to take the capabilities and limitations of soils into consideration during the planning stage of any recreational development proposal may not only increase the cost of facility development and maintenance and affect the quality of the recreational experience but may result in serious and costly health, safety, and water pollution problems. Soils throughout the Region have been analyzed and limitation and suitability rating determined for intensive play areas; extensive play areas; nature and hiking trails; golf course fairways; cottage and utility buildings; and tent and trailer camp sites. By utilizing the site specific soil survey data and its accompanying interpretive



Map 21

**PRESERVATION OF PRIMARY  
ENVIRONMENTAL CORRIDOR  
IN THE REGION: 1973**



Significant achievements have been made since adoption of the regional land use plan in preserving primary environmental corridor lands. By 1973, about 130,600 acres, or 38 percent of the total primary environmental corridor acreage, had been permanently preserved; that is, such lands were either publicly owned or leased for park and outdoor recreation purposes or protected from development by a floodland zoning ordinance. An additional 47,000 acres, representing about 14 percent of the primary environmental corridor acreage, have been temporarily preserved through the enactment of conservancy or park zoning through private park ownership or through an exclusive agricultural or country estate zoning. In total, about 178,000 acres, or 51 percent of the primary environmental corridor area of the Region, were either permanently or temporarily preserved by the end of 1973.

Source: SEWRPC.

Table 31

## AGRICULTURAL LAND USE IN THE REGION BY COUNTY: 1963 and 1970

County	Agricultural Land Use					
	Existing				Change: 1963-1970	
	1963		1970			
	Acres	Percent of Region	Acres	Percent of Region	Acres	Percent
Kenosha . . . . .	116,754	10.8	113,930	11.0	- 2,824	- 2.4
Milwaukee . . . . .	34,870	3.2	28,607	2.7	- 6,263	- 18.0
Ozaukee . . . . .	105,126	9.7	100,491	9.7	- 4,635	- 4.4
Racine. . . . .	153,641	14.2	147,207	14.1	- 6,434	- 4.2
Walworth. . . . .	265,694	24.5	261,744	25.2	- 3,950	- 1.5
Washington . . . . .	191,674	17.7	186,466	17.9	- 5,208	- 2.7
Waukesha. . . . .	216,041	19.9	201,676	19.4	- 14,365	- 6.6
Region	1,083,800	100.0	1,040,121	100.0	- 43,679	- 4.0

Source: SEWRPC.

Table 32

## NET PRIME AGRICULTURAL LAND IN THE REGION BY COUNTY: SELECTED YEARS 1963-1970

County	Net Prime Agricultural Land <sup>a</sup>					
	Existing				Change: 1963-1970	
	1963		1970			
	Acres	Percent of Region	Acres	Percent of Region		
	Acres				Acres	Percent
Kenosha . . . . .	67,014	16.2	66,055	16.3	- 959	- 1.4
Milwaukee . . . . .	7,976	2.0	7,165	1.8	- 811	- 10.2
Ozaukee . . . . .	38,161	9.2	37,112	9.2	- 1,049	- 2.7
Racine. . . . .	71,392	17.3	69,129	17.1	- 2,263	- 3.2
Walworth. . . . .	113,018	27.3	112,463	27.7	- 555	- 0.5
Washington . . . .	50,153	12.1	49,537	12.2	- 616	- 1.2
Waukesha. . . . .	65,871	15.9	63,743	15.7	- 2,128	- 3.2
Region	413,585	100.0	405,204	100.0	- 8,381	- 2.0

<sup>a</sup> Net prime agricultural lands include that portion of the gross prime agricultural area of the Region which is actually farmed. Woodlands, water and wetlands, and other lands, as well as the various types of urban development within the gross prime agricultural area, are excluded from the net prime agricultural acreage.

Source: SEWRPC.

analysis, detailed recreational site plans can be developed which take into consideration the suitability and limitation of the site for specific types of recreational use.

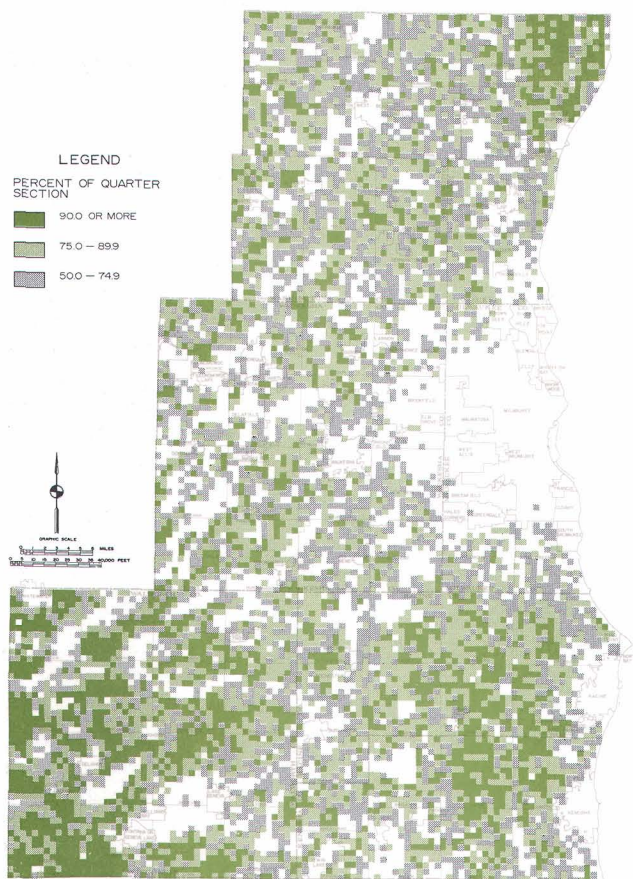
3. The land forms and physical features of the Region such as topography and drainage pattern are important considerations in park and open space location and development. Topographic

and drainage features determine the suitability of a site for specific recreational uses, provide for interesting and attractive vistas, and influence the cost of park development and maintenance. Glaciation has largely determined the physiography and topography of the Region. The dominant feature is the Kettle Moraine, an interlobate glacial deposit formed between the Green Bay and Lake Michigan lobes of the continental



Map 22

### AGRICULTURAL LAND USE IN THE REGION: 1970



Land devoted to agricultural uses, including cropland, pastureland, orchards, nurseries, and fowl and fur farms, totaled about 1,040,100 acres in 1970, or about 60 percent of the total area of the Region. Major concentrations of agricultural land use occur in northeastern Ozaukee County, in central and southeastern Walworth County, and in east-central Racine and Kenosha Counties. Other more scattered concentrations occur in Waukesha and Washington Counties.

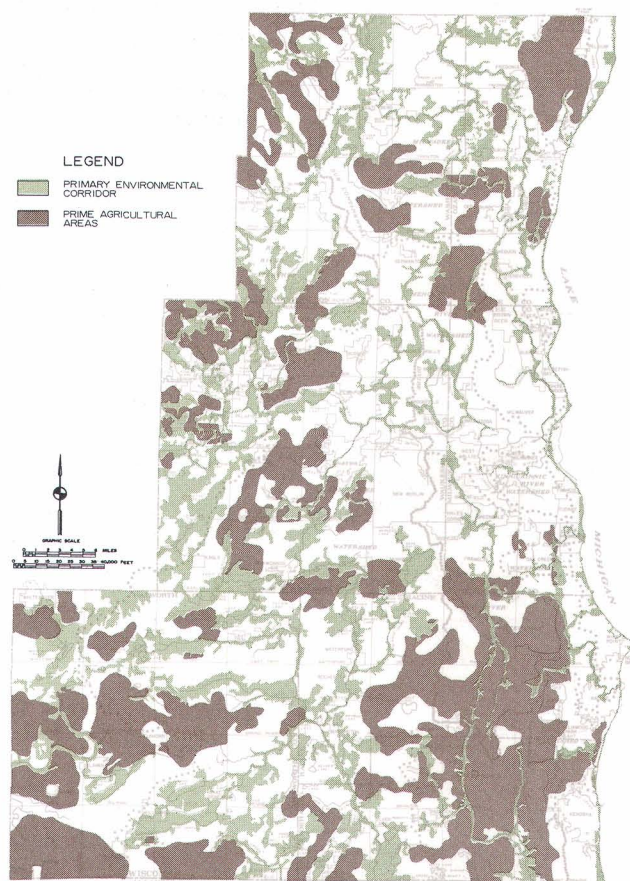
Source: SEWRPC.

glacier. The Region is also covered by a variety of other glacial land forms including kames, recessional moraines, lacustrine basins, outwash plains, eskers, and drumlins. The effects of glaciation are also shown in the poorly developed but highly diverse surface drainage pattern in the Region which includes 11 major watersheds and numerous small catchment areas which drain directly to Lake Michigan.

4. Lakes and streams are focal points for water-related recreational activities popular with the inhabitants of the Region. They provide very attractive sites for properly planned residential development and, when viewed as open space, greatly enhance the aesthetic quality of the

Map 23

### PRIME AGRICULTURAL LANDS IN THE REGION: 1970



A major recommendation of the adopted regional land use plan is the preservation in agricultural use of most of the remaining prime agricultural lands of southeastern Wisconsin, the most productive farming areas of the Region. Gross prime agricultural land includes all land uses, both urban and rural, located within the prime agricultural areas delineated on the above map. The gross prime agricultural areas of the Region include about 467,700 acres of land, of which approximately 446,460 acres, or 95 percent, are recommended for preservation under the adopted regional land use plan. The portion of the gross prime agricultural area of the Region which is actually farmed is termed net prime agricultural land. Net prime agricultural lands comprised about 405,200 acres, or 87 percent of the gross prime agricultural area of the Region, in 1970.

Source: SEWRPC.

environment. The lakes particularly are intensively used for recreational purposes by both residents and nonresidents of the Region. There are 100 major lakes of 50 acres or more in the Region having a combined surface water area of 57 square miles, or about 2 percent of the total area of the Region. In addition, there are 228 lakes in the Region of less than 50 acres having a combined surface water area of four square miles, or

about 0.15 percent of the area of the Region. At least 13 of the 57 major regional lakes sampled in Commission watershed studies were found to be in advanced stages of eutrophication. They are being degraded as a result of human activities to the point where they now have, or soon will have, greatly reduced value for recreational purposes and as desirable locations for properly planned and controlled lake-oriented residential development.

5. Floodland areas of the Region generally contain important elements of the natural resource base including high value woodlands, wetlands, and wildlife habitat and therefore constitute prime locations for needed park and open space areas. Floodlands have been delineated for about 530 miles of major stream channels in the Region as part of Commission watershed planning programs. Current ongoing watershed planning efforts by the Commission, as well as study efforts by other federal and local agencies, will provide flood hazard data for additional stream reaches within the Region. Continued efforts should be made, however, to discourage indiscriminate and incompatible urban development in the floodland while encouraging compatible open space uses.
6. Woodlands in the Region have both economic and ecologic value and, under good management, can serve a variety of uses providing multiple benefits. Woodlands contribute to the quality of life within an area by enhancing the overall quality of the environment by facilitating the provision of clean air and water. In addition, woodlands can contribute to the maintenance of a diversity of plant and animal life in association with human life and provide important recreational opportunities. Woodlands in the Region in 1970 covered a total combined area of about 125,300 acres, or approximately 7 percent of the total area of the Region. Over 91,700 acres, or 73 percent of the total, were located in Walworth, Washington, and Waukesha Counties. The Region experienced a net loss of over 5,100 acres, or 4 percent of the woodlands which were present in 1963. Nearly 1,900 acres, or 37 percent of the loss in woodlands, occurred in Waukesha County.
7. Water and wetlands provide the singular most striking feature of the regional landscape and can serve to enhance the setting of proximate uses. Wetlands serve important environmental and recreational functions; they contribute to flood control and to the maintenance of good water quality and are well suited as habitat for water fowl and marsh furbearers as well as upland game due to the protection afforded by vegetative cover. Wetlands should be protected by discouraging costly—both in monetary and environmental terms—wetland draining, filling, and conversion to other more intensive rural and

urban uses. Water and wetland areas covered 180,800 acres, or about 10 percent of the area of the Region, in 1970. This represents a net decrease of approximately 1,600 acres of water and wetlands from the 1963 figure.

8. Fish and wildlife are particularly valuable recreational assets of the Region. The variety and relative abundance of wildlife in the Region provide numerous recreational pursuits and pleasures for fishermen, hunters, and nature enthusiasts, and contribute to the regional economy. Wildlife habitat areas covered approximately 259,800 acres, or 15 percent of the total area of the Region in 1970. Over 103,000 acres, or 40 percent, were classified as high-value wildlife habitat areas; 94,100, or 36 percent, were classified as medium-value; and 62,700, or 24 percent, were classified as low-value wildlife habitat. Over 192,000 acres, or 74 percent of the wildlife habitat, were located in Walworth, Washington, and Waukesha Counties. Approximately 1,300 acres, or less than 1 percent of the wildlife habitat area in the Region, were destroyed from 1963 to 1970. The predominant cause for wildlife habitat loss is urbanization, primarily residential development.
9. The most important elements of the regional resource base, including the best remaining woodland, wildlife habitat, the major bodies of surface water and related undeveloped floodlands and shorelands, wetlands, recharge areas for the groundwater aquifers underlying the Region, and historic, scenic, and recreational sites, when combined on a regional map, result in essentially lineal elongated patterns termed by the Commission as environmental corridors. There were 322,200 acres of net primary environmental corridor in the Region in 1970, which represented a decrease of 3,800 acres from the 326,000 acres of net corridor which existed in 1963. Much of the loss in corridor lands occurred as a result of urban encroachment, particularly residential land uses which increased by 2,900 acres, and transportation uses which increased by about 700 acres from 1963 to 1970. Significant achievements have been made regarding the preservation of primary environmental corridors. Park, outdoor recreation, or related open space land acquisition; floodland, conservancy, or recreational district zoning; and exclusive agricultural or county estate zoning have essentially preserved a total of 178,000 acres, or 51 percent, of the gross primary environmental corridors in the Region.
10. Agricultural lands, in addition to providing food and fibre and maintaining an ecological balance between plants and animals, contribute to the provision of wildlife habitat and provide open space which gives form and structure to urban development. Agriculture is the largest land



use in southeastern Wisconsin, accounting for 1,040,121 acres, or 60 percent, of the total area of the Region. Between 1963 and 1970, due largely to conversion of agricultural land to urban uses, the agricultural land use base declined 4 percent, or 43,679 acres. In 1970 prime agricultural lands covered over 405,000 acres, or 24 percent of the area of the Region. Between 1963 and

1970 prime agricultural acreage decreased by almost 8,400 acres due primarily to urban development. As of 1972 almost 61,000 acres, or about 14 percent, of the prime agricultural lands recommended to be preserved under the adopted regional land use plan have been preserved through locally enacted exclusive agricultural zoning districts.

(This page intentionally left blank)

## EXISTING OUTDOOR RECREATION AND OPEN SPACE SITES

## INTRODUCTION

The existing stock of park and related open space lands provides the primary basis upon which to build a regional park and open space plan. An inventory of such lands is necessary, therefore, not only to assess their location, quantity, and quality, but also to provide the basis for scaling the existing supply against the present and probable future demand for outdoor recreation and to the need for open space areas. Definitive knowledge of existing park sites and open space areas also permits comparison with park and open space objectives and standards, thereby enabling judgments to be made of the adequacy of the present system. These adequacies—or deficiencies—can then be addressed in the preparation of alternative park and open space plans.

Inventories of existing outdoor recreation and open space sites were conducted by the Commission in 1963 and again in 1970 as integral parts of the initial and continuing regional land use planning efforts. Through use of two field inventory survey forms—"Inventory of Existing Public and Private Recreation Areas" and "Inventory of Historic and Cultural Sites" as set forth in Appendices B and C, respectively—the data on the existing outdoor recreation and related open space system collected under the Commission land use planning efforts were updated in 1973. State, county, and local officials responsible for the provision of recreation and open space facilities within the Region were contacted. Field inspections of each existing outdoor recreation and open space site were then conducted; pertinent data recorded on the field inventory forms; and the data coded, keypunched, and stored on magnetic tape for future processing and analysis. This chapter presents in summary form the findings of the existing outdoor recreation and open space sites inventory. Included are data related to general use outdoor recreation sites, open space sites, and other recreation and open space sites including special use recreation sites, urban open space sites, and historic sites. A detailed listing of these sites by planning analysis area is provided in Appendix D.

EXISTING GENERAL USE  
OUTDOOR RECREATION SITES

Recreation can be broadly defined as an activity or experience undertaken solely for the pleasure or satisfaction derived from it. Under such a definition, the term encompasses a broad range of human activities, from rest and reflection to learning and teaching, from development of personal and social skills to meeting challenges and recovering from failures. Recreation is fun and enjoyment and includes both mental and physical exercise, personal and interpersonal experience, and

self-provided and socially-observed entertainment. Recreation, within the context of this study, however, is viewed in a narrower scope and by definition includes only those types of user-oriented recreational activities typically carried on outdoors.

General use outdoor recreation sites then may be defined as areas of land and water whose primary function is to provide space and facilities to be used on either an intensive or extensive basis for the pursuit of a variety of outdoor recreation activities. General use outdoor recreation sites may further be subdivided by ownership, type, and facilities provided. Outdoor recreation sites may be classified by ownership as publicly owned or privately owned. Publicly owned sites may be further classified into sites owned by federal, state, county, or municipal units or agencies of government and by school districts. Privately owned sites may be further classified into sites owned by civic groups or quasi-public organizations, by private commercial organizations, and by private non-commercial interest groups. With respect to type, as indicated in Chapter II of this report, outdoor recreation sites may be classified into four basic types depending primarily on the size of the site but also on the extent and quality of natural resource amenities present. With respect to recreation facilities provided, outdoor recreation sites may be classified into sites which provide facilities for such activities as bicycling, hiking, or ski touring, requiring relatively undeveloped but extensive areas, or into sites which provide facilities for such activities as baseball, skiing, swimming, or tennis, requiring relatively smaller but more highly-developed areas.

This section accordingly presents the findings of the existing general use outdoor recreation sites inventory summarizing such data on the basis of ownership, type, and facilities provided. In addition, because many general use outdoor recreation sites rely heavily on the natural resource amenities present within the primary environmental corridors of the Region and because such recreation sites, when properly designed and located, serve also to preserve and protect the corridors, this section presents data which document the extent to which general use outdoor recreation sites occur within primary environmental corridors.

General Use Outdoor Recreation Sites—Ownership

As previously indicated, general use outdoor recreation sites may either be publicly or nonpublicly owned. Publicly owned general use outdoor recreation sites under the jurisdiction of federal, state, county, or local units of government are commonly termed "parks." Also included as publicly owned outdoor recreation sites are playfields and playgrounds generally under the jurisdiction of school districts. While such sites are not generally perceived as

“parks,” they do provide areas and facilities for the pursuit of active intensive outdoor recreational pursuits primarily at the neighborhood level.

Nonpublicly owned general use outdoor recreation sites may be under the jurisdiction of various quasi-public civic, charitable, or religious organizations, commercial enterprises, or private interest groups. Quasi-public organizational general use outdoor recreation sites are defined as those which are operated on a nonprofit basis and are not usually open to the general public. Such sites include YMCA camps, Boy Scout or Girl Scout camp areas, and recreation areas under the jurisdiction of parochial schools including playfields and playgrounds. Private commercial general use outdoor recreation sites, hereafter termed “commercial sites,” are those which are open to the general public, are operated on a profit-making basis, and provide facilities for such recreational activities as golf, camping, skiing, picnicking, and boating. Private noncommercial general use outdoor recreation sites, hereafter termed “private sites,” provide recreational facilities similar to commercial enterprises, but use of such sites is limited to a special membership group only; therefore the sites are not open to the general public.

There were 1,773 existing general use outdoor recreation sites, totaling about 49,200 acres in the Region in 1973. As indicated in Table 33, 1,128, or almost 64 percent of the sites, and about 23,600 acres, or about 48 percent of the existing general use outdoor recreation site acreage, were publicly owned. Almost half, or over 11,400 acres, of public general use outdoor recreation site acreage was in county ownership, with Milwaukee County—with a total of almost 6,000 acres—having the largest county-owned acreage of any county in the Region. A total of 566 sites, containing more than 4,600 acres, were owned by public school districts in the Region. While the average size of school district recreation sites is quite small compared with other sites under public ownership, they do provide needed outdoor recreation facilities, especially at the neighborhood level. Nonpublic ownership of general use outdoor recreation sites was rather evenly distributed among quasi-public organizational, commercial, and private interest groups, having, respectively, 38 percent, 33 percent, and 29 percent of the 25,600 acres of nonpublic recreation site acreage in the Region. Walworth County, with over 8,600 acres, had the largest acreage of nonpublic recreation sites. Nonpublic acreage in other counties ranged from a low of about 1,700 acres in Ozaukee County to over 5,100 acres in Waukesha County.

Milwaukee County, with over 8,100 acres of publicly owned general use outdoor recreation sites, not only had the largest acreage of publicly owned sites of any county but also the largest total acreage of general use recreation sites—10,444 acres—of any county in the Region. Milwaukee, Walworth, and Waukesha Counties, each with over 10,000 acres of general use outdoor recreation sites, together accounted for over 62 percent of the total general use outdoor recreation site acreage in the Region.

#### General Use Outdoor Recreation Sites—Type

As indicated in Chapter II of this report, general use outdoor recreation sites can be divided into four types based primarily upon size but also upon service area and the extent of natural resource amenities present at the site. Type I sites are defined as large outdoor recreation sites, 250 or more acres in area, having a multicounty service area. Such sites rely heavily for their recreational value and character on natural resource amenities to the degree that such amenities dictate the location and extent of that type of site. Type II sites are defined as intermediate in size, ranging in area from 100 to 249 acres, typically having a countywide or multicommunity service area. Like Type I sites, the recreational value and character of such sites rely on the natural resource amenities, but such sites usually provide a smaller variety of recreational facilities or have smaller areas devoted to a given recreational activity. Type III sites range in area from 25 to 99 acres and primarily have a multi-neighborhood service area. This is a service area which approximates the planning analysis area as defined by the Commission. Such sites rely more on the developmental characteristics of the area to be served than on natural resource amenities for their location and may have both intensively developed areas for active recreational pursuits and open “green” areas for more passive recreational pursuits. Type IV sites are defined as small sites usually less than 25 acres in area which have the neighborhood or subneighborhood as a service area. Such sites also include the small miniparks, tot lots, and school playgrounds which primarily provide for active intensive recreational pursuits.

As indicated in Table 34, there were 54 Type I general use outdoor recreation sites totaling over 18,500 acres, 84 Type II sites totaling over 13,200 acres, 190 Type III sites totaling over 9,400 acres, and 1,445 Type IV general use outdoor recreation sites totaling over 7,900 acres in the Region in 1973. While over 81 percent of all general use outdoor recreation sites in the Region were classified as Type IV sites, such sites accounted for only about 16 percent of the total outdoor recreation site acreage. Type I and Type II sites together accounted for about 8 percent of all existing general use recreation sites but totaled over 31,800 acres, or about 65 percent, of the total general use outdoor recreation site acreage in the Region in 1973. Milwaukee County had the largest acreage of publicly owned Type I sites—3,500 acres—while Walworth County had the largest acreage of nonpublic Type I sites—4,700 acres. It is interesting to note that in total there were more nonpublic Type I and Type II recreation sites, 91 versus 47, and more nonpublic recreation site acreage, 19,300 versus 12,500 acres, than publicly owned Type I and Type II sites and acreage in the Region in 1973 and that both the number and acreage of nonpublicly owned Type II park sites surpassed the number and acreage of publicly owned sites in all counties of the Region.

On a county basis, acreage for Type I sites ranged from a low of 845 acres in Racine County to a high of almost 3,800 acres in Milwaukee County; acreage for Type II



Table 33

## GENERAL USE OUTDOOR RECREATION SITES IN THE REGION BY COUNTY BY OWNERSHIP: 1973

County		Public Ownership													
		State		County		City		Village		Town		School District		Subtotal	
		Number	Percent of Public	Number	Percent of Public	Number	Percent of Public	Number	Percent of Public	Number	Percent of Public	Number	Percent of Public	Number	Percent of Total
Kenosha	Sites . . .	1	1.0	7	6.9	31	30.3	8	7.8	12	11.8	43	42.2	102	53.1
	Acres . .	747	25.1	1,301	43.7	540	18.1	26	0.9	43	1.4	321	10.8	2,978	52.4
Milwaukee	Sites . . .	1	0.2	89	19.5	99	21.6	13	2.8	0	0.0	255	55.9	457	75.4
	Acres . .	25	0.3	5,986	73.1	435	5.4	146	1.8	0	0.0	1,577	19.4	8,169	78.1
Ozaukee	Sites . . .	1	1.5	5	7.7	25	38.5	10	15.4	0	0.0	24	36.9	65	69.1
	Acres . .	632	34.1	633	34.2	235	12.7	60	3.2	0	0.0	292	15.8	1,852	52.3
Racine	Sites . . .	1	0.8	13	10.0	46	35.4	10	7.7	3	2.3	57	43.8	130	62.5
	Acres . .	2	0.1	1,180	45.7	944	36.6	22	0.8	38	1.5	395	15.3	2,581	58.2
Walworth	Sites . . .	4	5.1	1	1.3	16	20.3	8	10.1	13	16.4	37	46.8	79	43.9
	Acres . .	545	39.5	160	11.6	156	11.3	73	5.3	35	2.5	412	29.8	1,381	13.8
Washington	Sites . . .	3	4.7	2	3.1	15	23.4	6	9.4	3	4.7	35	54.7	64	50.4
	Acres . .	732	45.7	180	11.2	232	14.5	69	4.3	10	0.6	380	23.7	1,603	33.0
Waukesha	Sites . . .	6	2.6	12	5.2	52	22.5	36	15.6	10	4.3	115	49.8	231	63.1
	Acres . .	514	10.1	1,977	38.9	711	14.0	566	11.1	82	1.6	1,235	24.3	5,085	49.7
Region	Sites . . .	17	1.5	129	11.4	284	25.2	91	8.1	41	3.7	566	50.1	1,128	63.6
	Acres . .	3,197	13.6	11,417	48.1	3,253	13.8	962	4.1	208	0.8	4,612	19.6	23,649	48.0

County		Nonpublic Ownership									
		Quasi-Public Organizational		Commercial		Private		Nonpublic Subtotal		Total	
		Number	Percent of Nonpublic	Number	Percent of Nonpublic	Number	Percent of Nonpublic	Number	Percent of Total	Number	Percent of Total
Kenosha	Sites . . .	34	37.8	33	36.7	23	25.5	90	46.9	192	10.8
	Acres . .	899	33.2	1,344	49.6	466	17.2	2,709	47.6	5,687	11.6
Milwaukee	Sites . . .	119	79.9	9	6.0	21	14.1	149	24.6	606	34.1
	Acres . .	814	35.8	145	6.4	1,316	57.8	2,275	21.9	10,444	21.1
Ozaukee	Sites . . .	17	58.6	6	20.7	6	20.7	29	30.9	94	5.3
	Acres . .	583	34.6	279	16.5	825	48.9	1,687	47.7	3,539	7.2
Racine	Sites . . .	34	43.6	25	32.1	19	24.3	78	37.5	208	11.7
	Acres . .	670	36.2	643	34.7	538	29.1	1,851	41.8	4,432	9.0
Walworth	Sites . . .	31	30.7	48	47.5	22	21.8	101	56.1	180	10.2
	Acres . .	3,611	41.9	2,832	32.9	2,177	25.2	8,620	86.2	10,001	20.4
Washington	Sites . . .	26	41.3	28	44.4	9	14.3	63	49.6	127	7.2
	Acres . .	1,257	38.6	1,458	44.7	544	16.7	3,259	67.0	4,862	9.9
Waukesha	Sites . . .	57	42.2	55	40.8	23	17.0	135	36.9	366	20.7
	Acres . .	1,875	36.4	1,782	34.6	1,498	29.0	5,155	50.3	10,240	20.8
Region	Sites . . .	318	49.3	204	31.6	123	19.1	645	36.4	1,773	100.0
	Acres . .	9,709	38.0	8,483	33.2	7,364	28.8	25,556	52.0	49,205	100.0

Source: SEWRPC.

Table 34

## GENERAL USE OUTDOOR RECREATION SITES IN THE REGION BY COUNTY BY TYPE: 1973

County	Ownership		Type I		Type II		Type III		Type IV		Total	
			Number	Percent of County	Number	Percent of County	Number	Percent of County	Number	Percent of County	Number	Percent of Region
Kenosha	Public	Sites . . Acres . .	4 1,701	3.9 57.1	2 328	2.0 11.0	7 399	6.9 13.4	89 550	87.2 18.5	102 2,978	9.1 12.6
	Nonpublic	Sites . . Acres . .	2 519	2.2 19.2	10 1,609	11.1 59.4	6 334	6.7 12.3	72 247	80.0 9.1	90 2,709	13.9 10.6
	Total	Sites . . Acres . .	6 2,220	3.1 39.0	12 1,937	6.3 34.1	13 733	6.8 12.9	161 797	83.8 14.0	192 5,687	10.8 11.6
Milwaukee	Public	Sites . . Acres . .	12 3,532	2.6 43.6	5 696	1.1 8.6	39 1,755	8.4 21.0	401 2,186	87.9 26.8	457 8,169	40.4 34.4
	Nonpublic	Sites . . Acres . .	1 267	0.7 11.7	5 900	3.4 39.6	11 513	7.4 22.5	132 595	88.5 26.2	149 2,275	23.1 8.9
	Total	Sites . . Acres . .	13 3,799	2.2 36.6	10 1,596	1.7 15.4	50 2,268	8.1 21.4	533 2,781	88.0 26.6	606 10,444	34.1 21.1
Ozaukee	Public	Sites . . Acres . .	3 1,149	4.6 62.1	0 0	0.0 0.0	8 336	12.3 18.1	54 367	83.1 19.8	65 1,852	5.8 7.9
	Nonpublic	Sites . . Acres . .	2 625	6.9 37.0	4 624	13.8 37.0	5 355	17.2 21.1	18 83	62.1 4.9	29 1,687	4.5 6.6
	Total	Sites . . Acres . .	5 1,774	5.3 50.1	4 624	4.3 17.6	13 691	13.8 19.5	72 450	76.6 12.8	94 3,539	5.3 7.2
Racine	Public	Sites . . Acres . .	3 845	2.3 32.7	2 301	1.5 11.7	17 871	13.1 33.7	108 564	83.1 21.9	130 2,581	11.6 10.9
	Nonpublic	Sites . . Acres . .	0 0	0.0 0.0	7 1,140	9.0 61.6	8 461	10.3 24.9	63 250	80.7 13.5	78 1,851	12.1 7.2
	Total	Sites . . Acres . .	3 845	1.4 19.1	9 1,441	4.3 32.5	25 1,332	12.0 30.1	171 814	82.3 18.3	208 4,432	11.8 9.0
Walworth	Public	Sites . . Acres . .	2 511	2.5 37.0	1 160	1.3 11.6	10 397	12.7 28.7	66 313	83.5 22.7	79 1,381	7.0 5.9
	Nonpublic	Sites . . Acres . .	12 4,744	11.9 55.0	16 2,314	15.8 26.8	22 1,265	21.8 14.7	51 297	50.5 3.5	101 8,620	15.7 33.7
	Total	Sites . . Acres . .	14 5,255	7.8 52.5	17 2,474	9.4 24.7	32 1,662	17.8 16.6	117 610	65.0 6.2	180 10,001	10.2 20.4
Washington	Public	Sites . . Acres . .	1 672	1.6 41.9	1 140	1.6 8.7	11 404	17.2 25.2	51 387	79.6 24.2	64 1,603	5.6 6.8
	Nonpublic	Sites . . Acres . .	3 903	4.8 27.7	10 1,721	15.9 52.8	8 471	12.7 14.5	42 164	66.6 5.0	63 3,259	9.8 12.8
	Total	Sites . . Acres . .	4 1,575	3.1 32.4	11 1,861	8.7 38.3	19 875	15.0 18.0	93 551	73.2 11.3	127 4,862	7.2 9.9
Waukesha	Public	Sites . . Acres . .	6 1,612	2.6 31.7	5 835	2.2 16.4	28 1,315	12.1 25.9	192 1,323	83.1 26.0	231 5,085	20.5 21.5
	Nonpublic	Sites . . Acres . .	3 1,470	2.2 28.5	16 2,495	11.9 48.4	10 605	7.4 11.7	106 585	78.5 11.4	135 5,155	20.9 20.2
	Total	Sites . . Acres . .	9 3,082	2.5 30.1	21 3,330	5.7 32.5	38 1,920	10.4 18.8	298 1,908	81.4 18.6	366 10,240	20.6 20.8
Region	Public	Sites . . Acres . .	31 10,022	2.8 42.5	16 2,460	1.4 10.4	120 5,477	10.6 23.0	961 5,690	85.2 24.1	1,128 23,649	63.6 48.0
	Nonpublic	Sites . . Acres . .	23 8,528	3.6 33.4	68 10,803	10.5 42.3	70 4,004	10.9 15.7	484 2,221	75.0 8.6	645 25,556	36.4 52.0
	Total	Sites . . Acres . .	54 18,550	3.1 37.7	84 13,263	4.7 27.0	190 9,481	10.7 19.2	1,445 7,911	81.5 16.1	1,773 49,205	100.0 100.0

Source: SEWRPC.

sites ranged from a low of about 600 acres in Ozaukee County to a high of over 3,300 acres in Waukesha County; acreage for Types III and IV sites, ranged from a low of about 700 acres and 450 acres, respectively, in Ozaukee County to a high of almost 2,300 and 2,800 acres, respectively, in Milwaukee County.

Map 24 shows the spatial distribution of general use outdoor recreation sites in the Region by type and planning analysis area. As might be expected, there are large concentrations of the relatively small intensive use Type IV outdoor recreation sites located in the urban areas of the Region, especially planning analysis areas 18 through 26 and 29 through 31 in Milwaukee County; areas 43, 44, and 49 in Racine County; areas 50, 51, and 55 in Kenosha County; and area 40 in Waukesha County. Conversely, the relatively large extensive use Type I and Type II outdoor recreation sites which depend heavily for character and quality on natural resource amenities are located primarily in the rural areas of the Region, including planning analysis areas 6 and 7 in Washington County; areas 37, 38, 39, 41, and 42 in Waukesha County; area 55 in Kenosha County; and areas 56, 57, and 59 in Walworth County. Milwaukee County, however, because of its farsighted historic park acquisition and development program, also contains a relatively large number of such sites.

Planning analysis area 32 and 39 in Waukesha County; area 48 in Racine County; area 55 in Kenosha County; and area 59 in Walworth County, each having significant numbers—more than 30—of Type IV outdoor recreation sites, have less than 20 percent of their general use outdoor recreation site acreage devoted to such sites while planning analysis areas 3 and 5 in Ozaukee County; areas 6 and 10 in Washington County area 16 in Milwaukee County; area 42 in Waukesha County; area 45 in Racine County; areas 52 and 55 in Kenosha County; and areas 56, 58, and 60 in Walworth County, having significantly fewer Type I or II sites than Type IV sites, have more than 80 percent of their general use outdoor recreation site acreage devoted to such sites.

#### General Use Outdoor Recreation Sites—Recreation Facilities Provided

Previous sections have classified general use outdoor recreation sites on the basis of ownership and type. To provide a more meaningful description of the character of outdoor recreation sites, a further classification of such sites on the basis of recreation facilities provided is set forth in this section.

General use outdoor recreation sites analyzed on the basis of recreation facilities provided can first be classified as single use or multiuse recreation sites. Single use recreation sites, as the name implies, refers to those recreation sites which provide facilities primarily for the pursuit of a single recreation activity. Single use recreation sites include, but are not limited to, individual golf courses, camp grounds, nature study areas, or boat launches.

Multiuse recreation sites, on the other hand, refer to those recreation sites which provide facilities for the pursuit of a variety of recreation activities. Such sites can further be classified or characterized based upon the type of recreation facilities present on the site. To this end, four categories of multiuse recreation sites were defined. These categories are based upon the identification and grouping of recreation facilities present at multiuse recreation sites and are described as follows.

#### Group A

Group A sites contain a variety of outdoor recreation facilities reliant upon natural resource amenities. Such sites, to a large degree, are maintained in a natural state; and minimum site acreage is used for physical improvements such as buildings or facilities for active intensive recreational use. Facilities provided at Group A sites include camping areas, golf courses, nature study areas, picnic areas, skiing areas, ski-touring trails, swimming beaches, and boat launches. A site having at least three of the aforementioned eight facilities would be classified as a Group A site.

#### Group B

Group B sites contain a variety of outdoor recreation facilities utilized primarily on an active intensive basis. Such sites also may serve large numbers of users and provide for spectator activities, and they are generally located in urban areas of the Region. Recreation facilities provided in Group B sites generally require significant capital investment and include picnic areas with shelters, softball and baseball diamonds with lights, tennis courts, swimming pools, or recreation buildings. A site having at least three of the aforementioned six facilities would be classified as a Group B site.

#### Group C

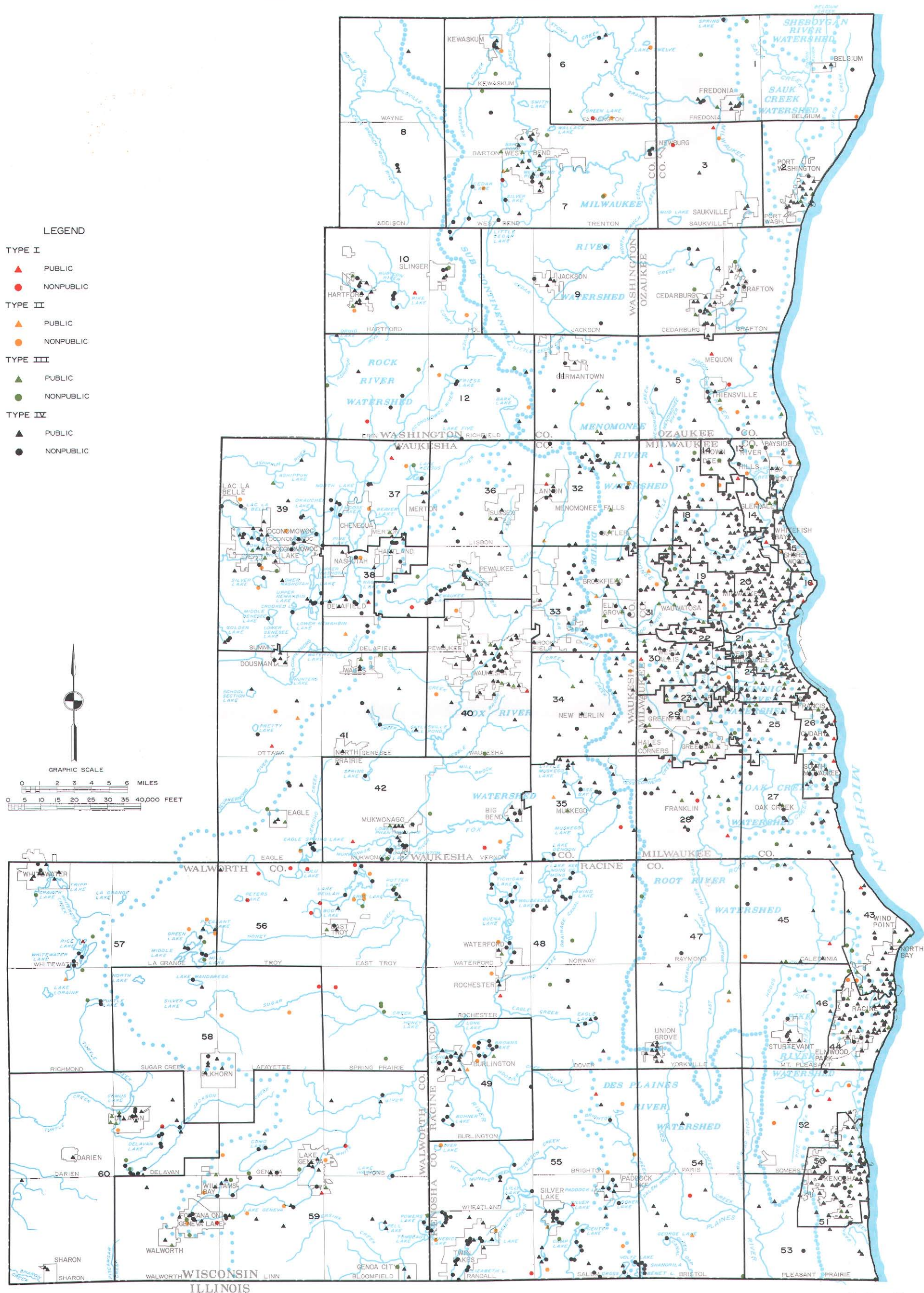
Group C sites contain recreation facilities utilized on an active intensive basis. Such sites, however, offer less variety of facilities for active intensive use and, therefore, require significantly less capital investment than Group B sites. Facilities typical of Group C sites include small picnic areas with grills, swimming pool or beach, tennis courts, and baseball and softball diamonds. Sites not previously classified into Groups A or B having two of the five aforementioned facilities would be classified as a Group C recreation site.

#### Group D

Group D sites contain facilities for active intensive recreation use. Such sites have a limited quantity and variety of recreation facilities. Sites not already classified in the aforementioned A, B, or C groups containing a picnic area, swimming pool or beach, softball or baseball diamond, or basketball goals associated with a playground, playfield, or other open space which could be utilized for other active or passive recreational pursuits would be classified as a Group D recreation site.



## GENERAL USE OUTDOOR RECREATION SITES IN THE REGION BY TYPE: 1973



There were 54 Type I general use outdoor recreation sites totaling over 18,500 acres, 84 Type II sites totaling over 13,200 acres, 190 Type III sites totaling over 9,400 acres, and 1,445 Type IV sites totaling over 7,900 acres in the Region in 1973. Type I sites—sites greater than 250 acres in size—and Type II sites—sites ranging from 100 to 250 acres in size—depend primarily upon natural resource amenities to provide opportunities to participate in a variety of recreation activities. Type I and Type II sites accounted for only 8 percent of the total number of general use sites but totaled over 31,800 acres, or about 65 percent, of the total acreage of general use sites. Such sites were located primarily in the rural areas of the Region. However, Milwaukee County, because of its farsighted park acquisition and development program, also contains a relatively large number of such sites. Type III general use outdoor recreation sites—sites ranging from 25 to 99 acres in size—and Type IV sites—sites less than 25 acres—provide opportunities for active outdoor recreational pursuits generally in proximity to the more intensively developed areas of the Region. Type III sites were distributed throughout the Region, while Type IV sites were concentrated in the urban areas of the Region. Type III sites accounted for 11 percent of the total number of general use sites but represented 19 percent of the total acreage of such sites. Type IV sites accounted for over 81 percent of the total number of general use sites but represented only 16 percent of the total acreage of such sites.

Source: SEWRPC.



As indicated in Table 35, there were 218 single use recreation sites totaling over 19,000 acres in the Region in 1973. Golf courses and camps accounted for a significant proportion of this acreage, totaling over 9,100 acres and 7,000 acres, respectively. On a county basis, Walworth County, with almost 5,700 acres, and Waukesha County, with over 4,000 acres, together accounted for over 50 percent of the single use outdoor recreation site acreage in the Region. It is interesting to note that only about 1,200 acres, or about 6 percent of the 19,000 acres of single use recreation site acreage in the Region in 1973, were in public ownership.

Also indicated in Table 35 are the multiuse sites classified by the groups of facilities present on the site. There were 90 sites, totaling over 14,000 acres, classified as Group A sites—namely, those which contain a variety of facilities reliant on natural resource amenities—while there were only 32 sites, totaling less than 1,700 acres, classified as Group B sites—that is, those sites which contain a variety of facilities utilized on an intensive basis requiring significant capital investment. In addition, there were 348 Group C sites, totaling almost 7,700 acres, and 1,085 Group D sites, totaling almost 6,700 acres. Milwaukee County, with 587 multiuse recreation sites, totaling over 8,800 acres, had both the largest number and acreage of multiuse sites of any county in the Region. Unlike single use outdoor recreation sites, almost 75 percent of the multiuse outdoor recreation site area, or over 22,400 acres, in 1973 was in public ownership.

Maps 25, 26, and 27 show the spatial distribution of general use outdoor recreation sites in the Region by facilities provided and planning analysis areas. As indicated on Map 25, the distribution of Group A outdoor recreation sites—that is, those sites maintained in an essentially open natural state with minimum acreage devoted to physical improvements or facilities for active intensive recreation use—are located primarily in rural areas of the Region; more specifically, in planning analysis area 1 in Ozaukee County; areas 7 and 10 in Washington County; areas 35, 37, 39, and 42 in Waukesha County; area 48 in Racine County; area 55 in Kenosha County; and areas 57 and 59 in Walworth County. Similar to the distribution of Type IV outdoor recreation sites, multiuse recreation sites with Group B, C, and D facilities—that is, those sites which provide facilities for intensive active uses—are generally located in urban areas of the Region, especially planning analysis areas 18 through 25 and 29 through 31 in Milwaukee County; areas 43 and 44 in Racine County; and areas 50 and 51 in Kenosha County. The spatial distribution of single use outdoor recreation sites is indicated on Maps 26 and 27. Camps and campgrounds are located primarily in rural areas of the Region with a significant number of these sites located in planning analysis area 39 in Waukesha County; area 55 in Kenosha County; and areas 56, 57, and 59 in Walworth County. As indicated on Map 27, golf courses are distributed rather uniformly throughout the Region while boat launch areas, as might be expected, are located primarily in the “lake areas” of Waukesha, Walworth, and Kenosha Counties.

#### General Use Outdoor Recreation Sites— Presence within Environmental Corridors

An important factor in the regional park and open space planning program is a determination of the extent to which both public and nonpublic outdoor recreation sites exist within the designated primary environmental corridors of the Region. Primary environmental corridors are defined as elongated areas which contain the best remaining elements of the natural resource base; to the maximum extent possible, they should be protected from incompatible rural and urban development. Locating and developing outdoor recreation sites—especially public Type I or II outdoor recreation sites—in primary environmental corridors not only serves to protect the corridors and, therefore, the underlying and sustaining natural resource base from deterioration and destruction, but also provides ideal natural settings for park and recreation facilities which require such a setting in order to provide high quality recreational experience.

Indicated in Table 36 are the general use outdoor recreation sites by type by presence within the environmental corridors of the Region. About 55 percent, or over 27,100 acres of the 49,200 acres of existing general use outdoor recreation site acreage, is located within the primary environmental corridors. Over 12,100 acres, or over 51 percent of all publicly-owned outdoor recreation site acreage, and about 14,900 acres, or over 58 percent of all nonpublicly owned outdoor recreation site acreage, are located within the primary environmental corridors. Almost 13,700 acres, or over 50 percent of the outdoor recreation site acreage in the environmental corridors, are classified as Type I outdoor recreation sites while over 8,200 acres, or about 31 percent, are classified as Type II sites. Type I and II outdoor recreation sites account for a large percentage of total outdoor recreation site acreage in the corridor because such sites are relatively large in size and a significant proportion of the number and acreage of such sites is either totally or partially located in the corridors. Fifty-one sites, or over 94 percent of Type I outdoor recreation sites, and 63 sites, or 75 percent of Type II sites, were either wholly or partially located within the primary environmental corridors. The 13,700 acres of Type I outdoor recreation sites and 8,200 acres of Type II sites in the corridor represented 74 percent and 62 percent of the respective total acreage of these sites. It is interesting to note that 3,700 acres, or about 14 percent of the total outdoor recreation site acreage in the primary environmental corridors, consisted of Type III sites; and approximately 1,400 acres, or about 5 percent, consisted of the Type IV sites. This represents about 39 percent and 18 percent of the total respective acreage of Type III and Type IV outdoor recreation sites in the Region.

Map 28 shows the spatial distribution of general use outdoor recreation sites in the Region by location within primary environmental corridors. Planning analysis area 7 in Washington County; area 37 in Waukesha County; area 55 in Kenosha County; and areas 56, 57, and 59 in Walworth County all have a majority of their outdoor recreation sites located partially or wholly in the primary environmental corridors. Over 50 percent of Type I and

Table 35

## SINGLE USE AND MULTIUSE OUTDOOR RECREATION SITES BY COUNTY BY OWNERSHIP: 1973

County	Ownership		Single Use Sites															
			Camp		Nature Study Area		Golf Course (including par 3)		Campground		Ski Hill		Boat Launch		Other Single Use		Single Use Subtotal	
			Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Total
Kenosha	Public	Sites . . Acres . .	0 0	0.0 0.0	0 0	0.0 0.0	1 69	20.0 94.5	0 0	0.0 0.0	0 0	0.0 0.0	4 4	80.0 5.5	0 0	0.0 0.0	5 73	4.9 2.5
	Nonpublic	Sites . . Acres . .	6 776	25.0 32.5	1 38	0.0 1.6	6 1,071	25.0 44.9	3 214	12.5 9.0	1 256	4.2 10.7	5 6	20.8 0.3	2 26	8.3 1.0	24 2,387	26.7 88.1
	Total	Sites . . Acres . .	6 776	20.7 31.6	1 38	3.5 1.5	7 1,140	24.1 46.3	3 214	10.3 8.7	1 256	3.6 10.4	9 10	31.0 0.4	2 26	6.9 1.1	29 2,460	15.1 43.3
Milwaukee	Public	Sites . . Acres . .	0 0	0.0 0.0	0 0	0.0 0.0	1 29	33.0 78.4	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	2 8	67.0 21.6	3 37	0.4 0.4
	Nonpublic	Sites . . Acres . .	1 54	6.3 3.5	1 164	6.3 10.7	9 1,179	56.2 76.9	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.3	5 136	31.2 8.9	16 1,533	10.7 67.4
	Total	Sites . . Acres . .	1 54	5.3 3.4	1 164	5.3 10.4	10 1,208	52.6 77.0	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	7 144	36.8 9.2	19 1,570	3.0 15.1
Ozaukee	Public	Sites . . Acres . .	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	1 4	100.0 100.0	0 0	0.0 0.0	1 4	1.5 0.2
	Nonpublic	Sites . . Acres . .	2 196	22.2 13.4	1 249	11.1 17.0	6 1,017	66.7 69.6	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	9 1,462	31.0 86.7
	Total	Sites . . Acres . .	2 196	20.0 13.4	1 249	10.0 17.0	6 1,017	60.0 69.4	0 0	0.0 0.0	0 0	0.0 0.0	1 4	10.0 0.2	0 0	0.0 0.0	10 1,466	10.6 41.4
Racine	Public	Sites . . Acres . .	0 0	0.0 0.0	0 0	0.0 0.0	3 345	50.0 98.2	0 0	0.0 0.0	0 0	0.0 0.0	2 3	33.3 0.9	1 3	16.7 0.9	6 351	4.6 13.6
	Nonpublic	Sites . . Acres . .	4 470	23.5 33.0	0 0	0.0 0.0	8 842	47.1 59.2	1 88	5.9 6.2	1 19	5.9 1.3	2 3	11.7 0.2	1 1	5.9 0.1	17 1,423	21.8 76.9
	Total	Sites . . Acres . .	4 470	17.4 26.5	0 0	0.0 0.0	11 1,187	47.9 66.9	1 88	4.3 5.0	1 19	4.3 1.1	4 6	17.4 0.3	2 4	8.7 0.2	23 1,774	11.1 40.0
Walworth	Public	Sites . . Acres . .	0 0	0.0 0.0	1 160	10.0 79.2	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	7 8	70.0 4.0	2 34	20.0 16.8	10 202	12.7 14.6
	Nonpublic	Sites . . Acres . .	25 3,588	49.0 65.3	0 0	0.0 0.0	9 992	17.7 18.0	4 538	7.8 9.8	2 250	3.9 4.5	5 10	9.8 0.2	6 119	11.8 2.2	51 5,497	50.5 63.8
	Total	Sites . . Acres . .	25 3,588	41.0 0.0	1 160	1.6 0.0	9 992	14.8 0.0	4 538	6.6 0.0	2 250	3.3 0.0	12 18	19.6 0.0	8 153	13.1 0.0	61 5,699	33.9 57.0
Washington	Public	Sites . . Acres . .	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	0 0	0.0 0.0	1 1	50.0 3.3	1 29	50.0 96.7	2 30	3.1 1.9
	Nonpublic	Sites . . Acres . .	6 1,176	42.9 56.5	0 0	0.0 0.0	5 763	35.7 36.7	0 0	0.0 0.0	3 142	21.4 6.8	0 0	0.0 0.0	0 0	0.0 0.0	14 2,081	22.2 63.9
	Total	Sites . . Acres . .	6 1,176	37.5 55.7	0 0	0.0 0.0	5 763	31.3 36.1	0 0	0.0 0.0	3 142	18.8 6.7	1 1	6.2 0.1	1 29	6.2 1.4	16 2,111	12.6 43.4
Waukesha	Public	Sites . . Acres . .	0 0	0.0 0.0	0 0	0.0 0.0	2 227	16.7 46.3	1 238	8.3 48.6	0 0	0.0 0.0	9 25	75.0 5.1	0 0	0.0 0.0	12 490	5.2 9.6
	Nonpublic	Sites . . Acres . .	12 781	25.0 22.2	0 0	0.0 0.0	15 2,633	31.3 74.7	0 0	0.0 0.0	2 36	4.2 1.0	11 20	22.9 0.6	8 53	16.6 1.5	48 3,523	35.6 68.3
	Total	Sites . . Acres . .	12 781	20.0 19.5	0 0	0.0 0.0	17 2,860	28.3 71.3	1 238	1.7 5.9	2 36	3.3 0.9	20 45	33.3 1.1	8 53	13.4 1.3	60 4,013	16.4 39.2
Region	Public	Sites . . Acres . .	0 0	0.0 0.0	1 160	2.6 13.5	7 670	17.9 56.4	1 238	2.6 20.1	0 0	0.0 0.0	24 45	61.5 3.8	6 74	15.4 6.2	39 1,187	3.4 5.0
	Nonpublic	Sites . . Acres . .	56 7,041	31.3 39.3	3 451	1.7 2.5	58 8,497	32.4 47.5	8 840	4.5 4.7	9 703	5.0 3.9	23 39	12.8 0.2	22 335	12.3 1.9	179 17,906	27.8 70.1
	Total	Sites . . Acres . .	56 7,041	25.7 36.9	4 611	1.8 3.2	65 9,167	29.8 48.0	9 1,078	4.1 5.6	9 703	4.1 3.7	47 84	21.7 0.5	28 409	12.8 2.1	218 19,093	12.3 38.8

II recreation site acreage in planning analysis areas 1 and 3 in Ozaukee County; area 7 in Washington County; areas 13, 16, 26, 27, and 31 in Milwaukee County; areas 32, 38, 41, and 42 in Waukesha County; area 45 in Racine County; area 55 in Kenosha County; and areas 56, 57, 58, and 59 in Walworth County are located in the primary environmental corridor.

It is apparent that a significant proportion of the total outdoor recreation acreage within the Region is located within the primary environmental corridors. Such acreage not only serves a useful recreational function but, at least for the time being, also helps to preserve the integrity of the environmental corridors by protecting those corridors from incompatible rural and urban uses. There is no

Table 35 (continued)

County	Ownership		Multiuse Sites										Total	
			Group A		Group B		Group C		Group D		Multi-Use Subtotal			
			Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Total	Number	Percent of Region Total
Kenosha	Public	Sites . . Acres . .	4 996	4.1 34.3	3 41	3.1 1.4	26 1,342	26.8 46.2	64 526	66.0 18.1	97 2,905	95.1 97.5	102 2,978	9.1 12.6
	Nonpublic	Sites . . Acres . .	6 30	9.1 9.3	1 5	1.5 1.6	17 181	25.8 56.2	42 106	63.6 32.9	66 322	73.3 11.9	90 2,709	13.9 10.6
	Total	Sites . . Acres . .	10 1,026	6.1 31.8	4 46	2.5 1.4	43 1,523	26.4 47.2	106 632	65.0 19.6	163 3,227	84.9 56.7	192 5,687	10.8 11.6
Milwaukee	Public	Sites . . Acres . .	17 3,951	3.8 48.9	10 350	2.2 4.3	112 2,379	24.6 28.9	315 1,452	69.4 17.9	454 8,132	99.6 99.6	457 8,169	40.4 34.4
	Nonpublic	Sites . . Acres . .	0 0	0.0 0.0	0 0	0.0 0.0	11 146	8.3 19.7	122 596	91.7 80.3	133 742	89.3 32.6	149 2,275	23.1 8.9
	Total	Sites . . Acres . .	17 3,951	2.9 44.8	10 350	1.7 4.0	123 2,525	20.9 28.1	437 2,048	74.5 23.1	587 8,874	97.0 84.9	606 10,444	34.1 21.1
Ozaukee	Public	Sites . . Acres . .	4 1,196	6.2 64.7	1 27	1.6 1.5	17 382	26.6 20.7	42 243	65.6 13.1	64 1,848	98.5 99.8	65 1,852	5.8 7.9
	Nonpublic	Sites . . Acres . .	1 53	5.0 23.6	1 7	5.0 3.1	2 8	10.0 3.5	16 157	80.0 69.8	20 225	69.0 13.3	29 1,687	4.5 6.6
	Total	Sites . . Acres . .	5 1,249	6.0 60.3	2 34	2.4 1.6	19 390	22.6 18.8	58 400	69.0 19.3	84 2,073	89.4 58.6	94 3,539	5.3 7.2
Racine	Public	Sites . . Acres . .	6 1,017	4.8 45.6	7 103	5.6 4.6	25 534	20.2 24.0	86 576	69.4 25.8	124 2,230	95.4 86.4	130 2,581	11.5 10.9
	Nonpublic	Sites . . Acres . .	3 6	4.9 1.4	1 84	1.7 19.6	11 157	18.0 36.7	46 181	75.4 42.3	61 428	78.2 23.1	78 1,851	12.1 7.2
	Total	Sites . . Acres . .	9 1,023	4.9 38.5	8 187	4.3 7.0	36 691	19.5 26.0	132 757	71.3 28.5	185 2,658	88.9 60.0	208 4,432	11.8 9.0
Walworth	Public	Sites . . Acres . .	3 526	4.3 44.6	0 0	0.0 0.0	15 269	21.7 22.8	51 384	74.0 32.6	69 1,179	87.3 85.4	79 1,381	7.0 5.8
	Nonpublic	Sites . . Acres . .	12 2,487	24.0 79.6	0 0	0.0 0.0	9 473	18.0 15.1	29 163	58.0 5.3	50 3,123	49.5 36.2	101 8,620	15.7 33.7
	Total	Sites . . Acres . .	15 3,013	12.6 70.0	0 0	0.0 0.0	24 742	20.2 17.3	80 547	67.2 12.7	119 4,302	66.1 43.0	180 10,001	10.2 20.4
Washington	Public	Sites . . Acres . .	1 672	1.6 42.7	3 113	4.8 7.2	16 257	25.8 16.3	42 531	67.8 33.8	62 1,573	96.9 98.1	64 1,603	5.7 6.8
	Nonpublic	Sites . . Acres . .	13 1,023	26.5 86.8	0 0	0.0 0.0	8 57	16.3 4.8	28 98	57.2 8.4	49 1,178	77.8 36.1	63 3,259	9.8 12.8
	Total	Sites . . Acres . .	14 1,695	12.6 61.6	3 113	2.7 4.1	24 314	21.6 11.4	70 629	63.1 22.9	111 2,751	87.4 56.6	127 4,862	7.2 9.9
Waukesha	Public	Sites . . Acres . .	8 1,781	3.7 38.8	2 189	0.9 4.1	63 1,355	28.8 29.5	146 1,270	66.6 27.6	219 4,595	94.8 90.4	231 5,085	20.5 21.6
	Nonpublic	Sites . . Acres . .	12 322	13.8 19.7	3 764	3.4 46.8	16 147	18.4 9.0	56 399	64.4 24.5	87 1,632	64.4 31.7	135 5,155	20.9 20.2
	Total	Sites . . Acres . .	20 2,103	6.5 33.8	5 953	1.7 15.3	79 1,502	25.8 24.1	202 1,669	66.0 26.8	306 6,227	83.6 60.8	366 10,240	20.6 20.8
Region	Public	Sites . . Acres . .	43 10,139	4.0 45.3	26 823	2.4 3.7	274 6,518	25.1 28.8	746 4,982	68.5 22.2	1,089 22,462	96.6 95.0	1,128 23,649	63.6 48.0
	Nonpublic	Sites . . Acres . .	47 3,921	10.1 51.3	6 860	1.3 11.2	74 1,169	15.9 15.3	339 1,700	72.7 22.2	466 7,650	72.2 29.9	645 25,556	36.4 52.0
	Total	Sites . . Acres . .	90 14,060	5.8 46.8	32 1,683	2.1 5.6	348 7,687	22.3 25.4	1,085 6,682	69.8 22.2	1,555 30,112	87.7 61.2	1,773 49,205	100.0 100.0

Source: SEWRPC.

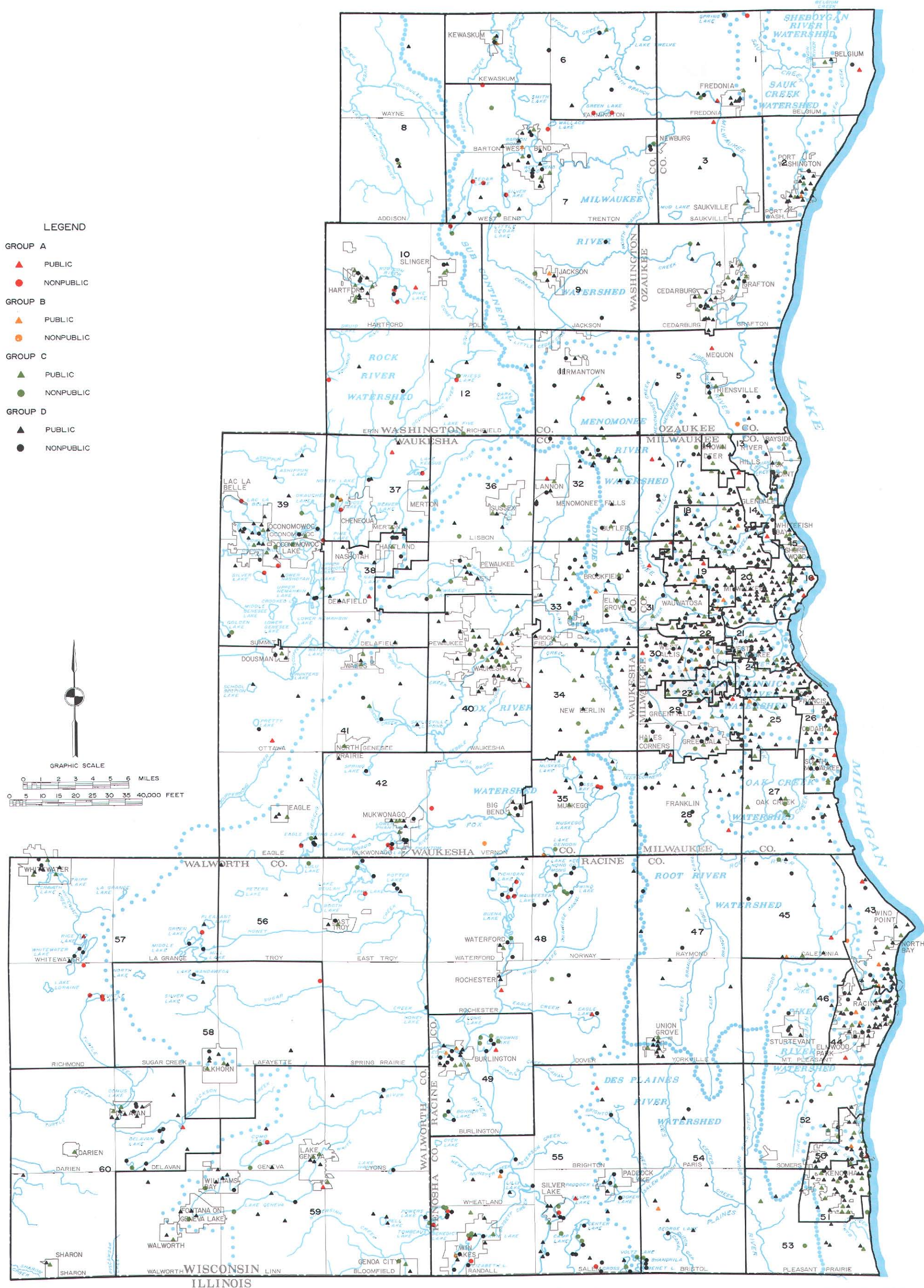
assurance, however, that such facilities, especially those provided by the private sector, will remain in recreational use in the future. It is important then that any regional park plans provide, to the maximum extent possible, for the preservation of the existing private recreational sites within the corridors in recreational or related open space use and for the location of new Type I and Type II park sites in the primary environmental corridors so as to take advantage of the high quality natural resource amenities associated with the corridors and at the same time to preserve such amenities for the future.

## EXISTING OPEN SPACE

A comprehensive approach to recreation and open space planning requires careful consideration of a number of other concerns in addition to outdoor recreation per se. These concerns include urban beautification; noise, air, and water pollution abatement; natural resource conservation; and the general enhancement of the overall quality of the environment. Within this full range of concerns, the need for the preservation of open space becomes evident.



## MULTIUSE OUTDOOR RECREATION SITES IN THE REGION BY FACILITIES PROVIDED: 1973



Multiuse outdoor recreation site classifications were based upon the type of recreational facilities present at the site. Group A multiuse outdoor recreation sites are characterized as containing a variety of outdoor recreation facilities reliant upon natural amenities. Such sites are generally located in the rural areas of the Region. Groups B, C, and D sites are characterized as containing a variety of outdoor recreation facilities intensively utilized for active recreational pursuits. Such sites generally are located in the urban areas of the Region. Group B sites serve large numbers of users, provide for spectator activities, and generally require significant capital investment to provide appropriate recreational facilities. Group C sites provide a variety of facilities for active intensive participant use but require less capital investment than Group B sites. Group D sites have a limited variety of facilities for active intensive participant use and include all multiuse sites not already accounted for in Groups A, B, and C. Ninety multiuse outdoor recreation sites totaling over 14,000 acres were classified as Group A sites; 32 sites totaling less than 1,700 acres were classified as Group B sites; 348 sites totaling almost 7,700 acres were classified as Group C sites; and 1,085 sites totaling almost 6,700 acres were classified as Group D sites.

Source: SEWRPC.



Table 36

**GENERAL USE OUTDOOR RECREATION SITES IN THE REGION  
BY PRESENCE IN PRIMARY ENVIRONMENTAL CORRIDOR BY TYPE: 1973**

Site Type	Ownership	Sites Totally Within Primary Environmental Corridor		Sites Partially Within Primary Environmental Corridor			Sites Totally Outside Primary Environmental Corridor		Total Sites					
		Number	Acres	Number	Acres Within Corridor	Acres Outside Corridor	Number	Acres	Number	Acres Within Corridor	Percent of Acres Within Corridor	Acres Outside Corridor	Percent of Acres Outside Corridor	Total Acres
I	Public	18	5,082	11	2,715	1,647	2	578	31	7,797	64.0	2,225	19.4	10,022
	Private	5	1,691	17	4,227	2,347	1	263	23	5,918	39.6	2,610	24.6	8,528
	Total	23	6,773	28	6,942	3,994	3	841	54	13,715	50.6	4,835	21.9	18,550
	Percent of Total	42.6	36.5	51.8	37.4	21.5	5.6	4.5	3.1	73.9	--	26.1	--	37.7
II	Public	9	1,277	3	493	9	4	681	16	1,770	14.6	690	6.0	2,460
	Private	20	3,066	31	3,425	1,388	17	2,924	68	6,491	43.4	4,312	40.7	10,803
	Total	29	4,343	34	3,918	1,397	21	3,605	84	8,261	30.5	5,002	22.6	13,263
	Percent of Total	34.5	32.7	40.5	29.5	10.5	25.0	27.2	4.7	62.3	--	37.7	--	26.9
III	Public	25	1,178	19	576	273	76	3,450	120	1,754	14.4	3,723	32.4	5,477
	Private	22	1,153	17	815	386	31	1,650	70	1,968	13.1	2,036	19.2	4,004
	Total	47	2,331	36	1,391	659	107	5,100	190	3,722	13.7	5,759	26.1	9,481
	Percent of Total	24.7	24.6	18.9	14.7	6.9	56.4	53.8	10.7	39.3	--	60.7	--	19.3
IV	Public	76	570	38	273	153	847	4,694	961	843	7.0	4,847	42.2	5,690
	Private	81	450	57	128	155	346	1,488	484	578	3.9	1,643	15.5	2,221
	Total	157	1,020	95	401	308	1,193	6,182	1,445	1,421	5.2	6,490	29.4	7,911
	Percent of Total	10.9	12.9	6.6	5.1	3.9	82.5	78.1	81.5	18.0	--	82.0	--	16.1
All Types	Public	128	8,107	71	4,057	2,082	929	9,403	1,128	12,164	51.4	11,485	48.6	23,649
	Private	128	6,360	122	8,595	4,276	395	6,325	645	14,955	58.5	10,601	41.5	25,556
	Total	256	14,467	193	12,652	6,358	1,324	15,728	1,773	27,119	55.1	22,086	44.9	49,205
	Percent of Total	14.4	29.4	10.9	25.7	12.9	74.7	32.0	100	55.1	100.0	44.9	100.0	100.0

Source: SEWRPC.

Open space, defined in the broadest of terms, is land and water which is not used for building or structures; that is, which has not been built upon or developed so as to be both physically and psychologically open in relation to other adjacent land uses. For purposes of this study, however, open space has been more narrowly defined as open land and water areas that possess certain features that merit consideration of permanent preservation in an essentially open undeveloped state for research, conservation, and recreation purposes. Under this definition, open space consists of "natural areas"—primarily major woodlands, wetlands, and wildlife habitat areas and lakes and streams and their associated undeveloped shorelands and floodlands—within the Region. It also includes major areas covered by organic soils, major groundwater recharge and discharge areas, areas of scenic topography, and areas having scientific or cultural value. These features occur together in the Region in essentially elongated patterns encompassed within the environmental corridors already referenced. Also included as open space are agricultural lands, especially prime agricultural lands which, because of their unique ability to economically produce higher than average crop yields, should continue to be preserved in an open state for agricultural purposes.

Detailed information concerning the quantity and spatial distribution of individual natural resource elements as well as information concerning the environmental corridors and prime agricultural lands has been included in Chapter IV of this report. It is the intent of this chapter to further refine the data presented in Chapter IV by identifying the quantity and spatial distribution of those "natural areas" of the Region which are publicly owned and, therefore, may be considered preserved or protected in the public interest and of those "natural areas" which are nonpublicly owned where the intent of such ownership is to preserve such lands in an essentially natural, open state for research, conservation, or recreation purposes. Also included in this section are data documenting the extent to which the aforementioned publicly and nonpublicly owned "natural areas" occur within and, therefore, tend to preserve the environmental corridors of the Region.

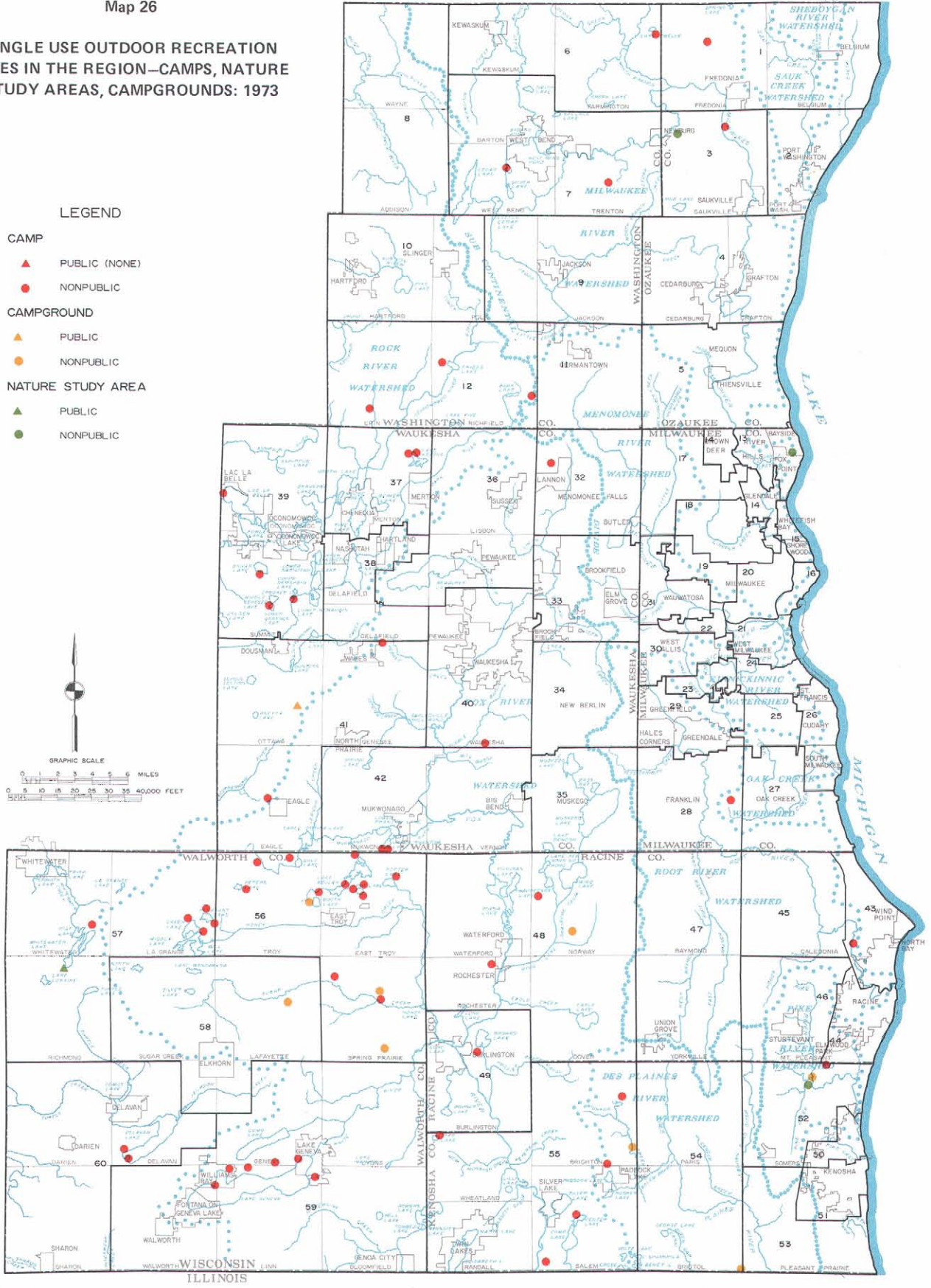
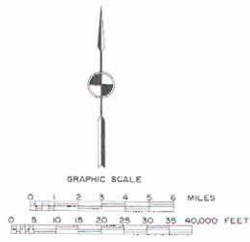
#### Natural Areas—Ownership

There were almost 49,300 acres of "natural areas" in the Region in 1973, the overwhelming proportion of this acreage, 99 percent, or almost 48,900, being in public ownership (see Table 37). Almost 37,700 acres, or about

Map 26

**SINGLE USE OUTDOOR RECREATION  
SITES IN THE REGION—CAMPS, NATURE  
STUDY AREAS, CAMPGROUNDS: 1973**

- LEGEND**
- CAMP**
- ▲ PUBLIC (NONE)
  - NONPUBLIC
- CAMPGROUND**
- ▲ PUBLIC
  - NONPUBLIC
- NATURE STUDY AREA**
- ▲ PUBLIC
  - NONPUBLIC



Single use outdoor recreation sites consisting of camps, nature study areas, and campgrounds totaled approximately 8,700 acres in 1973, or 45 percent of the acreage of single use outdoor recreation sites and 17 percent of the total general use outdoor recreation site acreage in the Region in 1973. Contrary to multiuse sites, the overwhelming number of camp, nature study areas, and campgrounds—97 percent—were in nonpublic ownership. The majority of such sites were located primarily in the rural areas of the Region with a significant number of such sites located in Walworth County.

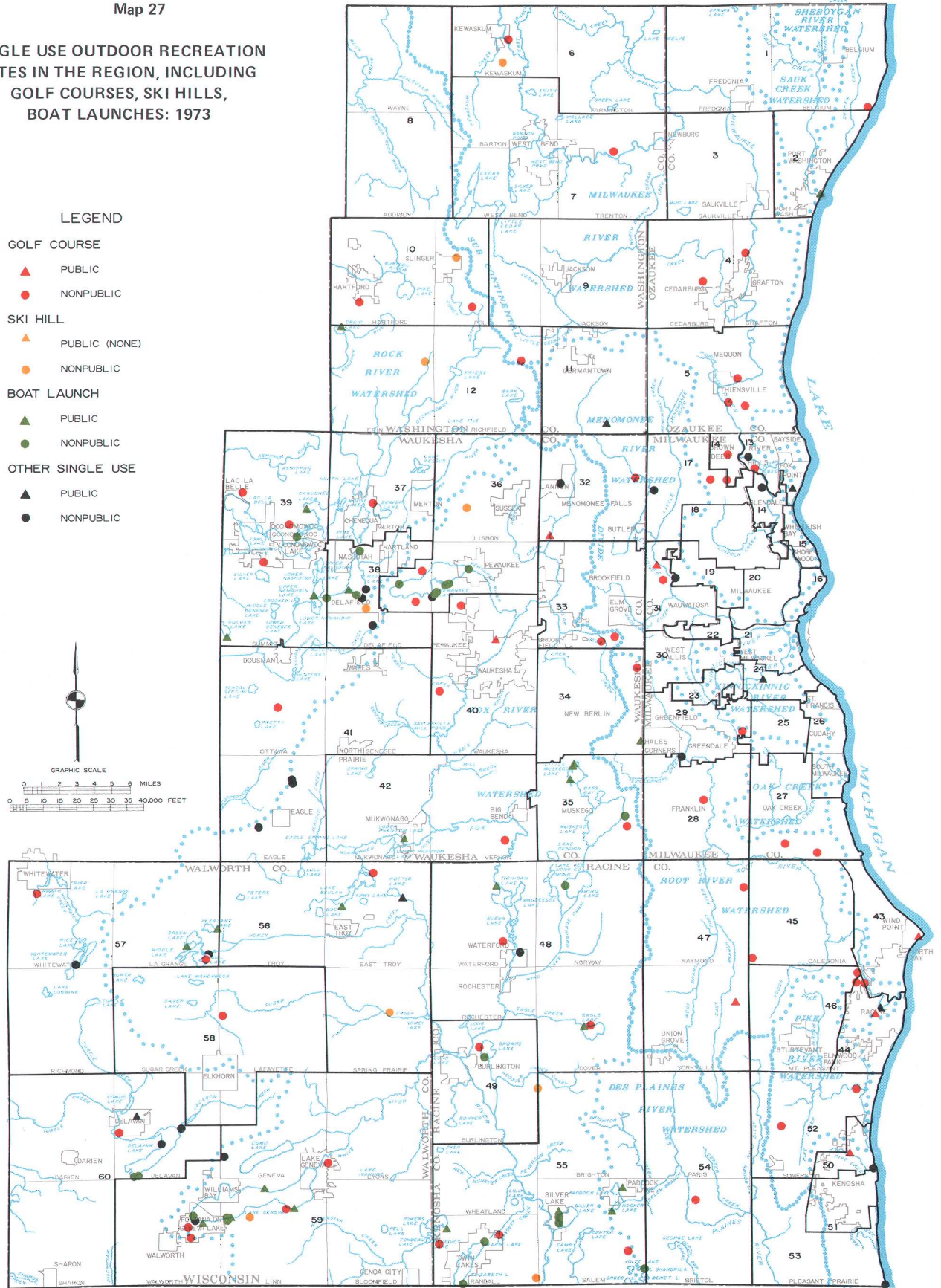
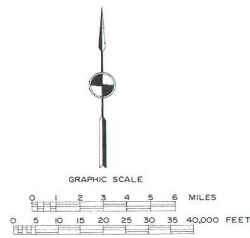
Source: SEWRPC.



Map 27

**SINGLE USE OUTDOOR RECREATION  
SITES IN THE REGION, INCLUDING  
GOLF COURSES, SKI HILLS,  
BOAT LAUNCHES: 1973**

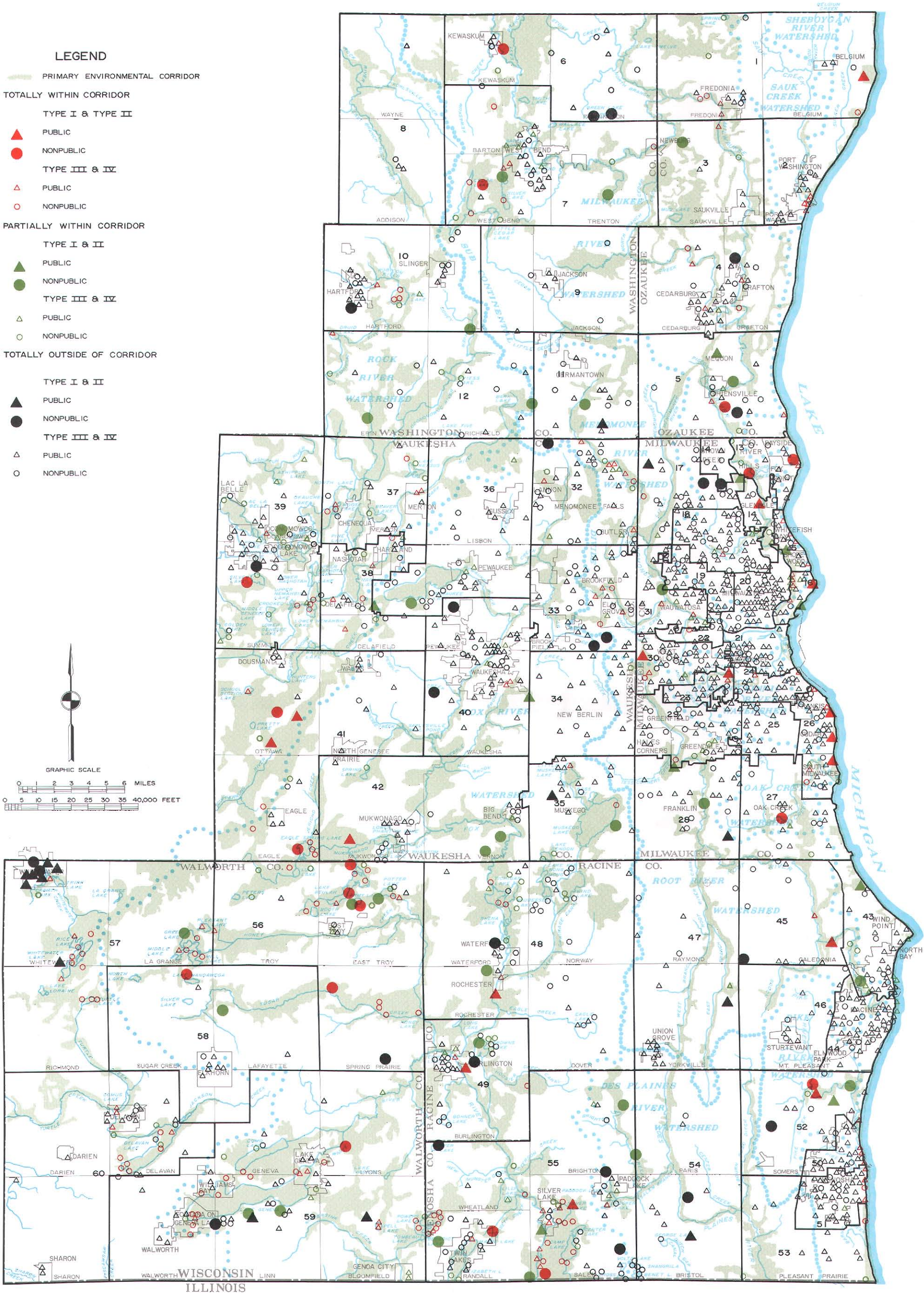
- LEGEND**
- GOLF COURSE**
- ▲ PUBLIC
  - NONPUBLIC
- SKI HILL**
- ▲ PUBLIC (NONE)
  - NONPUBLIC
- BOAT LAUNCH**
- ▲ PUBLIC
  - NONPUBLIC
- OTHER SINGLE USE**
- ▲ PUBLIC
  - NONPUBLIC



Golf courses, ski hills, boat launches, and other single use recreation areas totaled 10,360 acres in 1973, or 55 percent of the single use site acreage and 21 percent of the total general use outdoor recreation site in the Region in 1973. Like camps, nature study areas, and campgrounds, the single use sites of golf courses, ski hills, boat launches and other similar sites were primarily in nonpublic ownership. On a geographic basis, golf courses were distributed on a rather uniform basis throughout the Region, while ski hills were located primarily in Walworth, Washington, and Waukesha Counties; boat launches were located primarily in the lake areas of Waukesha, Walworth, and Kenosha Counties.

Source: SEWRPC.





The location and development of outdoor recreation sites especially public Type I or Type II recreation sites within the primary environmental corridor not only serves to protect the corridors and, therefore, the underlying and sustaining natural resource base from deterioration and destruction, but also provides an ideal natural setting of park and recreation facilities which require such a setting for a high quality recreation experience. About 55 percent, or over 27,100 acres, of the 49,200 acres of existing general use outdoor recreation site acreage were located within the primary environmental corridors in 1973. Over 12,100 acres, or 51 percent, of all publicly owned outdoor recreation site acreage and about 14,900 acres, or 58 percent, of nonpublicly owned outdoor recreation sites acreage were located within the corridors. Over 80 percent of the outdoor recreation site acreage in the corridor consisted of Type I or Type II outdoor recreation sites. This acreage also represented about 74 percent and 62 percent of the respective total acreage of Type I and II sites in the Region. About 3,700 acres, or 14 percent, of the total outdoor recreation site acreage in the primary environmental corridor consisted of Type III sites and approximately 1,400 acres, or 5 percent, consisted of Type IV sites, representing about 39 percent and 18 percent of the respective acreage of Type III and Type IV outdoor recreation sites in the Region.

Source: SEWRPC.



Table 37

## NATURAL AREAS IN THE REGION BY COUNTY BY OWNERSHIP: 1973

County		Public Ownership																Nonpublic Ownership		Total	
		Federal		State		County		City		Village		Town		School District		Public Subtotal		Organizational			
		Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Total	Number	Percent of Total		
Kenosha	Sites . . Acres . .	0 0	0.0 0.0	11 6,485	73.3 95.5	0 0	0.0 0.0	0 0	0.0 0.0	1 5	6.7 0.1	1 44	6.7 0.6	2 257	13.3 3.8	15 6,791	93.8 97.4	1 180	6.2 2.6	16 6,971	9.1 14.1
Milwaukee	Sites . . Acres . .	1 39	2.1 0.5	0 0	0.0 0.0	26 7,521	55.3 97.6	8 78	17.0 1.0	12 68	25.6 0.9	0 0	0.0 0.0	0 0	0.0 0.0	47 7,706	100.0 100.0	0 0	0.0 0.0	47 7,706	26.9 15.7
Ozaukee	Sites . . Acres . .	0 0	0.0 0.0	4 1,535	28.6 93.0	0 0	0.0 0.0	8 84	57.1 5.1	2 31	14.3 1.9	0 0	0.0 0.0	0 0	0.0 0.0	14 1,650	87.5 96.8	2 54	12.5 3.2	16 1,704	9.1 3.5
Racine	Sites . . Acres . .	0 0	0.0 0.0	9 2,830	37.5 78.8	4 298	16.7 8.3	9 149	37.5 4.1	0 0	0.0 0.0	0 0	0.0 0.0	2 315	8.3 8.8	24 3,592	96.0 98.6	1 52	4.0 1.4	25 3,644	14.3 7.4
Walworth	Sites . . Acres . .	0 0	0.0 0.0	17 7,144	77.3 99.6	0 0	0.0 0.0	4 30	18.2 0.4	1 1	4.5 0.0	0 0	0.0 0.0	0 0	0.0 0.0	22 7,175	95.7 99.7	1 18	4.3 0.3	23 7,193	13.2 14.6
Washington	Sites . . Acres . .	0 0	0.0 0.0	5 7,507	35.7 92.4	2 297	14.3 3.7	4 180	28.6 2.2	2 126	14.3 1.6	0 0	0.0 0.0	1 13	0.0 0.1	14 8,123	100.0 100.0	0 0	0.0 0.0	14 8,123	8.0 16.5
Waukesha	Sites . . Acres . .	0 0	0.0 0.0	10 12,173	30.3 87.8	5 787	15.2 5.7	9 513	27.3 3.7	6 196	18.2 1.4	1 105	3.0 0.8	2 83	6.0 0.6	33 13,857	97.1 99.5	1 64	2.9 0.5	34 13,921	19.4 28.2
Region	Sites . . Acres . .	1 39	0.6 0.1	56 37,674	33.1 77.0	37 8,903	21.9 18.3	42 1,034	24.9 2.1	24 427	14.2 0.9	2 149	1.2 0.3	7 668	4.1 1.3	169 48,894	96.6 99.3	6 368	3.4 0.7	175 49,262	100.0 100.0

Source: SEWRPC.

77 percent of such lands, were owned by the State of Wisconsin while about 8,900 acres, or 18 percent, were in county ownership. Waukesha County contained a total of almost 14,000 acres of natural areas, or over 28 percent of the regional total. Significant acreages of natural areas were also located in Kenosha County—7,000 acres; Milwaukee County—7,700 acres; Walworth County—7,200 acres; and Washington County—8,100 acres.

The spatial distribution of natural areas in the Region is shown on Map 29. The most significant concentrations of natural areas include the Cedarburg Bog in planning analysis area 3 in Ozaukee County; the Kettle Moraine State Forest—northern unit—in planning analysis area 6, the Theresa and Allenton marsh area of planning analysis area 8, and the Jackson Marsh in planning analysis area 9, all in Washington County; the parkway system located primarily in planning analysis areas 17, 27, 28, 29, 30, and 31 in Milwaukee County; the Kettle Moraine State Forest—southern unit—in planning analysis area 41 and the Vernon Marsh in area 42, both in Waukesha County; the Tichigan conservation area and Honey Creek wildlife area in planning analysis area 48 in Racine County; the Bong conservation area and New Munster wildlife area in planning analysis area 55 in Kenosha County; and the Kettle Moraine State Forest—southern unit—in planning analysis area 57 and the Turtle Creek conservation area in planning analysis area 60, both in Walworth County. These areas each represent 87 percent or more of the total natural area acreage of their respective planning analysis areas and together total over 39,000 acres, or about 80 percent of the total natural area acreage of the Region.

#### Natural Areas—Type and Presence within Environmental Corridors

As previously noted, natural areas within the context of this chapter refer to publicly and nonpublicly owned land or water areas in the Region which possess certain

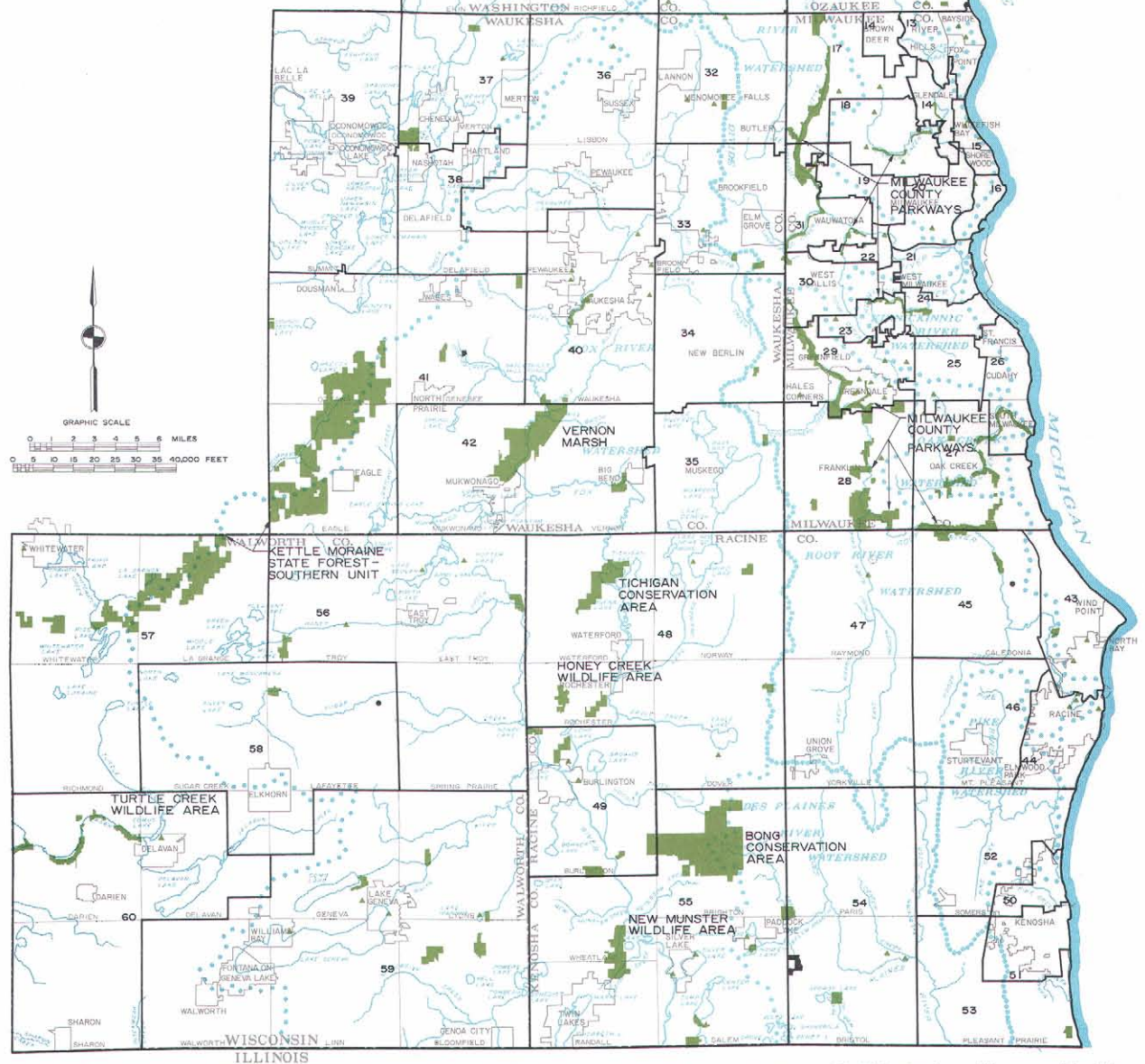
features that warrant consideration for permanent preservation in an essentially open, undeveloped state for research, conservation, or recreation purposes. Natural areas, so defined, encompass a variety of natural resource elements. For purposes of discussion in this chapter, natural areas were classified as wetlands, forests, parkways, scientific sites and nature areas, and other open lands (see Table 38 and Map 30).

Wetlands are natural areas under public ownership with multifold resource conservation purposes, including preservation of fish and wildlife habitat, storage of flood waters, and improvement of water quality. Forests are relatively large areas of publicly owned woodlands which provide wildlife habitat, reduce soil erosion, and improve air and water quality. Parkway are elongated publicly owned open space generally located in urban areas along primary environmental corridors. Parkway reduce flood damages, enhance adjacent residential property values, provide a setting for extensive recreational pursuits, and produce a continuity of open space important to the preservation of wildlife. Scientific sites and nature areas are publicly or privately owned natural undisturbed areas which preserve the flora and fauna for purposes of observation and research. Other open lands are natural areas under public ownership acquired primarily as “back-up” area for existing recreational sites and lands for future recreational development.

As indicated in Table 38, 15,800 acres, or 32 percent of the 49,300 acres of natural areas, are wetlands while 15,300 acres, or 31 percent, are forests. Scientific sites and nature areas and parkways, with 8,700 acres and 6,900 acres, respectively, account for 18 percent and 14 percent of the total natural areas in the Region. Also indicated in Table 38 and on Map 31 are the quantity and spatial distribution of the various natural areas within the primary environmental corridors. Over 35,600 acres, or 72 percent, of the total natural area acreage occur

## NATURAL AREAS IN THE REGION: 1973

- LEGEND
- SITES GREATER THAN 40 ACRES
- PUBLIC
  - NONPUBLIC
- SITES OF 40 ACRES OR LESS
- PUBLIC
  - NONPUBLIC



Natural areas in the Region totaled over 49,300 acres in 1973, the overwhelming proportion—over 99 percent—or almost 48,900 being in public ownership. The most significant concentration of natural areas include the Cedarburg Bog in Ozaukee County, the Kettle Moraine State Forest northern unit, the Theresa, Allenton, and Jackson marsh areas in Washington County, the parkway system located in Milwaukee County, the Kettle Moraine State Forest southern unit and the Vernon Marsh in Waukesha County, the Tichigan conservation and Honey Creek wildlife area in Racine County, the Bong conservation and Newmunster wildlife area in Kenosha County and the Kettle Moraine State Forest southern unit and Turtle Creek conservation area in Walworth County. These areas together total over 39,000 acres, or about 80 percent of the total natural area acreage of the Region in 1973.

Source: SEWRPC.

Table 38

## NATURAL AREAS IN THE REGION BY PRESENCE IN PRIMARY ENVIRONMENTAL CORRIDOR BY TYPE: 1973

Site Type	Ownership	Sites Totally Within Primary Environmental Corridor		Sites Partially Within Primary Environmental Corridor			Sites Totally Outside Primary Environmental Corridor		Total Sites					
					Acres Within Corridor	Acres Outside Corridor			Number	Acres Within Corridor	Percent of Acres Within Corridor	Acres Outside Corridor	Percent of Acres Outside Corridor	Total Acres
		Number	Acres				Number	Acres						
Wetland Areas	Public	24	1,650	20	11,321	2,333	5	500	49	12,971	36.5	2,833	21.3	15,804
	Nonpublic	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0
	Total	24	1,650	20	11,321	2,333	5	500	49	12,971	36.4	2,833	20.9	15,804
	Percent of Total	49.0	10.4	40.8	71.6	14.8	10.2	3.2	28.0	82.1	--	17.9	--	32.1
Forests	Public	0	0	3	13,503	1,760	0	0	3	13,503	38.0	1,760	13.2	15,263
	Nonpublic	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0
	Total	0	0	3	13,503	1,760	0	0	3	13,503	37.9	1,760	12.9	15,263
	Percent of Total	0.0	0.0	100.0	88.5	11.5	0.0	0.0	1.7	88.5	--	11.5	--	31.0
Parkways	Public	1	170	9	5,326	1,355	1	10	11	5,496	15.4	1,365	10.3	6,861
	Nonpublic	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0
	Total	1	170	9	5,326	1,355	1	10	11	5,496	15.4	1,365	10.0	6,861
	Percent of Total	9.1	2.5	81.8	77.7	19.7	9.1	0.1	6.3	80.1	--	19.9	--	13.9
Scientific/ Nature Areas	Public	5	492	10	2,464	4,800	8	616	23	2,956	8.3	5,416	40.6	8,372
	Nonpublic	2	32	1	51	1	3	284	6	83	100.0	285	100.0	368
	Total	7	524	11	2,515	4,801	11	900	29	3,039	8.5	5,701	41.9	8,740
	Percent of Total	24.2	5.9	37.9	28.9	54.9	37.9	10.3	16.6	34.8	--	65.2	--	17.7
Other Open Lands	Public	15	207	11	447	306	57	1,634	83	654	1.8	1,940	14.6	2,594
	Nonpublic	0	0	0	0	0	0	0.0	0	0	0.0	0	0.0	0
	Total	15	207	11	447	306	57	1,634	83	654	1.8	1,940	14.3	2,594
	Percent of Total	18.1	8.0	13.3	17.2	11.8	68.6	63.0	47.4	25.2	--	74.8	--	5.3
All Types	Public	45	2,519	53	33,061	10,554	71	2,760	169	35,580	72.8	13,314	27.2	48,894
	Nonpublic	2	32	1	51	1	3	284	6	83	22.6	285	77.4	368
	Total	47	2,551	54	33,112	10,555	74	3,044	175	35,663	72.4	13,599	27.6	49,262
	Percent of Total	26.9	5.2	30.9	67.2	21.4	42.2	6.2	100.0	72.4	--	27.6	--	100.0

Source: SEWRPC.

within the primary environmental corridors, with the most significant proportion of this acreage being composed of wetlands—13,000 acres—and forests—13,500 acres. Parkways in the environmental corridors totaled almost 5,500 acres and scientific sites and nature areas 3,000 acres—or 15 percent and 9 percent, respectively—of the total natural area acreage in the corridors. Wetlands, forests, and parkways all had significant proportions of their total acreage located in the primary environmental corridors—82 percent, 88 percent, and 80 percent, respectively.

As indicated on Map 31, significant natural area site acreage is located partially or wholly within primary environmental corridors; indeed, over 1,000 acres of natural areas, or over 50 percent, of the respective total natural area acreage is located in the primary environmental corridor in planning analysis areas 6, 8, and 9 in Washington County areas 27, 28, and 29 in Milwaukee County; areas 41 and 42 in Waukesha County; area 48 in Racine County; and area 57 in Walworth County.

## OTHER RECREATION AND OPEN SPACE SITES

Other recreation sites consist of special use recreation areas providing facilities for spectator-oriented activities or unique recreational pursuits. Other open space sites consist of small urban “green” areas and urban squares and plazas which are developed for passive recreational pursuits.

Special Use Recreation Sites

Special use recreation sites may be publicly or non-publicly owned and provide for spectator or participant activities. Sites which provide for spectator-oriented activities include fairgrounds, zoos, stadia, and race tracks. Sites which provide facilities for unique recreational pursuits include skeet and trap shooting areas, miniature golf, go-carting tracks, and golf driving ranges.

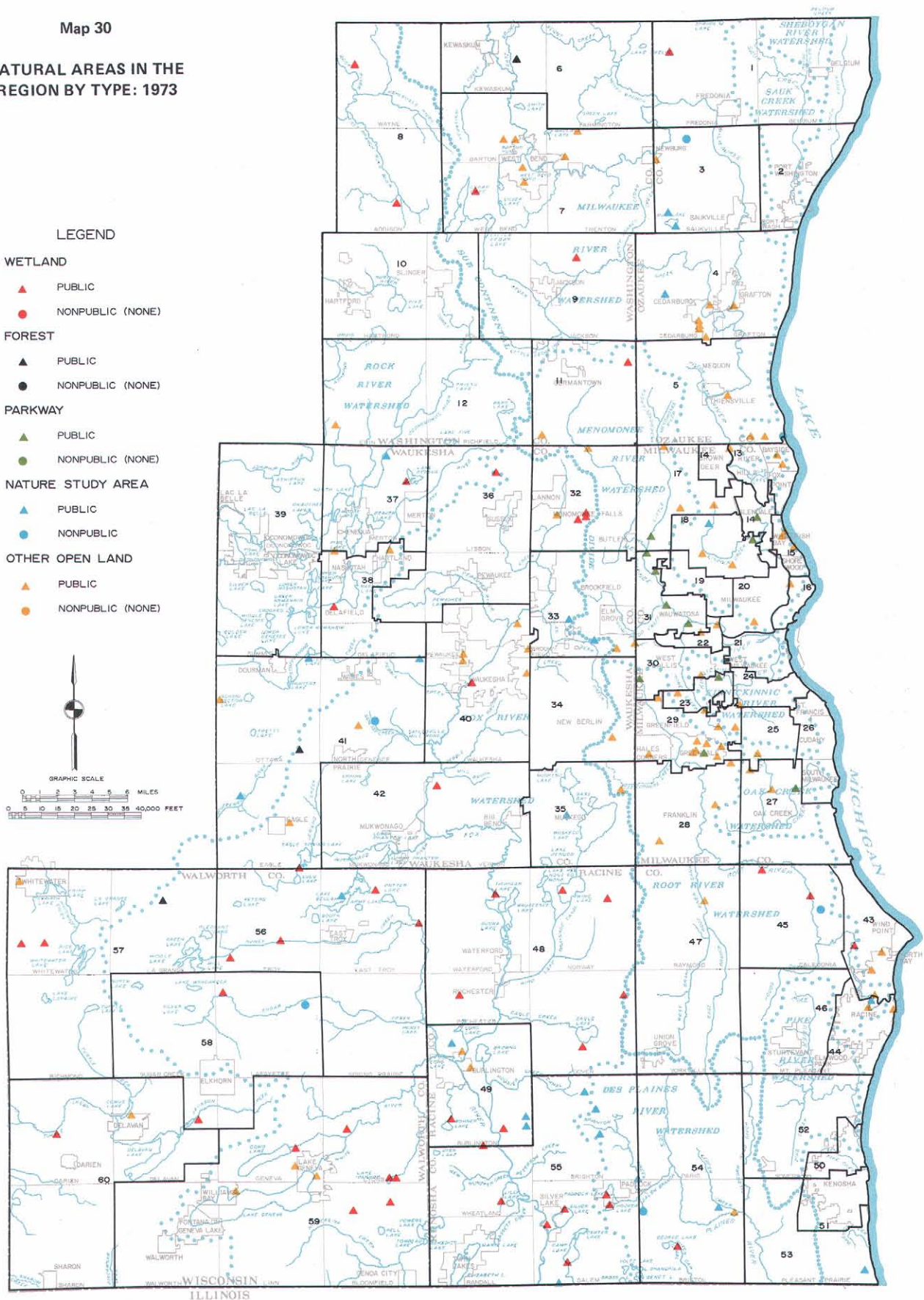
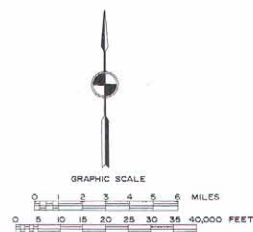
Indicated in Table 39 are special use sites classified by ownership. There were 166 special use sites, totaling over 4,900 acres, in the Region in 1973, with 56 sites, totaling



Map 30

# NATURAL AREAS IN THE REGION BY TYPE: 1973

- LEGEND**
- WETLAND**
- ▲ PUBLIC
  - NONPUBLIC (NONE)
- FOREST**
- ▲ PUBLIC
  - NONPUBLIC (NONE)
- PARKWAY**
- ▲ PUBLIC
  - NONPUBLIC (NONE)
- NATURE STUDY AREA**
- ▲ PUBLIC
  - NONPUBLIC
- OTHER OPEN LAND**
- ▲ PUBLIC
  - NONPUBLIC (NONE)








Natural areas in the Region have been classified as wetlands, forests, parkways, scientific sites and nature areas, and other open lands. Twenty-four sites were classified as wetlands, three as forests, 11 as parkways, 29 as scientific sites and nature areas, and 83 as other open lands. Wetland sites serve the resource conservation purposes of preservation of fish and wildlife habitat, storage of floodwaters, and improvement of water quality; forests provide wildlife habitat, reduce soil erosion, and improve air quality; parkways are generally located in urban areas and reduce flood damage, enhance adjacent property values, and provide a setting for extensive recreational pursuits; scientific sites and nature areas provide wildlife habitat and preserve the flora and fauna for purposes of observation and research; and other open lands provide "back up" area for existing recreation sites and lands for future recreational development.

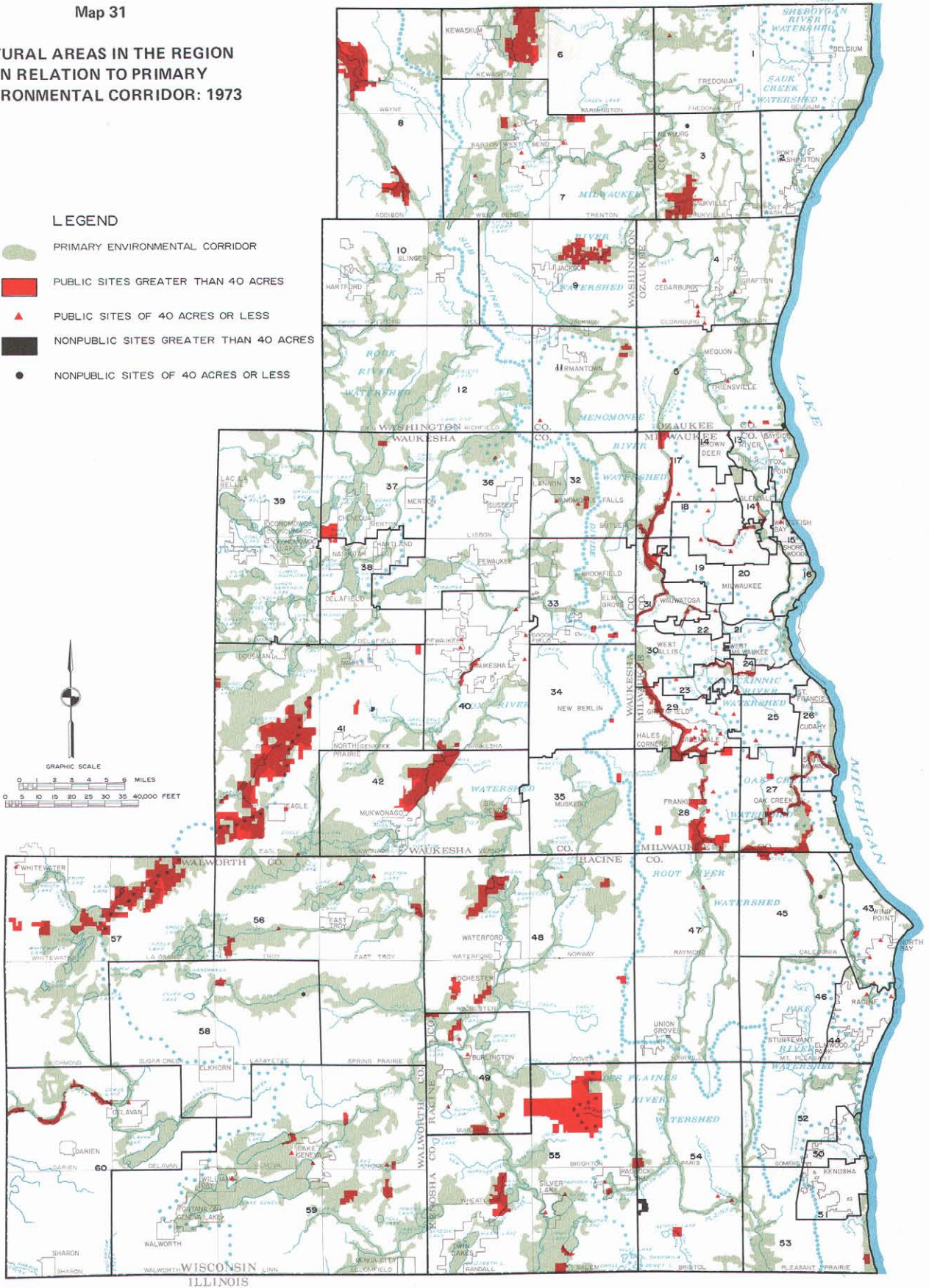
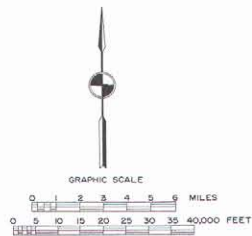
Source: SEWRPC.



Map 31

# NATURAL AREAS IN THE REGION IN RELATION TO PRIMARY ENVIRONMENTAL CORRIDOR: 1973

- LEGEND**
-  PRIMARY ENVIRONMENTAL CORRIDOR
  -  PUBLIC SITES GREATER THAN 40 ACRES
  -  PUBLIC SITES OF 40 ACRES OR LESS
  -  NONPUBLIC SITES GREATER THAN 40 ACRES
  -  NONPUBLIC SITES OF 40 ACRES OR LESS



Natural area sites located within primary environmental corridors serve to protect the corridors and, therefore, the underlying and sustaining natural resource base from deterioration and destruction. Such sites also provide an ideal setting for park and recreation facilities which may require such natural areas to insure a high quality recreational experience. Over 35,600 acres, or 72 percent, of the total natural area acreage in the Region in 1973 occurred within primary environmental corridors. Virtually all of such acreage—over 35,500 acres—were in public ownership.

Source: SEWRPC.

Table 39

## SPECIAL USE OUTDOOR RECREATION SITES IN THE REGION BY COUNTY BY OWNERSHIP: 1973

County		Public Ownership													
		State		County		City		Village		Town		School District		Subtotal	
		Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Total
Kenosha	Sites . . .	3	60.0	0	0.0	2	40.0	0	0.0	0	0.0	0	0.0	5	29.4
	Acres . .	8	25.0	0	0.0	24	75.0	0	0.0	0	0.0	0	0.0	32	4.2
Milwaukee	Sites . . .	2	28.6	2	28.6	0	0.0	0	0.0	0	0.0	3	42.8	7	30.4
	Acres . .	215	41.2	272	52.1	0	0.0	0	0.0	0	0.0	35	6.7	522	71.1
Ozaukee	Sites . . .	2	50.0	2	50.0	0	0.0	0	0.0	0	0.0	0	0.0	4	50.0
	Acres . .	4	13.8	25	86.2	0	0.0	0	0.0	0	0.0	0	0.0	29	17.8
Racine	Sites . . .	5	45.4	3	27.3	2	18.2	0	0.0	0	0.0	1	9.1	11	45.8
	Acres . .	10	7.2	88	63.8	33	23.9	0	0.0	0	0.0	7	5.1	138	29.6
Walworth	Sites . . .	5	41.7	4	33.3	1	8.3	2	16.7	0	0.0	0	0.0	12	41.4
	Acres . .	34	31.5	37	34.3	17	15.7	20	18.5	0	0.0	0	0.0	108	14.8
Washington	Sites . . .	6	85.7	1	14.3	0	0.0	0	0.0	0	0.0	0	0.0	7	31.8
	Acres . .	9	64.3	5	35.7	0	0.0	0	0.0	0	0.0	0	0.0	14	1.3
Waukesha	Sites . . .	6	60.0	2	20.0	1	10.0	0	0.0	1	10.0	0	0.0	10	23.3
	Acres . .	24	25.3	54	56.8	16	16.8	0	0.0	1	1.1	0	0.0	95	10.0
Region	Sites . . .	29	51.8	14	25.0	6	10.7	2	3.6	1	1.8	4	7.1	56	33.7
	Acres . .	304	32.4	481	51.3	90	9.6	20	2.1	1	0.1	42	4.5	938	19.1

County		Nonpublic Ownership								Total	
		Organizational		Commercial		Private		Subtotal		Public and Nonpublic	
		Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Subtotal	Number	Percent of Total	Number	Percent of Total
Kenosha	Sites . . .	4	33.3	6	50.0	2	16.7	12	70.6	17	10.2
	Acres . .	198	27.0	126	17.2	408	55.8	732	95.8	764	15.6
Milwaukee	Sites . . .	1	6.3	14	87.4	1	6.3	16	69.6	23	13.8
	Acres . .	9	4.2	160	75.5	43	20.3	212	28.9	734	14.9
Ozaukee	Sites . . .	3	75.0	0	0.0	1	25.0	4	50.0	8	4.8
	Acres . .	94	70.1	0	0.0	40	29.9	134	82.2	163	3.3
Racine	Sites . . .	3	23.1	6	46.2	4	30.7	13	54.2	24	14.5
	Acres . .	53	16.2	182	55.5	93	28.3	328	70.4	466	9.5
Walworth	Sites . . .	5	29.4	12	70.6	0	0.0	17	58.6	29	17.5
	Acres . .	170	27.4	451	72.6	0	0.0	621	85.2	729	14.8
Washington	Sites . . .	11	73.3	4	26.7	0	0.0	15	68.2	22	13.3
	Acres . .	1,018	92.6	81	7.4	0	0.0	1,099	98.7	1,113	22.6
Waukesha	Sites . . .	11	33.3	21	63.6	1	3.1	33	76.7	43	25.9
	Acres . .	490	57.3	364	42.6	1	0.1	855	90.0	950	19.3
Region	Sites . . .	38	34.5	63	57.3	9	8.2	110	66.3	166	100.0
	Acres . .	2,032	51.0	1,364	34.3	585	14.7	3,981	80.9	4,919	100.0

Source: SEWRPC.

about 900 acres, in public ownership and 110 sites, totaling about 4,000 acres, in nonpublic ownership. Over 83 percent of the publicly owned special use sites were in state or county ownership while 85 percent of nonpublicly owned sites were in organizational or commercial ownership. Washington County, with over 1,100 acres of special use sites, and Waukesha County, with over 900 acres, respectively, accounted for 23 percent and 19 percent of the special use site acreage in the Region

in 1973. Indicated in Table 40 are special recreation sites classified as to spectator or participant use. Twenty-eight sites, totaling almost 1,360 acres, were classified as special use spectator sites while 138 sites, totaling almost 3,600 acres, were classified as special use participant sites. On a regional basis, special use spectator sites and acreage appear evenly distributed between public and nonpublic ownership. The number of nonpublic special use participant sites—96—is more than double the public sites—42.

Table 40

## SPECIAL USE OUTDOOR RECREATION SITES IN THE REGION BY COUNTY BY TYPE: 1973

County	Ownership		Spectator		Participant		Total	
			Number	Percent of Total	Number	Percent of Total	Number	Percent of Region
Kenosha	Public	Sites . . .	1	20.0	4	80.0	5	8.9
		Acres . .	8	25.0	24	75.0	32	3.4
	Nonpublic	Sites . . .	3	25.0	9	75.0	12	10.9
		Acres . .	176	24.0	556	76.0	732	18.4
	Total	Sites . . .	4	23.5	13	76.5	17	10.2
		Acres . .	184	24.1	580	75.9	764	15.6
Milwaukee	Public	Sites . . .	6	85.7	1	14.3	7	12.5
		Acres . .	521	99.8	1	0.2	522	55.7
	Nonpublic	Sites . . .	4	25.0	12	75.0	16	14.6
		Acres . .	68	32.1	144	67.9	212	5.3
	Total	Sites . . .	10	43.5	13	56.5	23	13.9
		Acres . .	589	80.2	145	19.8	734	14.9
Ozaukee	Public	Sites . . .	1	25.0	3	75.0	4	7.2
		Acres . .	16	55.2	13	44.8	29	3.1
	Nonpublic	Sites . . .	1	25.0	3	75.0	4	3.6
		Acres . .	20	14.9	114	85.1	134	3.4
	Total	Sites . . .	2	25.0	6	75.0	8	4.8
		Acres . .	36	22.1	127	77.9	163	3.3
Racine	Public	Sites . . .	3	27.3	8	72.7	11	19.6
		Acres . .	116	84.1	22	15.9	138	14.7
	Nonpublic	Sites . . .	0	0.0	13	100.0	13	11.8
		Acres . .	0	0.0	328	100.0	328	8.2
	Total	Sites . . .	3	12.5	21	87.5	24	14.4
		Acres . .	116	24.9	350	75.1	466	9.5
Walworth	Public	Sites . . .	2	16.7	10	83.3	12	21.4
		Acres . .	20	18.5	88	81.5	108	11.5
	Nonpublic	Sites . . .	2	11.8	15	88.2	17	15.5
		Acres . .	212	34.1	409	65.9	621	15.6
	Total	Sites . . .	4	13.8	25	86.2	29	17.5
		Acres . .	232	31.8	497	68.2	729	14.8
Washington	Public	Sites . . .	0	0.0	7	100.0	7	12.5
		Acres . .	0	0.0	14	100.0	14	1.5
	Nonpublic	Sites . . .	1	6.7	14	93.3	15	13.6
		Acres . .	30	2.7	1,069	97.3	1,099	27.6
	Total	Sites . . .	1	4.5	21	95.5	22	13.3
		Acres . .	30	2.7	1,083	97.3	1,113	22.6
Waukesha	Public	Sites . . .	1	10.0	9	90.0	10	17.9
		Acres . .	53	55.8	42	44.2	95	10.1
	Nonpublic	Sites . . .	3	9.1	30	90.9	33	30.0
		Acres . .	118	13.8	737	86.2	855	21.5
	Total	Sites . . .	4	9.3	39	90.7	43	25.9
		Acres . .	171	18.0	779	82.0	950	19.3
Region	Public	Sites . . .	14	25.0	42	75.0	56	33.7
		Acres . .	734	78.3	204	21.7	938	19.1
	Nonpublic	Sites . . .	14	12.7	96	87.3	110	66.3
		Acres . .	624	15.7	3,357	84.3	3,981	80.9
	Total	Sites . . .	28	16.9	138	83.1	166	100.0
		Acres . .	1,358	27.6	3,561	72.4	4,919	100.0

Source: SEWRPC.

Nonpublic special use participant site acreage far surpasses public acreage—about 3,350 acres as opposed to about 200 acres, respectively. Milwaukee County has the largest acreage of special use spectator sites—590 acres—while Washington County has the largest acreage of special use participant sites—almost 1,100 acres.

Map 32 shows the spatial distribution of special use outdoor recreation sites in the Region by planning analysis area. Spectator type special use recreation sites are located primarily within or immediately adjacent to urban population concentrations, while participant special use outdoor recreation sites are more evenly distributed throughout both urban and rural areas of the Region.

#### Urban Open Areas

Urban open space defined in the broadest sense includes urban lands that are not used for buildings or structures; that is, which have not been built upon or developed, therefore are “open” physically and psychologically relative to other adjacent urban land use. Within the context of the park and open space planning program, urban open space is viewed in a narrower sense and includes only those open areas which exist in highly developed or densely populated urban settings which add variety or provide relief from surrounding urban uses and which are usually developed for passive recreational pursuits such as rest and reflection. Thus urban open areas consist primarily of small urban “green” areas and urban squares and plazas. As indicated in Table 41 and on Map 33, 49 urban open space sites, totaling 77 acres, were identified in the Region in 1973.

#### Historic Sites

Historic sites comprise an important element of the unique cultural heritage of the Region. A historic sites inventory identifying both marked and unmarked sites having historic, other cultural, or scientific value was conducted by the Commission in 1973 as a part of the regional park and open space planning program.

As shown in Table 42, the 1973 inventory identified 781 sites of historic significance within the Region, including 235 cultural sites, 84 natural features, and 462 structures. Seventy-five percent, or 69 of the 93 marked historic cultural feature sites, are located in Milwaukee, Racine, and Waukesha Counties. Most of the cultural sites within the Region are related to Indian or early European settlements and include old plank roads, early trails, and burial grounds and cemeteries. Natural features consist primarily of those wetland, woodland, or water areas which support plant and animal communities or contain geological features having potential importance for teaching or research. Only 7, or 8 percent, of the 85 areas containing such natural features identified in the inventories were marked in 1975. A total of 462, or 59 percent, of all the identified historic sites are structures, the majority of which are located in the urbanized areas of the Region, particularly in Milwaukee County. Indeed, 49, or 56 percent, of the 88 marked structure sites are located in Milwaukee County. Historic homes, churches, inns, and schools predominate in this

category, which also includes government buildings, mills, and museums. Map 34 shows the spatial distribution of the cultural, natural, and structural sites of historic significance identified in the 1973 inventory.

As urbanization continues in the Southeastern Wisconsin Region, many historic sites and structures which provide distinctive, authentic links to the past may be expected to be threatened with destruction. Once destroyed, such sites and structures cannot be replaced. Regional park and open space plans should recognize sites of historical significance and, to the maximum extent possible, should incorporate such sites into the park development and open space land acquisition process.

#### EXISTING OUTDOOR RECREATION AND OPEN SPACE LANDS—COMPARATIVE ANALYSIS

Previous sections of this chapter have presented quantitative data on the number of sites, acres, and spatial distribution of outdoor recreation and open space sites in each county of the Region and in the Region as a whole. This section relates the total acreage of outdoor recreation and open space sites in the planning analysis areas of each county of the Region and in the Region as a whole to the resident population. This per capita acreage of recreation and open space lands serves as one measure of the relative amount of recreation and open space lands provided in the various planning analysis areas and counties of the Region. In addition, because the total area—land and water—of each planning analysis area and county varies, a relative comparison of recreation and open space lands as a percentage of total planning analysis area and county area is also given. This offers another measure of the relative amount of recreation and open space lands provided in the various planning analysis areas and counties of the Region. Both measures facilitate a better understanding of the potential fiscal impact of recreation and open space lands.

Table 41

#### URBAN OPEN SPACE SITES IN THE REGION BY COUNTY: 1973

County	Urban Open Space	
	Sites	Acres
Kenosha . . . . .	3	7
Milwaukee . . . . .	12	15
Ozaukee . . . . .	1	1
Racine . . . . .	8	18
Walworth . . . . .	10	18
Washington . . . . .	7	7
Waukesha . . . . .	8	11
Region	49	77

Source: SEWRPC.



Map 32

# SPECIAL USE OUTDOOR RECREATION SITES IN THE REGION: 1973

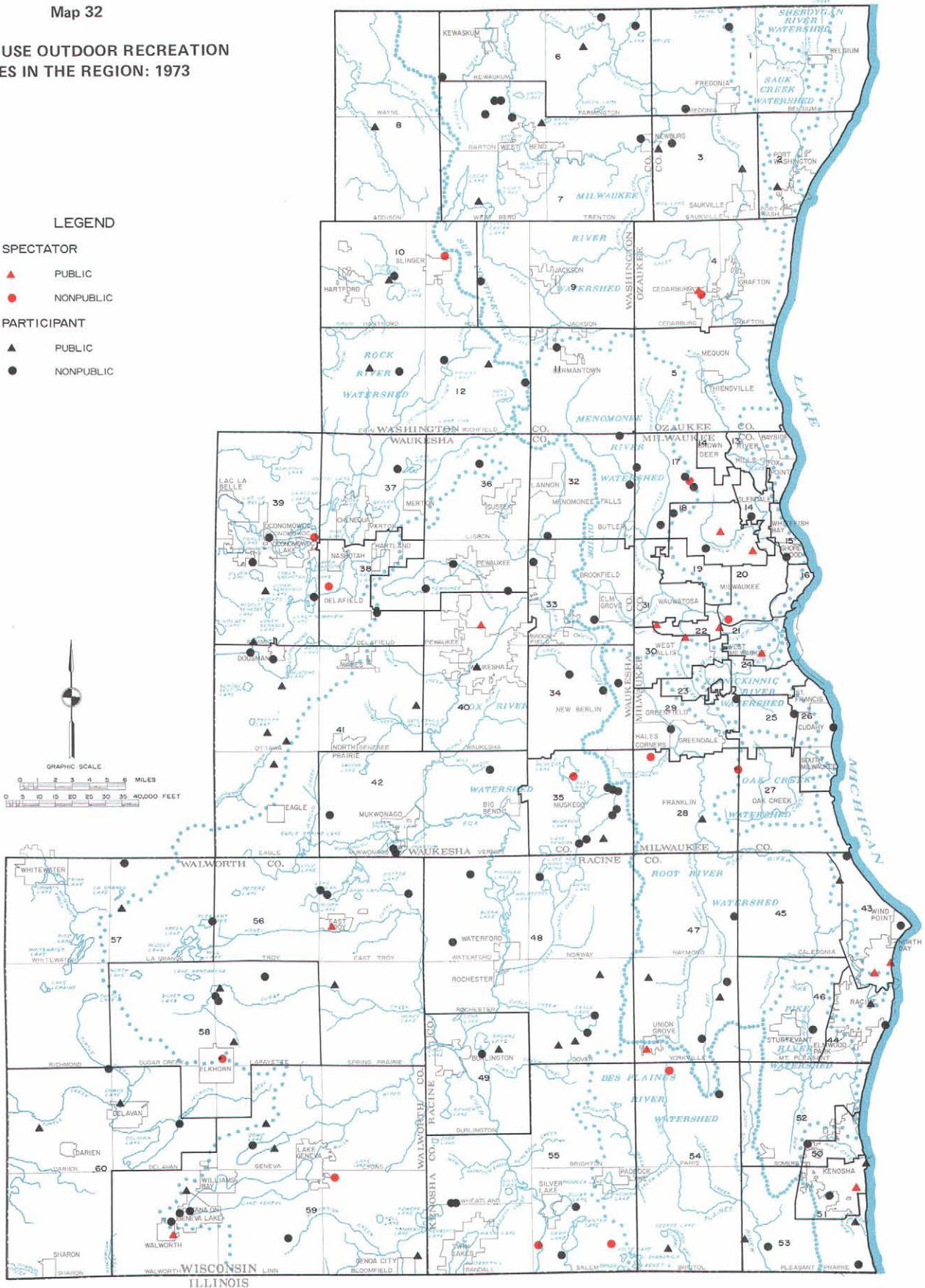
## LEGEND

### SPECTATOR

- ▲ PUBLIC
- NONPUBLIC

### PARTICIPANT

- ▲ PUBLIC
- NONPUBLIC

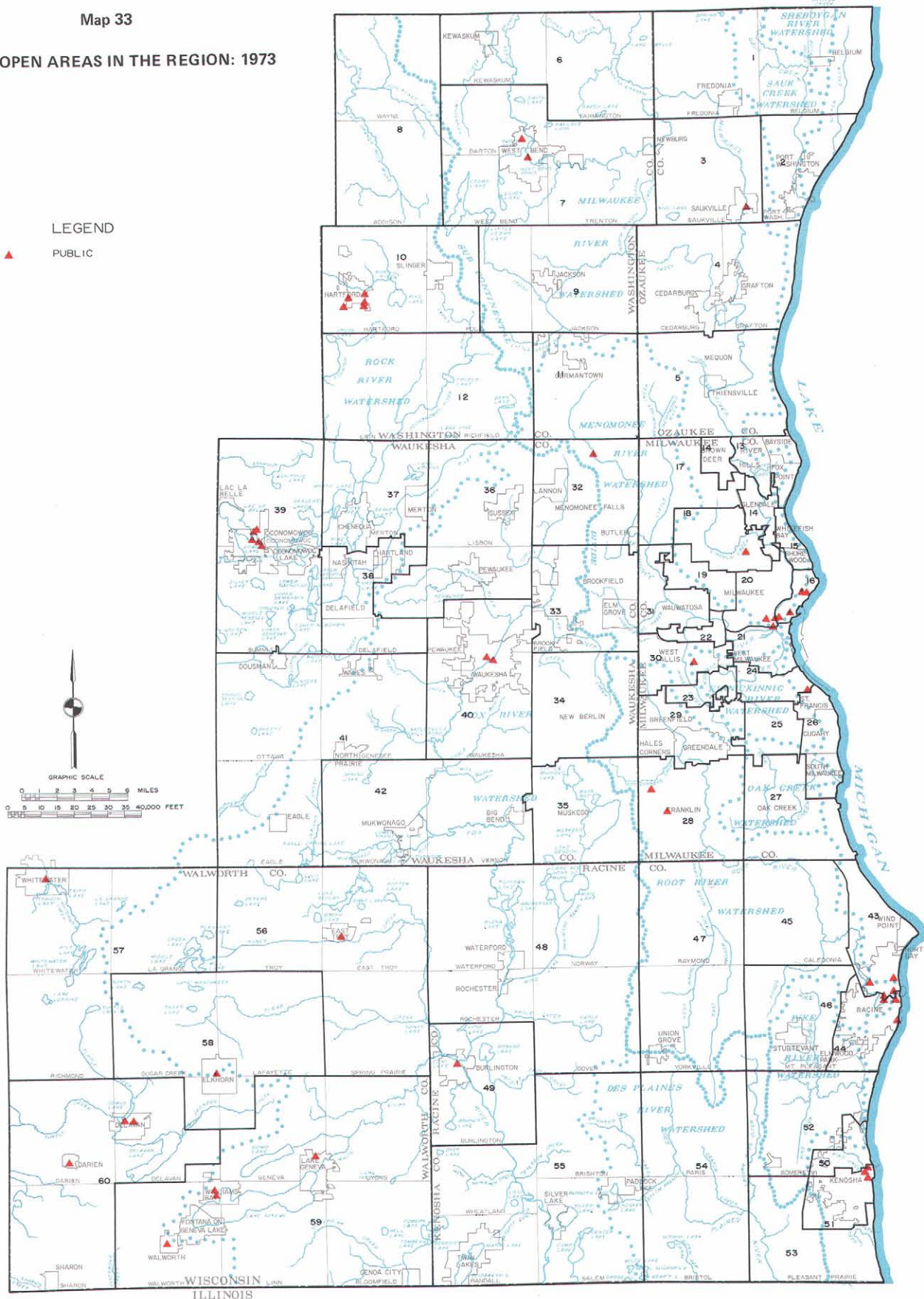
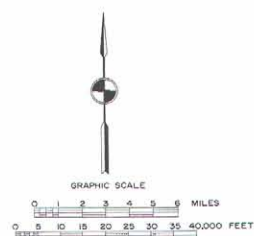


There were 166 special use recreation sites totaling over 4,900 acres in the Region in 1973, with 56 sites totaling about 900 acres in public ownership and 110 sites totaling 4,000 acres in nonpublic ownership. Twenty-eight sites totaling almost 1,360 acres were classified as special use spectator sites, while 138 sites totaling almost 3,600 acres were classified as special use participant sites. On a regional basis, special use spectator sites and acreage were evenly distributed between the public and nonpublic ownership; however, the number of nonpublic special use participant sites—96—is more than double the public sites—42. The acreage of nonpublic special use participant sites also far surpasses public site acreage—3,350 acres versus 200 acres, respectively.

Source: SEWRPC.



URBAN OPEN AREAS IN THE REGION: 1973



Source: SEWRPC.

Table 42

## HISTORIC SITES IN THE REGION BY TYPE OF SITES BY COUNTY: 1973

Type of Site <sup>a</sup>	Kenosha	Milwaukee	Ozaukee	Racine	Walworth	Washington	Waukesha	Region
Cultural Features								
Marked . . . . .	6	23	3	22	9	6	24	93
Unmarked . . . .	11	10	19	1	11	19	71	142
Subtotal	17	33	22	23	20	25	95	235
Natural Features								
Marked . . . . .	0	2	0	0	1	0	3	6
Unmarked . . . .	13	0	3	19	25	6	12	78
Subtotal	13	2	3	19	26	6	15	84
Structures								
Marked . . . . .	3	49	5	4	5	4	18	88
Unmarked . . . .	40	71	49	55	42	33	84	374
Subtotal	43	120	54	59	47	37	102	462
Total Sites								
Marked . . . . .	9	74	8	26	15	10	45	187
Unmarked . . . .	64	81	71	75	78	58	167	594
Total	73	155	79	101	93	68	212	781

<sup>a</sup> Marked sites are those which have been officially recognized and marked in some manner by historical groups or local, county, or state historical societies. Unmarked sites are those which: a) are being considered for marking by historical societies or groups or b) are identified as having historical significance by historical societies or groups but are not yet being considered for marking.

Source: SEWRPC.

#### Existing Outdoor Recreation and Open Space—Acres Per 1,000 Population

The per capita provision of general use outdoor recreation sites, open space sites, and other recreation and open space sites by county within the Region and by planning analysis area by county within the Region in 1973 is shown in Tables 43 and 44, respectively. There were over 103,000 acres of outdoor recreation and open space land, or 58 acres per thousand residents, with 73,500 acres, or over 41 acres per thousand, provided by the public sector and almost 30,000 acres, or about 17 acres per thousand, provided by the nonpublic sector. It is interesting to note that while the public and nonpublic sectors provided relatively equal amounts of general use outdoor recreation sites—13.2 and 14.3 acres per thousand residents, respectively—the public sector provided almost all of the open space sites, 27.3 acres per thousand. The private sector provided only 0.2 acre per thousand of such open space sites.

There is a great variance in the per capita provision of total recreation and open space when viewed at the county level with provision of such acreage ranging from a high of over 266 acres per thousand in Walworth County to a low of about 19 acres per thousand in Milwaukee County. This variance carries through each of the respective recreation and open space categories. The provision

of general use outdoor recreation area ranged from a high of 148 acres per thousand in Walworth County to a low of 10 acres per thousand in Milwaukee County. Ozaukee County provides the most public outdoor recreation area—29 acres per thousand—and Walworth County provides the most nonpublic outdoor recreation area—128 acres per thousand.

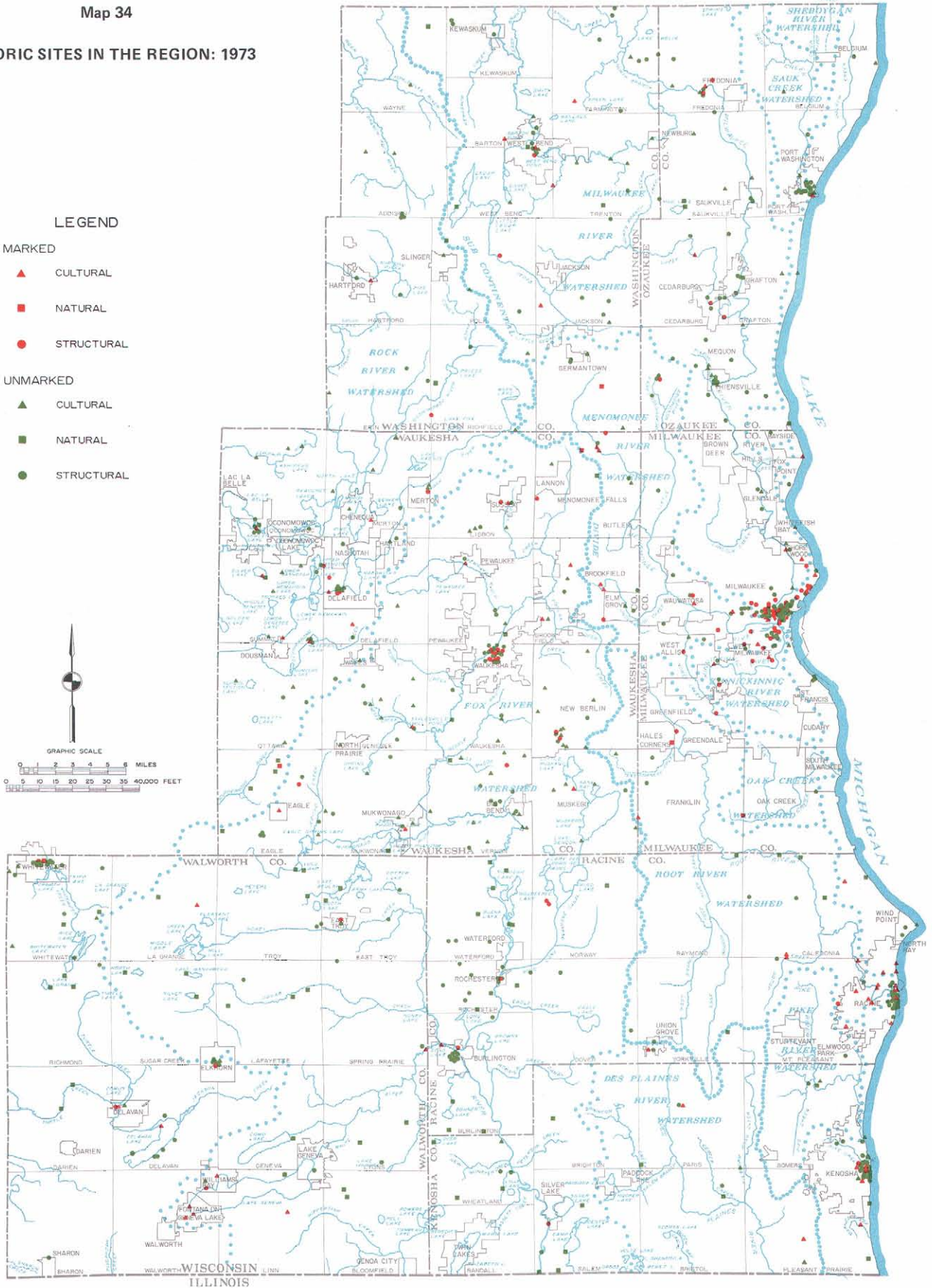
The provision of open space area—that is, publicly or nonpublicly owned natural areas designated for research, conservation, or recreation purposes—ranged from a high of 106 acres per thousand residents in Washington County to a low of about 8 acres per thousand residents in Milwaukee County. The provision of other recreation and open space acreage—that is, special use recreation sites and urban open lands—ranged from a high of 15 acres per thousand in Washington County to a low of 0.7 acres per thousand in Milwaukee County.

It is interesting to note that while large acreages of outdoor recreation and open space lands—especially public general use outdoor recreation sites—have been provided in Milwaukee County, when such lands are viewed within the context of the resident population able to utilize such land, Milwaukee County, in all cases, exhibited the lowest acres per thousand of outdoor recreation and open space lands of any county in the Region.



## HISTORIC SITES IN THE REGION: 1973

- LEGEND**
- MARKED**
- ▲ CULTURAL
  - NATURAL
  - STRUCTURAL
- UNMARKED**
- ▲ CULTURAL
  - NATURAL
  - STRUCTURAL



Historic sites comprise an important element of the unique cultural heritage of the Region. In 1973, 781 sites of historic significance including 235 cultural sites, 84 natural features, and 462 structures were identified. Most cultural historic sites within the Region relate to Indian or early European settlements and include old plank roads, early trails, burial grounds and cemeteries, while natural features consist primarily of wetland, woodland and water areas which support plant and animal communities or contain geological features having potential importance for teaching and research. Historic structures include early homes, churches, inns and schools as well as government buildings, mills, and museums. Over 75 percent, or 69 of the 93 marked historic cultural features, were located in Milwaukee, Racine, and Waukesha Counties. A total of 462, or 59 percent, of all identified historic sites were structures, the majority of which were located in urbanized areas of the Region, particularly in Milwaukee County.

Source: SEWRPC.



Table 43

**ACREAGE OF OUTDOOR RECREATION AND OPEN SPACE SITES  
PER THOUSAND POPULATION IN THE REGION BY COUNTY: 1973**

County		General Use Outdoor Recreation Sites			Natural Areas			Other Recreation and Open Space Sites			Total Recreation and Open Space Sites		
		Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons
Kenosha Population 126,651	Public	102	2,978	23.5	15	6,791	53.6	8	39	0.3	125	9,808	77.4
	Nonpublic	90	2,709	21.4	1	180	1.4	12	732	5.8	103	3,621	28.6
	Total	192	5,687	44.9	16	6,971	55.0	20	771	6.1	228	13,429	106.0
Milwaukee Population 1,012,536	Public	457	8,169	8.1	47	7,706	7.6	19	537	0.5	523	16,412	16.2
	Nonpublic	149	2,275	2.3	0	0	0.0	16	212	0.2	165	2,487	2.5
	Total	606	10,444	10.4	47	7,706	7.6	35	749	0.7	688	18,899	18.7
Ozaukee Population 64,932	Public	65	1,852	28.5	14	1,650	25.4	5	30	0.5	84	3,532	54.4
	Nonpublic	29	1,687	26.0	2	54	0.8	4	134	2.1	35	1,875	28.9
	Total	94	3,539	54.5	16	1,704	26.2	9	164	2.6	119	5,407	83.3
Racine Population 178,916	Public	130	2,581	14.4	24	3,592	20.1	19	156	0.9	173	6,329	35.4
	Nonpublic	78	1,851	10.3	1	52	0.3	13	328	1.8	92	2,231	12.4
	Total	208	4,432	24.7	25	3,644	20.4	32	484	2.7	265	8,560	47.8
Walworth Population 67,511	Public	79	1,381	20.4	22	7,175	106.3	22	126	1.9	123	8,682	128.6
	Nonpublic	101	8,620	127.7	1	18	0.2	17	621	9.2	119	9,259	137.1
	Total	180	10,001	148.1	23	7,193	106.5	39	747	11.1	242	17,941	265.7
Washington Population 76,579	Public	64	1,603	20.9	14	8,123	106.1	14	21	0.3	92	9,747	127.3
	Nonpublic	63	3,259	42.6	0	0	0.0	15	1,099	14.3	78	4,358	56.9
	Total	127	4,862	63.5	14	8,123	106.1	29	1,120	14.6	170	14,105	184.2
Waukesha Population 262,746	Public	231	5,085	19.4	33	13,857	52.7	18	106	0.4	282	19,048	72.5
	Nonpublic	135	5,155	19.6	1	64	0.2	33	855	3.3	169	6,074	23.1
	Total	366	10,240	39.0	34	13,921	52.9	51	961	3.7	451	25,122	95.6
Region Population 1,789,871	Public	1,128	23,649	13.2	169	48,894	27.3	105	1,015	0.6	1,402	73,558	41.1
	Nonpublic	645	25,556	14.3	6	368	0.2	110	3,981	2.2	761	29,905	16.7
	Total	1,773	49,205	27.5	175	49,262	27.5	215	4,996	2.8	2,163	103,463	57.8

<sup>a</sup> Estimated 1975 population.

Source: SEWRPC.

The per capita provision of recreation and open space lands also varies considerably when viewed at the planning analysis area level, ranging from a low of 2.3 acres per thousand residents in planning analysis area 20 in the City of Milwaukee to a high of 971 acres per thousand residents in planning analysis area 41 in southwestern Waukesha County. There are eight planning analysis areas—namely, areas 15, 18, 19, 20, 21, 24, and 25 in urban portions of Milwaukee County and area 51 which includes much of the City of Kenosha—which have less than 10 acres per thousand residents of total recreation and open space land, while there were 14 planning analysis areas—namely, areas 1 and 3 in Ozaukee County, areas 6, 8, and 9 in Washington County, area 28 in Milwaukee County, areas 41 and 42 in Waukesha County, area 48 in Racine County, areas 52, 54, and 55 in Kenosha County, and areas 56 and 57 in Walworth County—which had 200 or more acres per thousand residents of total recreation and open space land.

The provision of general use outdoor recreation site area ranged from a low of 2.0 acres per thousand residents in planning analysis area 20 in the City of Milwaukee to a high of 474 acres per thousand residents in planning analysis area 56 in Walworth County. The overwhelming majority of open space acreage is provided by the public sector and is generally located in primarily rural areas of the Region. Planning analysis areas 3, 6, 8, 41, 55, and 57 all provide over 300 acres of open space “natural area” per thousand residents.

Existing Outdoor Recreation and  
Open Space—Percent of County Area

As indicated in Table 45, over 103,000 acres, or about 6 percent of the total of 1,721,000 acres of land and inland water area within the Region, are utilized for outdoor recreation or open space purposes, with almost 73,600 acres, or about 4 percent of the total area of the

Table 44

**ACREAGE OF OUTDOOR RECREATION AND OPEN SPACE SITES PER THOUSAND  
POPULATION IN THE REGION BY PLANNING ANALYSIS AREA BY COUNTY: 1973**

Planning Analysis Area <sup>a</sup>		General Use Outdoor Recreation Sites			Natural Areas			Other Recreation and Open Space Sites			Total Recreation and Open Space Sites		
		Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons
1 Population 5,728	Public	10	756	132.0	1	40	7.0	0	0	0.0	11	796	139.0
	Nonpublic	8	280	48.9	0	0	0.0	2	74	12.9	10	354	61.8
	Total	18	1,036	180.9	1	40	7.0	2	74	12.9	21	1,150	200.8
2 Population 10,842	Public	17	167	15.4	0	0	0.0	1	2	0.2	18	169	15.6
	Nonpublic	1 <sup>b</sup>	36	3.3	0	0	0.0	0	0	0.0	1	36	3.3
	Total	18 <sup>b</sup>	203	18.7	0	0	0.0	1	2	0.2	19	205	18.9
3 Population 4,082	Public	4	303	74.2	3	1,476	361.6	3	12	2.9	10	1,791	438.7
	Nonpublic	3	438	107.3	1	40	9.8	1	40	9.8	5	518	126.9
	Total	7	741	181.5	4	1,516	371.4	4	52	12.7	15	2,309	565.6
4 Population 25,138	Public	23	206	8.2	7	63	2.5	1	16	0.6	31	285	11.3
	Nonpublic	8	155	6.2	0	0	0.0	1	20	0.8	9	175	7.0
	Total	31	361	14.4	7	63	2.5	2	36	1.4	40	460	18.3
5 Population 19,142	Public	11	420	21.9	3	71	3.7	0	0	0.0	14	491	25.6
	Nonpublic	9	778	40.7	1	14	0.7	0	0	0.0	10	792	41.4
	Total	20	1,198	62.6	4	85	4.4	0	0	0.0	24	1,283	67.0
Ozaukee County Population 64,932	Public	65	1,852	28.5	14	1,650	25.4	5	30	0.5	84	3,532	54.4
	Nonpublic	29	1,687	26.0	2	54	0.8	4	134	2.1	35	1,875	28.9
	Total	94	3,539	54.5	16	1,704	26.2	9	164	2.6	119	5,407	83.3
6 Population 5,521	Public	6	87	15.7	1	2,820	510.8	1	2	0.4	8	2,909	526.9
	Nonpublic	10	799	144.7	0	0	0.0	3	227	41.1	13	1,026	185.8
	Total	16	886	160.4	1	2,820	510.8	4	229	41.5	21	3,935	712.7
7 Population 28,623	Public	20	472	16.5	7	479	16.7	4	8	0.3	31	959	33.5
	Nonpublic	20	945	33.0	0	0	0.0	5	198	6.9	25	1,143	39.9
	Total	40	1,417	49.5	7	479	16.7	9	206	7.2	56	2,102	73.4
8 Population 3,986	Public	3	22	5.5	2	3,297	827.1	1	3	0.8	6	3,322	833.4
	Nonpublic	1	1	0.3	0	0	0.0	0	0	0.0	1	1	0.3
	Total	4	23	5.8	2	3,297	827.1	1	3	0.8	7	3,323	833.7
9 Population 6,420	Public	4	29	4.5	1	1,361	212.0	0	0	0.0	5	1,390	216.5
	Nonpublic	3	15	2.3	0	0	0.0	1	34	5.3	4	49	7.6
	Total	7	44	6.8	1	1,361	212.0	1	34	5.3	9	1,439	224.1
10 Population 13,201	Public	15	827	62.6	0	0	0.0	6	6	0.5	21	833	63.1
	Nonpublic	12	515	39.0	0	0	0.0	2	48	3.6	14	563	42.6
	Total	27	1,342	101.6	0	0	0.0	8	54	4.1	35	1,396	105.7
11 Population 9,013	Public	8	134	14.8	2	126	14.0	0	0	0.0	10	260	28.8
	Nonpublic	5	214	23.7	0	0	0.0	1	7	0.8	6	221	24.5
	Total	13	348	38.5	2	126	14.0	1	7	0.8	16	481	53.3

Table 44 (continued)

Planning Analysis Area <sup>a</sup>		General Use Outdoor Recreation Sites			Natural Areas			Other Recreation and Open Space Sites			Total Recreation and Open Space Sites		
		Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons
12	Public	8	32	3.3	1	40	4.0	2	2	0.2	11	74	7.5
Population	Nonpublic	12	770	78.4	0	0	0.0	3	585	59.6	15	1,355	138.0
9,815	Total	20	802	81.7	1	40	4.0	5	587	59.8	26	1,429	145.5
Washington County	Public	64	1,603	20.9	14	8,123	106.1	14	21	0.3	92	9,747	127.3
Population	Nonpublic	63	3,259	42.6	0	0	0.0	15	1,099	14.3	78	4,358	56.9
76,579	Total	127	4,862	63.5	14	8,123	106.1	29	1,120	14.6	170	14,105	184.2
13	Public	9	127	8.9	2	9	0.6	0	0	0.0	11	136	9.5
Population	Nonpublic	8	430	30.3	0	0	0.0	0	0	0.0	8	430	30.3
14,208	Total	17	557	39.2	2	9	0.6	0	0	0.0	19	566	39.8
14	Public	13 <sup>b</sup>	462	18.2	2	61	2.4	0	0	0.0	15	523	20.6
Population	Nonpublic	7	251	9.9	0	0	0.0	1	15	0.6	8	266	10.5
25,344	Total	20 <sup>b</sup>	713	28.1	2	61	2.4	1	15	0.6	23	789	31.1
15	Public	16	177	5.5	3	3	0.1	0	0	0.0	19	180	5.6
Population	Nonpublic	4 <sup>b</sup>	30	0.9	0	0	0.0	1	1	-- <sup>c</sup>	5	31	0.9
32,321	Total	20 <sup>b</sup>	207	6.4	3	3	0.1	1	1	-- <sup>c</sup>	24	211	6.5
16	Public	14 <sup>b</sup>	459	10.5	0	0	0.0	3	3	0.1	17	462	10.6
Population	Nonpublic	2	2	-- <sup>c</sup>	0	0	0.0	0	0	0.0	2	2	-- <sup>c</sup>
43,735	Total	16 <sup>b</sup>	461	10.5	0	0	0.0	3	3	0.1	19	464	10.6
17	Public	19	846	17.0	4 <sup>b</sup>	1,034	20.8	0	0	0.0	23	1,880	37.8
Population	Nonpublic	11	331	6.7	0	0	0.0	5	80	1.6	16	411	8.3
49,644	Total	30	1,177	23.7	4 <sup>b</sup>	1,034	20.8	5	80	1.6	39	2,291	46.1
18	Public	45 <sup>b</sup>	385	3.2	4 <sup>b</sup>	215	1.8	3	29	0.3	52	629	5.3
Population	Nonpublic	16	41	0.3	0	0	0.0	2	3	-- <sup>c</sup>	18	44	0.4
119,257	Total	61 <sup>b</sup>	426	3.5	4 <sup>b</sup>	215	1.8	5	32	0.3	70	673	5.6
19	Public	28	325	4.0	0 <sup>b</sup>	6	0.1	0	0	0.0	28	331	4.1
Population	Nonpublic	12	131	1.6	0	0	0.0	0	0	0.0	12	131	1.6
81,413	Total	40	456	5.6	0 <sup>b</sup>	6	0.1	0	0	0.0	40	462	5.7
20	Public	64 <sup>b</sup>	276	2.0	2	29	0.2	4 <sup>b</sup>	11	0.1	70	316	2.3
Population	Nonpublic	6	12	0.1	0	0	0.0	1	9	-- <sup>c</sup>	7	21	0.1
141,801	Total	70 <sup>b</sup>	288	2.1	2	29	0.2	5 <sup>b</sup>	20	0.1	77	337	2.4
21	Public	29	190	2.9	0 <sup>b</sup>	2	-- <sup>c</sup>	1 <sup>b</sup>	25	0.4	30	217	3.3
Population	Nonpublic	6	9	0.1	0	0	0.0	0	0	0.0	6	9	0.1
66,807	Total	35	199	3.0	0 <sup>b</sup>	2	-- <sup>c</sup>	1 <sup>b</sup>	25	0.4	36	226	3.4
22	Public	15	130	6.5	2 <sup>b</sup>	40	2.0	2 <sup>b</sup>	314	15.8	19	484	24.3
Population	Nonpublic	4	14	0.7	0	0	0.0	0	0	0.0	4	14	0.7
19,918	Total	19	144	7.2	2 <sup>b</sup>	40	2.0	2 <sup>b</sup>	314	15.8	23	498	25.0
23	Public	18	248	6.4	3 <sup>b</sup>	107	2.7	0	0	0.0	21	355	9.1
Population	Nonpublic	4	38	1.0	0	0	0.0	0	0	0.0	4	38	1.0
38,979	Total	22	286	7.4	3 <sup>b</sup>	107	2.7	0	0	0.0	25	393	10.1

Table 44 (continued)

Planning Analysis Area <sup>a</sup>		General Use Outdoor Recreation Sites			Natural Areas			Other Recreation and Open Space Sites			Total Recreation and Open Space Sites		
		Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons
24 Population 59,567	Public	27 <sup>b</sup>	307	5.2	1	65	1.1	1	1	.. <sup>c</sup>	29	373	6.3
	Nonpublic	5 <sup>b</sup>	12	0.2	0	0	0.0	0	0	0.0	5	12	0.2
	Total	32 <sup>b</sup>	319	5.4	1	65	1.1	1	1	.. <sup>c</sup>	34	385	6.5
25 Population 36,188	Public	21	241	6.6	1	32	0.9	0	0	0.0	22	273	7.5
	Nonpublic	2	8	0.2	0	0	0.0	1	25	0.7	3	33	0.9
	Total	23	249	6.8	1	32	0.9	1	25	0.7	25	306	8.4
26 Population 55,634	Public	30	963	17.3	0 <sup>b</sup>	267	4.8	0	0	0.0	30	1,230	22.1
	Nonpublic	15	66	1.2	0	0	0.0	1	8	0.1	16	74	1.3
	Total	45	1,029	18.5	0 <sup>b</sup>	267	4.8	1	8	0.1	46	1,304	23.4
27 Population 15,641	Public	12	443	28.3	3 <sup>b</sup>	1,473	94.2	0	0	0.0	15	1,916	122.5
	Nonpublic	7	65	4.2	0	0	0.0	0	0	0.0	7	65	4.2
	Total	19	508	32.5	3 <sup>b</sup>	1,473	94.2	0	0	0.0	22	1,981	126.7
28 Population 14,673	Public	14	793	54.0	4	2,020	137.7	3	3	0.2	21	2,816	191.9
	Nonpublic	8	365	24.9	0	0	0.0	2	56	3.8	10	421	28.7
	Total	22	1,158	78.9	4	2,020	137.7	5	59	4.0	31	3,237	220.6
29 Population 58,677	Public	25 <sup>b</sup>	673	11.5	12 <sup>b</sup>	1,256	21.4	0	0	0.0	37	1,929	32.9
	Nonpublic	14	214	3.6	0	0	0.0	2	15	0.3	16	229	3.9
	Total	39 <sup>b</sup>	887	15.1	12 <sup>b</sup>	1,256	21.4	2	15	0.3	53	2,158	36.8
30 Population 80,457	Public	34	592	7.3	0 <sup>b</sup>	198	2.5	2	151	1.9	36	941	11.7
	Nonpublic	12	27	0.3	0	0	0.0	0	0	0.0	12	27	0.3
	Total	46	619	7.6	0 <sup>b</sup>	198	2.5	2	151	1.9	48	968	12.0
31 Population 58,272	Public	24	532	9.1	4 <sup>b</sup>	889	15.3	0	0	0.0	28	1,421	24.4
	Nonpublic	6	229	3.9	0	0	0.0	0	0	0.0	6	229	3.9
	Total	30	761	13.0	4 <sup>b</sup>	889	15.3	0	0	0.0	34	1,650	28.3
Milwaukee County Population 1,012,536	Public	457	8,169	8.1	47	7,706	7.6	19	537	0.5	523	16,412	16.2
	Nonpublic	149	2,275	2.3	0	0	0.0	16	212	0.2	165	2,487	2.5
	Total	606	10,444	10.4	47	7,706	7.6	35	749	0.7	688	18,899	18.7
32 Population 36,827	Public	28	993	26.9	5	177	4.8	1	3	0.1	34	1,173	31.8
	Nonpublic	14	237	6.5	0	0	0.0	3	90	2.4	17	327	8.9
	Total	42	1,230	33.4	5	177	4.8	4	93	2.5	51	1,500	40.7
33 Population 45,036	Public	28	553	12.3	4	171	3.8	0	0	0.0	32	724	16.1
	Nonpublic	13	374	8.3	0	0	0.0	2	35	0.8	15	409	9.1
	Total	41	927	20.6	4	171	3.8	2	35	0.8	47	1,133	25.2
34 Population 31,462	Public	19 <sup>b</sup>	320	10.2	1	82	2.6	0	0	0.0	20	402	12.8
	Nonpublic	2	197	6.2	0	0	0.0	3	84	2.7	5	281	8.9
	Total	21 <sup>b</sup>	517	16.4	1	82	2.6	3	84	2.7	25	683	21.7
35 Population 13,402	Public	15	262	19.5	1	80	6.0	1	3	0.2	17	345	25.7
	Nonpublic	8	512	38.2	0	0	0.0	8	80	6.0	16	592	44.2
	Total	23	774	57.7	1	80	6.0	9	83	6.2	33	937	69.9



Table 44 (continued)

Planning Analysis Area <sup>a</sup>		General Use Outdoor Recreation Sites			Natural Areas			Other Recreation and Open Space Sites			Total Recreation and Open Space Sites		
		Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons
36 Population 21,231	Public	17 <sup>b</sup>	477	22.5	1	19	0.9	0	0	0.0	18	496	23.4
	Nonpublic	15	397	18.7	0	0	0.0	4	137	6.4	19	534	25.1
	Total	32	874	41.2	1	19	0.9	4	137	6.4	37	1,030	48.5
37 Population 5,916	Public	8	151	25.5	3	514	86.9	0	0	0.0	11	665	112.4
	Nonpublic	9	445	75.2	0	0	0.0	1	49	8.3	10	494	83.5
	Total	17	596	100.7	3	514	86.9	1	49	8.3	21	1,159	195.9
38 Population 10,045	Public	15	577	57.4	2 <sup>b</sup>	86	8.6	0	0	0.0	17	663	66.0
	Nonpublic	11	237	23.6	0	0	0.0	2	108	10.7	13	345	34.3
	Total	26	814	81.0	2	86	8.6	2	108	10.7	30	1,008	100.3
39 Population 20,986	Public	24	188	8.9	0	0	0.0	7	8	0.4	31	196	9.3
	Nonpublic	26	781	37.3	0	0	0.0	4	35	1.6	30	816	38.9
	Total	50	969	46.2	0	0	0.0	11	43	2.0	61	1,012	48.2
40 Population 56,441	Public	45 <sup>b</sup>	721	12.8	6 <sup>b</sup>	415	7.4	4	71	1.2	55	1,207	21.4
	Nonpublic	8	419	7.4	0	0	0.0	1 <sup>b</sup>	15	0.3	8	434	7.7
	Total	53 <sup>b</sup>	1,140	20.2	6 <sup>b</sup>	415	7.4	4 <sup>b</sup>	86	1.5	63	1,641	29.1
41 Population 10,580	Public	19	476	45.0	8	9,191	868.7	5	21	2.0	32	9,688	915.7
	Nonpublic	14	479	45.3	1	64	6.0	2	40	3.8	17	583	55.1
	Total	33	955	90.3	9	9,255	874.7	7	61	5.8	49	10,271	970.8
42 Population 10,820	Public	13	367	33.9	2	3,122	288.6	0	0	0.0	15	3,489	322.5
	Nonpublic	15	1,077	99.5	0	0	0.0	4	182	16.8	19	1,259	116.3
	Total	28	1,444	133.4	2	3,122	288.6	4	182	16.8	34	4,748	438.8
Waukesha County Population 262,746	Public	231	5,085	19.4	33	13,857	52.7	18	106	0.4	282	19,048	72.5
	Nonpublic	135	5,155	19.6	1	64	0.2	33	855	3.3	169	6,074	23.1
	Total	366	10,240	39.0	34	13,921	52.9	51	961	3.7	451	25,122	95.6
43 Population 48,401	Public	25	580	12.0	3	61	1.3	5	46	0.9	33	687	14.2
	Nonpublic	9	336	6.9	0	0	0.0	2	25	0.5	11	361	7.4
	Total	34	916	18.9	3	61	1.3	7	71	1.4	44	1,048	21.6
44 Population 69,931	Public	45	602	8.6	4	27	0.4	5	11	0.2	54	640	9.2
	Nonpublic	11	196	2.8	0	0	0.0	1	2	0.0 <sup>c</sup>	12	198	2.8
	Total	56	798	11.4	4	27	0.4	6	13	0.2	66	838	12.0
45 Population 8,006	Public	7	418	52.2	2	237	29.6	1	2	0.2	10	657	82.0
	Nonpublic	5	176	22.0	1	52	6.5	0	0	0.0	6	228	28.5
	Total	12	594	74.2	3	289	36.1	1	2	0.2	16	885	110.5
46 Population 12,451	Public	7	82	6.6	0	0	0.0	0	0	0.0	7	82	6.6
	Nonpublic	3 <sup>b</sup>	51	4.1	0	0	0.0	1	11	0.9	4	62	5.0
	Total	10 <sup>b</sup>	133	10.7	0	0	0.0	1	11	0.9	11	144	11.6

Table 44 (continued)

Planning Analysis Area <sup>a</sup>		General Use Outdoor Recreation Sites			Natural Areas			Other Recreation and Open Space Sites			Total Recreation and Open Space Sites		
		Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons
47 Population 10,104	Public	16	331	32.7	1	10	1.0	3	89	8.8	20	430	42.5
	Nonpublic	3	119	11.9	0	0	0.0	3	82	8.1	6	201	20.0
	Total	19	450	44.6	1	10	1.0	6	171	16.9	26	631	62.5
48 Population 16,456	Public	16	328	19.9	6	2,443	148.5	3	6	0.4	25	2,777	168.8
	Nonpublic	29	542	32.9	0	0	0.0	5	207	12.6	34	749	45.5
	Total	45	870	52.8	6	2,443	148.5	8	213	13.0	59	3,526	214.3
49 Population 13,567	Public	14	240	17.7	8	814	60.0	2	2	0.1	24	1,056	77.8
	Nonpublic	18	431	31.8	0	0	0.0	1	1	0.1	19	432	31.9
	Total	32	671	49.5	8	814	60.0	3	3	0.2	43	1,488	109.7
Racine County Population 178,916	Public	130	2,581	14.4	24	3,592	20.1	19	156	0.9	173	6,329	35.4
	Nonpublic	78	1,851	10.3	1	52	0.3	13	328	1.8	92	2,231	12.4
	Total	208	4,432	24.7	25	3,644	20.4	32	484	2.7	265	8,560	47.8
50 Population 32,103	Public	21	345	10.7	0	0	0.0	0	0	0.0	21	345	10.7
	Nonpublic	6	87	2.7	0	0	0.0	0	0	0.0	6	87	2.7
	Total	27	432	13.4	0	0	0.0	0	0	0.0	27	432	13.4
51 Population 55,950	Public	31	326	5.8	0	0	0.0	5	31	0.6	36	357	6.4
	Nonpublic	9	37	0.7	0	0	0.0	1	7	0.1	10	44	0.8
	Total	40	363	6.5	0	0	0.0	6	38	0.7	46	401	7.2
52 Population 7,575	Public	7	1,145	151.2	0	0	0.0	0	0	0.0	7	1,145	151.2
	Nonpublic	7	422	55.7	0	0	0.0	1	13	1.7	8	435	57.4
	Total	14	1,567	206.9	0	0	0.0	1	13	1.7	15	1,580	208.6
53 Population 7,791	Public	8	46	5.9	1	86	11.0	2	7	0.9	11	139	17.8
	Nonpublic	3	35	4.5	0	0	0.0	2	392	50.3	5	427	54.8
	Total	11	81	10.4	1	86	11.0	4	399	51.2	16	566	72.6
54 Population 4,849	Public	6	218	45.0	4	343	70.7	1	1	0.2	11	562	115.9
	Nonpublic	8	358	73.9	1	180	37.1	2	118	24.3	11	656	135.3
	Total	14	576	118.9	5	523	107.8	3	119	24.5	22	1,218	251.2
55 Population 18,383	Public	29	898	48.8	10 <sup>b</sup>	6,362	346.1	0	0	0.0	39	7,260	394.9
	Nonpublic	57	1,770	96.3	0	0	0.0	6	202	11.0	63	1,972	107.3
	Total	86	2,668	145.1	10 <sup>b</sup>	6,362	346.1	6	202	11.0	102	9,232	502.2
Kenosha County Population 126,651	Public	102	2,978	23.5	15	6,791	53.6	8	39	0.3	125	9,808	77.4
	Nonpublic	90	2,709	21.4	1	180	1.4	12	732	5.8	103	3,621	28.6
	Total	192	5,687	44.9	16	6,971	55.0	20	771	6.1	228	13,429	106.0

Table 44 (continued)

Planning Analysis Area <sup>a</sup>		General Use Outdoor Recreation Sites			Natural Areas			Other Recreation and Open Space Sites			Total Recreation and Open Space Sites		
		Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons	Sites	Acres	Acres Per 1,000 Persons
56 Population 8,032	Public	7	135	16.8	5	613	76.3	3	15	1.9	15	763	95.0
	Nonpublic	26	3,673	457.3	0	0	0.0	3	87	10.8	29	3,760	468.1
	Total	33	3,808	474.1	5	613	76.3	6	102	12.7	44	4,523	563.1
57 Population 13,303	Public	13	482	36.2	4	4,794	360.4	2	2	0.2	19	5,278	396.8
	Nonpublic	21	849	63.8	0	0	0.0	2	11	0.8	23	860	64.6
	Total	34	1,331	100.0	4	4,794	360.4	4	13	1.0	42	6,138	461.4
58 Population 8,267	Public	8	75	9.0	2	99	12.0	3	22	2.7	13	196	23.7
	Nonpublic	5	617	74.6	1	18	2.2	4	310	37.5	10	945	114.3
	Total	13	692	83.6	3	117	14.2	7	332	40.2	23	1,141	138.0
59 Population 23,787	Public	33	488	20.5	9	905	38.0	9	64	2.7	51	1,457	61.2
	Nonpublic	32	2,965	124.7	0	0	0.0	6	172	7.2	38	3,137	131.9
	Total	65	3,453	145.2	9	905	38.0	15	236	9.9	89	4,594	193.1
60 Population 14,122	Public	18	201	14.3	2	764	54.1	5	23	1.6	25	988	70.0
	Nonpublic	17	516	36.5	0	0	0.0	2	41	2.9	19	557	39.4
	Total	35	717	50.8	2	764	54.1	7	64	4.5	44	1,545	109.4
Walworth County Population 67,511	Public	79	1,381	20.4	22	7,175	106.3	22	126	1.9	123	8,682	128.6
	Nonpublic	101	8,620	127.7	1	18	0.2	17	621	9.2	119	9,259	137.1
	Total	180	10,001	148.1	23	7,193	106.5	39	747	11.1	242	17,941	265.7

<sup>a</sup> Estimated 1975 population.

<sup>b</sup> Sites located in more than one planning analysis area have acreage tabulated under each PAA accordingly, while the site is counted in the PAA having the most acreage.

<sup>c</sup> Less than 0.05 acres per thousand.

Source: SEWRPC.

Region, being in public ownership and 29,900 acres, or about 2 percent of the total area of the Region, being in nonpublic ownership.

On a county basis, the total acreage of outdoor recreation and open space sites as a percentage of total county area ranged from a high of about 12 percent for Milwaukee County to a low of about 4 percent for Ozaukee County. As indicated previously, the relative fiscal impact of outdoor recreation and open space land within a county depends, in part, upon the relationship of publicly owned recreation and open space acreage to total land area in the county. Milwaukee County, with about 11 percent of the area of the county being devoted to public outdoor recreation or open space, has almost

double the percentage of the next highest county. The combined total public recreation and open space acreage of Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties is 57,100 acres, or about 4 percent of the combined acreage of those counties. Milwaukee County then on a relative basis, with about 11 percent of the county area devoted to public recreational or open space use, has on an average about three times the amount of such lands as the other six counties in the Region.

The total acreage of outdoor recreation and open space sites, as a percentage of planning analysis area, ranged from a high of 19 percent in planning analysis area 22 in Milwaukee County to a low of less than 1 percent

Table 45

**ACREAGE OF OUTDOOR RECREATION AND OPEN SPACE SITES AS  
A PERCENTAGE OF TOTAL ACRES IN THE REGION BY COUNTY: 1973**

County and Region		General Use Outdoor Recreation Sites		Natural Areas		Other Recreation and Open Space Sites		Total Recreation and Open Space Sites	
		Acres	Percent of County	Acres	Percent of County	Acres	Percent of County	Acres	Percent of County
Kenosha Acres 178,100	Public	2,978	1.7	6,791	3.8	39	.. <sup>a</sup>	9,808	5.5
	Nonpublic	2,709	1.5	180	0.1	732	0.4	3,621	2.0
	Total	5,687	3.2	6,971	3.9	771	0.4	13,429	7.5
Milwaukee Acres 155,064	Public	8,169	5.2	7,706	5.0	537	0.4	16,412	10.6
	Nonpublic	2,275	1.5	0	0.0	212	0.1	2,487	1.6
	Total	10,444	6.7	7,706	5.0	749	0.5	18,899	12.2
Ozaukee Acres 150,013	Public	1,852	1.3	1,650	1.1	30	.. <sup>a</sup>	3,532	2.4
	Nonpublic	1,687	1.1	54	.. <sup>a</sup>	134	0.1	1,875	1.2
	Total	3,539	2.4	1,704	1.1	164	0.1	5,407	3.6
Racine Acres 217,561	Public	2,581	1.2	3,592	1.6	156	0.1	6,329	2.9
	Nonpublic	1,851	0.8	52	.. <sup>a</sup>	328	0.2	2,231	1.0
	Total	4,432	2.0	3,644	1.6	484	0.3	8,560	3.9
Walworth Acres 369,982	Public	1,381	0.4	7,175	1.9	126	.. <sup>a</sup>	8,682	2.3
	Nonpublic	8,620	2.3	18	.. <sup>a</sup>	621	0.2	9,259	2.5
	Total	10,001	2.7	7,193	1.9	747	0.2	17,941	4.8
Washington Acres 278,734	Public	1,603	0.6	8,123	2.9	21	.. <sup>a</sup>	9,747	3.5
	Nonpublic	3,259	1.2	0	0.0	1,099	0.4	4,358	1.6
	Total	4,862	1.8	8,123	2.9	1,120	0.4	14,105	5.1
Waukesha Acres 371,646	Public	5,085	1.4	13,857	3.7	106	.. <sup>a</sup>	19,048	5.1
	Nonpublic	5,155	1.4	64	.. <sup>a</sup>	855	0.3	6,074	1.7
	Total	10,240	2.8	13,921	3.7	961	0.3	25,122	6.8
Region Acres 1,721,100	Public	23,649	1.3	48,894	2.9	1,015	0.1	73,558	4.3
	Nonpublic	25,556	1.5	368	.. <sup>a</sup>	3,981	0.2	29,905	1.7
	Total	49,205	2.8	49,262	2.9	4,996	0.3	103,463	6.0

Source: SEWRPC.

for planning analysis area 46 in Racine County (see Table 46). Eleven planning analysis areas—10 of which are located in Milwaukee County—had more than 10 percent of their area devoted to public recreation and open space use while 15 planning analysis areas, all located outside of Milwaukee County, had less than 2 percent of their area devoted to public recreation and open space use.

The comparative analysis of outdoor recreation and open space land on the basis of acres of such land per thousand population as well as the analysis of percentage of total county area represented by such lands indicate that compared to Milwaukee County, all other counties in the Region both have relatively large per capita acreages

of public outdoor recreation and open space land as well as relatively small percentages of total county area devoted to public outdoor recreation and open space use.

It should be noted that foregoing comparative analyses should not be interpreted as indicating that any particular county has an excess or a deficiency of outdoor recreation and open space lands. It is only through the development and application of outdoor recreation and open space objectives and standards and the evaluation of the existing and probable future outdoor recreation demand and open space needs against such objectives and standards that judgments can be made of the adequacy or deficiency of outdoor recreation and open space lands.



Table 46

**ACREAGE OF OUTDOOR RECREATION AND OPEN SPACE SITES AS A PERCENTAGE  
OF TOTAL ACRES IN THE REGION BY PLANNING ANALYSIS AREA BY COUNTY: 1973**

Planning Analysis Area		General Use Outdoor Recreation Sites		Natural Areas		Other Recreation and Open Space Sites		Total Recreation and Open Space Sites	
		Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area
1 Acres 47,234	Public	756	1.6	40	0.1	0	0.0	796	1.7
	Nonpublic	280	0.6	0	0.0	74	0.2	354	0.8
	Total	1,036	2.2	40	0.1	74	0.2	1,150	2.5
2 Acres 14,388	Public	167	1.1	0	0.0	2	.. <sup>a</sup>	169	1.1
	Nonpublic	36	0.3	0	0.0	0	0.0	36	0.3
	Total	203	1.4	0	0.0	2	.. <sup>a</sup>	205	1.4
3 Acres 23,285	Public	303	1.3	1,476	6.3	12	0.1	1,791	7.7
	Nonpublic	438	1.9	40	0.2	40	0.1	518	2.2
	Total	741	3.2	1,516	6.5	52	0.2	2,309	9.9
4 Acres 34,341	Public	206	0.6	63	0.2	16	.. <sup>a</sup>	285	0.8
	Nonpublic	155	0.5	0	0.0	20	0.1	175	0.6
	Total	361	1.1	63	0.2	36	0.1	460	1.4
5 Acres 30,757	Public	420	1.4	71	0.2	0	0.0	491	1.6
	Nonpublic	778	2.5	14	.. <sup>a</sup>	0	0.0	792	2.5
	Total	1,198	3.9	85	0.2	0	0.0	1,283	4.1
Ozaukee County Acres 150,005	Public	1,852	1.3	1,650	1.1	30	.. <sup>a</sup>	3,532	2.4
	Nonpublic	1,687	1.1	54	.. <sup>a</sup>	134	0.1	1,875	1.2
	Total	3,539	2.4	1,704	1.1	164	0.1	5,407	3.6
6 Acres 39,096	Public	87	0.2	2,820	7.2	2	.. <sup>a</sup>	2,909	7.4
	Nonpublic	799	2.0	0	0.0	227	0.6	1,026	2.6
	Total	886	2.2	2,820	7.2	229	0.6	3,935	10.0
7 Acres 54,086	Public	472	0.9	479	0.9	8	.. <sup>a</sup>	959	1.8
	Nonpublic	945	1.7	0	0.0	198	0.4	1,143	2.1
	Total	1,417	2.6	479	0.9	206	0.4	2,102	3.9
8 Acres 45,972	Public	22	.. <sup>a</sup>	3,297	7.2	3	.. <sup>a</sup>	3,322	7.2
	Nonpublic	1	.. <sup>a</sup>	0	0.0	0	0.0	1	.. <sup>a</sup>
	Total	23	.. <sup>a</sup>	3,297	7.2	3	.. <sup>a</sup>	3,323	7.2
9 Acres 35,082	Public	29	0.1	1,361	3.9	0	0.0	1,390	4.0
	Nonpublic	15	.. <sup>a</sup>	0	0.0	34	0.1	49	0.1
	Total	44	0.1	1,361	3.9	34	0.1	1,439	4.1
10 Acres 35,070	Public	827	2.4	0	0.0	6	.. <sup>a</sup>	833	2.4
	Nonpublic	515	1.5	0	0.0	48	0.1	563	1.6
	Total	1,342	3.9	0	0.0	54	0.1	1,396	4.0
11 Acres 23,106	Public	134	0.6	126	0.5	0	0.0	260	1.1
	Nonpublic	214	1.0	0	0.0	7	.. <sup>a</sup>	221	1.0
	Total	348	1.6	126	0.5	7	.. <sup>a</sup>	481	2.1

Table 46 (continued)

Planning Analysis Area		General Use Outdoor Recreation Sites		Natural Areas		Other Recreation and Open Space Sites		Total Recreation and Open Space Sites	
		Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area
12 Acres 46,321	Public	32	0.1	40	0.1	2	.. <sup>a</sup>	74	0.2
	Nonpublic	770	1.6	0	0.0	585	1.3	1,355	2.9
	Total	802	1.7	40	0.1	587	1.3	1,429	3.1
Washington County Acres 278,733	Public	1,603	0.6	8,123	2.9	21	.. <sup>a</sup>	9,747	3.5
	Nonpublic	3,259	1.2	0	0.0	1,099	0.4	4,358	1.6
	Total	4,862	1.8	8,123	2.9	1,120	0.4	14,105	5.1
13 Acres 6,406	Public	127	2.0	9	0.1	0	0.0	136	2.1
	Nonpublic	430	6.7	0	0.0	0	0.0	430	6.7
	Total	557	8.7	9	0.1	0	0.0	566	8.8
14 Acres 6,820	Public	462	6.8	61	0.9	0	0.0	523	7.7
	Nonpublic	251	3.7	0	0.0	15	0.2	266	3.9
	Total	713	10.5	61	0.9	15	0.2	789	11.6
15 Acres 2,669	Public	177	6.6	3	0.1	0	0.0	180	6.7
	Nonpublic	30	1.2	0	0.0	1	.. <sup>a</sup>	31	1.2
	Total	207	7.8	3	0.1	1	.. <sup>a</sup>	211	7.9
16 Acres 2,531	Public	459	18.1	0	0.0	3	0.1	462	18.2
	Nonpublic	2	0.1	0	0.0	0	0.0	2	0.1
	Total	461	18.2	0	0.0	3	0.1	464	18.3
17 Acres 14,040	Public	846	6.0	1,034	7.4	0	0.0	1,880	13.4
	Nonpublic	331	2.3	0	0.0	80	0.6	411	2.9
	Total	1,177	8.3	1,034	7.4	80	0.6	2,291	16.3
18 Acres 9,794	Public	385	3.9	215	2.2	29	0.3	629	6.4
	Nonpublic	41	0.4	0	0.0	3	.. <sup>a</sup>	44	0.4
	Total	426	4.3	215	2.2	32	0.3	673	6.8
19 Acres 5,459	Public	325	6.0	6	0.1	0	0.0	331	6.1
	Nonpublic	131	2.4	0	0.0	0	0.0	131	2.4
	Total	456	8.4	6	0.1	0	0.0	462	8.5
20 Acres 6,602	Public	276	4.2	29	0.4	11	0.2	316	4.8
	Nonpublic	12	0.2	0	0.0	9	0.1	21	0.3
	Total	288	4.4	29	0.4	20	0.3	337	5.1
21 Acres 5,331	Public	190	3.5	2	.. <sup>a</sup>	25	0.5	217	4.0
	Nonpublic	9	0.2	0	0.0	0	0.0	9	0.2
	Total	199	3.7	2	.. <sup>a</sup>	25	0.5	226	4.2
22 Acres 2,598	Public	130	5.0	40	1.5	314	12.1	484	18.6
	Nonpublic	14	0.5	0	0.0	0	0.0	14	0.5
	Total	144	5.5	40	1.5	314	12.1	498	19.1

Table 46 (continued)

Planning Analysis Area		General Use Outdoor Recreation Sites		Natural Areas		Other Recreation and Open Space Sites		Total Recreation and Open Space Sites	
		Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area
23 Acres 3,384	Public Nonpublic Total	248 38 286	7.3 1.1 8.4	107 0 107	3.2 0.0 3.2	0 0 0	0.0 0.0 0.0	355 38 393	10.5 1.1 11.6
24 Acres 4,582	Public Nonpublic Total	307 12 319	6.7 0.3 7.0	65 0 65	1.4 0.0 1.4	1 0 1	-- <sup>a</sup> 0.0 -- <sup>a</sup>	373 12 385	8.1 0.3 8.4
25 Acres 6,723	Public Nonpublic Total	241 8 249	3.6 0.1 3.7	32 0 32	0.5 0.0 0.5	0 25 25	0.0 0.4 0.4	273 33 306	4.1 0.5 4.6
26 Acres 7,650	Public Nonpublic Total	963 66 1,029	12.6 0.9 13.5	267 0 267	3.5 0.0 3.5	0 8 8	0.0 0.1 0.1	1,230 74 1,304	16.1 1.0 17.1
27 Acres 18,134	Public Nonpublic Total	443 65 508	2.4 0.4 2.8	1,473 0 1,473	8.1 0.0 8.1	0 0 0	0.0 0.0 0.0	1,916 65 1,981	10.5 0.4 10.9
28 Acres 22,120	Public Nonpublic Total	793 365 1,158	3.6 1.6 5.2	2,020 0 2,020	9.1 0.0 9.1	3 56 59	-- <sup>a</sup> 0.3 0.3	2,816 421 3,237	12.7 1.9 14.6
29 Acres 13,139	Public Nonpublic Total	673 214 887	5.1 1.6 6.7	1,256 0 1,256	9.6 0.0 9.6	0 15 15	0.0 0.1 0.1	1,929 229 2,158	14.7 1.7 16.4
30 Acres 8,361	Public Nonpublic Total	592 27 619	7.1 0.3 7.4	198 0 198	2.4 0.0 2.4	151 0 151	1.8 0.0 1.8	941 27 968	11.3 0.3 11.6
31 Acres 8,730	Public Nonpublic Total	532 229 761	6.1 2.6 8.7	889 0 889	10.2 0.0 10.2	0 0 0	0.0 0.0 0.0	1,421 229 1,650	16.3 2.6 18.9
Milwaukee County Acres 155,073	Public Nonpublic Total	8,169 2,275 10,444	5.2 1.5 6.7	7,706 0 7,706	5.0 0.0 5.0	537 212 749	0.4 0.1 0.5	16,412 2,487 18,899	10.6 1.6 12.2
32 Acres 23,564	Public Nonpublic Total	993 237 1,230	4.2 1.0 5.2	177 0 177	0.8 0.0 0.8	3 90 93	-- <sup>a</sup> 0.4 0.4	1,173 327 1,500	5.0 1.4 6.4
33 Acres 23,259	Public Nonpublic Total	553 374 927	2.4 1.6 4.0	171 0 171	0.7 0.0 0.7	0 35 35	0.0 0.2 0.2	724 409 1,133	3.1 1.8 4.9
34 Acres 23,567	Public Nonpublic Total	320 197 517	1.4 0.8 2.2	82 0 82	0.3 0.0 0.3	0 84 84	0.0 0.4 0.4	402 281 683	1.7 1.2 2.9

Table 46 (continued)

Planning Analysis Area		General Use Outdoor Recreation Sites		Natural Areas		Other Recreation and Open Space Sites		Total Recreation and Open Space Sites	
		Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area
35 Acres 22,980	Public Nonpublic Total	262 512 774	1.1 2.2 3.3	80 0 80	0.3 0.0 0.3	3 80 83	.. <sup>a</sup> 0.4 0.4	345 592 937	1.4 2.6 4.0
36 Acres 40,326	Public Nonpublic Total	477 397 874	1.2 1.0 2.2	19 0 19	0.0 0.0 0.0	0 137 137	0.0 0.3 0.3	496 534 1,030	1.2 1.3 2.5
37 Acres 21,860	Public Nonpublic Total	151 445 596	0.7 2.0 2.7	514 0 514	2.4 0.0 2.4	0 49 49	0.0 0.2 0.2	665 494 1,159	3.1 2.2 5.3
38 Acres 19,761	Public Nonpublic Total	577 237 814	2.9 1.2 4.1	86 0 86	0.4 0.0 0.4	0 108 108	0.0 0.5 0.5	663 345 1,008	3.3 1.7 5.0
39 Acres 46,655	Public Nonpublic Total	188 781 969	0.4 1.7 2.1	0 0 0	0.0 0.0 0.0	8 35 43	.. <sup>a</sup> 0.1 0.1	196 816 1,012	0.4 1.8 2.2
40 Acres 34,105	Public Nonpublic Total	721 419 1,140	2.1 1.3 3.4	415 0 415	1.2 0.0 1.2	71 15 86	0.2 .. <sup>a</sup> 0.2	1,207 434 1,641	3.5 1.3 4.8
41 Acres 69,638	Public Nonpublic Total	476 479 955	0.7 0.7 1.4	9,191 64 9,255	13.2 0.1 13.3	21 40 61	.. <sup>a</sup> 0.1 0.1	9,688 583 10,271	13.9 0.9 14.8
42 Acres 45,929	Public Nonpublic Total	367 1,077 1,444	0.8 2.3 3.1	3,122 0 3,122	6.8 0.0 6.8	0 182 182	0.0 0.4 0.4	3,489 1,259 4,748	7.6 2.7 10.3
Waukesha County Acres 371,644	Public Nonpublic Total	5,085 5,155 10,240	1.4 1.4 2.8	13,857 64 13,921	3.7 .. <sup>a</sup> 3.7	106 855 961	0.0 0.3 0.3	19,048 6,074 25,122	5.1 1.7 6.8
43 Acres 11,796	Public Nonpublic Total	580 336 916	4.9 2.8 7.7	61 0 61	0.5 0.0 0.5	46 25 71	0.4 0.2 0.6	687 361 1,048	5.8 3.0 8.8
44 Acres 9,721	Public Nonpublic Total	602 196 798	6.2 2.0 8.2	27 0 27	0.3 0.0 0.3	11 2 13	0.1 .. <sup>a</sup> 0.1	640 198 838	6.6 2.0 8.6
45 Acres 22,554	Public Nonpublic Total	418 176 594	1.9 0.8 2.7	237 52 289	1.1 0.2 1.3	2 0 2	.. <sup>a</sup> 0.0 .. <sup>a</sup>	657 228 885	3.0 1.0 4.0



Table 46 (continued)

Planning Analysis Area		General Use Outdoor Recreation Sites		Natural Areas		Other Recreation and Open Space Sites		Total Recreation and Open Space Sites	
		Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area
46	Public	82	0.4	0	0.0	0	0.0	82	0.4
Acres	Nonpublic	51	0.2	0	0.0	11	0.1	62	0.3
20,600	Total	133	0.6	0	0.0	11	0.1	144	0.7
47	Public	331	0.7	10	.. <sup>a</sup>	89	0.2	430	0.9
Acres	Nonpublic	119	0.3	0	0.0	82	0.2	201	0.5
45,780	Total	450	1.0	10	.. <sup>a</sup>	171	0.4	631	1.4
48	Public	328	0.4	2,443	3.0	6	.. <sup>a</sup>	2,777	3.4
Acres	Nonpublic	542	0.7	0	0.0	207	0.3	749	1.0
80,370	Total	870	1.1	2,443	3.0	213	0.3	3,526	4.4
49	Public	240	0.9	814	3.0	2	.. <sup>a</sup>	1,056	3.9
Acres	Nonpublic	431	1.6	0	0.0	1	.. <sup>a</sup>	432	1.6
26,742	Total	671	2.5	814	3.0	3	.. <sup>a</sup>	1,488	5.5
Racine County	Public	2,581	1.1	3,592	1.7	156	0.1	6,329	2.9
Acres	Nonpublic	1,851	0.9	52	.. <sup>a</sup>	328	0.1	2,231	1.0
217,563	Total	4,432	2.0	3,644	1.7	484	0.2	8,560	3.9
50	Public	345	8.4	0	0.0	0	0.0	345	8.4
Acres	Nonpublic	87	2.1	0	0.0	0	0.0	87	2.1
4,081	Total	432	10.5	0	0.0	0	0.0	432	10.5
51	Public	326	4.2	0	0.0	31	0.4	357	4.6
Acres	Nonpublic	37	0.5	0	0.0	7	0.1	44	0.6
7,700	Total	363	4.7	0	0.0	38	0.5	401	5.2
52	Public	1,145	5.2	0	0.0	0	0.0	1,145	5.2
Acres	Nonpublic	422	1.9	0	0.0	13	.. <sup>a</sup>	435	1.9
22,213	Total	1,567	7.1	0	0.0	13	.. <sup>a</sup>	1,580	7.1
53	Public	46	0.2	86	0.4	7	.. <sup>a</sup>	139	0.6
Acres	Nonpublic	35	0.2	0	0.0	392	1.9	427	2.1
20,859	Total	81	0.4	86	0.4	399	1.9	566	2.7
54	Public	218	0.5	343	0.7	1	.. <sup>a</sup>	562	1.2
Acres	Nonpublic	358	0.7	180	0.4	118	0.3	656	1.4
46,164	Total	576	1.2	523	1.1	119	0.3	1,218	2.6
55	Public	898	1.2	6,362	8.3	0	0.0	7,260	9.5
Acres	Nonpublic	1,770	2.3	0	0.0	202	0.3	1,972	2.6
77,083	Total	2,668	3.5	6,362	8.3	202	0.3	9,232	12.1
Kenosha County	Public	2,978	1.7	6,791	3.8	39	.. <sup>a</sup>	9,808	5.5
Acres	Nonpublic	2,709	1.5	180	0.1	732	0.4	3,621	2.0
178,100	Total	5,687	3.2	6,971	3.9	771	0.4	13,429	7.5

Table 46 (continued)

Planning Analysis Area		General Use Outdoor Recreation Sites		Natural Areas		Other Recreation and Open Space Sites		Total Recreation and Open Space Sites	
		Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area	Acres	Percent of Planning Analysis Area
56	Public	135	0.2	613	0.9	15	.. <sup>a</sup>	763	1.1
Acres	Nonpublic	3,673	5.3	0	0.0	87	0.1	3,760	5.4
68,950	Total	3,808	5.5	613	0.9	102	0.1	4,523	6.5
57	Public	482	0.7	4,794	6.9	2	.. <sup>a</sup>	5,278	7.6
Acres	Nonpublic	849	1.2	0	0.0	11	.. <sup>a</sup>	860	1.2
69,122	Total	1,331	1.9	4,794	6.9	13	.. <sup>a</sup>	6,138	8.8
58	Public	75	0.1	99	0.2	22	.. <sup>a</sup>	196	3
Acres	Nonpublic	617	1.1	18	.. <sup>a</sup>	310	0.6	945	1.7
53,874	Total	692	1.2	117	0.2	332	0.6	1,141	2.0
59	Public	488	0.4	905	0.8	64	0.1	1,457	1.3
Acres	Nonpublic	2,965	2.6	0	0.0	172	0.1	3,137	2.7
113,587	Total	3,453	3.0	905	0.8	236	0.2	4,594	4.0
60	Public	201	0.3	764	1.2	23	.. <sup>a</sup>	988	1.5
Acres	Nonpublic	516	0.8	0	0.0	41	0.1	557	0.9
64,449	Total	717	1.1	764	1.2	64	0.1	1,545	2.4
Walworth County	Public	1,381	0.4	7,175	1.9	126	.. <sup>a</sup>	8,682	2.3
Acres	Nonpublic	8,620	2.3	18	.. <sup>a</sup>	621	0.2	9,259	2.5
369,982	Total	10,001	2.7	7,193	1.9	747	0.2	17,941	4.8

<sup>a</sup>Less than 0.05 percent.

Source: SEWRPC.

## SUMMARY

This chapter has presented data on existing outdoor recreation and open space lands in the Region. An inventory of such lands is necessary to assess the amount and spatial distribution of recreation and open space areas against present and probable future demands for outdoor recreation and the need for open space. The following inventory findings have particular significance for the regional park and open space planning program.

1. There were a total of 1,773 general use outdoor recreation sites covering over 49,000 acres in the Region in 1973. About 23,600 acres, 48 percent of this area, were publicly owned.

Approximately 11,400 acres, about half of the publicly owned acreage, were under county jurisdiction. Milwaukee County with almost 6,000 acres had the largest county-owned acreage of any county in the Region.

There were 138 large—greater than 100 acres—outdoor recreation sites which together totaled almost 31,800 acres, or about 65 percent of the total general use outdoor recreation site acreage within the Region in 1973. While small recreation sites—less than 25 acres—accounted for 81 percent of the total number of outdoor recreation sites, they accounted for only 16 percent of the total site acreage.

Of the 1,773 general use outdoor recreation sites, 218 sites totaling over 19,000 acres were classified as single use sites providing facilities primarily for a single recreational activity. Such sites include commercial campgrounds, nature study areas, golf courses, boat launches, organizational camps, and ski hills. There were 1,555 sites totaling 30,000 acres classified as multiuse sites providing facilities for a variety of recreational activities. Multiuse sites were further identified by the number and type of recreational facilities

provided. Ninety sites totaling over 14,000 acres, or about half of the multiuse outdoor recreation site acreage in the Region, provided a variety of extensively utilized recreation facilities reliant on natural resource amenities. The remainder of multiuse sites totaling about 16,000 acres provided a variety of intensively utilized recreation facilities which did not rely on natural resource amenities.

About 27,100 acres, or 55 percent of the 49,200 acres of existing general use outdoor recreation site acreage within the Region, were located within the primary environmental corridors of the Region in 1973. Over 12,000 acres, or over 51 percent of all publicly owned outdoor recreation site acreage, and about 14,900 acres, or over 58 percent of nonpublicly owned outdoor recreation site acreage, were located within the primary environmental corridors.

2. There were almost 49,300 acres of owned—publicly or privately owned—“natural” areas in the Region in 1973. The overwhelming proportion of these natural areas—99 percent or 48,900 acres—was in public ownership. Almost 37,700 acres, or about 77 percent of such lands, were owned by the State of Wisconsin, while about 8,900 acres, or 18 percent, were in county ownership. Owned “natural areas” consisted of wetlands, 15,800 acres; forests, 15,300 acres; scientific sites and nature areas, 8,700 acres; parkways, 6,900 acres; and other open lands, 2,600 acres. Over 35,600 acres of these natural areas were located within the primary environmental corridors, with the most significant proportion of this acreage represented by wetlands—13,000 acres, and forests—13,500 acres.
3. There were 166 special use recreation sites totaling over 4,900 acres in the Region in 1973, with 56 sites totaling 900 acres being in public ownership and 110 sites total 4,000 acres in nonpublic ownership. Twenty-eight sites totaling 1,400 acres were classified as special use spectator sites, while 138 sites totaling almost 3,600 acres were classified as special use participant sites. There were also 49 urban open space sites totaling 77 acres in the Region in 1973. Urban open space sites are usually developed for passive recreational pursuits such as rest and reflection and include small urban “green” areas and urban squares and plazas.
4. A total of 781 sites of historic significance were identified in the Region in 1973. Of this total, 235, or 30 percent, were cultural sites related to Indian or early European settlements; 84, or 11 percent, were natural features such as woodland or wetland areas which support plant and animal communities of scientific importance; and 462, or 59 percent, were historic structures such as homes, churches, inns, or schools. Of the 187 marked historical sites, over 70 sites, or 37 percent, were located in Milwaukee County.
5. In total there were over 103,000 acres of outdoor recreation and open space land in the Region in 1973, or approximately 58 acres per thousand residents. Over 73,000 acres, or 41 acres per thousand residents, were provided by the public sector; while almost 30,000 acres, or 17 acres per thousand residents, were provided through the nonpublic sector. Per capita provision of total recreation and open space land ranged from a high of 266 acres per thousand in Walworth County to a low of about 19 acres per thousand in Milwaukee County. The provision of general use outdoor recreation site acreage ranged from a high of 148 acres per thousand in Walworth County to a low of 10 acres per thousand in Milwaukee County, with Ozaukee County providing the most publicly owned site acreage—29 acres per thousand—and Milwaukee County providing the least publicly owned site acreage—8 acres per thousand. The provision of open space acreage—that is, “natural areas” designated for research, conservation, or recreational purposes—ranged from a high of 106 acres per thousand in Washington County to a low of 8 acres per thousand in Milwaukee County.
6. The 103,000 acres of outdoor recreation and open space represents about 6 percent of the total area of the Region. About 73,600 acres, or 4 percent of the total area of the Region, were in public ownership and 29,900 acres, or about 2 percent of the total area of the Region, were in nonpublic ownership. Total recreation and open space acreage as a percentage of total county area ranged from a high of about 12 percent in Milwaukee County to a low of about 4 percent in Ozaukee County. Milwaukee County with about 11 percent of the County area devoted to public recreation or open space use had, on average, relatively three times the amount of such lands as did the other six counties in the Region.

In summary, it can be stated that the Southeastern Wisconsin Region is well endowed with a variety of outdoor recreation and open space lands, that such lands are provided by the private as well as the public sector, and offer residents of the Region an opportunity to participate in a wide range of both active and passive recreational pursuits. The following conclusions concerning the quantity and spatial distribution of outdoor recreation and open space lands in the Region may be drawn from the inventory data presented herein:

- The various types of outdoor recreation and open space lands are not uniformly distributed throughout the Region. Many of the large recreation and open space sites which rely greatly on high value natural resource elements as a basis for their location are located in the outlying rural areas of the Region. Certain segments of the population—particularly the low income and elderly segments—who may not have access to automobile transportation and must, therefore,

rely on public transit facilities—may find it difficult or impossible to use the outdoor recreation and open space areas located beyond the transit service area.

- A significant proportion—over one-third—of the general use outdoor recreation sites is provided in the form of public or private school sites. Such sites, while generally small in area, provide valuable recreation facilities for intensive, active use. Such sites should, and may be expected to continue to, be provided in conjunction with new school construction. Conversely, the abandonment of existing schools and their associated recreational facilities for various social, demographic, or economic reasons may leave a void in needed recreational facilities especially if such a loss occurs in the densely populated central city areas of the Region.
- The private sector—quasi-public/organizational groups, commercial enterprises, and private interest groups—provides over 50 percent of the general use recreation site acreage within the Region. Changes in this role of the private sector, and the possible conversion of existing nonpublic outdoor

recreation sites to urban uses, would have important implications for the role of the public sector in providing for the future recreation demands and open space needs of the Region. Consequently, consideration should be given in the planning process to the means by which the public sector could be given first opportunity to acquire certain “critical” private outdoor recreation sites in the event that such sites were proposed to be converted to other urban uses.

- Significant disparities exist among the various planning analysis areas in the Region in the per capita provision of outdoor recreation and open space land as well as in the proportion of such lands relative to the total area of the planning analysis area. The real magnitude and significance of these disparities, however, can be determined only through the development and application of outdoor recreation and open space objectives and standards and the evaluation of the existing and probable future outdoor recreation demand and open space needs against such objectives and standards. It is only then that judgments can be made concerning the adequacy or deficiency of outdoor recreation and open space lands within given planning analysis areas.



## Chapter VI

### OUTDOOR RECREATION ACTIVITIES, FACILITIES, AND USE

#### INTRODUCTION

Recreation, as noted in previous chapters of this report, covers a broad spectrum of human activities ranging from rest and reflection to learning and teaching, from development of personal and social skills to meeting challenges and recovering from failures. It is fun and enjoyment and includes both mental and physical exercise, personal and interpersonal experience, and self-provided and socially observed entertainment. Recreation occupies a necessary and increasingly significant place in every person's life. An understanding of recreational activities—particularly as such activities are viewed within the context of this report, that is, as activities typically carried on outdoors—is essential to the development of a regional park and open space plan. A primary purpose of the regional park and open space planning program is the development of a workable plan to guide the acquisition and development of sites and facilities required to meet existing and probable future outdoor recreation and open space needs within the Southeastern Wisconsin Region. This requires an inventory of the nature of outdoor recreational activities, of the characteristics of participants in outdoor recreational activities, and of the use of recreational facilities as well as an inventory of the facilities themselves.

Accordingly, existing outdoor recreation activities, facilities, and use are examined in the chapter. The first section of this chapter briefly describes the types of surveys utilized and the procedures followed in the collection of outdoor recreation activity data. The second section discusses the nature of selected outdoor recreational activities, the characteristics of the users of outdoor recreational facilities, and the number and distribution as well as the degree of use of facilities provided for outdoor recreational activities.

#### OUTDOOR RECREATION SURVEYS

To provide reliable data for the formulation of a regional park and open space plan, a series of recreation surveys was conducted by the Commission. These surveys were designed to obtain information on the nature of outdoor recreational activities, the characteristics of the participants in such activities, and the degree of use of the facilities provided for outdoor recreation. Data collected from the surveys were an essential element in formulating recreation and open space development objectives and standards and in helping determine existing and potential outdoor recreation demands and open space needs within the Region.

To reflect the wide range of outdoor recreation activities carried on in the Region, five surveys were conducted for the regional park and open space planning program, including two user surveys related specifically to winter

outdoor recreation activity; two user surveys related specifically to summer outdoor recreation activity; and one survey of outdoor recreation site managers related to both summer and winter recreation activities. In addition, recreation data were collated from a public opinion survey conducted by the Commission in 1972 as part of its continuing land use-transportation planning effort.

#### Winter Outdoor Recreation Surveys

Winter outdoor recreation activity data were collected by means of: 1) either onsite personal interview or hand-out mail-back user survey conducted at selected outdoor recreation sites in the Region and 2) a mail-out mail-back survey of a sample of registered snowmobile owners in the Region. The onsite personal interview or hand-out mail-back survey of winter users was conducted in February 1974 at 26 general use outdoor recreation sites in the Region (see Map 35). Sites with a limited number of access points were surveyed utilizing the hand-out mail-back survey technique; staff members distributed almost 8,800 survey forms to participants as they entered or exited the recreation site and requested that they complete the survey form and return it by mail in the prestamped self-addressed envelope provided. Over 2,500 forms, or almost 30 percent of such forms, were completed and returned. Sites with numerous access points were surveyed by means of personal interviews of users on the site. Almost 400 interviews were completed at these sites. Utilizing both techniques, then, over 2,900 survey forms with winter user survey data were completed. The forms used for conducting onsite interviews and hand-out mail-back surveys on winter recreational activity are shown in Appendices E and F, respectively.

The mail-out mail-back survey of registered snowmobile owners in the Region was conducted in April 1974 and consisted of a random sample of over 5,700 of the 31,000 registered snowmobile owners in the Southeastern Wisconsin Region. The 2,000 survey forms which were completed and returned in prestamped self-addressed envelopes represented 6.5 percent of the total registered snowmobile owners in the Region and 35.2 percent of the forms distributed. The form utilized in the conduct of the snowmobile owner survey is shown in Appendix G.

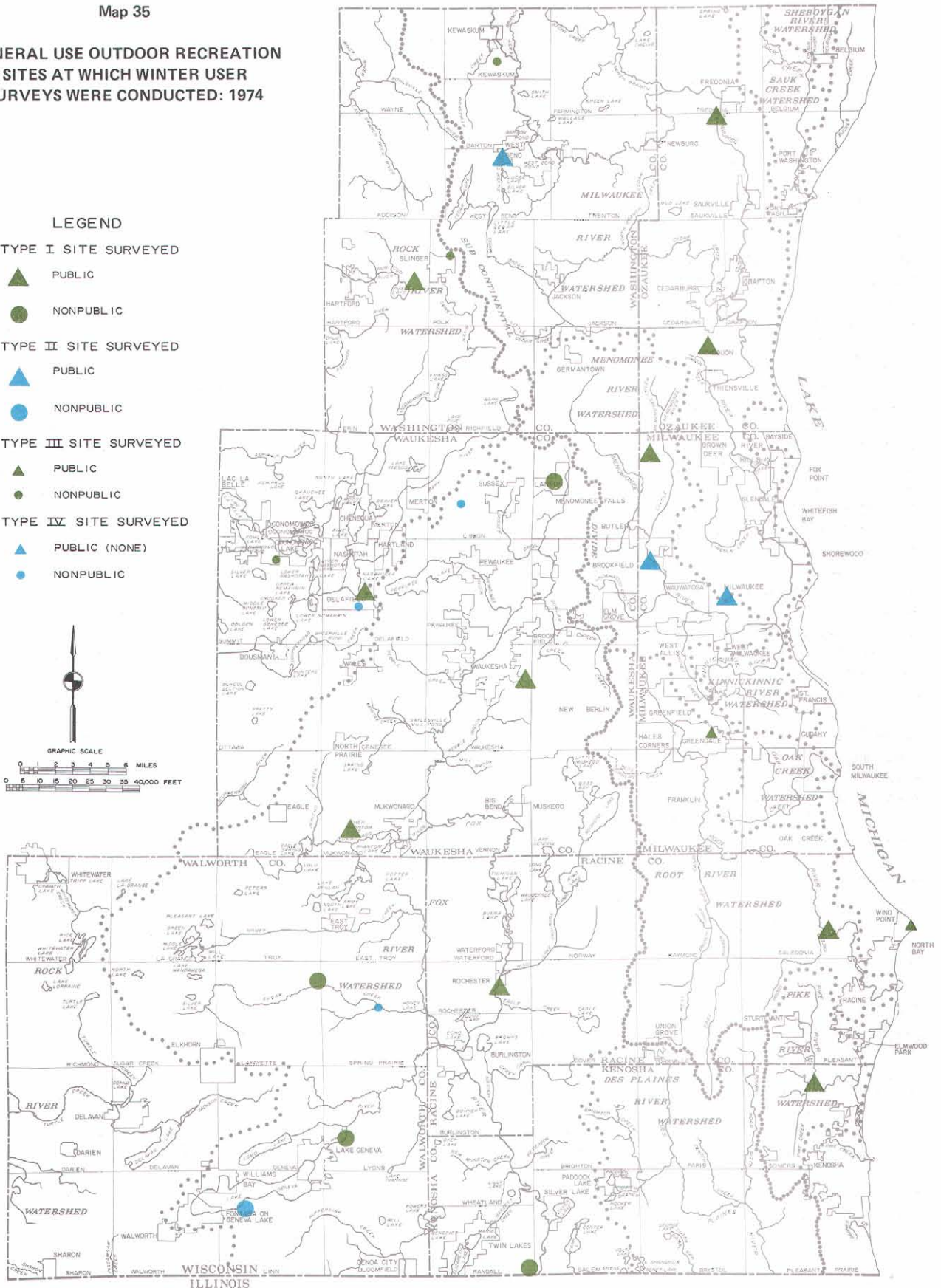
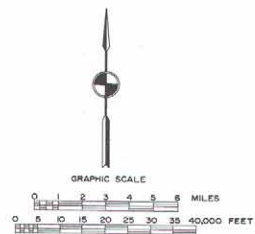
#### Summer Outdoor Recreation Surveys

Summer outdoor recreation activity data was collected by means of: 1) a personal interview survey conducted at selected general use outdoor recreation sites in the Region and 2) a mail-out mail-back survey of registered boat owners in the Region.

The personal interview survey of users was conducted during the months of June, July, and August 1974 at 187 general use outdoor recreation sites in the Region (see Map 36). A total of approximately 2,400 interviews

**GENERAL USE OUTDOOR RECREATION  
SITES AT WHICH WINTER USER  
SURVEYS WERE CONDUCTED: 1974**

- LEGEND**
- TYPE I SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC
- TYPE II SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC
- TYPE III SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC
- TYPE IV SITE SURVEYED**
- ▲ PUBLIC (NONE)
  - NONPUBLIC



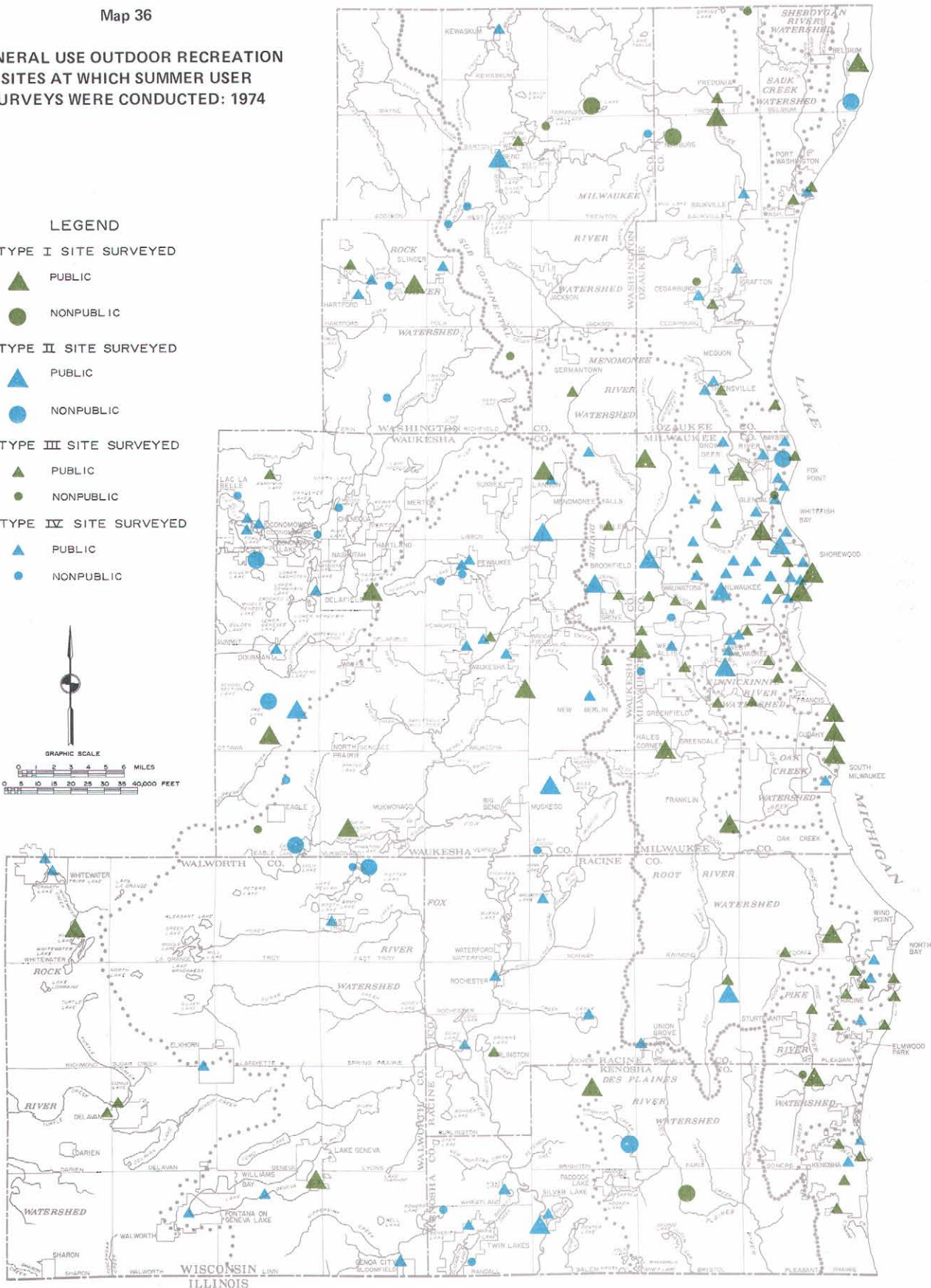
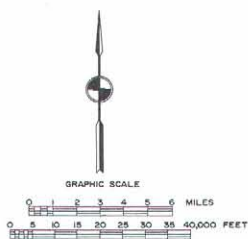
Winter outdoor recreation activity surveys were conducted at 26 publicly and privately owned general use outdoor recreation sites in the Region. Almost 400 personal interviews were conducted with visitors to the recreation sites. In addition, over 2,500 hand out-mail back survey forms were completed by visitors to the recreation sites. Survey data from the personal interview and mail back survey forms provided detailed information on the nature of winter outdoor recreation activities as well as the characteristics of participants in such activities. Surveyed sites included 14 Type I sites, four Type II sites, six Type III sites, and two Type IV sites.

Source: SEWRPC.

Map 36

**GENERAL USE OUTDOOR RECREATION  
SITES AT WHICH SUMMER USER  
SURVEYS WERE CONDUCTED: 1974**

- LEGEND**
- TYPE I SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC
- TYPE II SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC
- TYPE III SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC
- TYPE IV SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC



Summer outdoor recreation activity surveys were conducted at 187 publicly and privately owned outdoor recreation sites in the Region. Over 2,400 personal interviews were completed with visitors to the recreation sites and provided detailed information on the nature of summer outdoor recreation activities as well as the characteristics of participants in such activities. Surveyed sites included 27 Type I sites; 18 Type II sites; 54 Type III sites; and 88 Type IV sites.

Source: SEWRPC.



were completed. The form used to conduct the survey of summer recreational activity is shown in Appendix H.

The mail-out mail-back survey of registered boat owners in the Region was conducted in December 1974 and consisted of a random sample of over 9,700 of the 76,600 registered boat owners in the Southeastern Wisconsin Region. The 3,158 survey forms which were completed and returned in the prestamped self-addressed envelopes represented 4.1 percent of the total registered boat owners in the Region and 32.5 percent of the forms distributed. The form utilized in the conduct of the boat owner survey is shown in Appendix I.

#### Other Surveys

Other recreation surveys consisted of an outdoor recreation site manager survey conducted at selected sites in the Region and a public opinion survey of the general population of southeastern Wisconsin. The outdoor recreation site manager interview survey was conducted during the months of July, August, September, and October 1974. A total of 244 personal interviews were conducted at general use sites, the locations of which are shown in Map 37. Site managers, supervisors, or owners were interviewed by Commission staff concerning the use of these 244 general use outdoor recreation sites. The form utilized to conduct the survey of recreation site managers is shown in Appendix J.

A hand-out mail-back survey of the general population in the Region was conducted by the Commission in 1972 as part of its continuing land use and transportation planning effort. A sample of over 17,000 households was selected from the estimated 557,223 occupied housing units in the Southeastern Wisconsin Region. Almost 5,000 households, or about 32 percent, returned completed questionnaires. To broaden the coverage of response throughout the Region and increase the degree of representativeness of the survey, a subsample of one household in four was subsequently made of the approximately 12,000 households not previously returning usable questionnaires. The subsample resulted in a selection of 3,038 sample households of which 1,829 households, or about 60 percent, returned completed questionnaires. Thus, over 6,800 questionnaires were completed in the survey. It should be noted that only the data related to the recreation portion of the public opinion survey was collated for use in the regional park and open space study. A more detailed analysis of the findings of the entire public opinion survey are presented in SEWRPC Technical Report No. 13, A Survey of Public Opinion in Southeastern Wisconsin—1972.

#### **OUTDOOR RECREATION ACTIVITIES, FACILITIES, AND USE**

To facilitate the orderly presentation of data in this chapter and provide a common basis of understanding of recreation terms used to describe various recreation activities, outdoor recreation activities were classified as 1) Intensive Activities or Extensive Activities; 2) Resource Oriented Activities or Nonresource Oriented Activities;

and 3) Land Based Activities or Water Based Activities (see Table 47).

Identification of outdoor recreation activities as intensive or extensive provides an indication of the relative degree or intensity of use of the appropriate site area. Intensive recreational activities are defined as those activities which occur on areas of land or water designated solely for the given activity, with the total space of the designated area completely utilized for the recreational activity. In addition, the provision of facilities for intensive activities usually requires some alteration of the natural setting, such as grading, paving, artificial drainage, and landscaping; the construction of support facilities, such as clubhouses, rest room facilities, bleachers or bath houses; and regular maintenance of the designated facilities or activity area. Examples of intensive outdoor recreation activities are baseball, tennis, golf, and swimming. Extensive recreational activities are defined as those activities not restricted to specifically designated areas of land or water and where only a small portion of the total land or water area available for the extensive activity is utilized for the activity. The area provided for an extensive activity is usually left in a natural state with only minimal support facilities in the form of trails or access points required to make the natural resource amenities available to the participant in the extensive activity. Examples of extensive outdoor recreation activity are fishing, hiking, nature study, and ski touring.

Classification of outdoor recreation activities as resource oriented or nonresource oriented indicates the degree to which either natural resource or man-made amenities are required to provide the proper setting for those activities. Resource oriented activities occur on relatively large areas of land or water and include both those activities which depend upon natural resource amenities for the existence of the activity, such as fishing and nature study, and those activities in which the quality of the recreational experience is significantly enhanced by the presence of natural resource amenities, such as camping and picnicking. Nonresource oriented outdoor recreation activities occur on relatively small areas of land or water and, as the name implies, are not reliant on natural resource amenities nor is the quality of the recreational experience significantly enhanced by the presence of natural resource amenities. Nonresource oriented activities simply require the provision of a facility, usually man-made—as, for example, a baseball diamond or ice skating rink—to enable participation in the activity. Classification of outdoor recreation activities as land based or water based simply indicates whether the activity takes place primarily on land or water.

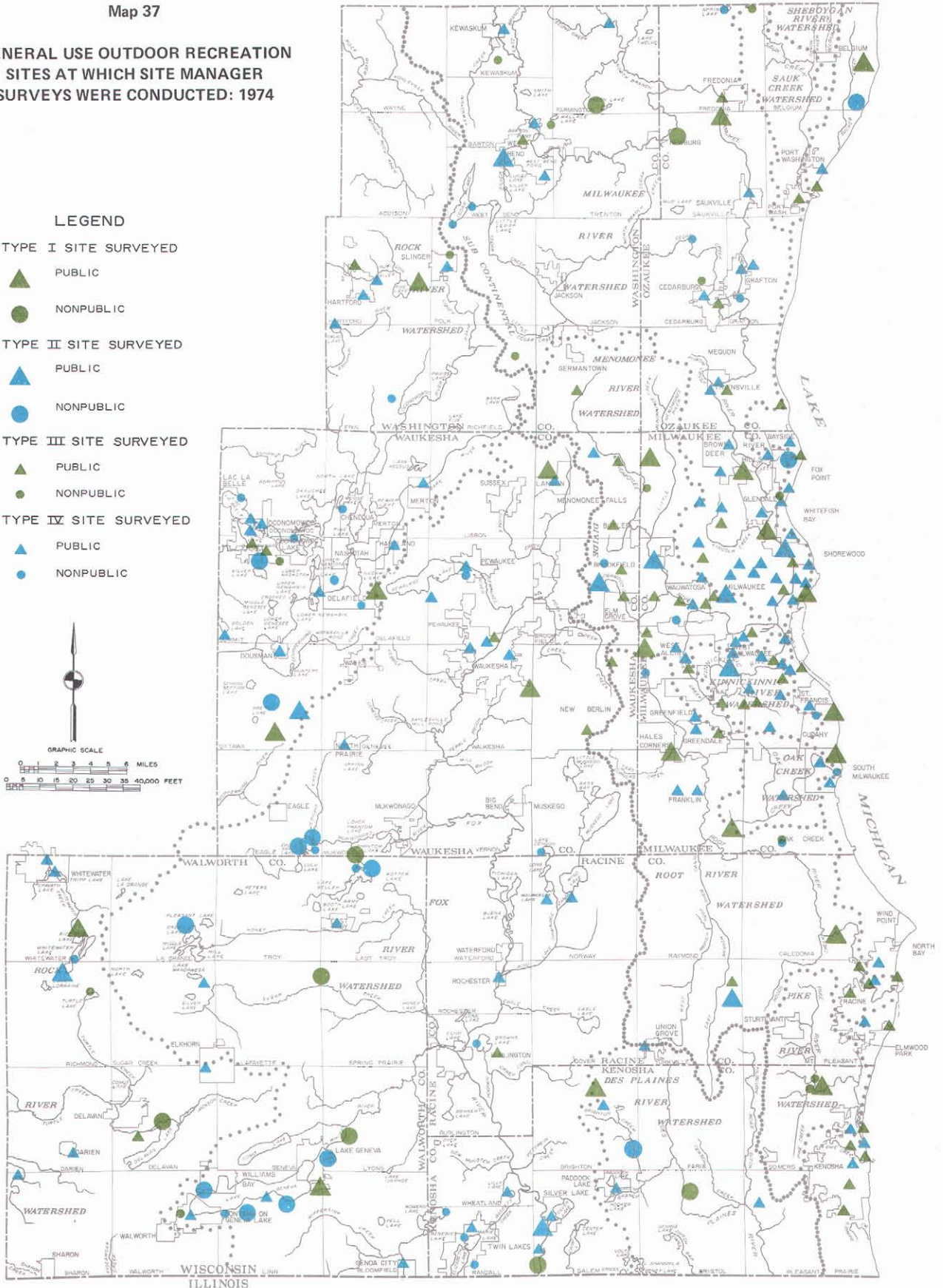
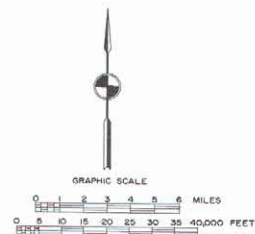
Utilizing the classification of recreational activities according to intensity of use, natural resources required, and land or water based, the 26 recreational activities presented in Figure 1 have been grouped into four general categories: intensive resource oriented activities, intensive nonresource oriented activities, extensive land based activities, and extensive water based activities. The remainder of this section presents data on the nature of



Map 37

**GENERAL USE OUTDOOR RECREATION  
SITES AT WHICH SITE MANAGER  
SURVEYS WERE CONDUCTED: 1974**

- LEGEND**
- TYPE I SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC
- TYPE II SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC
- TYPE III SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC
- TYPE IV SITE SURVEYED**
- ▲ PUBLIC
  - NONPUBLIC



Personal interviews were conducted with the managers of 244 publicly and privately general use owned outdoor recreation sites in the Region to obtain detailed information on the type of outdoor recreation facilities provided at the sites and on the use of those facilities. Surveyed sites included 29 Type I sites; 23 Type II sites; 64 Type III sites; and 128 Type IV sites. The surveyed sites represented almost 14 percent of the 1,773 general use publicly and privately owned recreation sites in the Region.

Source: SEWRPC.

Table 47

## CLASSIFICATION OF OUTDOOR RECREATION ACTIVITIES

Activity	Intensive	Extensive	Resource Oriented	Nonresource Oriented	Land Based	Water Based
Baseball . . . . .	X			X	X	
Basketball . . . . .	X			X	X	
Bicycling . . . . .		X	X		X	
Camping . . . . .	X		X		X	
Canoeing . . . . .		X	X			X
Fishing . . . . .		X	X			X
Golf . . . . .	X		X		X	
Hiking . . . . .		X	X		X	
Horseback Riding . . . . .		X	X		X	
Ice Fishing . . . . .		X	X			X
Ice Skating . . . . .	X			X	X	
Motor Boating . . . . .		X	X			X
Nature Study . . . . .		X	X		X	
Picnicking . . . . .	X		X		X	
Playfield Activities . . . . .	X			X	X	
Playground Activities . . . . .	X			X	X	
Pleasure Driving . . . . .		X	X		X	
Sailing . . . . .		X	X			X
Ski Touring . . . . .		X	X		X	
Skiing (Downhill) . . . . .	X		X		X	
Snowmobiling . . . . .		X	X		X	
Softball . . . . .	X			X	X	
Swimming (Beach) . . . . .	X		X			X
Swimming (Pool) . . . . .	X			X		X
Tennis . . . . .	X			X	X	
Water Skiing . . . . .		X	X			X

Source: SEWRPC.

each activity, the characteristics of participants in such activities and the number and spatial distribution as well as use of the facilities provided for activities within each of those four categories. Information on intensive, resource and nonresource oriented outdoor recreation activities is presented first, followed by the analysis of extensive land and water based outdoor activities.

It should be noted that the basic purpose of this report is to provide recommendations to the public sector concerning the acquisition of needed park and open space lands and the provision of needed recreation facilities. Data presented in this chapter as well as in Chapter XI, "Outdoor Recreation and Open Space Objectives, Principles, and Standards," and Chapter XII, "Outdoor Recreation Site and Facility Needs," therefore deal explicitly with those recreation activities which are both typically provided for in public parks and which require significant expenditures for acquisition of lands and construction of facilities. Special or unique recreational activities like go carting, hang kite flying, and trap shooting, which are not typically provided for in public parks, are considered only implicitly in this report insofar as it is assumed that the majority of

facilities for such activities—currently being provided by the private sector—would continue to be provided by the private sector in the future. Also implicitly considered are such activities as jogging, archery, sledding, and horse shoe pitching. Such activities, while typically provided for in public parks, require minimal expenditure for additional site acreage or facility development. The acreage requirements and costs associated with the provision of facilities for such activities are thus implicitly included in the overall park acreage needs and park acquisition and development costs.

It should also be noted that certain new and emerging outdoor recreation activities like minibike driving could not be explicitly included in this report due to the lack of information concerning both the location of sites where such activities take place and the characteristics of participants in the activity. Consideration of new and emerging outdoor recreation activities should be the concern of a continuing regional park and open space planning program which can be responsive to the changing recreational needs and desires of the regional population. A continuing regional park and open space planning program can properly evaluate new recreational

activities and, over a period of time, determine the public sector's role, if any, in the provision of facilities for that recreational activity. If it is determined that a given activity be included in the regional recreational planning program, site and facility standards can be developed, existing and future demands determined, alternative strategies designed to meet such demands, and a final strategy formulated and ultimately incorporated into the adopted regional park and open space plan.

#### Intensive Resource Oriented Outdoor Recreation Activities

Intensive, resource oriented outdoor recreation activities, as indicated in Table 47, include camping, golf, picnicking, swimming (beach), and skiing (downhill). Facilities and activity areas provided for such activities are found primarily in general use outdoor recreation sites. The discussion of each activity considered in this section consists of a definition of the activity and a description of the characteristics of the participants in the activity including the approximate distance individuals traveled to participate in the given activity, the approximate ratio of instate to out-of-state participants, and the average time spent participating in the activity. Also included is a description of the related facilities provided, including a description of the types of facilities and areas on which the activity takes place, an identification of the quantity of facilities provided, and an analysis of the per capita provision of facilities in the Region in 1973. Finally, the discussion of each activity describes the degree of use, including an identification of peak times of participation, including the peak month(s) of the year, peak days of the week during the peak month(s); and the peak times of day during the peak month(s), along with a measure of the degree of use of facilities during the peak month(s).

Camping: Camping, for purposes of this report, is defined as all activities which take place in campgrounds on sites developed for the purposes of accommodating recreational camping vehicles, trailers, or tents for overnight outings. All age groups of both sexes participate in this activity, with the average length of stay at camping areas in the Region being about three days. Participants will travel relatively long distances from their home—25 miles or more—to camp. Indeed, a significant portion of the participants in camping in the Region reside outside of the State of Wisconsin. Approximately four out of every 10 campers in the Region are from out of State. Moreover, the ratio of out-of-State campers increases in the southern portions of the Region, particularly in Walworth and Kenosha Counties where approximately 63 percent of the campers are non-Wisconsin residents.

Camping activity is enhanced by the presence of high quality natural resource amenities and, thus, campgrounds are generally located in attractive natural settings, often in wooded areas and near bodies of water or areas which support wildlife. In addition, opportunities to participate in other resource oriented activities, such as fishing, nature study and swimming, are often provided near a campground. Campground support facilities include rest room facilities and may include showers and utility hook-ups.

As indicated in Table 48, there was a total of 3,176 camp sites located within 47 developed camping areas in general use outdoor recreation sites in the Region in 1973. On a county basis, Walworth County with 1,073 camp sites and Washington County with 935 camp sites together accounted for almost two-thirds of the total number of camp sites provided in the Region in 1973. It is important to note that 2,624, or over 80 percent of the 3,176 camp sites in the Region, were in nonpublic ownership. As further indicated in Table 48, there was a total of 1.78 camp sites provided per thousand residents, or approximately one camp site per 560 residents, in the Region in 1973. About 0.31 camp sites per thousand residents, or approximately one camp site per 3,200 residents, was provided by the public sector. On a county basis, Walworth County provided almost 16 camp sites per thousand residents, or approximately one camp site per 63 residents. There were no developed camping areas or camp sites in Milwaukee County. Map 38 shows the spatial distribution of general use outdoor recreation sites that provided developed camping areas within each planning analysis area in the Region. As indicated, most sites were located in the outlying rural areas of the Region. Six sites with developed camping areas were located in planning analysis area 57 in Walworth County while planning analysis area 7 in Washington County, area 41 in Waukesha County, area 55 in Kenosha County, and area 56 in Walworth County each contained at least three sites with developed camping areas. Of the 26 recreation activities considered in this chapter, camping ranked seventh in relative popularity, with about 16 percent of the households in the Region participating in the activity. Peak use of camping areas in the Region occurred during the summer. As indicated in Figure 20, about half of the total participation in camping occurred during the months of July and August. In addition, over 20 percent of the total participation occurred in June, though participation in camping activity did occur throughout the entire calendar year. As further indicated in Figure 20—for all of the camping areas in the Region—the peak days of the week were either Saturdays or Sundays. Finally, as indicated in Figure 20, over 60 percent of the camping areas in the Region rated the use of camping facilities as heavy on Saturdays and Sundays and as slight on weekdays during the peak months.

Golf: Golfing is an activity which typically takes place on 9 or 18 hole golf courses. Participation in this activity ranges from playing on a par 3 "pitch and putt" course to participation as a member of a country club or organized league play at regulation 18 hole courses. Most age groups of both sexes participate in golfing, and the average length of time required to complete play at a regulation 18 hole course is between four and five hours. Participants will travel 10 miles or more to play an attractive, properly maintained golf course. Approximately one out of every 10 golfers in the Region is from out of state; moreover, the ratio of out-of-state to instate golfers increases in the southern portions of the Region, particularly at regulation courses in Walworth and Kenosha Counties where approximately 33 percent of the golfers are non-Wisconsin residents.



Table 48

**DISTRIBUTION OF CAMPING AREAS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973**

County (Population) <sup>a</sup>	Ownership	Sites		Facilities		Number of Camp Sites Per 1,000 Population
		Number of Sites with Developed Camping Areas	Percent of Sites	Number of Camp Sites	Percent of Camp Sites	
Kenosha ( 126,651)	Public . . . .	0	0.0	0	0.0	0.00
	Nonpublic . .	7	14.9	298	9.4	2.35
	Total . . . .	7	14.9	298	9.4	2.35
Milwaukee (1,012,536)	Public . . . .	0	0.0	0	0.0	0.00
	Nonpublic . .	0	0.0	0	0.0	0.00
	Total . . . .	0	0.0	0	0.0	0.00
Ozaukee ( 64,932)	Public . . . .	1	2.1	10	0.3	0.15
	Nonpublic . .	1	2.2	50	1.6	0.77
	Total . . . .	2	4.3	60	1.9	0.92
Racine ( 178,916)	Public . . . .	1	2.1	27	0.9	0.15
	Nonpublic . .	4	8.5	395	12.4	2.21
	Total . . . .	5	10.6	422	13.3	2.36
Walworth ( 67,511)	Public . . . .	2	4.3	183	5.8	2.71
	Nonpublic . .	12	25.5	890	28.0	13.19
	Total . . . .	14	29.8	1,073	33.8	15.90
Washington ( 76,579)	Public . . . .	1	2.1	32	1.0	0.42
	Nonpublic . .	7	14.9	903	28.4	11.79
	Total . . . .	8	17.0	935	29.4	12.21
Waukesha ( 262,746)	Public . . . .	6	12.8	300	9.4	1.14
	Nonpublic . .	5	10.6	88	2.8	0.33
	Total . . . .	11	23.4	388	12.2	1.47
Region (1,789,871)	Public . . . .	11	23.4	552	17.4	0.31
	Nonpublic . .	36	76.6	2,624	82.6	1.47
	Total . . . .	47	100.0	3,176	100.0	1.78

<sup>a</sup> Estimated 1975 population.

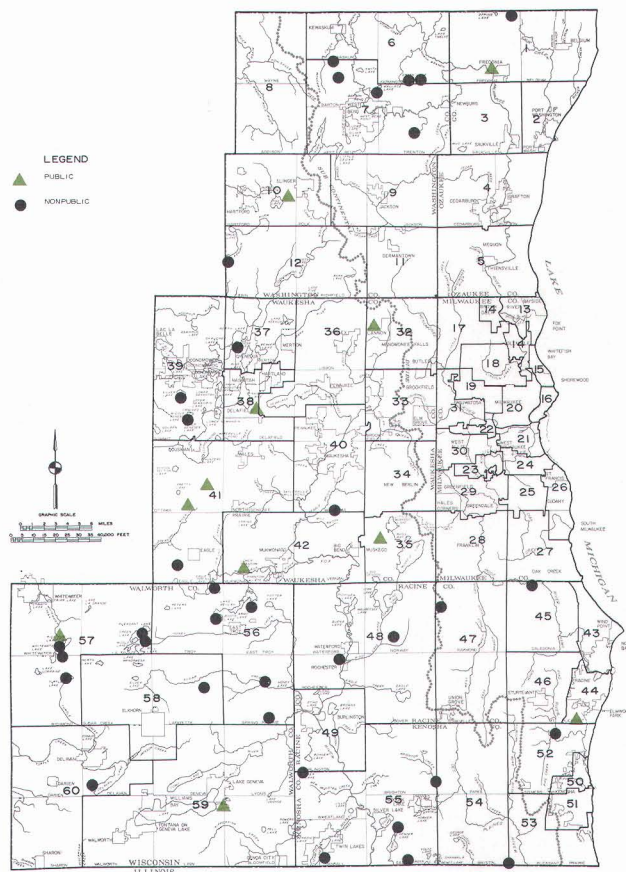
Source: SEWRPC.

Golf courses are enhanced by the presence of natural resource amenities and are generally considered desirable if they include uneven but not rugged topography, some woodland areas, good drainage, and a water course or body of water to challenge the golfers' skills. Regulation 18 hole courses range in size from about 140 acres to a maximum of approximately 200 acres to par 3 courses which generally have shorter fareways and smaller greens and are less than half the size of regulation courses. Par 3 courses are intended to help meet golfing demand in areas where sufficient land and resources for regulation courses are not available.<sup>1</sup> In addition to the actual golf course fareways and greens, support facilities such as a clubhouse, automobile parking areas, practice greens,

<sup>1</sup> There were 16 par 3 golf courses in the Region in 1973, six of which were in public ownership and ten in non-public ownership. All six publicly owned sites and three nonpublicly owned sites were located in Milwaukee County.

Map 38

**GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH DEVELOPED CAMPING  
AREAS BY PLANNING ANALYSIS AREA: 1973**



A total of 47 general use publicly and privately owned outdoor recreation sites with developed camping areas containing almost 3,200 campsites existed within the Region in 1973. Over 2,600, or more than 80 percent of the 3,200 campsites, were in nonpublic ownership. More than 2,000 campsites, or almost two-thirds of the total campsites provided in the Region, were located in Walworth and Washington Counties.

Source: SEWRPC.

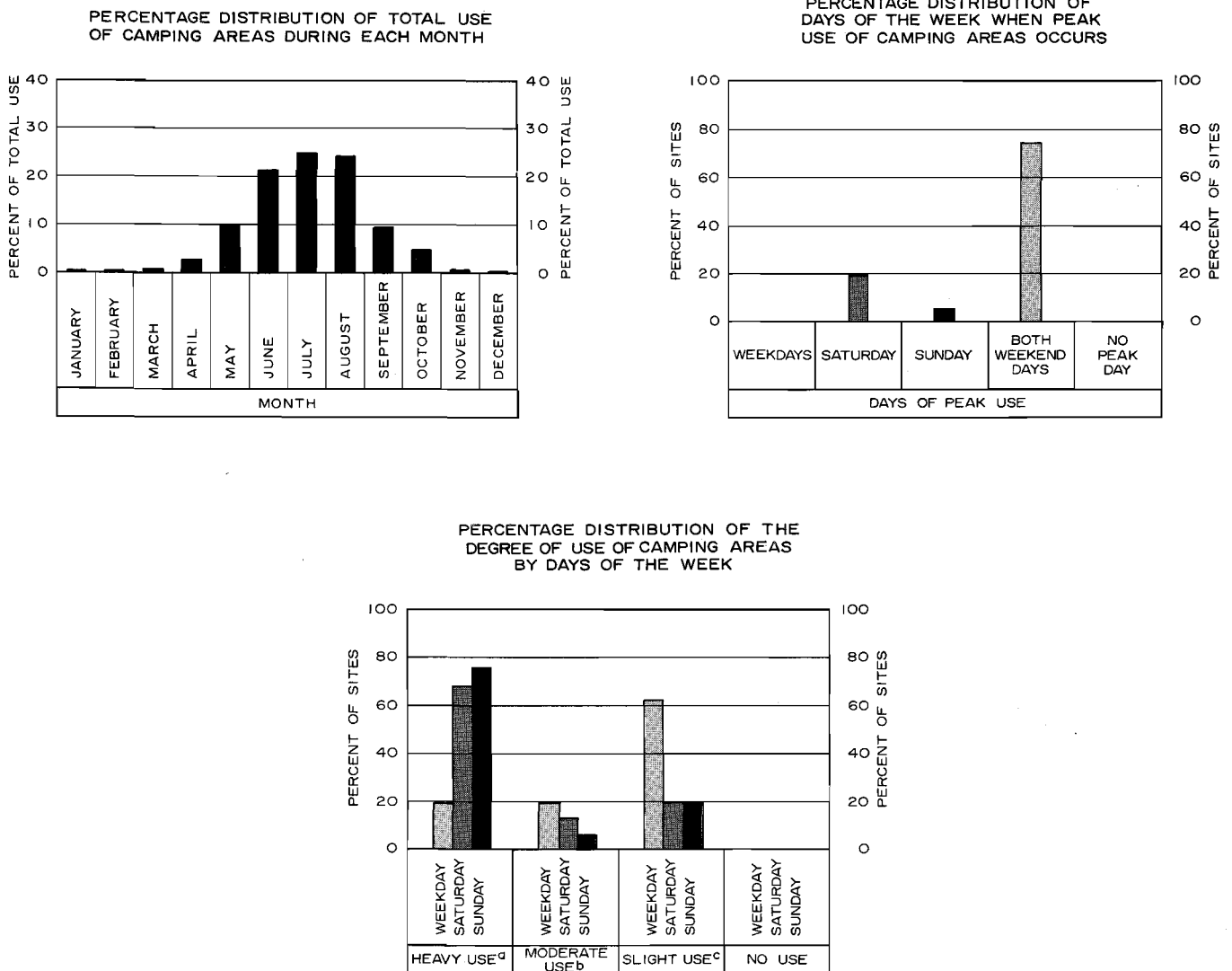
and driving ranges are often provided. For purposes of this report, only regulation golf courses have been included in the inventory.

As indicated in Table 49, there was a total of 80 general use outdoor recreation sites in the Region in 1973 each having from nine to 36 regulation golf holes or a total of 1,350 regulation golf holes. On a county basis, Waukesha County, with 20 sites providing 324 golf holes, accounted for 25 percent of the golfing facilities provided in the Region; while Washington County, with six courses providing 99 golf holes, accounted for approximately 7 percent of the golf facilities in the Region. It is interesting to note that 1,026 golf holes, or 76 percent of the



Figure 20

CHARACTERISTICS OF THE USE OF CAMPING AREAS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

Source: SEWRPC.

total of 1,350 golf holes in the Region, were provided by the nonpublic sector; and there were no public courses located in Walworth and Washington Counties. As further indicated in Table 49, there were 0.045 equivalent regulation 18 hole golf courses per thousand residents, or approximately one regulation 18 hole course per 22,200 residents in the Region in 1973, with 0.034 equivalent regulation courses per thousand residents, or approxi-

mately one regulation course per 29,400 residents being provided by the nonpublic sector. On a county basis, Washington and Waukesha Counties each provided approximately 0.077 equivalent regulation 18 hole courses per thousand residents, or approximately one regulation course per 13,000 residents. Milwaukee County provided approximately 0.015 equivalent regulation courses per thousand residents, or approximately one regulation

Table 49

**DISTRIBUTION OF GOLF COURSES AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973**

County (Population) <sup>a</sup>	Ownership	Sites		Facilities		Number of Regulation 18 Hole Golf Courses Per 1,000 Population
		Number of Sites with Golf Courses	Percent of Sites	Number of Golf Holes	Percent of Facilities	
Kenosha ( 126,651)	Public . . . .	3	3.7	54	4.0	0.0237
	Nonpublic . .	6	7.5	108	8.0	0.0474
	Total . . . .	9	11.2	162	12.0	0.0711
Milwaukee (1,012,536)	Public . . . .	8	10.0	135	10.0	0.0074
	Nonpublic . .	7	8.8	108	8.0	0.0059
	Total . . . .	15	18.8	243	18.0	0.0133
Ozaukee ( 64,932)	Public . . . .	2	2.5	36	2.7	0.0308
	Nonpublic . .	5	6.3	99	7.3	0.0847
	Total . . . .	7	8.8	135	10.0	0.1155
Racine ( 178,916)	Public . . . .	4	5.0	54	4.0	0.0168
	Nonpublic . .	5	6.2	90	6.7	0.0279
	Total . . . .	9	11.2	144	10.7	0.0447
Walworth ( 67,511)	Public . . . .	0	0.0	0	0.0	0.0000
	Nonpublic . .	14	17.5	243	18.0	0.2000
	Total . . . .	14	17.5	243	18.0	0.2000
Washington ( 76,579)	Public . . . .	0	0.0	0	0.0	0.0000
	Nonpublic . .	6	7.5	99	7.3	0.0718
	Total . . . .	6	7.5	99	7.3	0.0718
Waukesha ( 262,746)	Public . . . .	3	3.8	45	3.3	0.0095
	Nonpublic . .	17	21.2	279	20.7	0.0590
	Total . . . .	20	25.0	324	24.0	0.0685
Region (1,789,871)	Public . . . .	20	25.0	324	24.0	0.0101
	Nonpublic . .	60	75.0	1,026	76.0	0.0318
	Total . . . .	80	100.0	1,350	100.0	0.0419

<sup>a</sup>Estimated 1975 population.

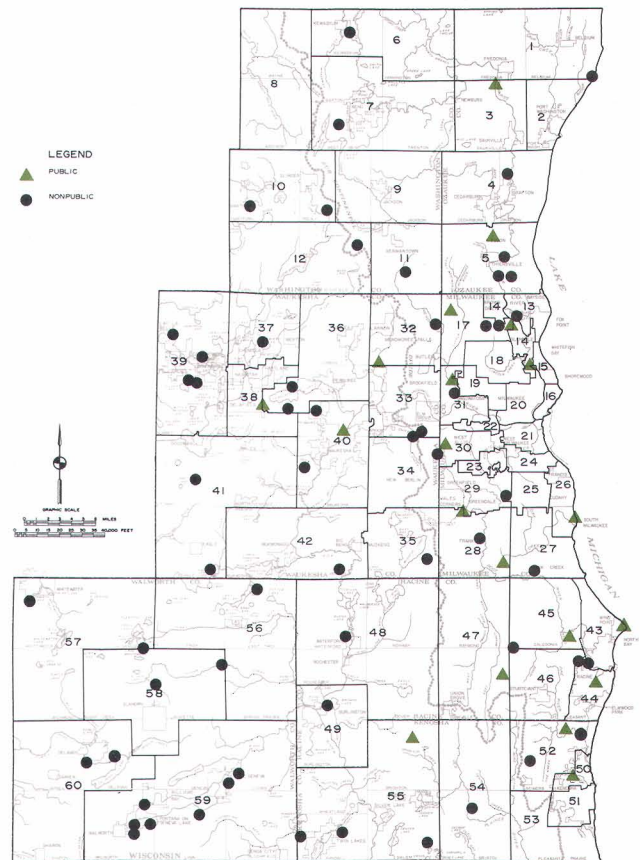
Source: SEWRPC.

course per 66,700 residents. Map 39 shows the spatial distribution of general use outdoor recreation sites providing golf courses within each planning analysis area in the Region. As indicated, most regulation courses were located in the outlying rural areas of the Region. Seven regulation golf courses were located in planning analysis area 59 in Walworth County while planning analysis area 5 in Ozaukee County, areas 17 and 28 in Milwaukee County, areas 39 and 40 in Waukesha County, and areas 52 and 55 in Kenosha County each contained at least three regulation golf courses.

Of the 26 recreation activities considered in this chapter, golfing ranked tenth in relative popularity, with about 13 percent of the households in the Region participating in the activity. Peak use of golf courses in the Region occurred during late spring, summer, and early fall. As indicated in Figure 21, about 55 percent of the total participation in golf occurred during the months of June, July, and August. However, the use of golf courses also included the months of April, May, September, and October. As further indicated in Figure 21, for over 80 percent of the golf courses in the Region, the peak

Map 39

**GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH REGULATION GOLF COURSES  
BY PLANNING ANALYSIS AREA: 1973**



A total of 80 general use publicly and privately owned outdoor recreation sites with regulation—9 to 36 hole—golf courses existed in the Region in 1973. Three-fourths, or 60 of the 80 golf courses in the Region, were in nonpublic ownership. Milwaukee, Walworth, and Waukesha Counties with 49 public and privately owned regulation golf courses together provided over 60 percent of the golf courses in the Region.

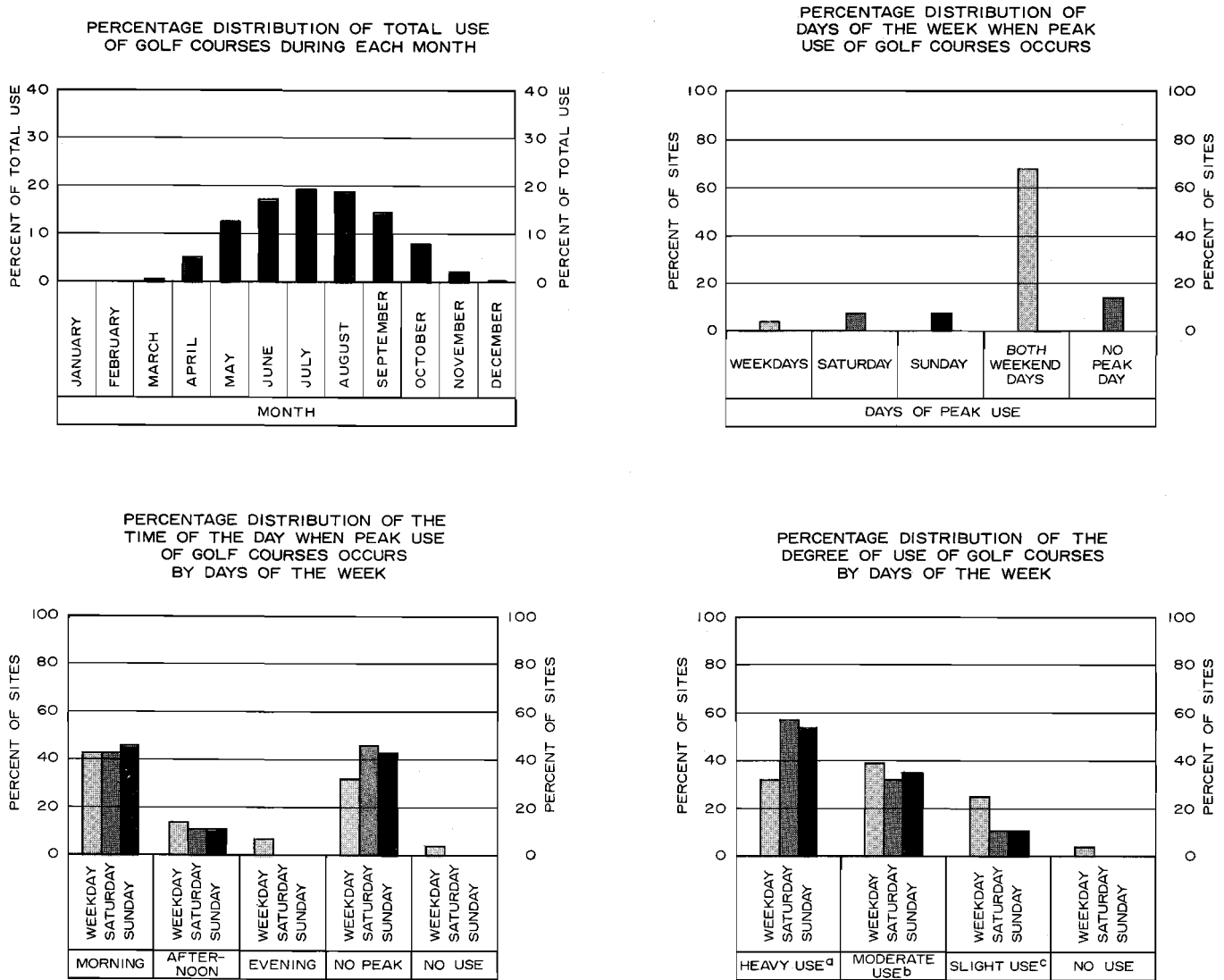
Source: SEWRPC.

time of the week for golfing was on weekends. As further indicated in Figure 21, for about 45 percent of the courses in the Region, morning was the time of day when the peak use occurred. Finally, as indicated in Figure 21, the use of the facility during peak months was rated as heavy on Saturdays and Sundays for about 55 percent of the sites and heavy on weekdays for about 32 percent of the sites.

**Picnicking:** Participation in picnicking ranges from outdoor backyard barbecues and family picnics in a local park to large group or organizational picnics in large picnic areas provided with grills and picnic shelters. The primary purpose of picnicking is the preparation and/or

Figure 21

CHARACTERISTICS OF THE USE OF GOLF COURSES AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

Source: SEWRPC.

eating of a meal out of doors. Picnic outings, however, often include other resource oriented activities such as boating, swimming, or hiking, as well as the picnic activity itself. All age groups of both sexes participate in this activity, and the average length of stay ranges from about two hours on weekdays to four or more hours on weekends. Participants in picnicking often travel 25 miles or more from their home to picnic areas, particularly

on the weekends, and a significant portion of the participants picnicking in the Region reside outside of the State of Wisconsin. Approximately one out of every 10 picnickers in the Region is from out of state. The ratio of out-of-state to instate picnickers increases in the southern portions of the Region, particularly at picnic areas in Walworth and Kenosha Counties where approximately 43 percent of the picnickers are non-Wisconsin



residents. For purposes of this report, any area of land located within general use outdoor recreation sites designated for picnicking and having picnic tables on the site was included in the inventory of picnic areas.

As indicated in Table 50, there were 429 general use outdoor recreation sites having a total of 15,590 picnic tables in the Region in 1973. Of this total, 11,344 picnic tables, or approximately 73 percent of the total 15,590 tables, were provided by the public sector. On a county basis, Milwaukee County with 5,992 picnic tables accounted for almost 40 percent of the tables provided in the Region in 1973. As further indicated in Table 50, there were almost nine picnic tables per thousand residents, or approximately one table per 115 residents in the Region in 1973, with over 6.33 tables per thousand residents, or approximately one table per 160 residents, being provided by the public sector. On a county basis, Washington County provided over 21 picnic tables per thousand residents, or approximately one table per 47 residents, while Milwaukee County provided less than six tables per thousand residents, or approximately one table per 170 residents. Map 40 shows the spatial distribution of general use outdoor recreation sites providing picnic areas within each planning analysis area in the Region in 1973. While sites with picnic facilities

are distributed throughout the entire Region, it is interesting to note that picnic facilities in urban areas are generally provided by the public sector while picnic facilities in rural areas are generally provided by the nonpublic sector. Thirty-four sites with developed picnic areas were located in planning analysis area 55 in Kenosha County while planning analysis area 39 in Waukesha County, area 48 in Racine County, and areas 57 and 59 in Walworth County each contained at least 15 sites with developed picnic areas. Almost all of the picnic areas are provided by the public sector in planning analysis areas 2 and 5 in Ozaukee County; areas 13, 15, 16, 18, 19, 20, 21, 23, 24, 25, 30, and 31 in Milwaukee County; areas 32, 34, and 40 in Waukesha County; area 44 in Racine County; and areas 50 and 51 in Kenosha County; while virtually all of the picnic areas are provided by the nonpublic sector in planning analysis area 12 in Washington County; area 55 in Kenosha County; and area 56 in Walworth County.

Map 40

**GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH PICNIC AREAS BY  
PLANNING ANALYSIS AREA: 1973**

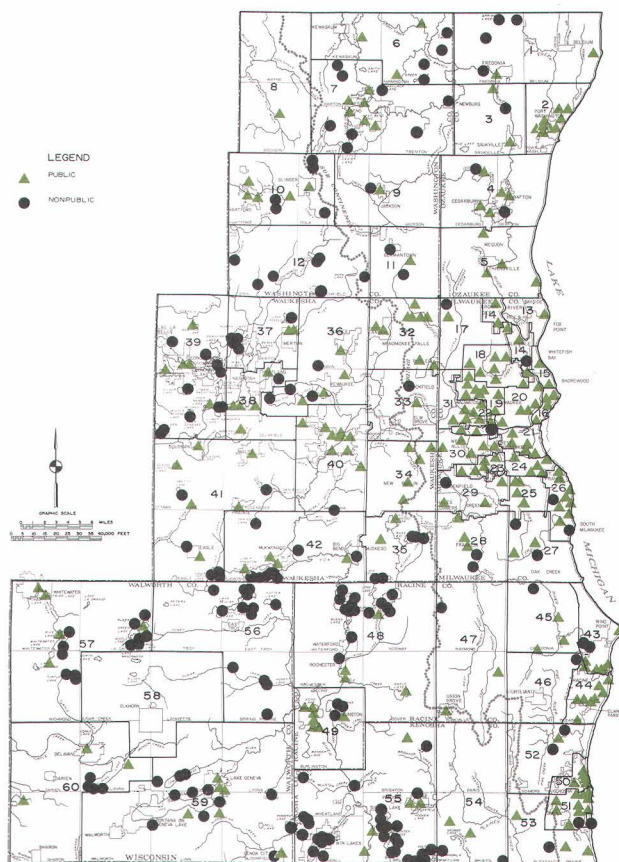


Table 50

**DISTRIBUTION OF PICNIC AREAS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973**

County (Population) <sup>a</sup>	Ownership	Sites		Facilities		Number of Picnic Tables Per 1,000 Population
		Number of Sites with Picnic Area	Percent of Sites	Number of Picnic Tables	Percent of Picnic Tables	
Kenosha ( 126,651)	Public . . . .	26	6.0	580	3.7	4.57
	Nonpublic . .	36	8.4	464	3.0	3.67
	Total . . . .	62	14.4	1,044	6.7	8.24
Milwaukee (1,012,536)	Public . . . .	82	19.1	5,810	37.3	5.74
	Nonpublic . .	10	2.3	182	1.2	0.18
	Total . . . .	92	21.4	5,992	38.5	5.92
Ozaukee ( 64,932)	Public . . . .	22	5.2	621	4.0	9.57
	Nonpublic . .	7	1.6	117	0.7	1.80
	Total . . . .	29	6.8	738	4.7	11.37
Racine ( 178,916)	Public . . . .	31	7.2	986	6.3	5.51
	Nonpublic . .	22	5.2	400	2.6	2.24
	Total . . . .	53	12.4	1,386	8.9	7.75
Walworth ( 67,511)	Public . . . .	14	3.3	154	1.0	2.28
	Nonpublic . .	41	9.5	1,047	6.7	15.51
	Total . . . .	55	12.8	1,201	7.7	17.79
Washington ( 76,579)	Public . . . .	17	4.0	814	5.2	10.62
	Nonpublic . .	27	6.3	829	5.3	10.82
	Total . . . .	44	10.3	1,643	10.5	21.44
Waukesha ( 262,746)	Public . . . .	52	12.1	2,369	15.2	9.02
	Nonpublic . .	42	9.8	1,217	7.8	4.63
	Total . . . .	94	21.9	3,586	23.0	13.65
Region (1,789,871)	Public . . . .	244	56.9	11,334	72.7	6.33
	Nonpublic . .	185	43.1	4,256	27.3	2.38
	Total . . . .	429	100.0	15,590	100.0	8.71

<sup>a</sup> Estimated 1975 population.

Source: SEWRPC.

A total of 429 general use publicly and privately owned outdoor recreation sites containing almost 15,600 picnic tables existed in the Region in 1973. Over 11,000 picnic tables, or about 70 percent of all picnic tables, were provided by the public sector. Almost 6,000 picnic tables, or about 40 percent of the picnic tables provided in the Region, were located in Milwaukee County.

Source: SEWRPC.

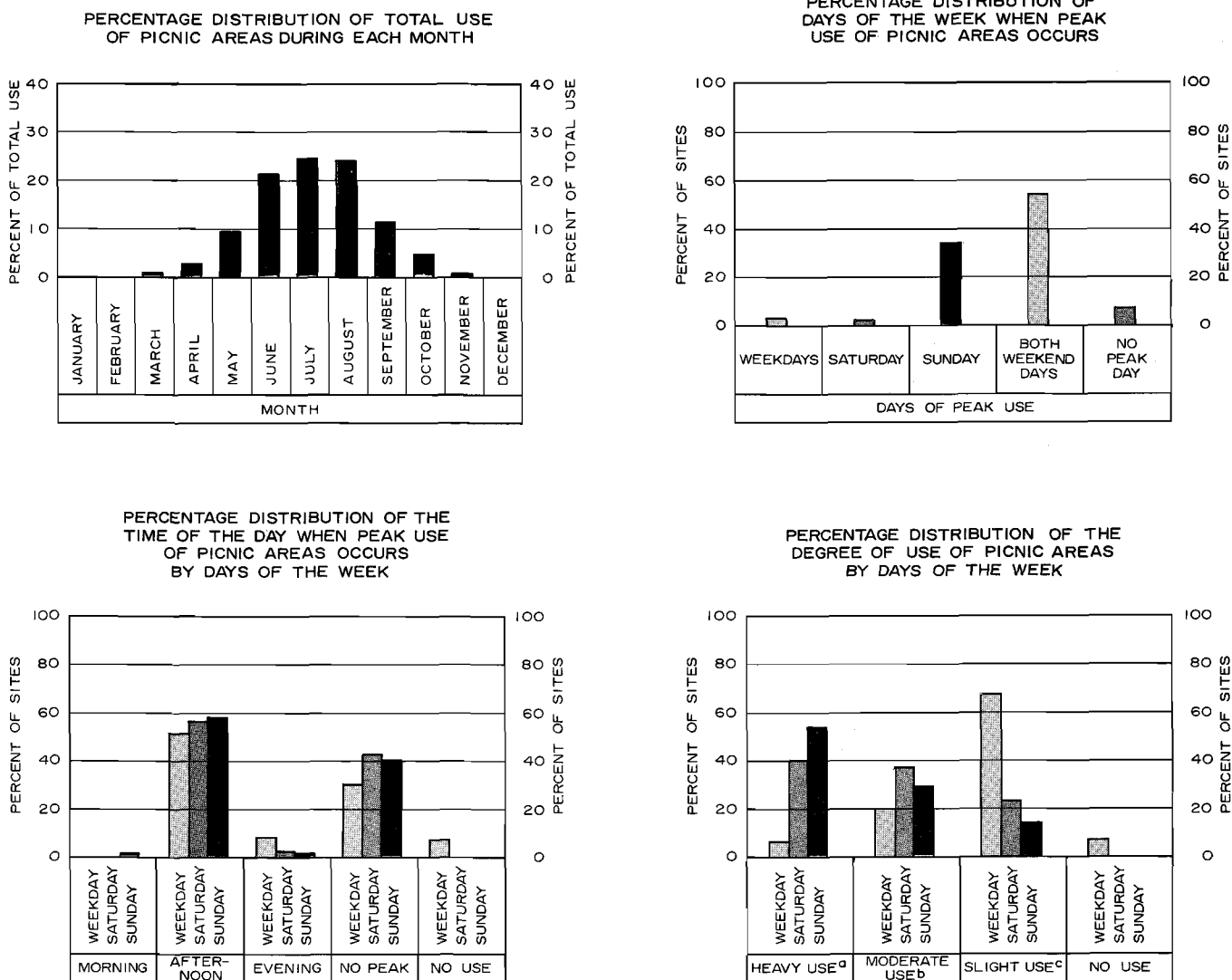


Of the 26 recreation activities considered in this chapter, picnicking ranked third in relative popularity with about 34 percent of the households in the Region participating in the activity. Peak use of picnic areas in the Region occurred in late spring and summer. As indicated in Figure 22, over 70 percent of the total participation in the activity picnicking occurred during the months of June, July, and August, although the use of picnic areas also occurred in the months of May and September. As further indicated in Figure 22, for almost 90 percent of

the sites with picnic areas in the Region, the peak time of the week for picnicking was weekends, while afternoons was rated as the peak time of day for picnicking at over 55 percent of the sites. It is interesting to note, however, that peak use of picnic areas occurred on weekday evenings at 8 percent of the sites in the Region. Finally, as indicated in Figure 22, the use of picnic facilities during the peak month was rated as heavy on Sundays for over 50 percent of the sites and slight on weekdays for about two-thirds of the sites.

Figure 22

# CHARACTERISTICS OF THE USE OF PICNIC AREAS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

Source: SEWRPC.

**Downhill Skiing:** Downhill skiing generally occurs on ski hills or slopes developed specifically for that purpose. The primary age groups participating in downhill skiing are school age children and young adults of both sexes. The average length of stay at ski hills in the Region is between four and five hours. Participants travel relatively long distances—up to 40 miles or more—to participate in downhill skiing. Approximately five out of every 10 skiers in the Region are from out of state. The ratio of out-of-state to in-state skiers increases in the southern portions of the Region particularly at developed ski hills in Walworth and Kenosha Counties where approximately 70 percent of the skiers are non-Wisconsin residents.

Providing facilities for downhill skiing requires suitable natural resource amenities. Most developed ski hills have a minimum vertical drop of about 200 feet and have slopes with a northern exposure. The slope grade ranges from less than 20 percent for beginners to greater than 35 percent for the expert skier. In addition, appropriate support facilities such as a ski chalet, lighting, snow-making equipment, ski tows, and adequate automobile parking are normally required. For purposes of this report, any general use outdoor recreation site with slopes designated specifically for downhill skiing and having a ski tow has been included in the inventory of

developed ski hills. As indicated in Table 51, there was a total of 182 acres of developed slopes for downhill skiing located within a total of 21 general use outdoor recreation sites in the Region in 1973. On a county basis, Walworth, Kenosha, and Washington Counties with 59, 44, and 39 developed acres, respectively, accounted for 78 percent of the total developed acres provided in the Region in 1973. It is important to note that 158 developed acres, or approximately 87 percent of the total 182 developed acres in the Region, were in nonpublic ownership. As further indicated in Table 51, there was 0.10 acre developed ski slopes per thousand residents, or approximately one acre per 10,000 residents, in the Region in 1973, with 0.09 acres of developed slopes per thousand residents, or approximately one acre per 11,100 residents, provided by the nonpublic sector.

Table 51

**DISTRIBUTION OF SKI HILLS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973**

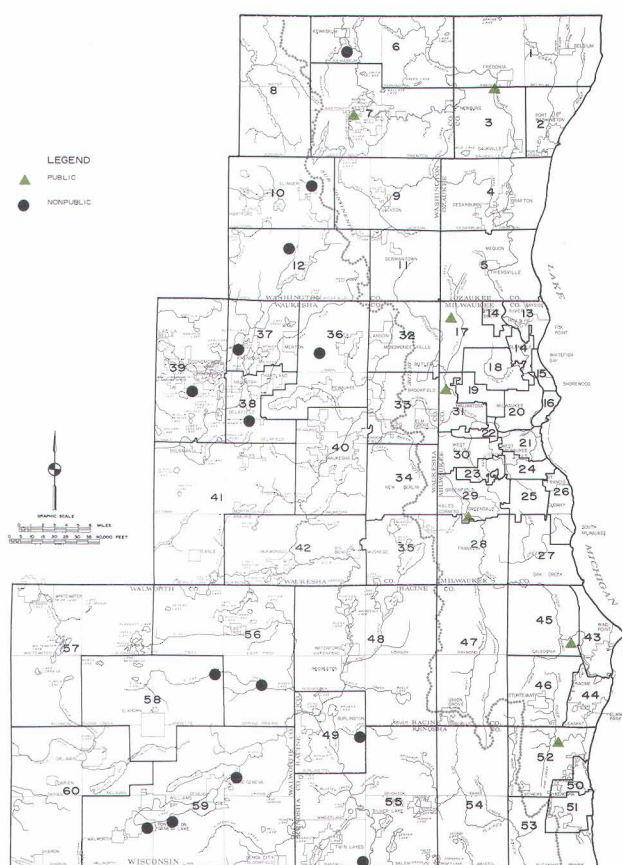
County (Population) <sup>a</sup>	Ownership	Sites		Facilities		Number of Acres Per 1,000 Population
		Number of Sites with Ski Hill	Percent of Sites	Number of Developed Acres for Skiing	Percent of Sites	
Kenosha ( 126,651)	Public . . . .	1	4.8	1	0.6	0.007
	Nonpublic . .	1	4.8	43	23.6	0.340
	Total . . . .	2	9.6	44	24.2	0.347
Milwaukee (1,012,536)	Public . . . .	3	14.3	19	10.4	0.019
	Nonpublic . .	0	0.0	0	0.0	0.000
	Total . . . .	3	14.3	19	10.4	0.019
Ozaukee ( 64,932)	Public . . . .	1	4.8	1	0.6	0.015
	Nonpublic . .	0	0.0	0	0.0	0.000
	Total . . . .	1	4.8	1	0.6	0.015
Racine ( 178,916)	Public . . . .	1	4.7	1	0.5	0.006
	Nonpublic . .	1	4.8	2	1.1	0.011
	Total . . . .	2	9.5	3	1.6	0.017
Walworth ( 67,511)	Public . . . .	0	0.0	0	0.0	0.000
	Nonpublic . .	5	23.8	59	32.4	0.874
	Total . . . .	5	23.8	59	32.4	0.874
Washington ( 76,579)	Public . . . .	1	4.7	2	1.1	0.026
	Nonpublic . .	3	14.3	37	20.3	0.484
	Total . . . .	4	19.0	39	21.4	0.510
Waukesha ( 262,746)	Public . . . .	0	0.0	0	0.0	0.000
	Nonpublic . .	4	19.0	17	9.4	0.065
	Total . . . .	4	19.0	17	9.4	0.065
Region (1,789,871)	Public . . . .	7	33.3	24	13.2	0.013
	Nonpublic . .	14	66.7	158	86.8	0.088
	Total . . . .	21	100.0	182	100.0	0.101

<sup>a</sup>Estimated 1975 population.

Source: SEWRPC.

Map 41

**GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH SKI HILLS BY  
PLANNING ANALYSIS AREAS: 1973**



A total of 21 general use publicly and privately owned outdoor recreation sites with 182 acres of slopes for downhill skiing existed in the Region in 1973. Fourteen of the 21 sites were in nonpublic ownership. Thirteen of the 21 sites, or almost two-thirds of the ski hills in the Region, were located in Walworth, Washington, and Waukesha Counties.

Source: SEWRPC.

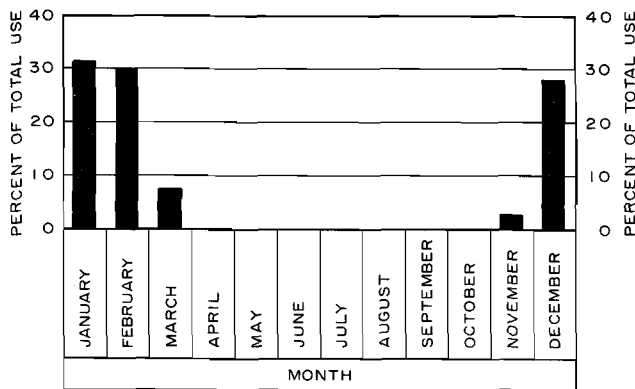
Map 41 shows the spatial distribution of general use outdoor recreation sites providing ski hills within each planning analysis area in the Region. As indicated, sites with ski hills were distributed throughout the Region with only one planning analysis area—area 59 in Walworth County—having more than one ski hill. Of the 26 recreation activities considered in this chapter, downhill skiing ranked seventeenth in relative popularity, with about 9 percent of the households in the Region participating in the activity. Peak use of ski hills in the Region occurred during the winter months. As indicated in Figure 23, about 90 percent of the total participation in the activity

skiing occurred during the months of December, January, and February. With the aid of snowmaking equipment, skiing also occurs in the months of November and March. As further indicated in Figure 23, for over 90 percent of the ski hills in the Region, the peak time of the week for skiing was weekends. Afternoon was rated as the peak time of day for weekend skiing and evenings were rated as the peak time of day for weekday skiing. Finally, as indicated in Figure 23, the use of the skiing facilities during the peak month was rated as slight on weekdays for over 80 percent of the ski hills and moderate on weekends for about 60 percent of the sites.

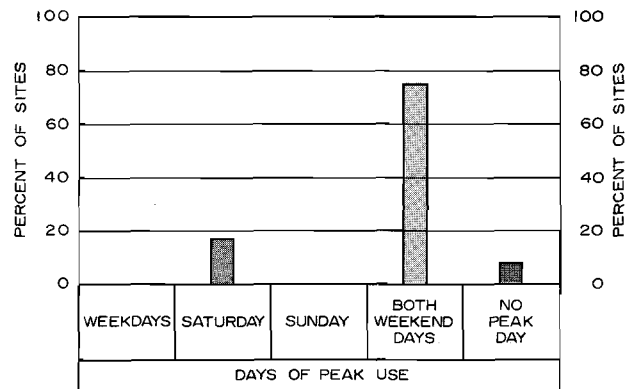
Figure 23

# CHARACTERISTICS OF THE USE OF SKI HILLS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION

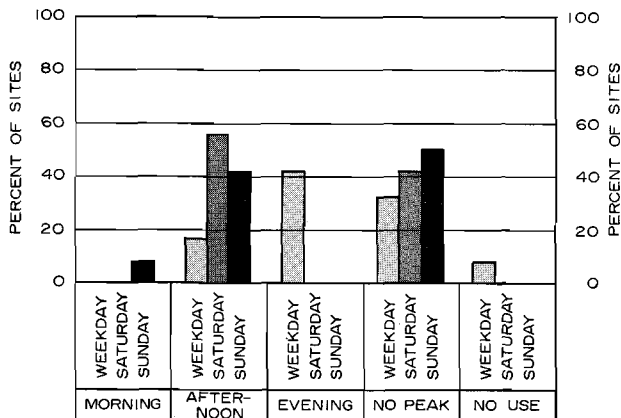
PERCENTAGE DISTRIBUTION OF TOTAL USE OF SKI HILLS DURING EACH MONTH



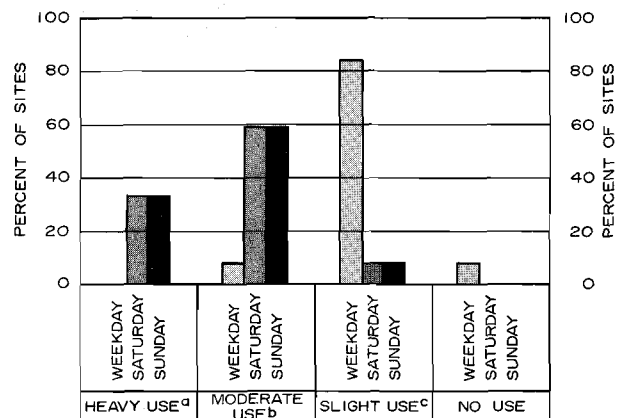
PERCENTAGE DISTRIBUTION OF DAYS OF THE WEEK WHEN PEAK USE OF SKI HILLS OCCURS



PERCENTAGE DISTRIBUTION OF THE TIME OF THE DAY WHEN PEAK USE OF SKI HILLS OCCURS BY DAYS OF THE WEEK



PERCENTAGE DISTRIBUTION OF THE DEGREE OF USE OF SKI HILLS BY DAYS OF THE WEEK



- <sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.
- <sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.
- <sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

Source: SEWRPC.



**Beach Swimming:** Swimming as an outdoor recreation activity has been classified into two categories namely beach swimming and pool swimming (see Table 47). Beach swimming, which is an intensive resource oriented activity, will be considered in this section while pool swimming, which is an intensive nonresource oriented activity, will be considered in a later section of this chapter.

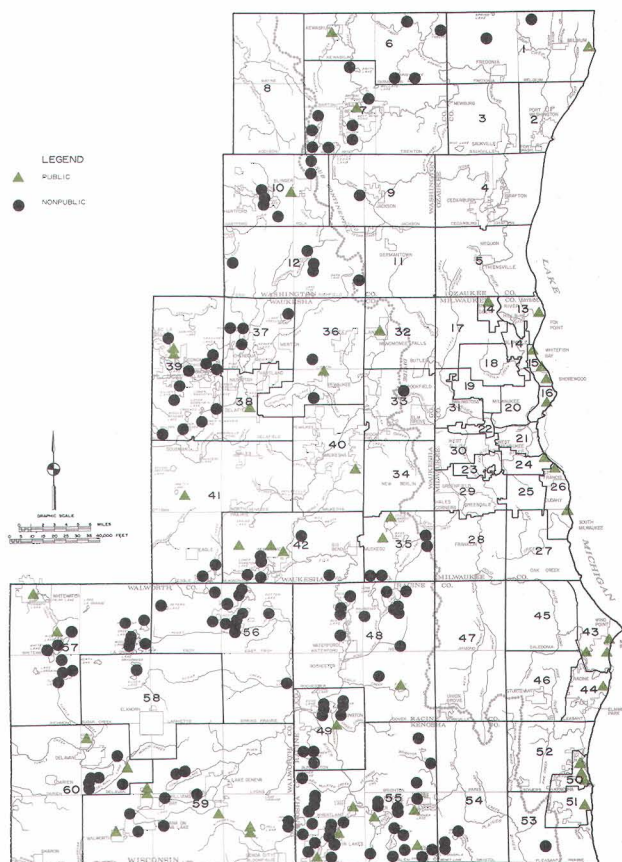
Swimming at beaches is a popular activity participated in by almost all age groups of both sexes. The average length of stay of participants at swimming beaches is between three and four hours and the activity is often combined with picnicking. Participants generally travel 25 miles or more from their home to participate in beach swimming and a significant portion of the participants in swimming at beaches in the Region resides outside of the State of Wisconsin. Approximately two out of every 10 swimmers in the Region are from out of state; moreover, the ratio of out-of-state to in-state swimmers increases in the southern portions of the Region, particularly at beaches in Walworth and Kenosha Counties where approximately 40 percent of the swimmers are non-Wisconsin residents.

Beach swimming—in addition to a stable, preferably sandy beach and suitable water quality—often is provided with support facilities and services such as automobile parking areas, a bath house, concession stands, and life

guards. The provision of picnic areas near swimming beaches is desirable. For purposes of this report, any area of beach included in general use outdoor recreation sites designated for swimming has been included in the inventory of swimming beaches. As indicated in Table 52, a total of 60,320 linear feet, or about 11 linear miles, of swimming beach were provided in 204 general use outdoor recreation sites in the Region in 1973. On a county basis, Milwaukee County, with 14,700 linear feet of swimming beach, accounted for one-fourth of the linear feet of swimming beach provided in the Region in 1973. It is interesting to note that, while the public sector provides 51 swimming beaches with 39,100 linear feet of beach, or about 65 percent of the 60,320 linear feet of beach in the Region, the nonpublic sector provides about 21,200 linear feet of swimming beach at 153 sites, or 75 percent of the total 204 sites with swimming

Map 42

**GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH SWIMMING BEACHES  
BY PLANNING ANALYSIS AREA: 1973**



**Table 52  
DISTRIBUTION OF SWIMMING BEACHES AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973**

County (Population) <sup>a</sup>	Ownership	Sites		Facilities		Number of Linear Feet Per 1,000 Population
		Number of Sites with Swimming Beach	Percent of Sites	Number of Linear Feet	Percent of Linear Feet	
Kenosha ( 126,651)	Public. . . . .	10	4.9	5,550	9.2	43.8
	Nonpublic . .	34	16.7	2,635	4.4	20.8
	Total . . . . .	44	21.6	8,185	13.6	64.6
Milwaukee (1,012,536)	Public. . . . .	9	4.4	14,700	24.3	14.5
	Nonpublic . .	0	0.0	0	0.0	0.0
	Total . . . . .	9	4.4	14,700	24.3	14.5
Ozaukee ( 64,932)	Public. . . . .	1	0.5	5,000	8.3	77.0
	Nonpublic . .	2	0.9	120	0.1	1.8
	Total . . . . .	3	1.4	5,120	8.4	78.8
Racine ( 178,916)	Public. . . . .	6 <sup>b</sup>	2.9	6,050 <sup>b</sup>	8.2	33.8
	Nonpublic . .	21	10.3	2,670	4.5	14.9
	Total . . . . .	27	13.2	8,720	12.7	48.7
Walworth ( 67,511)	Public. . . . .	10	4.9	3,725	6.2	55.2
	Nonpublic . .	42	20.6	7,265	12.0	107.6
	Total . . . . .	52	25.5	10,990	18.2	162.8
Washington ( 76,579)	Public. . . . .	3	1.4	360	0.6	4.7
	Nonpublic . .	24	11.8	3,540	5.9	46.2
	Total . . . . .	27	13.2	3,900	6.5	50.9
Waukesha ( 262,746)	Public. . . . .	12	5.9	3,780	6.2	14.4
	Nonpublic . .	30	14.7	4,925	8.2	18.7
	Total . . . . .	42	20.6	8,705	14.4	33.1
Region (1,789,871)	Public. . . . .	51	25.0	39,165	64.9	21.9
	Nonpublic . .	153	75.0	21,155	35.1	11.8
	Total . . . . .	204	100.0	60,320	100.0	33.7

<sup>a</sup> Estimated 1975 population.

<sup>b</sup> Includes 1,200 feet of swimming beach at Zoo Park, a special recreation site in the City of Racine.

Source: SEWRPC.

A total of 204 general use publicly and privately owned outdoor recreation sites containing 60,300 lineal feet—or about 11 miles—of swimming beach existed in the Region in 1973. Three-fourths of the sites with swimming beaches, but only about one-third of the lineal feet of swimming beach, were in nonpublic ownership. Milwaukee, Racine, and Kenosha Counties with significant Lake Michigan beach areas together accounted for over 31,000 lineal feet of swimming beach, or more than 50 percent of the lineal feet of swimming beach in the Region.

Source: SEWRPC.



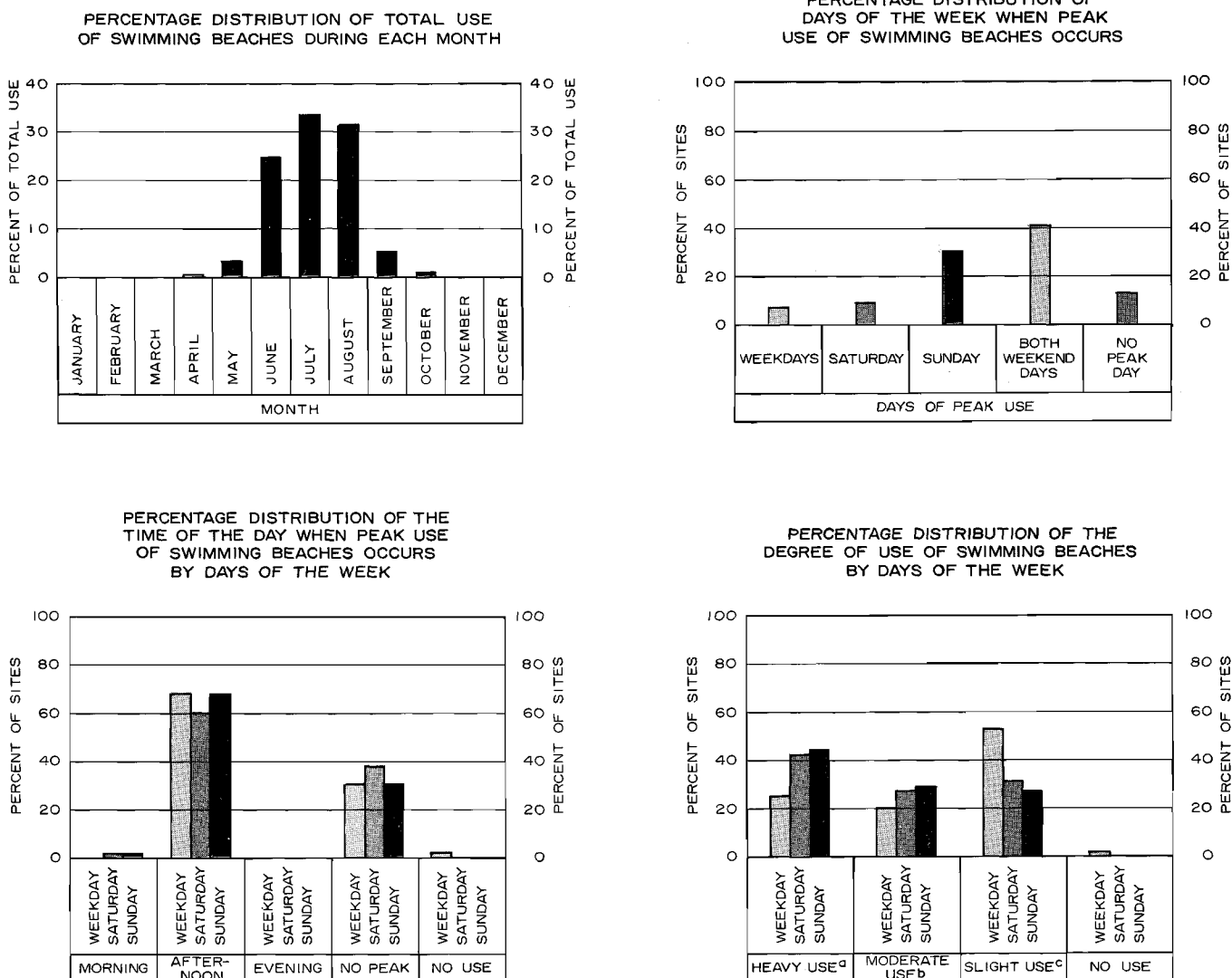
beaches in the Region in 1973. The public sector, therefore, has more beach footage but at fewer beach sites than the nonpublic sector. As further indicated in Table 52, there were almost 34 linear feet of beach per thousand residents in the Region in 1973, with about 22 linear feet of beach per thousand provided by the public sector. On a county basis, Walworth County provided almost 163 linear feet of beach per thousand residents, while Milwaukee County provided 14 linear feet per thousand residents. It is interesting to note that all Milwaukee County swimming beaches were publicly-owned. Map 42 shows the spatial distribution of general use outdoor recreation sites providing swimming beaches within each planning analysis area in the Region. As indicated, most swimming beaches were located in the

lakes areas within Kenosha, Racine, Walworth, and Waukesha Counties. Thirty-six sites with swimming beaches were located in planning analysis area 55 in Kenosha County while planning analysis area 39 in Waukesha County; areas 48 and 49 in Racine County; and areas 56, 57, and 59 in Walworth County each contained at least 10 sites with swimming beaches.

Of the 26 recreation activities considered in this chapter, beach swimming ranked second in relative popularity with about 35 percent of the households in the Region participating in the activity. Peak use of swimming beaches in the Region occurred during the summer. As indicated in Figure 24, about two-thirds of the total participation at swimming beaches occurred during the

Figure 24

# CHARACTERISTICS OF THE USE OF SWIMMING BEACHES AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

months of July and August, with the month of June accounting for approximately one-fourth of the remaining total participation. As further indicated in Figure 24, for about 80 percent of the swimming beaches in the Region, the peak time of the week for swimming was weekends, especially Sundays, while the peak time of day was afternoons for over two-thirds of the sites. Finally, as indicated in Figure 24, the use of swimming beaches during the peak month was rated as heavy on Saturdays and Sundays for about 40 percent of the sites but only slight on weekdays for over 50 percent of the sites.

#### Intensive Nonresource Oriented Outdoor Recreation Activities

Intensive nonresource oriented outdoor recreation activities, as indicated in Table 47, include baseball, basketball, ice skating, playfield activities, playground activities, softball, swimming (pool), and tennis. Facilities and activity areas provided for such activities are found in general use outdoor recreation sites. The description of each activity considered in this section, like the description of intensive resource oriented activities presented in the previous section, consists of a discussion of the nature of each activity and the characteristics of the participants, the facilities provided, and the characteristics of use of the facilities.

**Baseball:** Most baseball activity occurs on "baseball diamonds" with participation in this activity ranging from informal neighborhood games on a local diamond to organized little leagues to high school competition and organized leagues for young adults. The primary

participants in baseball activity are school age or young adult males. Most participants travel less than three miles from their home for this activity and the average participation time is about two hours. Regulation baseball also known as "hardball" is played on a 90 foot base path diamond with the total surface area required being approximately 125,000 square feet. Little league diamonds, however, may cover only half that area, and informal participation in baseball may occur on almost any area of land which is properly graded and free of obstacles. Support facilities, such as parking areas, bleachers, lights, and rest room facilities are often provided. For purposes of this report, any area of land located within general use outdoor recreation sites having a "skinned" infield—an infield with the sod or turf removed—90 foot regulation or 60 foot Little League base paths and a back stop has been included in the inventory of baseball diamonds. As indicated in Table 53, there was a total of 216 baseball diamonds located within a total of 182 general use outdoor recreation sites in the Region in 1973. On a county basis, Milwaukee County, with 76 sites providing a total of 91 diamonds, accounted

Map 43

#### GENERAL USE OUTDOOR RECREATION SITES IN THE REGION WITH BASEBALL DIAMONDS BY PLANNING ANALYSIS AREA: 1973

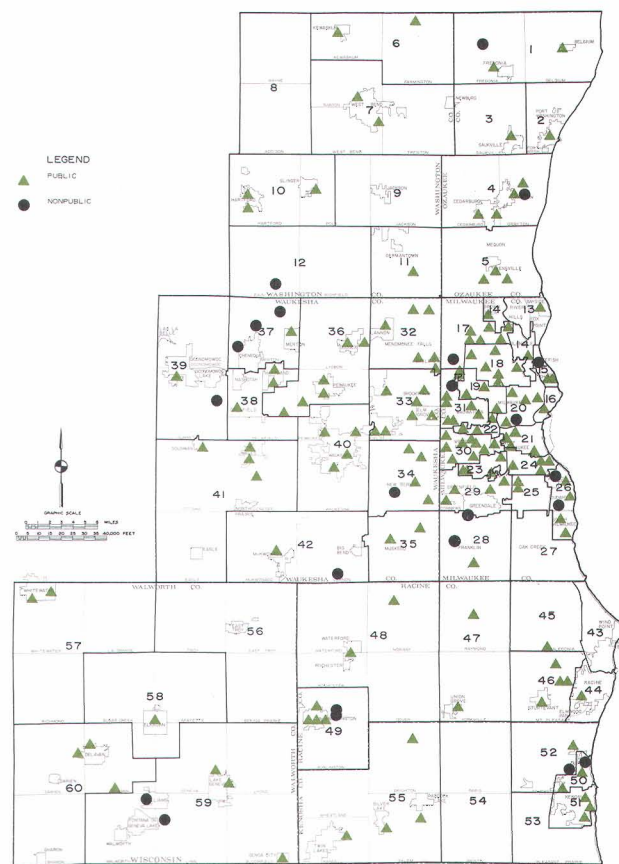


Table 53  
DISTRIBUTION OF BASEBALL DIAMONDS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973

County (Population) <sup>a</sup>	Ownership	Sites		Facilities		Number of Diamonds Per 1,000 Population
		Number of Sites with Baseball Diamonds	Percent of Sites	Number of Diamonds	Percent of Diamonds	
Kenosha ( 126,651)	Public . . . .	10	5.5	13	6.1	0.102
	Nonpublic . .	2	1.1	2	0.9	0.016
	Total . . . .	12	6.6	15	7.0	0.118
Milwaukee (1,012,536)	Public . . . .	68	37.0	80	36.7	0.079
	Nonpublic . .	8	4.4	11	5.2	0.011
	Total . . . .	76	41.4	91	41.9	0.090
Ozaukee ( 64,932)	Public . . . .	11	6.1	12	5.6	0.184
	Nonpublic . .	2	1.1	3	1.4	0.046
	Total . . . .	13	7.2	15	7.0	0.230
Racine ( 178,916)	Public . . . .	14	7.7	16	7.4	0.089
	Nonpublic . .	2	1.1	2	0.9	0.011
	Total . . . .	16	8.8	18	8.3	0.100
Walworth ( 67,511)	Public . . . .	9	5.0	10	4.7	0.148
	Nonpublic . .	2	1.1	5	2.3	0.074
	Total . . . .	11	6.1	15	7.0	0.222
Washington ( 76,579)	Public . . . .	8	4.4	9	4.1	0.117
	Nonpublic . .	1	0.6	1	0.5	0.013
	Total . . . .	9	5.0	10	4.6	0.130
Waukesha ( 262,746)	Public . . . .	39	21.6	46	21.4	0.175
	Nonpublic . .	6	3.3	6	2.8	0.023
	Total . . . .	45	24.9	52	24.2	0.198
Region (1,789,871)	Public . . . .	159	87.3	186	86.0	0.104
	Nonpublic . .	23	12.7	30	14.0	0.017
	Total . . . .	182	100.0	216	100.0	0.121

<sup>a</sup> Estimated 1975 population.

Source: SEWRPC.

A total of 182 general use publicly and privately owned outdoor recreation sites containing 216 baseball diamonds existed in the Region in 1973. About 86 percent, or 186 of the 216 baseball diamonds in the Region, was in public ownership. Milwaukee County, with 76 sites containing a total of 91 diamonds, accounted for over 40 percent of the baseball diamonds in the Region.

Source: SEWRPC.

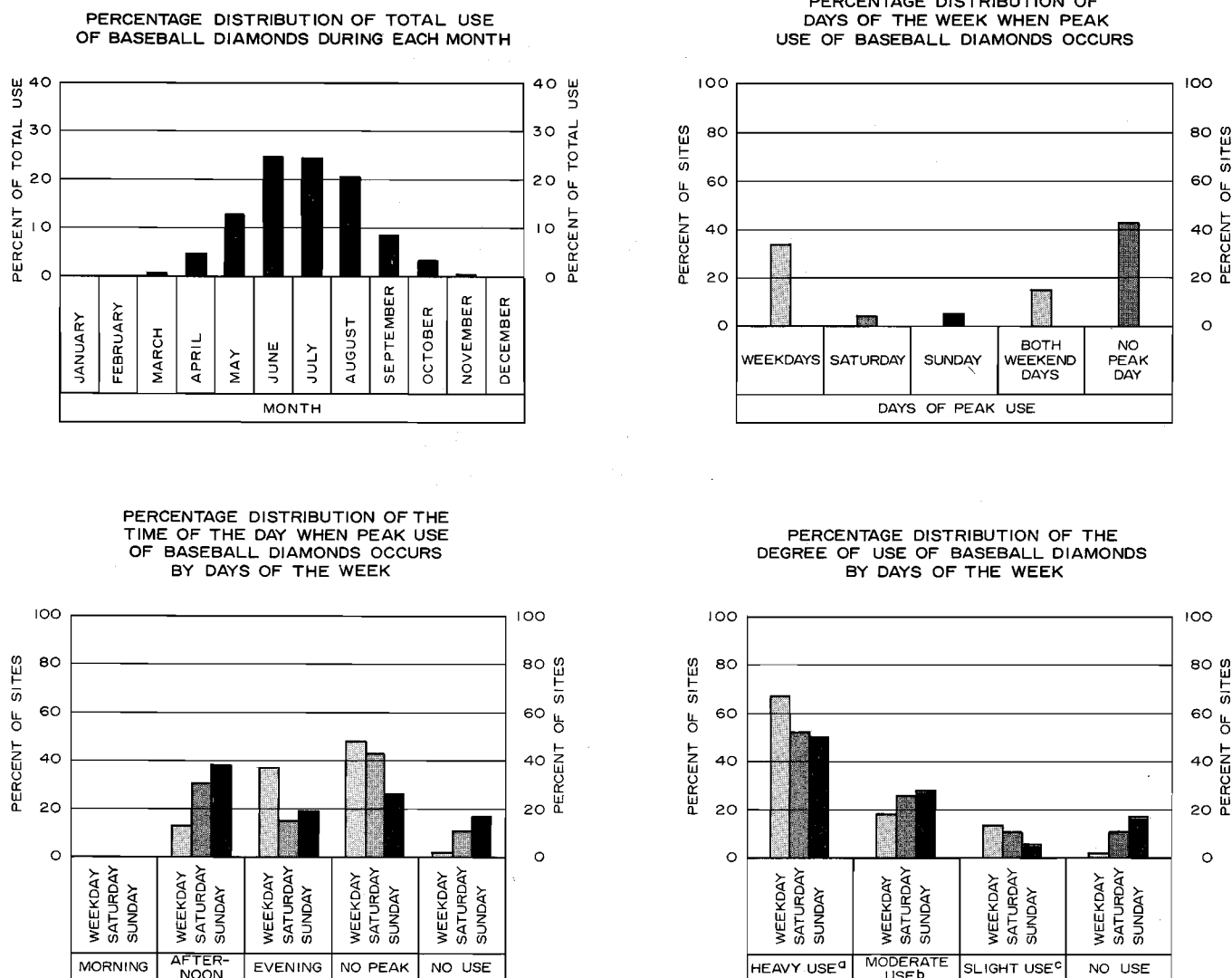
for over 40 percent of the baseball facilities provided in the Region. It is important to note that 186 baseball diamonds, or about 86 percent of 216 baseball diamonds in the Region, were in public ownership. As further indicated in Table 53, there was 0.12 baseball diamond per thousand residents, or approximately one diamond per 8,300 residents, in the Region in 1973, with 0.1 diamond per thousand residents, or approximately one diamond per 10,000 residents, provided by the public sector. On a county basis, Ozaukee, Walworth, and Waukesha Counties each provide approximately 0.2 diamond per thousand residents, or approximately one diamond per 5,000 residents. Map 43 shows the spatial distribution of general use outdoor recreation sites providing baseball diamonds within each planning analysis area in the Region. As indicated, relatively large quanti-

ties of sites with baseball diamonds were located in the more densely populated areas of the Region. Nine sites with baseball diamonds were located in planning analysis areas 30 and 31 in Milwaukee County while planning analysis areas 17, 18, and 26 in Milwaukee County; areas 32, 33, and 36 in Waukesha County; and area 49 in Racine County each contained at least six sites with baseball diamonds.

Of the 26 recreation activities considered in this chapter, baseball ranked twenty-second in relative popularity with about 3 percent of the households in the Region participating in the activity. Peak use of baseball diamonds in the Region occurred during late spring and summer. As indicated in Figure 25, about two-thirds of the total participation in the activity occurred during the months

Figure 25

# CHARACTERISTICS OF THE USE OF BASEBALL DIAMONDS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.



of June, July, and August; however, baseball diamonds were also utilized during the months of April, May, September, and October. As further indicated in Figure 25, for over 40 percent of the baseball diamonds in the Region there was no day of the week when peak use of the facility occurred, indicating a relatively even or uniform use of facility throughout the week; however, for approximately one-third of the baseball diamonds, the peak use occurred on weekdays. As further indicated in Figure 25, for almost half of the baseball diamonds in the Region, there was no one time of the day during the week when a peak use occurred; however, on weekends, for almost 40 percent of the baseball diamonds, Sunday afternoons was the time when peak use occurred. Finally, as indicated in Figure 25, the use of the facilities during the peak month was rated as heavy during both week days and weekends for over half of the baseball diamonds in the Region.

**Basketball:** Basketball as an outdoor recreation activity occurs on outdoor courts with participation in the activity ranging from informal neighborhood games on local playgrounds to organized leagues. The primary participants in basketball are school age or young adult males. Most participants travel less than one mile from their home for this activity and the average participation time is between one and two hours.

Regulation basketball is played on a 50 foot x 90 foot court—although outdoor courts are often smaller—with the total surface area required for a regulation court

being approximately 6,000 square feet. For purposes of this report, any paved court area with back boards and goals located within general use outdoor recreation sites was included in the inventory of basketball facilities. As indicated in Table 54, there was a total of 2,277 basketball goals located within a total of 806 general use outdoor recreation sites in the Region in 1973. On a county basis, Milwaukee County, with almost 1,100 goals, accounted for almost half of the total basketball goals provided in the Region. It is interesting to note that 1,758 basketball goals, or about 77 percent of the 2,277 goals in the Region, were in public ownership.

As further indicated in Table 54, there were 1.27 basketball goals per thousand residents, or approximately one goal per 800 residents, in the Region in 1973, with approximately one goal per thousand residents provided by the public sector. On a county basis, Ozaukee County provided almost two basketball goals per thousand residents while Milwaukee County provided only one goal per thousand residents. Map 44 shows the spatial

Table 54

**DISTRIBUTION OF BASKETBALL GOALS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973**

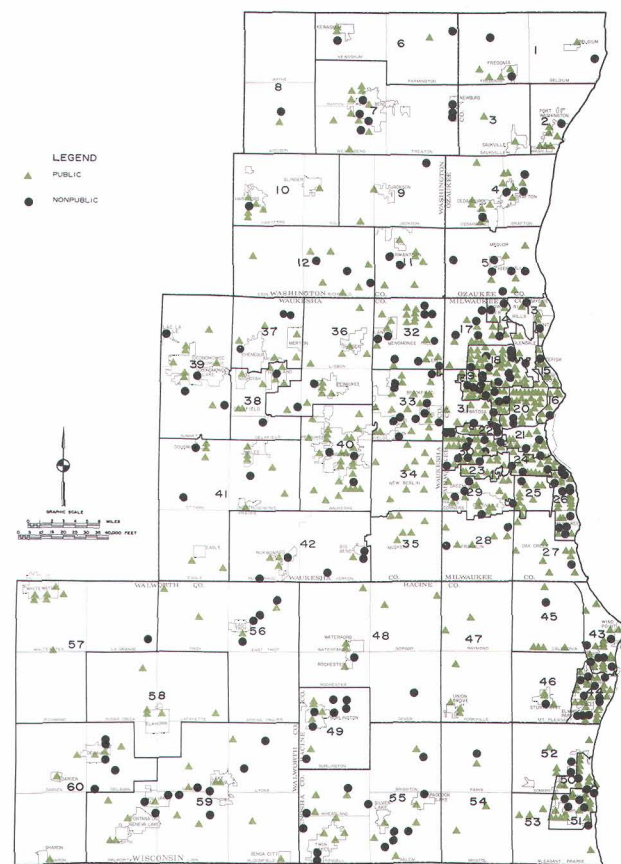
County (Population) <sup>a</sup>	Ownership	Sites		Facilities		Number of Goals Per 1,000 Population
		Number of Sites with Basketball Goals	Percent of Sites	Number of Goals	Percent of Goals	
Kenosha ( 126,651)	Public . . . .	51	6.3	106	4.7	0.84
	Nonpublic . .	23	2.9	45	1.9	0.36
	Total . . . .	74	9.2	151	6.6	1.20
Milwaukee (1,012,536)	Public . . . .	246	30.5	884	38.8	0.87
	Nonpublic . .	75	9.3	205	9.0	0.20
	Total . . . .	321	39.8	1,089	47.8	1.07
Ozaukee ( 64,932)	Public . . . .	31	3.9	91	4.0	1.40
	Nonpublic . .	14	1.7	31	1.4	0.48
	Total . . . .	45	5.6	122	5.4	1.88
Racine ( 178,916)	Public . . . .	64	7.9	194	8.5	1.08
	Nonpublic . .	27	3.4	66	2.9	0.37
	Total . . . .	91	11.3	260	11.4	1.45
Walworth ( 67,511)	Public . . . .	36	4.5	69	3.0	1.02
	Nonpublic . .	19	2.3	39	1.8	0.58
	Total . . . .	55	6.8	108	4.8	1.60
Washington ( 76,579)	Public . . . .	35	4.3	67	2.9	0.87
	Nonpublic . .	17	2.2	45	2.0	0.59
	Total . . . .	52	6.5	112	4.9	1.46
Waukesha ( 262,746)	Public . . . .	127	15.8	347	15.3	1.32
	Nonpublic . .	41	5.0	88	3.8	0.33
	Total . . . .	168	20.8	435	19.1	1.65
Region (1,789,871)	Public . . . .	590	73.2	1,758	77.2	0.98
	Nonpublic . .	216	26.8	519	22.8	0.29
	Total . . . .	806	100.0	2,277	100.0	1.27

<sup>a</sup> Estimated 1975 population.

Source: SEWRPC.

Map 44

**GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH BASKETBALL GOALS  
BY PLANNING ANALYSIS AREA: 1973**



A total of 806 general use publicly and privately owned outdoor recreation sites containing 2,277 basketball goals existed in the Region in 1973. Almost 600 sites, or approximately three-fourths of the sites with basketball goals, were in public ownership. Milwaukee County, with 321 sites containing 1,089 basketball goals, accounted for almost 40 percent of the sites and almost 50 percent of the basketball goals provided in the Region.

Source: SEWRPC.

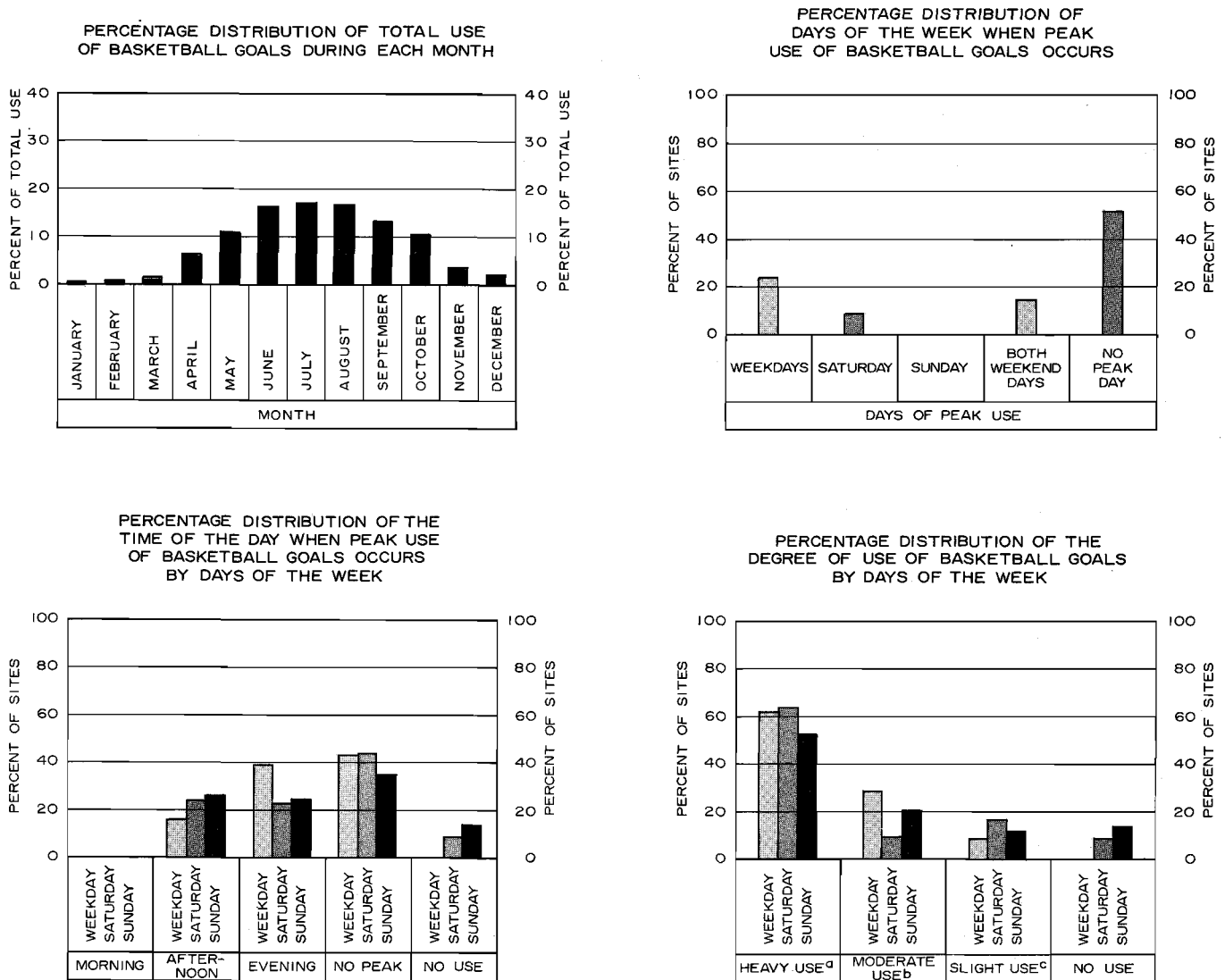


distribution of general use outdoor recreation sites providing basketball goals within each planning analysis area in the Region. As indicated, relatively large quantities of sites with basketball goals were located in the more densely populated areas of the Region. Forty-four sites with basketball goals were located in planning analysis area 18 in Milwaukee County while planning analysis areas 19, 20, 26, and 30 in Milwaukee County; areas 32, 33, and 40 in Waukesha County; area 44 in Racine County; and area 55 in Kenosha County each contained at least 25 sites with basketball goals.

Of the 26 recreation activities considered in this chapter, basketball ranked eighteenth in relative popularity with about 8 percent of the households in the Region participating in the activity. Peak use of basketball goals in the Region occurred during late spring, summer, and early fall. As indicated in Figure 26, over half of the use of basketball goals occurred during the months of June, July, and August although the use of basketball goals continued to some extent throughout the calendar year. As further indicated in Figure 26, for over 50 percent of the basketball goals in the Region, there was no one day

Figure 26

# CHARACTERISTICS OF THE USE OF BASKETBALL GOALS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

when peak use of the facility occurred. However, for the remaining 50 percent of the basketball goals, the peak use was evenly distributed on both weekend and weekdays. Finally, as indicated in Figure 26, the use of basketball facilities during the peak month was rated as heavy on the weekdays and weekends for over 50 percent of the basketball goals in the Region.

**Ice Skating:** Ice skating is an activity which occurs on frozen bodies of water, including large lakes and slow moving rivers or rinks provided specifically for that purpose.<sup>2</sup> The primary participants in ice skating activity are elementary school age children of both sexes. Almost all participants travel less than three miles from their home to participate in the activity and the average participation time is about two hours.

<sup>2</sup>Ice skating as indicated in Figure 20 is classified as an intensive nonresource oriented land based, as opposed to water based, recreation activity because more than 75 percent of the sites with ice skating are man-made flooded rinks rather than natural frozen ponds, lakes, or streams.

Table 55

DISTRIBUTION OF ICE SKATING RINKS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973

County (Population) <sup>a</sup>	Ownership	Sites		Number of Rinks Per 1,000 Population
		Number of Sites with Ice Skating Rink	Percent of Sites	
Kenosha ( 126,651)	Public. . . . .	17	5.8	0.13
	Nonpublic . .	10	3.4	0.08
	Total . . . . .	27	9.2	0.21
Milwaukee (1,012,536)	Public. . . . .	137	46.9	0.14
	Nonpublic . .	2	0.7	<sup>b</sup>
	Total . . . . .	139	47.6	0.14
Ozaukee ( 64,932)	Public. . . . .	11	3.8	0.17
	Nonpublic . .	1	0.3	0.02
	Total . . . . .	12	4.1	0.19
Racine ( 178,916)	Public. . . . .	27	9.2	0.15
	Nonpublic . .	10	3.4	0.06
	Total . . . . .	37	12.6	0.21
Walworth ( 67,511)	Public. . . . .	7	2.4	0.10
	Nonpublic . .	8	2.8	0.12
	Total . . . . .	15	5.2	0.22
Washington ( 76,579)	Public. . . . .	11	3.8	0.14
	Nonpublic . .	6	2.1	0.08
	Total . . . . .	17	5.9	0.22
Waukesha ( 262,746)	Public. . . . .	35	12.0	0.13
	Nonpublic . .	10	3.4	0.04
	Total . . . . .	45	15.4	0.17
Region (1,789,871)	Public. . . . .	245	83.9	0.14
	Nonpublic . .	47	16.1	0.03
	Total . . . . .	292	100.0	0.17

<sup>a</sup> Estimated 1975 population.

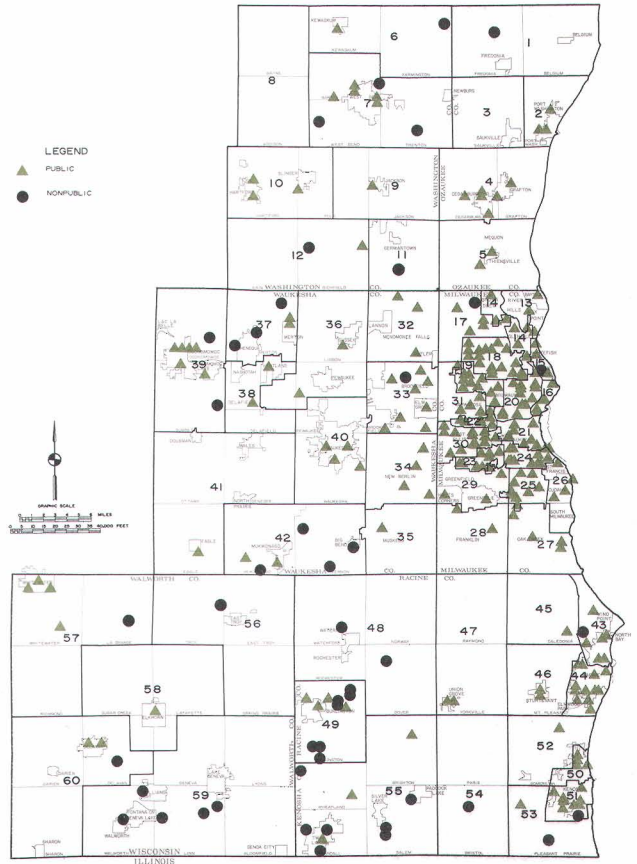
<sup>b</sup> Less than 0.005.

Source: SEWRPC.

For purposes of this report, all land rinks and any natural bodies of water located within general use outdoor recreation sites which are cleared and maintained specially for the purpose of ice skating have been included in the inventory of ice skating rinks. As indicated in Table 55, there was a total of 292 ice skating rinks located in general use sites in the Region in 1973 with 245 rinks, or 84 percent, provided by the public sector. On a county basis, Milwaukee County, with 139 rinks, provided almost half of the ice skating rinks in the Region, and virtually all of these sites were provided by the public sector. As further indicated in Table 55, there was 0.17 ice skating rinks per thousand residents, or approximately one rink per 5,900 residents, in the Region in 1973. Map 45 shows the spatial distribution of general use outdoor recreation sites providing ice skating rinks within each planning analysis area in the Region. As indicated, relatively large quantities of sites with ice skating rinks were located in the more densely populated areas of the Region. Eighteen sites with ice skating rinks were located in planning analysis area 18 in

Map 45

GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH ICE SKATING RINKS  
BY PLANNING ANALYSIS AREA: 1973



A total of 292 general use publicly and privately owned outdoor recreation sites with ice skating rinks existed in the Region in 1973. Over 240 rinks, or almost 84 percent of all ice skating rinks, were provided by the public sector. Milwaukee County with 139 rinks provided almost half of the ice skating rinks in the Region.

Source: SEWRPC.

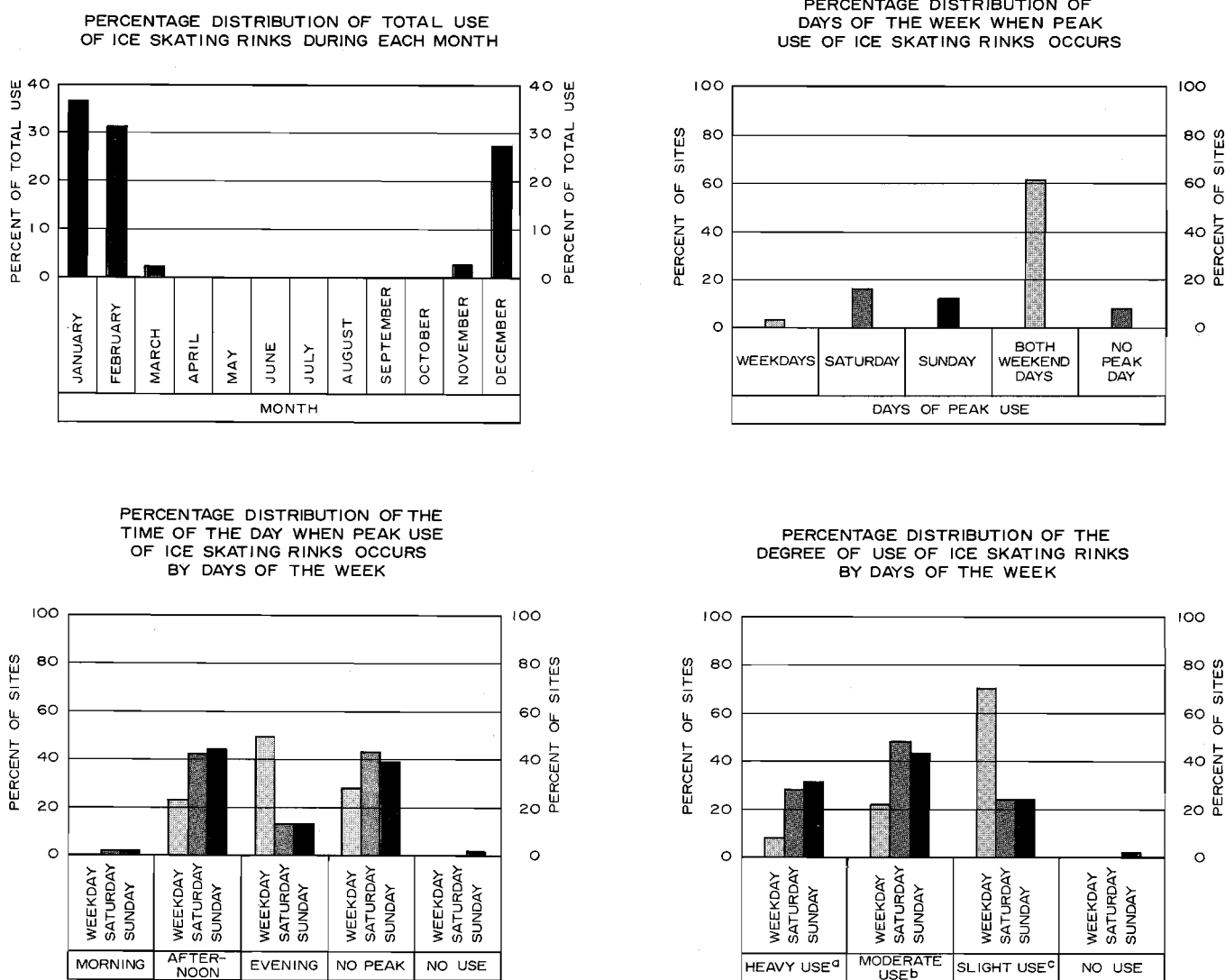
Milwaukee County while planning analysis areas 19, 20, 24, and 30 in Milwaukee County; areas 44 and 49 in Racine County; and area 55 in Kenosha County each contained at least 10 sites with ice skating rinks. Conversely, less than two rinks were located in planning analysis areas 1 and 3 in Ozaukee County; areas 8, 9, and 11 in Washington County; areas 35 and 41 in Waukesha County; area 45 in Racine County; areas 52 and 54 in Kenosha County; and areas 56 and 58 in Walworth County.

Of the 26 recreation activities considered in this chapter, ice skating ranked fourteenth in relative popularity with

about 12 percent of the households in the Region participating in the activity. As indicated in Figure 27, peak use of ice skating rinks in the Region occurs during the winter months of December, January, and February with participation in January being slightly higher than in December and February. As further indicated in Figure 27, for almost 90 percent of the ice skating rinks in the Region, use of the facility on weekend days was significantly greater than on weekdays. The peak time of the day for participating in ice skating on weekdays was evening at about half of the ice skating rinks, while peak use on Saturdays and Sundays occurred in the afternoon

Figure 27

# CHARACTERISTICS OF THE USE OF ICE SKATING RINKS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

Source: SEWRPC.



at over 40 percent of the ice skating rinks. Finally, as indicated in Figure 27, the use of ice skating facilities was rated as slight on weekdays for about 70 percent of the ice skating rinks in the Region and moderate on Saturdays and Sundays for about 45 percent of the ice skating rinks.

**Playfield Activities:** Playfield activities encompass a wide range of athletic activities which can take place on an open, generally turf covered field area including but not limited to volleyball, tag, football, and kite flying. Playfield areas are provided for the specific purpose of accommodating a variety of informal field games and sports. The primary participants in the various playfield activities are school age children of both sexes. Most participants travel less than one mile from their homes to participate in playfield activities, and the length of stay varies with the type of activity but usually averages about two hours.

Many playfields are provided in conjunction with a picnic area or swimming beach, while other playfields are provided in conjunction with a school recreation yard. For purposes of this report, any area of land located

within a general use outdoor recreation site which is properly graded and free of obstacles and which is designated and maintained for participation in field games or sports has been included in the inventory of playfields. As indicated in Table 56, there was a total of 1,175 playfields in the Region in 1973, of which 844 or over 70 percent were provided by the public sector. On a county basis, Milwaukee County, with 471 playfields, accounted for 40 percent of the playfield areas provided in the Region. As further indicated in Table 56, there was 0.65 playfield per thousand residents, or approximately one playfield per 1,500 residents, in the Region in 1973, with 0.47 playfield per thousand residents, or approximately one playfield per 2,200 residents, provided by the public sector. On a county basis, Walworth County provided 1.29 playfields per thousand residents, or approximately one playfield per 800 residents, while Milwaukee County provided 0.46 playfield per thousand residents, or approximately one playfield per 2,200 residents. Map 46 shows the spatial distribution of general

Map 46

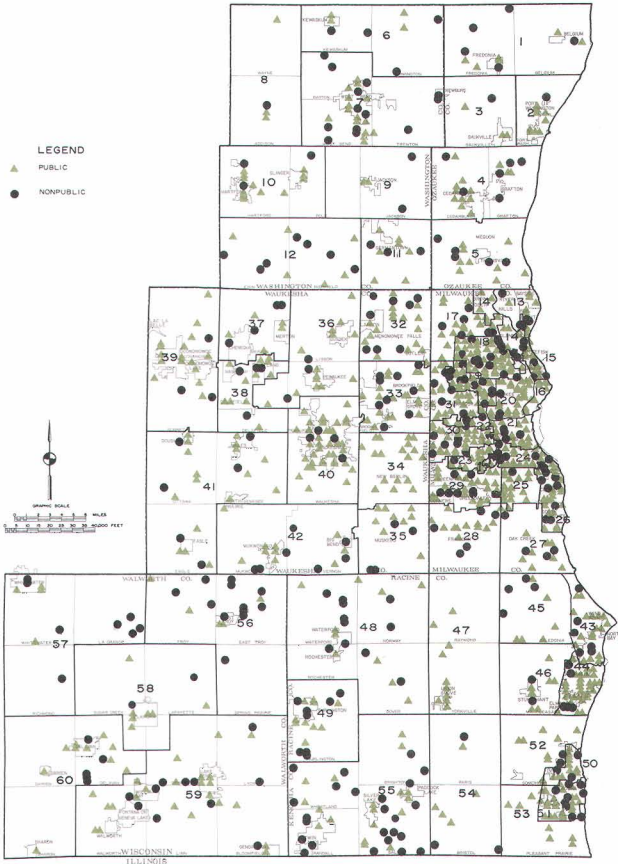
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH PLAYFIELDS BY  
PLANNING ANALYSIS AREA: 1973

DISTRIBUTION OF PLAYFIELDS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973

County (Population) <sup>a</sup>	Ownership	Sites		Number of Playfields Per 1,000 Population
		Number of Sites with Playfields	Percent of Sites	
Kenosha ( 126,651)	Public. . . . .	75	6.4	0.59
	Nonpublic . .	41	3.5	0.32
	Total . . . . .	116	9.9	0.91
Milwaukee (1,012,536)	Public. . . . .	358	30.4	0.35
	Nonpublic . .	113	9.6	0.11
	Total . . . . .	471	40.0	0.46
Ozaukee ( 64,932)	Public. . . . .	40	3.4	0.62
	Nonpublic . .	18	1.5	0.28
	Total . . . . .	58	4.9	0.90
Racine ( 178,916)	Public. . . . .	93	7.9	0.52
	Nonpublic . .	36	3.1	0.20
	Total . . . . .	129	11.0	0.72
Walworth ( 67,511)	Public. . . . .	49	4.1	0.73
	Nonpublic . .	38	3.3	0.56
	Total . . . . .	87	7.4	1.29
Washington ( 76,579)	Public. . . . .	51	4.4	0.67
	Nonpublic . .	33	2.8	0.43
	Total . . . . .	84	7.2	1.10
Waukesha ( 262,746)	Public. . . . .	178	15.2	0.68
	Nonpublic . .	52	4.4	0.20
	Total . . . . .	230	19.6	0.88
Region (1,789,871)	Public. . . . .	844	71.8	0.47
	Nonpublic . .	331	28.2	0.18
	Total . . . . .	1,175	100.0	0.65

<sup>a</sup> Estimated 1975 population.

Source: SEWRPC.



A total of 1,175 general use publicly or privately owned outdoor recreation sites with playfields existed in the Region in 1973. Almost 850 playfields, or more than 70 percent of all playfields, were in public ownership. Milwaukee County with 471 playfields accounted for 40 percent of the playfields in the Region.

Source: SEWRPC.

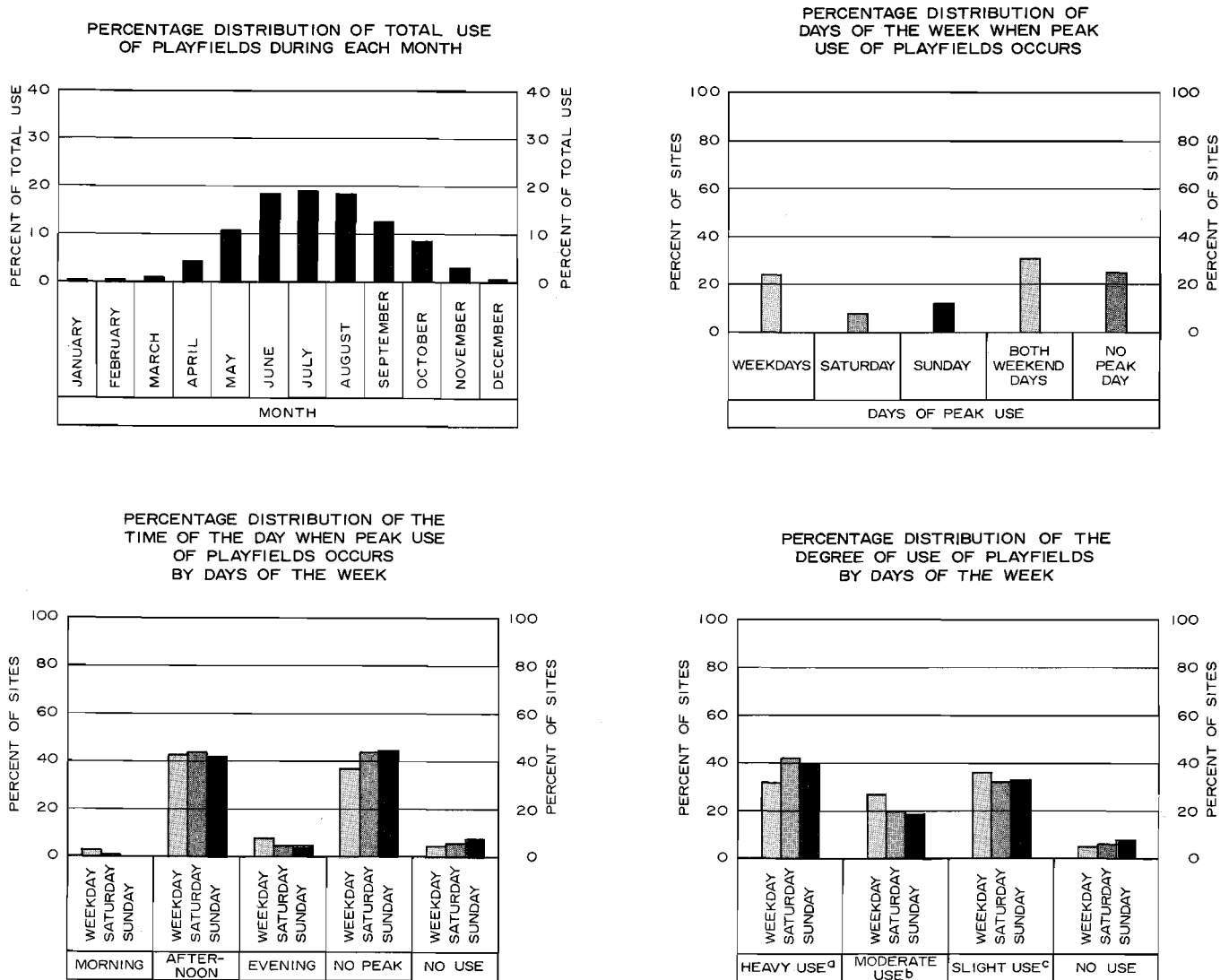


use outdoor recreation sites providing playfields within each planning analysis area in the Region. As indicated, general use sites providing playfields are distributed throughout the Region with concentrations of playfields located in the more densely populated areas of the Region. Fifty-three sites with playfields were located in planning analysis area 18 in Milwaukee County while planning analysis areas 19, 20, 26, 29, and 30 in Milwaukee County; area 40 in Waukesha County; area 44 in Racine County; areas 51 and 55 in Kenosha County; and area 59 in Walworth County each contained at least 30 sites with playfields.

Of the 26 recreation activities considered in this chapter, playfield activities ranked fifteenth in relative popularity with about 10 percent of the households in the Region participating in playfield activities. Peak use of playfields in the Region occurred during late spring, summer, and early fall. As indicated in Figure 28, over half of the total use of playfields occurred during the months of June, July, and August although some playfield areas were utilized throughout the entire calendar year. As further indicated in Figure 28, peak use of playfields occurs primarily on weekends while the peak time of day is generally afternoons. Finally, as indicated in

Figure 28

# CHARACTERISTICS OF THE USE OF PLAYFIELDS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

Source: SEWRPC.

Figure 28, the use of playfields during the peak month was rated as heavy for Saturdays and Sundays for about 40 percent of the sites in the Region. It should be noted, however, that the use of playfields was rated as slight for all days of the week for about one-third of the sites in the Region.

**Playground Activities:** Playground activities generally occur on school related playground areas or within larger general use outdoor recreation sites. Participation in this activity includes the utilization of facilities generally found in children's play areas, such as sand boxes, swings, and slides. The primary participants in playground activities are preschool age and school age children of both sexes. Often supervision of such activities is provided by parents or by a recreation program supervisor. Most participants travel less than one mile from their home to participate in these activities and the average length of stay is generally one to two hours or possibly longer if a recreation program and supervision are provided.

Playgrounds vary in size and facilities provided, from small areas simply providing a few playground apparatuses, such as swings or a sand box, to highly developed areas which may include special areas for preschool

children, apparatus areas, and areas for organized games. For purposes of this report, all areas of land having play apparatus such as swings, slides, and sand boxes—including tot lots and play lots located in general use outdoor recreation sites—were included in the inventory of playgrounds. As indicated in Table 57, there was a total of 945 playgrounds located in general use sites in the Region in 1973, over 75 percent of which were in public ownership. On a county basis, Milwaukee County with 320 playgrounds and Waukesha County with 205 playgrounds together accounted for over half of the playgrounds in the Region. As further indicated in Table 57, there was 0.53 playground per thousand residents, or approximately one playground per 1,900 residents, in the Region in 1973, with 0.41 playground per thousand residents, or approximately one playground per 2,400 residents, provided by the public sector. On a county basis, Ozaukee, Walworth, and Washington Counties all provide approximately one playground per thousand residents, while Milwaukee County provides 0.32 playground per thousand residents, or approximately one playground per 3,100 residents. Map 47 shows the

Table 57

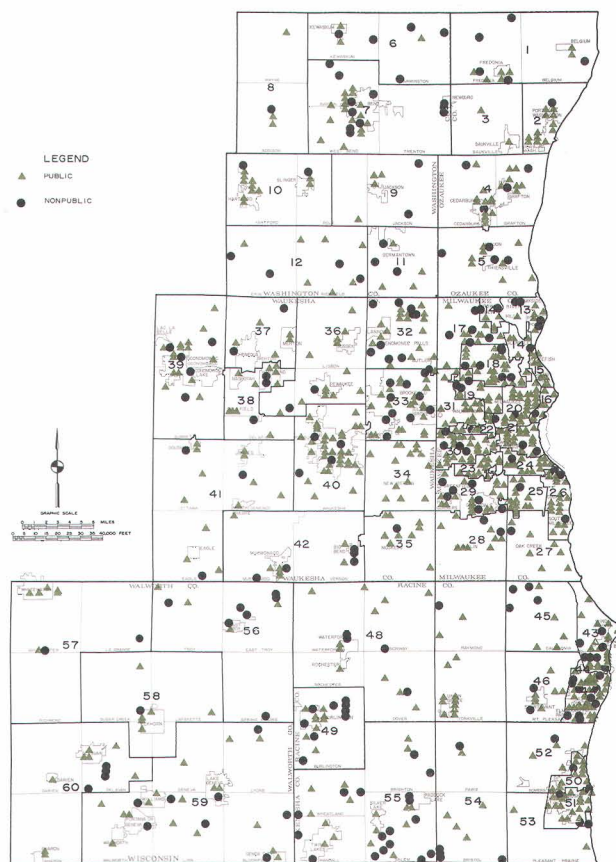
**DISTRIBUTION OF PLAYGROUNDS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973**

County (Population) <sup>a</sup>	Ownership	Sites		Number of Playgrounds Per 1,000 Population
		Number of Sites with Playgrounds	Percent of Sites	
Kenosha ( 126,651)	Public . . . .	57	6.0	0.45
	Nonpublic . .	28	3.0	0.22
	Total . . . .	85	9.0	0.67
Milwaukee (1,012,536)	Public . . . .	274	29.0	0.27
	Nonpublic . .	46	4.9	0.05
	Total . . . .	320	33.9	0.32
Ozaukee ( 64,932)	Public . . . .	48	5.1	0.74
	Nonpublic . .	14	1.5	0.22
	Total . . . .	62	6.6	0.96
Racine ( 178,916)	Public . . . .	97	10.3	0.54
	Nonpublic . .	37	3.9	0.21
	Total . . . .	134	14.2	0.75
Walworth ( 67,511)	Public . . . .	41	4.3	0.61
	Nonpublic . .	22	2.3	0.33
	Total . . . .	63	6.6	0.94
Washington ( 76,579)	Public . . . .	48	5.1	0.63
	Nonpublic . .	28	2.9	0.37
	Total . . . .	76	8.0	1.00
Waukesha ( 262,746)	Public . . . .	160	16.9	0.61
	Nonpublic . .	45	4.8	0.17
	Total . . . .	205	21.7	0.78
Region (1,789,871)	Public . . . .	725	76.7	0.41
	Nonpublic . .	220	23.3	0.12
	Total . . . .	945	100.0	0.53

<sup>a</sup> Estimated 1975 population.

Source: SEWRPC.

**Map 47  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH PLAYGROUNDS BY  
PLANNING ANALYSIS AREA: 1973**



A total of 945 general use publicly or privately owned outdoor recreation sites with playgrounds existed in the Region in 1973. Over 700 playgrounds, or more than three-fourths of all playgrounds in the Region, were in public ownership. Milwaukee County with 320 playgrounds and Waukesha County with 205 playgrounds together accounted for over half of the playgrounds in the Region.

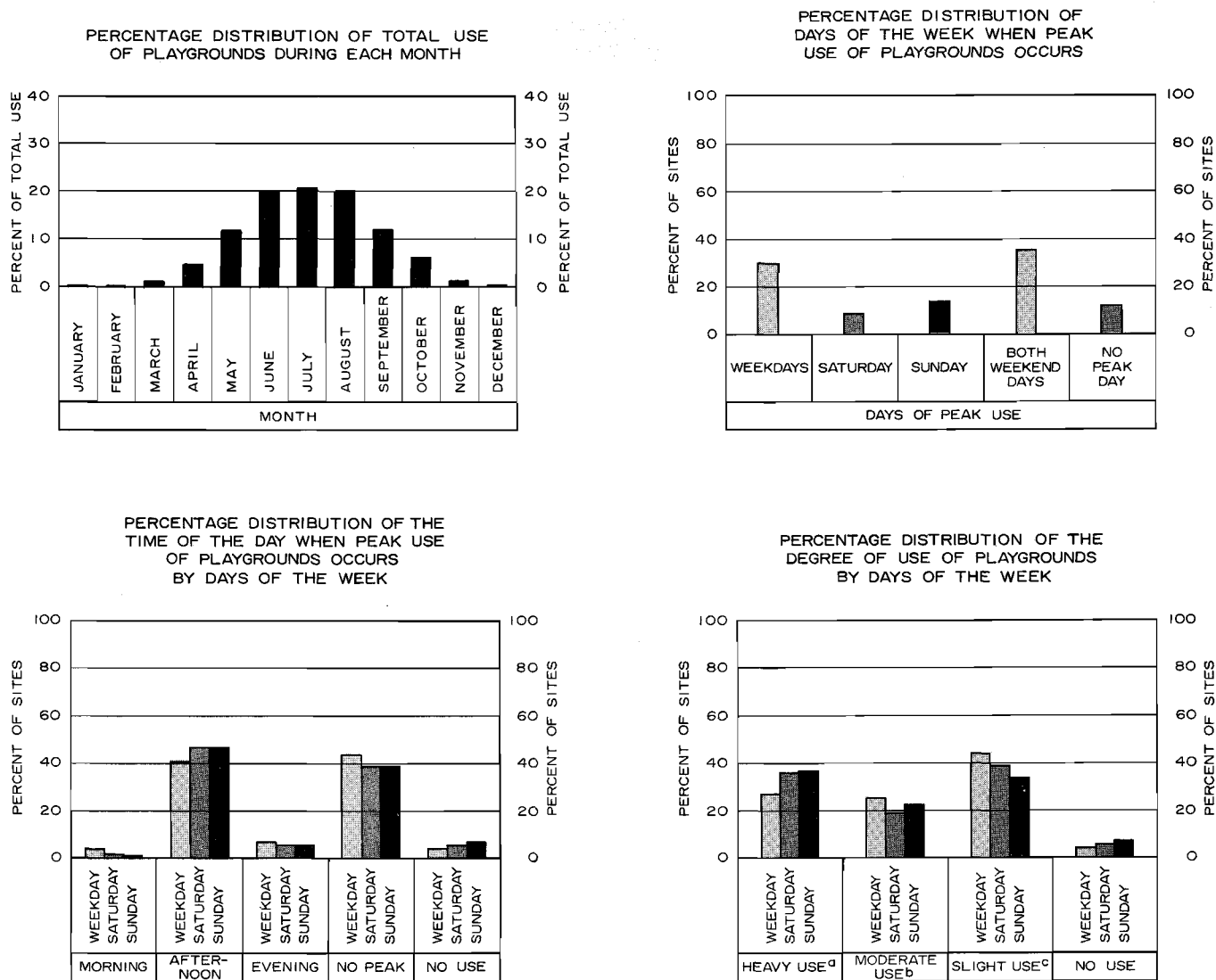
Source: SEWRPC.

spatial distribution of general use outdoor recreation sites providing playgrounds within each planning analysis area in the Region. As indicated, playgrounds are distributed throughout the Region, with relatively large quantities of playgrounds located in the more densely populated areas in the Region. Forty-five sites with playgrounds were located in planning analysis area 44 in Racine County while planning analysis area 7 in Washington County; areas 18, 20, 29, and 30 in Milwaukee County; areas 32, 33, and 40 in Waukesha County; area 43 in Racine County; area 55 in Kenosha County; and area 59 in Walworth County each contained at least 25 sites with playgrounds.

Of the 26 recreation activities considered in this chapter, playground activities ranked nineteenth in relative popularity with about 6 percent of the households in the Region participating in the activity. Peak use of playground facilities occurred during the summer months. As indicated in Figure 29, about 60 percent of the total use of playgrounds occurred during the months of June, July, and August, although a significant portion of the activity on the playgrounds also occurred during the months of April, May, September, and October. As further indicated in Figure 29—the peak time of the week for playground activity was weekends, although for 30 percent of the playgrounds in the Region, peak use

Figure 29

# CHARACTERISTICS OF THE USE OF PLAYGROUNDS AT GENERAL USE OUTDOOR RECREATION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

Source: SEWRPC.



occurred during the week. Afternoon was the time of day when peak use occurred for about 40 percent of the playgrounds; however, for an additional 40 percent of the playgrounds of the Region, use was uniform throughout the day. Finally, as indicated in Figure 29, there was an even distribution of sites with heavy, moderate, as well as slight use on both week as well as weekend days.

**Softball:** Most softball activity occurs on "softball diamonds" with participation in this activity ranging from informal neighborhood games on local diamonds to organized leagues for school age children and young adults. The primary participants in softball activity are school age and young adult males, although the range of participants in softball may include most age groups of both sexes. Most participants travel less than three miles from their homes to participate in the activity, and the average participation lasts between one and two hours.

Regulation softball is played on a 60 foot base path diamond with the total surface area required being approximately 75,000 square feet. Some diamonds, however, may be somewhat smaller and informal participation may occur on almost any area of land greater than one acre which is properly graded and free of obstacles. Support facilities such as parking areas, bleachers, lights, and rest rooms are often provided. For purposes of this report, any area of land located within a general use outdoor recreation site having 60 foot base paths, and a backstop has been included in the inventory of softball diamonds. As indicated in Table 58, there was a total

of 1,278 softball diamonds located within a total of 786 general use outdoor recreation sites in the Region in 1973. On a county basis, Milwaukee County with 482 softball diamonds and Waukesha County with 280 softball diamonds accounted for about half of the softball diamonds provided in the Region. It is important to note that 1,056 softball diamonds, or about 83 percent of the 1,278 softball diamonds in the Region, were in public ownership. As further indicated in Table 58, there was 0.71 softball diamond per thousand residents, or approximately one diamond per 1,400 residents in the Region in 1973, with 0.59 diamond per thousand residents, or approximately one diamond per 1,700 residents, provided by the public sector. On a county basis, Walworth and Washington Counties each provided approximately 1.26 softball diamonds per thousand residents, or approximately one diamond per 800 residents, while Milwaukee County provided 0.48 diamond per one thousand residents, or approximately one diamond per 2,100 residents. Map 48 shows the spatial distribution of general use outdoor recreation sites providing softball diamonds within each planning

Table 58

**DISTRIBUTION OF SOFTBALL DIAMONDS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973**

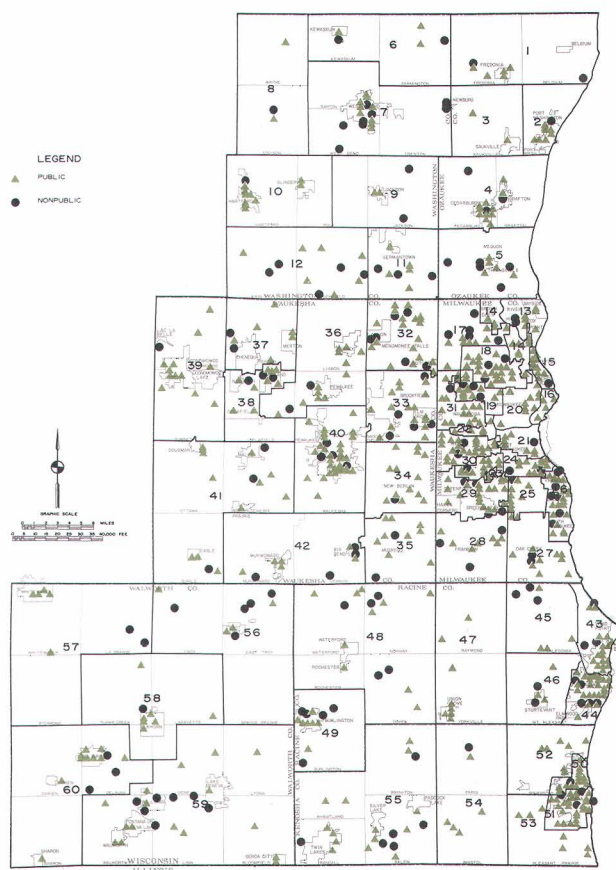
County (Population) <sup>a</sup>	Ownership	Sites		Facilities		Number of Diamonds Per 1,000 Population
		Number of Sites with Softball Diamonds	Percent of Sites	Number of Diamonds	Percent of Diamonds	
Kenosha ( 126,651)	Public . . . .	73	9.3	108	8.5	0.85
	Nonpublic . .	12	1.5	17	1.3	0.13
	Total . . . .	85	10.8	125	9.8	0.98
Milwaukee (1,012,536)	Public . . . .	224	28.3	426	33.1	0.42
	Nonpublic . .	38	4.9	56	4.4	0.06
	Total . . . .	262	33.2	482	37.5	0.48
Ozaukee ( 64,932)	Public . . . .	31	4.0	47	3.7	0.72
	Nonpublic . .	11	1.4	13	1.0	0.20
	Total . . . .	42	5.4	60	4.7	0.92
Racine ( 178,916)	Public . . . .	75	9.6	116	9.1	0.65
	Nonpublic . .	23	2.9	33	2.6	0.18
	Total . . . .	98	12.5	149	11.7	0.83
Walworth ( 67,511)	Public . . . .	42	5.4	60	4.7	0.89
	Nonpublic . .	18	2.3	26	2.0	0.39
	Total . . . .	60	7.7	86	6.7	1.28
Washington ( 76,579)	Public . . . .	38	4.9	61	4.8	0.80
	Nonpublic . .	23	2.9	35	2.8	0.46
	Total . . . .	61	7.8	96	7.6	1.26
Waukesha ( 262,746)	Public . . . .	145	18.4	238	18.7	0.91
	Nonpublic . .	33	4.2	42	3.3	0.16
	Total . . . .	178	22.6	280	22.0	1.07
Region (1,789,871)	Public . . . .	628	79.9	1,056	82.6	0.59
	Nonpublic . .	158	20.1	222	17.4	0.12
	Total . . . .	786	100.0	1,278	100.0	0.71

<sup>a</sup> Estimated 1975 population.

Source: SEWRPC.

Map 48

**GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH SOFTBALL DIAMONDS  
BY PLANNING ANALYSIS AREA: 1973**



A total of 786 general use publicly or privately owned outdoor recreation sites with 1,278 softball diamonds existed in the Region in 1973. Almost 630 sites, or about 80 percent of the 786 sites with softball diamonds, were in public ownership. Milwaukee County, with 262 sites containing 482 softball diamonds, and Waukesha County, with 178 sites containing 280 softball diamonds, together accounted for over 55 percent of the sites and almost 60 percent of the baseball diamonds in the Region.

Source: SEWRPC.



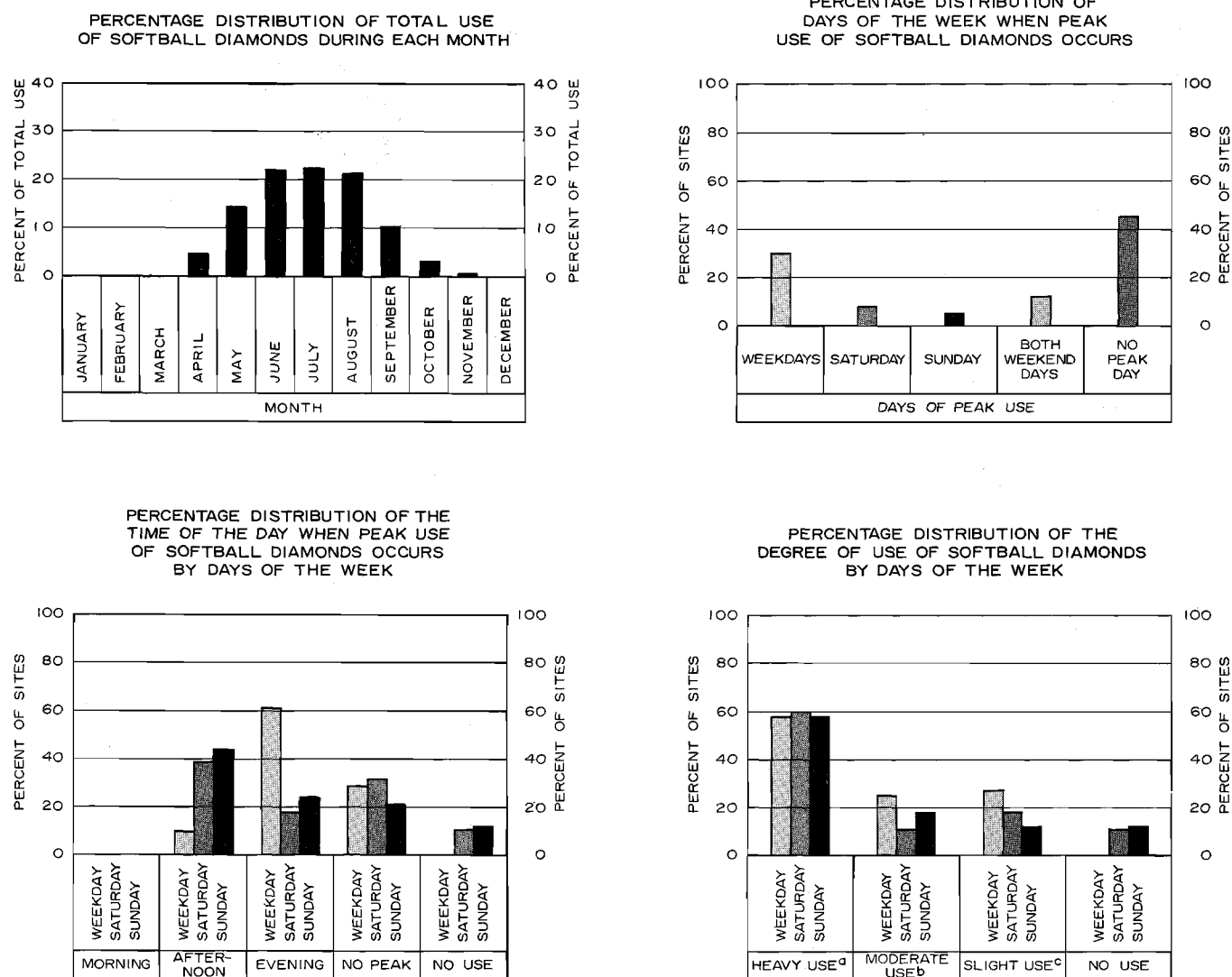
analysis area in the Region. As indicated, relatively large quantities of sites with softball diamonds were located in the more densely populated areas of the Region. Thirty-four sites with softball diamonds were located in planning analysis area 40 in Waukesha County while planning analysis areas 18, 26, 29, and 30 in Milwaukee County; areas 32 and 33 in Waukesha County; areas 43 and 44 in Racine County; areas 51 and 55 in Kenosha County; and area 59 in Walworth County each contained at least 20 sites with softball diamonds.

Of the 26 recreation activities considered in this chapter, softball ranked eighth in relative popularity with about 16 percent of the households in the Region participating

in the activity. Peak use of softball diamonds in the Region occurred during late spring and summer. As indicated in Figure 30, about two-thirds of the total participation in softball occurred during the months of June, July, and August although softball diamonds were also utilized in April, May, September, and October. As further indicated in Figure 30, for about 45 percent of the softball diamonds in the Region, there was no one day of the week when peak use of the facility occurred, while for approximately 30 percent of the softball diamonds, the peak use occurred on weekdays. Peak time of the day for use of softball diamonds on weekdays was in the evening while the peak time of use on Saturdays and Sundays occurred during the afternoon. Finally,

Figure 30

# CHARACTERISTICS OF THE USE OF SOFTBALL DIAMONDS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

as indicated in Figure 30, the use of the facilities during the peak month was rated as heavy on all days for almost 60 percent of the softball diamonds in the Region.

**Pool Swimming:** Pool swimming is a popular activity in those areas of the Region which lack adequate natural swimming beaches. Though swimming is a popular activity for all age groups, the primary participants utilizing outdoor swimming pools are school age children of both sexes. Most participants travel less than three miles from their home to participate in the activity, and the average participation time is about three hours.

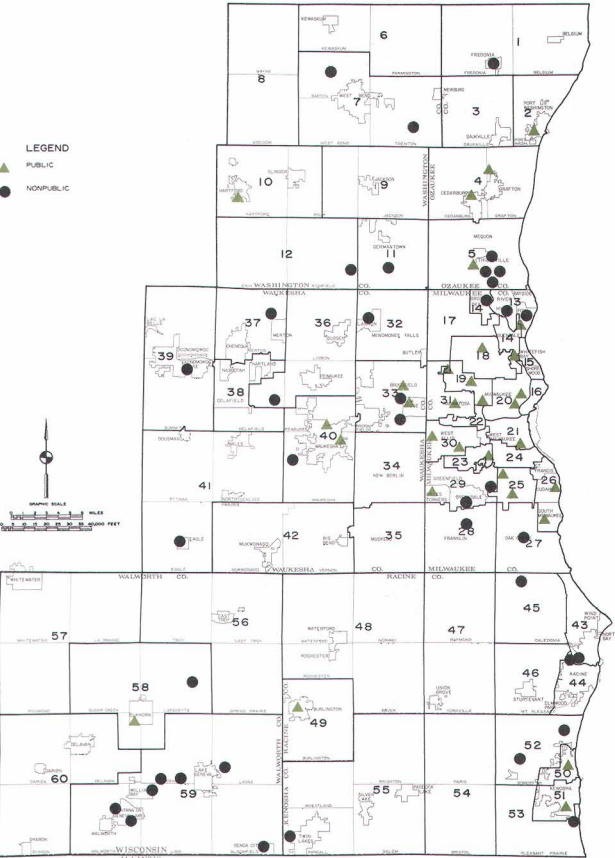
Swimming pools in the Region are provided by both public and private sector and range in size from about 1,000 square feet for pools provided by some private clubs or apartment complexes to over 35,000 square feet for pools provided in public parks. A swimming pool complex generally includes adequate automobile parking areas, a bath house, shower and rest room facilities, and lighting. For purposes of this report, all outdoor swimming pools located within general use outdoor recreation sites have been included in the inventory of swimming pools. As indicated in Table 59, there was a total of 70 swimming pools in the Region in 1973, with 31 pools, or approximately 44 percent, in public ownership. Milwaukee County, with 25 pools, accounted for over one-third of the swimming pools in the Region and, with 18 public pools totaling almost 320,000 square feet of surface water, Milwaukee County also accounted for over

half of the public pools and almost three-fourths of the public pool surface water in the Region. As further indicated in Table 59, there were 241 square feet of public pool surface water per thousand residents in the Region in 1973. On a county basis, Ozaukee County provided more than twice the amount of public pool surface water area as the regional average, while Racine County provided less than one-sixth the regional average. Map 49 shows the spatial distribution of general outdoor recreation sites providing swimming pools within each planning analysis area in the Region. As indicated, a large number of public pools are provided in the densely populated areas of the Region particularly in Milwaukee County. Planning analysis areas 19, 20, 25, 26, 30, and 31 in Milwaukee County together provided 12 public swimming pools while two public swimming pools were provided in planning analysis area 4 in Ozaukee County and areas 33 and 40 in Waukesha County.

Of the 26 recreation activities considered in this chapter, pool swimming ranked twelfth in relative popularity, with about 13 percent of the households in the Region

Map 49

GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH SWIMMING POOLS  
BY PLANNING ANALYSIS AREA: 1973



A total of 70 general use publicly or privately owned outdoor recreation sites with swimming pools existed in the Region in 1973. A total of 39 pools, or over 55 percent of all pools, were in nonpublic ownership. Milwaukee County with 25 pools accounted for over one-third of swimming pools provided in the Region. Source: SEWRPC.

Table 59

DISTRIBUTION OF SWIMMING POOLS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973

County (Population) <sup>a</sup>	Ownership	Sites		Facilities		Number of Square Feet in 1000's of Square Feet Per 1,000 Population
		Number of Sites with Swimming Pools	Percent of Sites	Number of Square Feet (1000's of Square Feet)	Percent of Total Area	
Kenosha ( 126,651)	Public . . . .	2	2.9	20.8	4.8	164
	Nonpublic . .	4	5.7	N/A	0.0	0
	Total . . . .	6	8.6	N/A	0.0	0
Milwaukee (1,012,536)	Public . . . .	18	25.7	318.9	74.0	315
	Nonpublic . .	7	10.0	N/A	0.0	0
	Total . . . .	25	35.7	N/A	0.0	0
Ozaukee ( 64,932)	Public . . . .	4	5.7	34.4	8.0	530
	Nonpublic . .	5	7.1	N/A	0.0	0
	Total . . . .	9	12.8	N/A	0.0	0
Racine ( 178,916)	Public . . . .	1	1.4	6.3	1.5	35
	Nonpublic . .	3	4.3	N/A	0.0	0
	Total . . . .	4	5.7	N/A	0.0	0
Walworth ( 67,511)	Public . . . .	1	1.4	6.1	1.4	90
	Nonpublic . .	8	11.4	N/A	0.0	0
	Total . . . .	9	12.8	N/A	0.0	0
Washington ( 76,579)	Public . . . .	1	1.5	9.2	2.2	120
	Nonpublic . .	4	5.7	N/A	0.0	0
	Total . . . .	5	7.2	N/A	0.0	0
Waukesha ( 262,746)	Public . . . .	4	5.7	35.1	8.1	134
	Nonpublic . .	8	11.4	N/A	0.0	0
	Total . . . .	12	17.1	N/A	0.0	0
Region (1,789,871)	Public . . . .	31	44.3	430.8	100.0	241
	Nonpublic . .	39	55.7	N/A	0.0	0
	Total . . . .	70	100.0	N/A	0.0	0

<sup>a</sup> Estimated 1975 population.  
Source: SEWRPC.

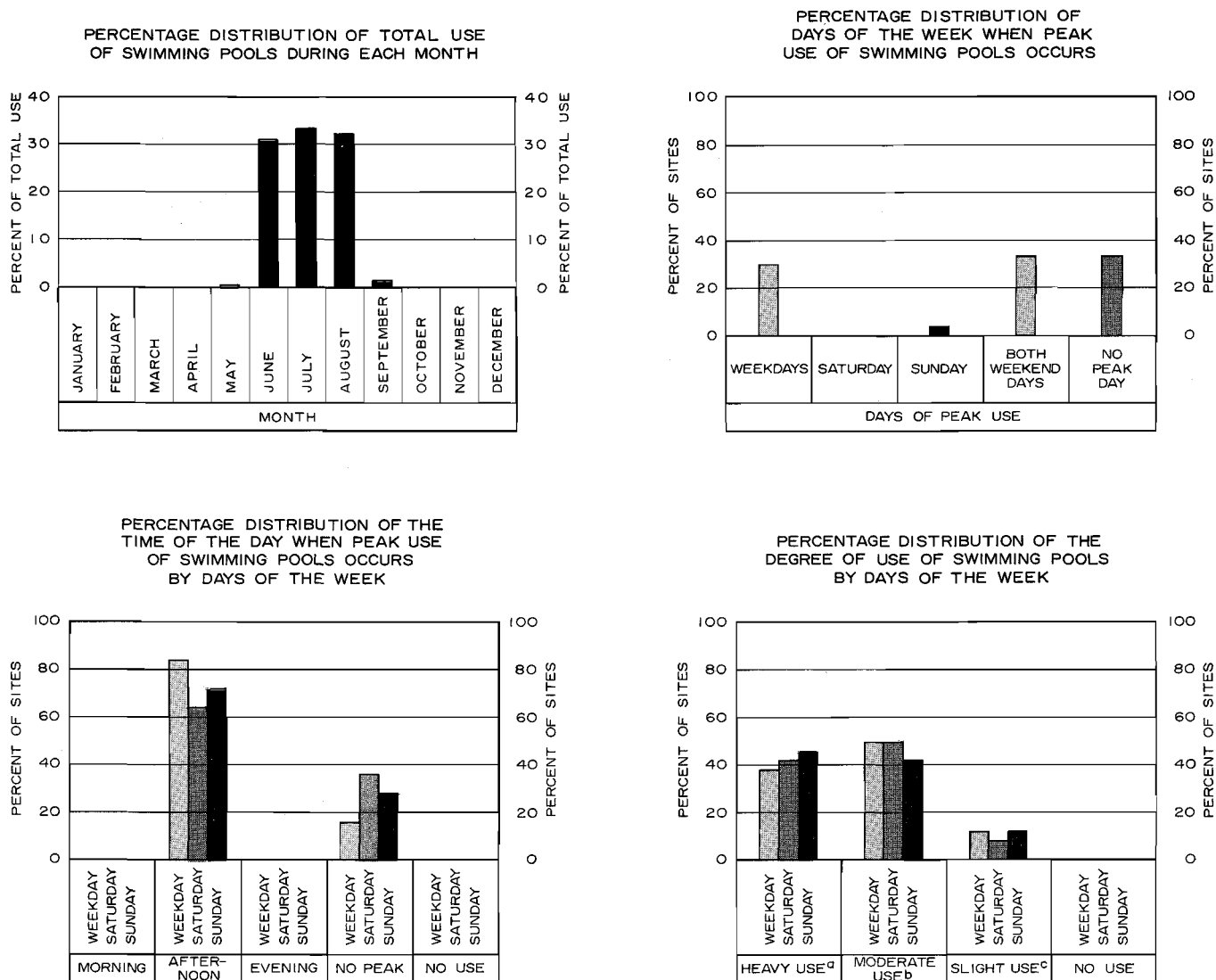
participating in the activity. Peak use of swimming pools in the Region occurred during summer. As indicated in Figure 31 virtually all swimming pool use occurred during the months of June, July, and August. As further indicated in Figure 31, peak use of the swimming pools in the Region seemed fairly evenly distributed throughout the entire week while the time of day when peak use occurred was predominantly in the afternoon on both weekdays as well as weekends. Finally, the use of swimming pool facilities during the peak month was rated as heavy on all days of the week for about 40 percent of the pools in the Region.

**Tennis:** Tennis is an outdoor activity that occurs on courts provided specifically for that purpose. Participants in the activity include most age groups and both sexes. Most participants travel less than three miles from their homes to participate and the average participation time is about two hours.

The playing area of a regulation doubles tennis court is 36 feet x 78 feet with the total surface area required for such a court being approximately 7,200 square feet. In addition, support facilities such as automobile parking and lighting are often provided. As indicated in Table 60,

Figure 31

# CHARACTERISTICS OF THE USE OF SWIMMING POOLS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.



there was a total of 1,023 tennis courts located within a total of 284 general use outdoor recreation sites in the Region in 1973. On a county basis, Milwaukee County with 448 courts and Waukesha County with 226 courts together accounted for about two-thirds of the total number of tennis courts provided in the Region. It is important to note that 775 courts, or about three-fourths of the 1,023 courts in the Region, were in public ownership. As further indicated in Table 60, there was 0.57 tennis court per thousand residents, or approximately one court per 1,800 residents in the Region in 1973, with 0.43 tennis court per thousand residents, or approximately one court per 2,300 residents provided by the public sector. On a county basis, Walworth County provides 1.44 tennis courts per thousand residents, or approximately one court per 700 residents; however, about 70 percent of these courts are provided by the nonpublic sector. Indeed, Walworth County is the only County in the Region where more tennis courts were provided by the nonpublic sector than the public sector. In Waukesha County, 0.72 court per thousand residents, or approximately one court per 1,400 residents, were provided by the public sector. Map 50 shows the spatial distribution of general use outdoor recreation sites providing tennis courts within each planning analysis area

in the Region. As indicated, a relatively large number of courts was located in the more densely populated areas of the Region. Seventeen sites with tennis courts were located in planning analysis area 59 in Walworth County while planning analysis areas 15 and 30 in Milwaukee County; areas 32, 33, and 40 in Waukesha County; and area 44 in Racine County each contained at least 10 sites with tennis courts.

Of the 26 recreation activities considered in this chapter, tennis ranked sixteenth in relative popularity, with about 9.8 percent of the households in the Region participating in the activity. Peak use of tennis courts in the Region

Table 60

**DISTRIBUTION OF TENNIS COURTS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973**

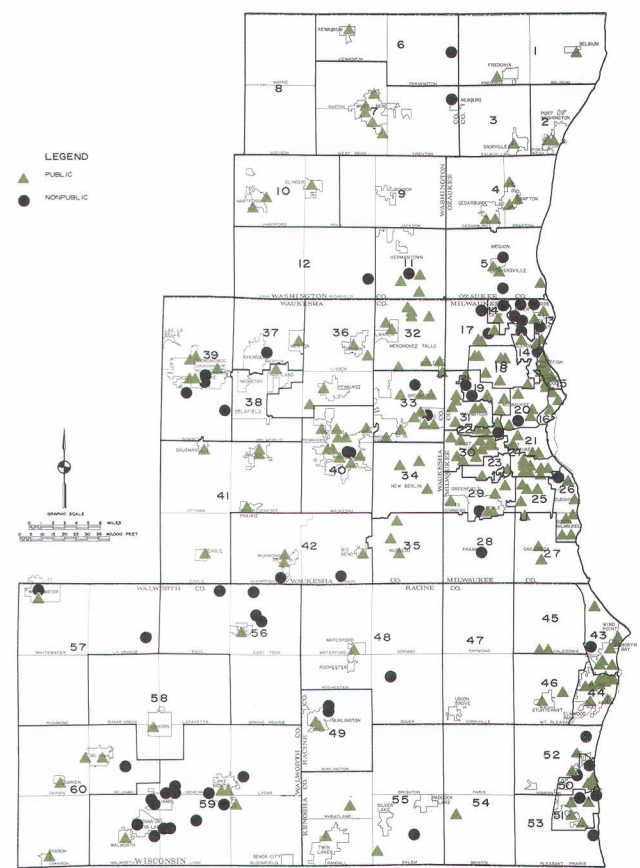
County (Population) <sup>a</sup>	Ownership	Sites		Facilities		Number of Tennis Courts Per 1,000 Population
		Number of Sites with Tennis Courts	Percent of Sites	Number of Courts	Percent of Sites	
Kenosha ( 126,651)	Public . . . .	13	4.6	46	4.5	0.36
	Nonpublic . .	7	2.5	34	3.4	0.27
	Total . . . .	20	7.1	80	7.9	0.63
Milwaukee (1,012,536)	Public . . . .	92	32.4	356	34.8	0.35
	Nonpublic . .	17	6.0	92	9.0	0.09
	Total . . . .	109	38.4	448	43.5	0.44
Ozaukee ( 64,932)	Public . . . .	13	4.6	40	3.9	0.62
	Nonpublic . .	2	0.7	4	0.4	0.06
	Total . . . .	15	5.3	44	4.3	0.68
Racine ( 178,916)	Public . . . .	24	8.4	76	7.4	0.42
	Nonpublic . .	4	1.4	7	0.7	0.04
	Total . . . .	28	9.8	83	8.1	0.46
Walworth ( 67,511)	Public . . . .	11	3.8	29	2.8	0.43
	Nonpublic . .	20	7.1	68	6.6	1.01
	Total . . . .	31	10.9	97	9.4	1.44
Washington ( 76,579)	Public . . . .	12	4.2	38	3.7	0.50
	Nonpublic . .	4	1.4	7	0.7	0.09
	Total . . . .	16	5.6	45	4.4	0.59
Waukesha ( 262,746)	Public . . . .	54	19.0	190	18.6	0.72
	Nonpublic . .	11	3.9	36	3.5	0.14
	Total . . . .	65	22.9	226	22.1	0.86
Region (1,789,871)	Public . . . .	219	77.0	775	75.8	0.43
	Nonpublic . .	65	23.0	248	24.2	0.14
	Total . . . .	284	100.0	1,023	100.0	0.57

<sup>a</sup> Estimated 1975 population.

Source: SEWRPC.

Map 50

**GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH TENNIS COURTS  
BY PLANNING ANALYSIS AREA: 1973**



A total of 284 general use publicly or privately owned outdoor recreation sites containing a total of 1,023 tennis courts existed in the Region in 1973. Almost 220, or over 75 percent of the 284 sites with tennis courts, were in public ownership. Milwaukee County, with 109 sites and 448 tennis courts, and Waukesha County, with 65 sites and 226 tennis courts, together accounted for 60 percent of the sites and 65 percent of the tennis courts provided in the Region.

Source: SEWRPC.

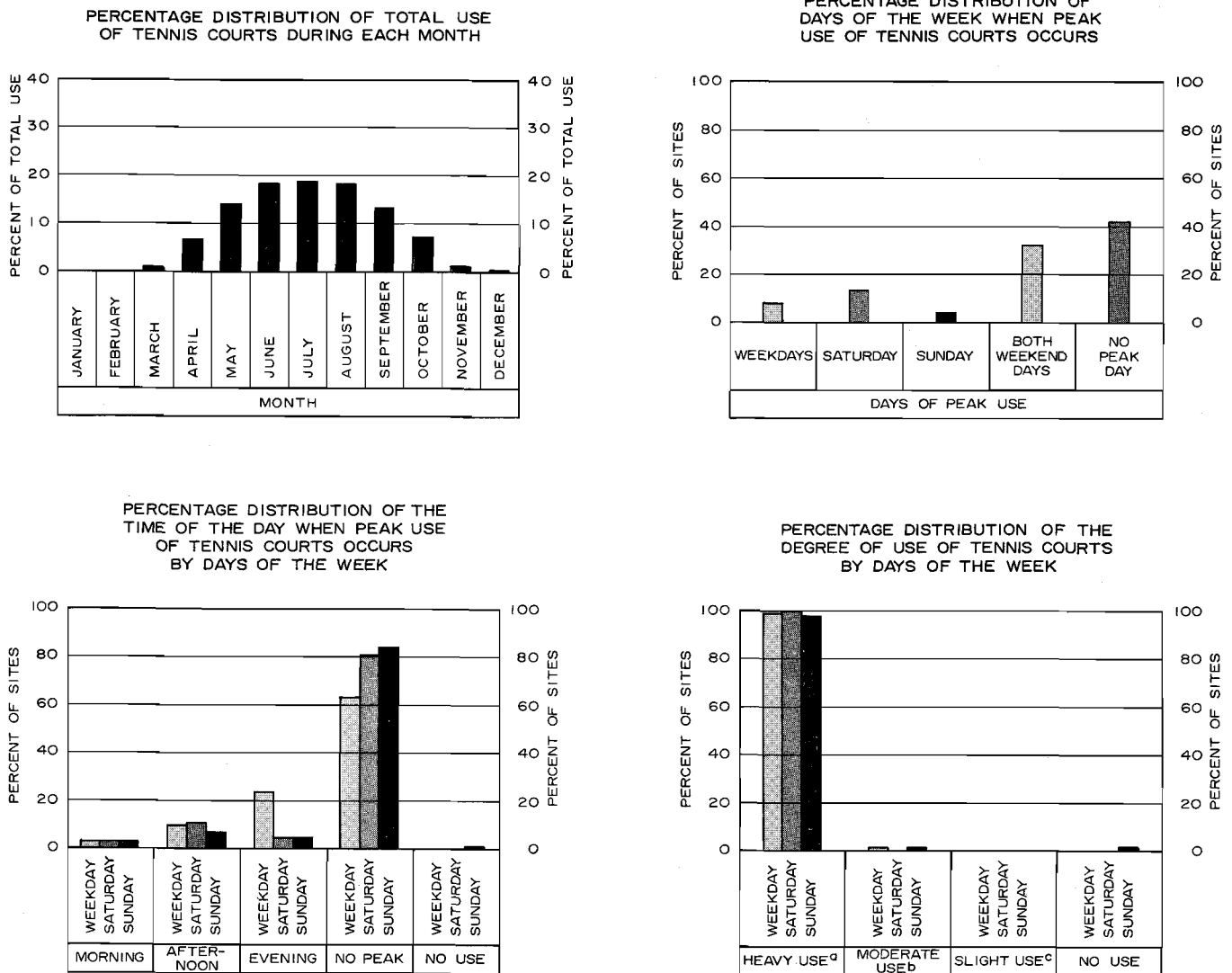


occurred during summer. As indicated in Figure 32, over one-half of the total participation in the activity occurred during the month of June, July, and August with some use also included in the months of April, May, September, and October. As further indicated in Figure 32, peak use of tennis courts in the Region occurred on weekends for

about 50 percent of sites, while use of tennis courts was evenly distributed throughout the day for over 60 percent of the sites. Finally, as indicated in Figure 32, the use of the facilities during the peak month was rated as heavy for all days of the week for virtually all of the tennis courts in the Region.

Figure 32

# CHARACTERISTICS OF THE USE OF TENNIS COURTS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

Source: SEWRPC.

### Concluding Remarks—Intensive Resource and Nonresource Oriented Recreation Facilities

It is apparent from the preceding section that certain disparities exist among the various counties in the Region in the provision of facilities for intensive outdoor recreation activities. In order to facilitate a comparison by county of the provision of facilities for intensive outdoor recreation activities, Table 61 provides data on the per capita provision of facilities for intensive resource and nonresource oriented outdoor recreation activities within each of the counties of the Region. As might be expected from the data previously presented, Milwaukee County had the lowest per capita provision of facilities for 11 of the 13 outdoor recreation activities listed, while Walworth County had the highest per capita provision of facilities for eight of the 13 activities listed.

Table 61 also shows the estimated number of participants in each intensive outdoor recreation activity at facilities located in both publicly and privately owned general use sites in the Region in 1974. The estimate reflects participation on an average Sunday during the month of peak use. As indicated in Table 61, the activity with the

largest number of participants on an average Sunday during the peak month of use was beach swimming with an estimated 66,600 participants, followed by picnicking and ice skating with 46,400 and 44,000 participants, respectively. It also was estimated that, on an average summer Sunday in 1974, approximately 266,800 people participated in intensive outdoor recreation activities at general use sites in the Region with 185,000<sup>3</sup> people, or about 70 percent of this total, utilizing facilities at public sites.

### Extensive Land Based Outdoor Recreation Activities

Extensive land based outdoor recreation activities, as indicated in Table 47, include bicycling, hiking, horseback riding, nature study, pleasure driving, ski touring,

<sup>3</sup> Both figures given here on participants include participants in all activities listed in Table 61 with the exception of participants in ice skating and downhill skiing. Both figures also include only one-half of the participants in picnicking since one-half of the participants in picnicking are included in the participation estimates of other activities.

Table 61

### PER CAPITA PROVISION AND USE OF INTENSIVE RESOURCE AND NONRESOURCE ORIENTED OUTDOOR RECREATION FACILITIES AT GENERAL USE SITES IN THE REGION

Facility Provided <sup>a</sup>	Low Provision		High Provision		Regional Average Facilities per 1,000 Population	Estimated Number of Participants on a Sunday During the Month of Peak Use		
	County	Facilities per 1,000 Population	County	Facilities per 1,000 Population		Public Sites	Nonpublic Sites	Total Sites
<b>Intensive Resource Oriented Facilities</b>								
Campsites . . . . .	Milwaukee	0.00	Walworth	15.90	1.78	2,000	9,300	11,300
Golf Courses . . . . .	Milwaukee	0.015	Walworth	0.207	0.045	5,600	17,900	23,500
Picnic Tables . . . . .	Milwaukee	5.92	Washington	21.44	8.71	33,800	12,600	46,400
Ski Hill (acres) . . . . .	Ozaukee	0.015	Walworth	0.874	0.101	1,700	11,500	13,200
Swimming Beach (linear feet) . . . .	Milwaukee	14.5	Walworth	162.8	33.7	43,200	23,400	66,600
<b>Intensive Nonresource Oriented Facilities</b>								
Baseball Diamonds . . . . .	Milwaukee	0.090	Ozaukee	0.230	0.121	5,900	900	6,800
Basketball Goals . . . . .	Milwaukee	1.07	Ozaukee	1.88	1.27	14,300	4,200	18,500
Ice Skating Rinks . . . . .	Milwaukee	0.14	Walworth	0.22	0.17	36,900	7,100	44,000
Playfields . . . . .	Milwaukee	0.46	Walworth	1.29	0.65	20,800	8,200	29,000
Playgrounds . . . . .	Milwaukee	0.32	Washington	1.00	0.53	10,900	3,300	14,200
Softball Diamonds . . . . .	Milwaukee	0.48	Walworth	1.28	0.71	24,700	5,200	29,900
Swimming Pool (square feet) <sup>b</sup> . . .	Racine	35	Ozaukee	530	241	30,800	--	30,800
Tennis Courts . . . . .	Milwaukee	0.44	Walworth	1.44	0.57	9,900	3,100	13,000

<sup>a</sup> Includes public and nonpublic facilities.

<sup>b</sup> Includes public pools only.

Source: SEWRPC.

and snowmobiling. All extensive land based outdoor recreation activities are resource oriented, relying on suitable natural resource amenities to enhance the quality of the recreational experience. Areas and facilities for extensive land based recreation activities are located both within general use outdoor recreation sites and on other public and nonpublic open space lands. This section presents a description of each of the extensive land based recreation activities including a discussion of the nature of each activity and its facility and resource requirements, the characteristics of the participants in each activity, and the facilities provided specifically for each activity.

**Bicycling:** Bicycling as a recreational activity is undertaken for a variety of reasons including touring, competitive racing, and simple exercise. At its best, recreational bicycling occurs on a linear or circular trail facility through scenic areas with points of historic and cultural interest and diversified topographical features. Presently, however, most recreational bicycling occurs on existing roads which have been developed primarily for automobile traffic and which often are unsafe or otherwise undesirable for recreational biking.

Most age groups of both sexes participate in recreational bicycling. Of the 26 recreation activities considered in this chapter, bicycling ranked ninth in relative popularity, with about 15 percent of the households in the Region participating in the activity.

Facilities intended to provide safe and satisfying recreational bicycling opportunities are of two general types—bike trails and bike routes. A bike trail is a separate way designed for the exclusive use of bicyclists. Desirably, a bike trail should be entirely independent of other transportation facilities. Bike trails are generally eight feet wide with bituminous paving as the surface material. The maximum desirable grade over a relatively long distance is 5 percent, although grades of up to 10 percent are acceptable for short distances. Bike routes share the roadway with automotive vehicles, and the routes are designated by appropriate bike route signs. In addition, these signed routes may include pavement markings indicating the separation between bicycle and automotive traffic.

Bike trails were virtually nonexistent in the Region in 1973, the only bike trails provided being a 1.5 mile public trail within Warnimont Park and a 4.6 mile public trail in Lake Park in Milwaukee County. Due to heavy popular demand for such facilities, however, planning for the development of bike trails has taken place in the recent past and, since 1973, short segments of bike trails have been proposed for development and in some cases were constructed in southern Ozaukee County, throughout Milwaukee County, in northeastern Kenosha County, and in eastern Racine County.

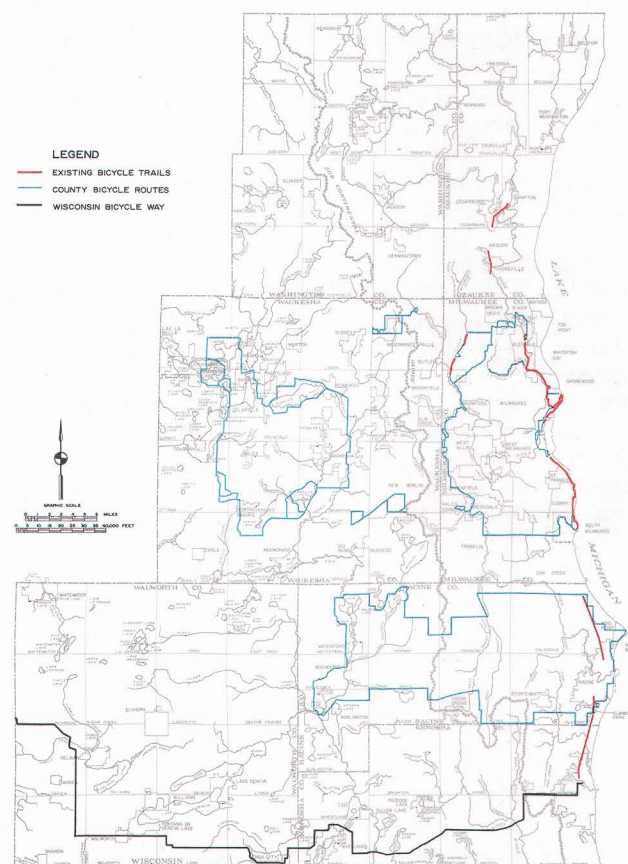
Bike routes have been designated in Kenosha, Milwaukee, Racine, Walworth, and Waukesha Counties. The Wisconsin Bikeway—the first statewide bike route in the United States—is a 300-mile route from the City of Kenosha to LaCrosse. In the Southeastern Wisconsin Region,

this route traverses Kenosha and Walworth Counties. Milwaukee and Racine Counties are the only counties in the Region which have designated their own system of bike routes.<sup>4</sup> Map 51 shows the bike trails and bike

<sup>4</sup> *The Milwaukee County Park Commission, as a bicentennial project, recently completed the signing of a 76-mile bicycle tour utilizing bike trails and existing roadways in Milwaukee County parks and parkways whenever possible. Racine County has developed a bicycle plan, Racine County: Master Bike Route Development Plan, to provide an integrated bicycle trail and route development plan for the year 1990.*

Map 51

#### BICYCLE TRAILS AND BICYCLE ROUTES IN THE REGION: 1976



Bicycle trails—separate ways designed for the exclusive use of bicyclists—totaled 38 miles in the Region in 1976 with the majority of such trails being located in Milwaukee County. County bicycle routes—designated ways which share the roadway with automotive vehicles—totaled 272 miles in the Region in 1976 with virtually all of such routes located in Milwaukee, Racine, and Waukesha Counties. The Wisconsin Bikeway—the first statewide bicycle route in the United States—has 67 of its designated 300 mile route from the City of Kenosha to the City of LaCrosse located in Kenosha and Walworth Counties.

Source: SEWRPC.



routes existing in the Region in 1976. There were 38 miles of bike trails, 272 miles of county bike routes, and 67 miles of the Wisconsin Bikeway for a total of 377 miles of such bike trails and routes in the Region in 1976.

**Hiking:** Hiking is an activity which provides participants with recreational opportunities ranging from simply walking for exercise to pleasure walking in a park or scenic area to backpack touring. Much hiking occurs along existing roads and walks. Existing roads or walks, however, may be unsafe for hiking due to conflicts with automobile traffic or may be generally undesirable for recreational hiking due to lack of interesting features along the hiking route. To enhance the quality of the recreational experience, hiking requires scenic routes with points of natural, historic, and cultural interest; suitable topography which adds diversity to the hiking route; and, perhaps most importantly, a linear or circular trail facility so that the recreational hiker is presented with a variety of new and different features.

Most age groups of both sexes participate in the activity of hiking; however, for hikes of day-long or longer duration, young adults are the predominant participants. Of the 26 recreation activities considered in this chapter, hiking ranked thirteenth in relative popularity, with about 13 percent of the households in the Region participating in the activity.

In its most vigorous form, hiking occurs on backpack trails located in scenic corridors which pass through a variety of areas—including areas of historic, natural, cultural, or geological interest—and often provides opportunity for overnight stays away from urbanized areas. An acceptable width for such trails is generally four feet, and gradients on such trails should not exceed 15 percent. Surface materials for such trails vary with the degree of use the trail receives, and drainage considerations vary with the type of soil and topography on which the trail is located.

There were two backpack trails in the Region greater than 15 miles in length, a 27-mile trail located primarily on nonpublic lands circling Lake Geneva in Walworth County, and the delineated 77-mile segment of the Wisconsin Ice Age Trail<sup>5</sup> which provides opportunities for backpack hiking in the western portion of the Region. Map 52 shows the location of the 104 miles of backpack trails in the Region in 1976.

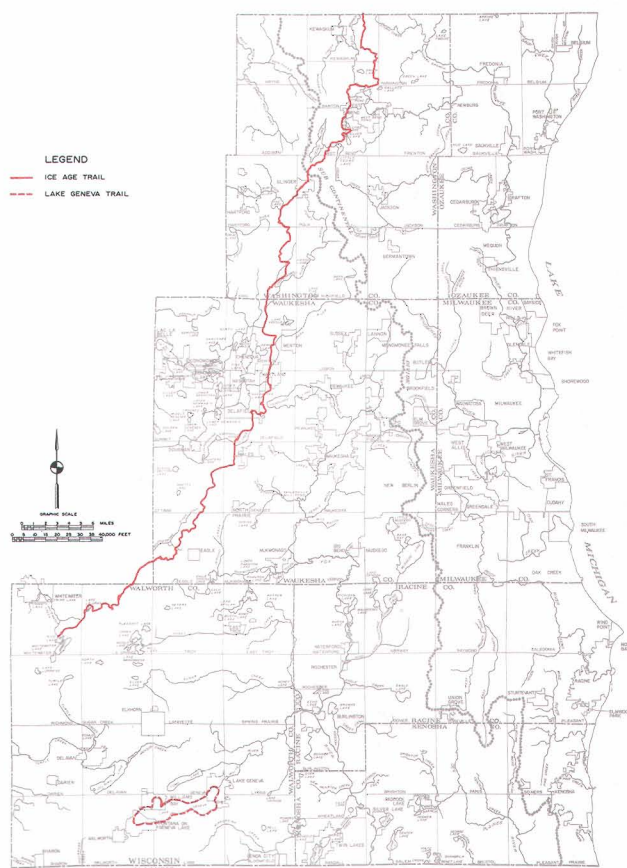
**Horseback Riding:** Horseback riding is an activity which requires proper training and conditioning of both horses and riders, as well as a significant investment in both time and money for proper equipment, services, food, and care for those participants who own horses. Under ideal condi-

tions, horseback riding occurs in areas of natural interest on a linear or circular trail facility so that the rider is presented with a variety of new and different features.

Most age groups and both sexes participate in horseback riding, though female riders form the majority of participants. Horseback riding activity is highest during the summer, with almost 60 percent of horseback riding activity occurring during the months of June, July, and August (see Figure 33). The average time of participation in horseback riding activity is about two hours. Of the 26 recreation activities considered in this chapter, horseback riding ranked twenty-first in relative popularity, with about 3 percent of the households in the Region participating in the activity.

Map 52

# **BACKPACK HIKING TRAILS IN THE REGION: 1976**



In its most vigorous form, hiking occurs on backpack trails—trails at least 15 miles in length—located in scenic corridors which pass through areas of historic, natural, cultural, or geological interest. There were two backpack hiking trails greater than 15 miles in length in the Region in 1976, a 27 mile trail located primarily on nonpublic land circling Lake Geneva in Walworth County and the delineated 77-mile segment of the Wisconsin Ice Age Trail which provides opportunities for backpack hiking in the western portion of the Region.

Source: SEWRPC.

<sup>5</sup>For more detailed information concerning the Ice Age Trail, see *On the Trail of the Ice Age*, a report sponsored by Congressman Henry S. Reuss of Wisconsin in conjunction with the Wisconsin American Revolution Bicentennial Commission.



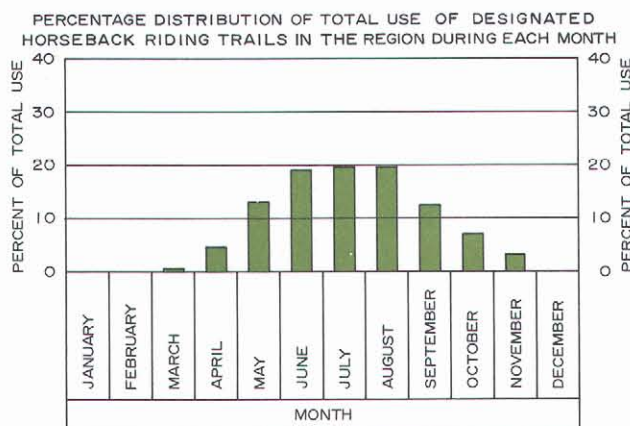
Private lands and road rights-of-way in rural areas comprise a major portion of areas used for horseback riding. In addition, designated horseback riding trails through public and nonpublic lands also meet a portion of the demand for riding areas. Designated horseback riding trails are generally at least four feet wide, with a vertical clearance of at least 12 feet. Prevention of erosion and consideration for the horse are important factors in the design of a trail. Surface material for horse trails is generally gravel.

As indicated in Table 62, there was a total of 90 miles of designated horseback riding trails located within a total of 16 sites in the Region in 1973. On a county basis, Waukesha County, with eight sites providing 61 miles of trails, accounted for half of the trails and over two-thirds of the total mileage provided in the Region. Conversely, there were no designated horseback riding trails open to the general public in Ozaukee and Racine Counties as of 1973. Map 53 shows the locations of horseback riding trails open to the general public in the Region in 1973. It should be noted that the Kettle Moraine Forest—Southern Unit provided the most mileage of trail in the Region in 1973. It should be further noted, however, that there were many nonpublic lands where horseback riding activity took place.

**Nature Study:** Broadly defined, nature study is an activity in which the participants carefully and thoughtfully examine various aspects of their natural surroundings and, in particular, plant and animal life. For the serious participant, nature study activity may include a detailed examination of the interrelationships of various natural systems while, for the casual participant, the activity provides an opportunity simply to observe his natural surroundings. At its best, nature study is undertaken in areas having a variety of natural resource amenities which provide a diversity of plant and animal life.

Figure 33

**PERCENTAGE DISTRIBUTION OF TOTAL USE OF DESIGNATED HORSEBACK RIDING TRAILS IN THE REGION DURING EACH MONTH**



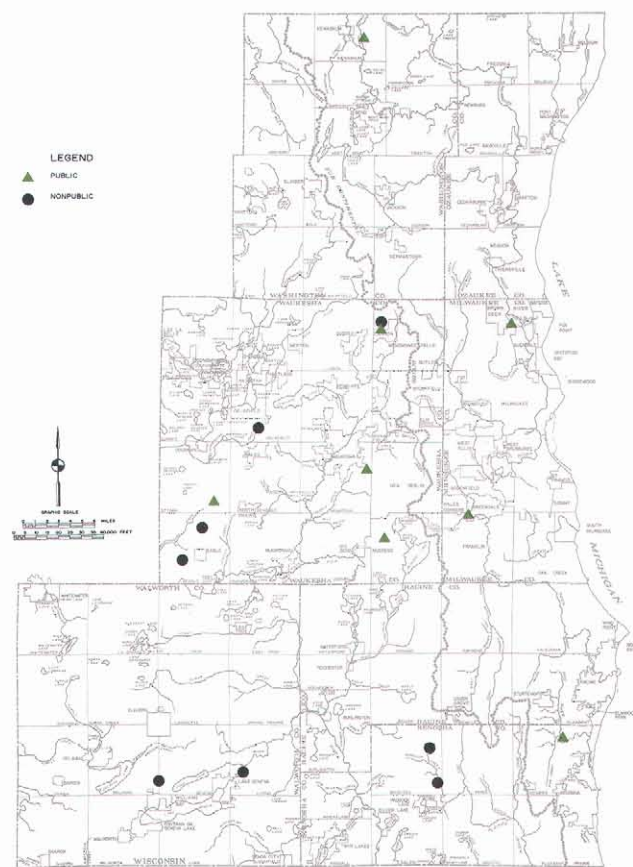
Source: SEWRPC.

Most age groups of both sexes participate in the activity, and the average length of time spent on a nature study outing is about two hours. As indicated in Figure 34, nature study activity occurs throughout the year, with peak activity occurring during May and September. Of the 26 recreation activities considered in this chapter, nature study ranked twenty-third in relative popularity, with about 3 percent of the households in the Region participating in the activity.

Only those areas which have been officially designated as nature study areas were included in the inventory of nature study sites. Each designated nature study area provides a tour conducted by a naturalist on a regular basis, a self-guided nature trail, or an interpretative center consisting of a structure displaying pertinent educational materials. There were nine designated nature study areas in the Region in 1973 (see Table 63 and Map 54).

Map 53

**GENERAL USE OUTDOOR RECREATION SITES IN THE REGION WITH HORSEBACK RIDING TRAILS: 1973**



A total of 16 general use publicly and privately owned outdoor recreation sites with 90 miles of designated horseback riding trails existed in the Region in 1973. One-half of the sites and over 75 percent of the lineal miles of horseback riding trails were provided by the public sector.

Source: SEWRPC.

Table 62

**HORSEBACK RIDING TRAILS AT  
GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION BY COUNTY: 1973**

County	Ownership	Sites		Facilities	
		Number of Sites with Horseback Riding Trails	Percent of Sites	Miles of Trails	Percent of Sites
Kenosha	Public. . . . .	1	6.2	3	3.7
	Nonpublic . .	2	12.5	2	2.3
	Total . . . . .	3	18.7	5	6.0
Milwaukee	Public. . . . .	2	12.5	8 <sup>a</sup>	9.0
	Nonpublic . .	0	0.0	0	0.0
	Total . . . . .	2	12.5	8	9.0
Ozaukee	Public. . . . .	0	0.0	0	0.0
	Nonpublic . .	0	0.0	0	0.0
	Total . . . . .	0	0.0	0	0.0
Racine	Public. . . . .	0	0.0	0	0.0
	Nonpublic . .	0	0.0	0	0.0
	Total . . . . .	0	0.0	0	0.0
Walworth	Public. . . . .	0	0.0	0	0.0
	Nonpublic . .	2	12.5	14	15.0
	Total . . . . .	2	12.5	14	15.0
Washington	Public. . . . .	1	6.3	2 <sup>b</sup>	2.0
	Nonpublic . .	0	0.0	0	0.0
	Total . . . . .	1	6.3	2	2.0
Waukesha	Public. . . . .	4	25.0	56 <sup>c</sup>	62.0
	Nonpublic . .	4	25.0	5	6.0
	Total . . . . .	8	50.0	61	68.0
Region	Public. . . . .	8	50.0	69	76.7
	Nonpublic . .	8	50.0	21	23.3
	Total . . . . .	16	100.0	90	100.0

<sup>a</sup> Includes six miles of trail in the Root River Parkway which has been classified as a natural area site.

<sup>b</sup> Includes two miles of trail in the Kettle Moraine State Forest—northern unit which has been classified as a natural area site.

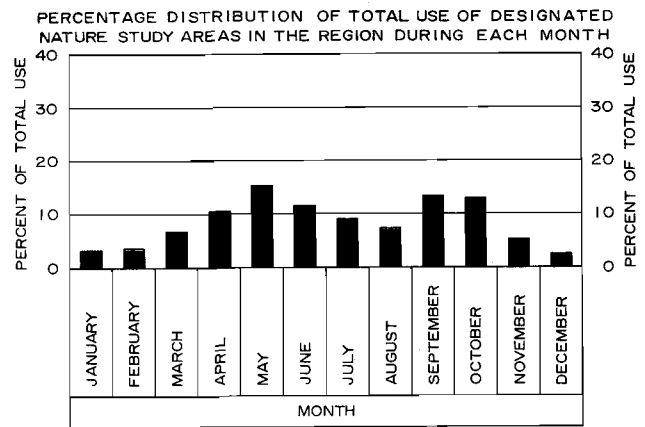
<sup>c</sup> Includes 52 miles of trail in the Kettle Moraine State Forest—southern unit which has been classified as a natural area site.

Source: SEWRPC.

Since there are relatively few designated nature study areas in the Region, it can be assumed that much nature study activity occurs in public and nonpublic natural areas which, although not formally designated for that purpose, provide ideal settings for such activity. As indicated in Chapter IV of this report, there are many natural areas suitable for nature study use in southeastern Wisconsin.

Figure 34

**PERCENTAGE DISTRIBUTION OF TOTAL USE  
OF DESIGNATED NATURE STUDY AREAS  
IN THE REGION DURING EACH MONTH**



Source: SEWRPC.

**Pleasure Driving:** Pleasure driving is an outdoor recreation activity which usually involves driving and sightseeing, the latter consisting of viewing scenic, historic, cultural, or natural areas along rural roads, in urban parkways, or even in urban centers. Of the 26 recreation activities considered in this chapter, pleasure driving ranked first in relative popularity, with about 46 percent of the households in the Region participating in the activity. All age groups of both sexes are participants in this activity, and often pleasure driving and sightseeing activity consists of a day-long family outing. Facilities serving the wide ranges of this activity include all public roads in the Region; however, pleasure driving is most enjoyable in those areas of the Region which provide outstanding scenic, historical, cultural, or natural interest. An inventory of scenic drives and parkways in the Southeastern Wisconsin Region has been provided in Chapter III of this report while an inventory of historical and cultural sites and natural areas has been presented in Chapter V.

**Ski Touring:** Ski touring or cross-country skiing is an increasingly popular activity which may occur within any available large open area but which, at its best, occurs on specially groomed and cleared trails through areas with suitable topography and points of natural interest so that the tourist is provided with a variety of new and different features.

Most age groups of both sexes participate in ski touring. Due to the vigorous nature of the activity, good physical conditioning is essential. Ski touring activity reaches its peak in the month of January (see Figure 35). The average length of participation in the activity is about two hours. Of the 26 recreation activities considered in this chapter, ski touring ranked twenty-fourth in relative popularity, with about 3 percent of the households in the Region participating in the activity.



Table 63

### NATURE STUDY AREAS AT GENERAL USE OUTDOOR RECREATION SITES IN THE REGION BY COUNTY: 1973

County (Population) <sup>a</sup>	Ownership	Sites	
		Number of Sites with Designated Nature Study Areas	Percent of Sites
Kenosha	Public . . . . .	0	0.0
	Nonpublic . .	1	12.5
	Total . . . . .	1	12.5
Milwaukee	Public . . . . .	1	12.5
	Nonpublic . .	1	12.5
	Total . . . . .	2	25.0
Ozaukee	Public . . . . .	0	0.0
	Nonpublic . .	1	12.5
	Total . . . . .	1	12.5
Racine	Public . . . . .	2	25.0
	Nonpublic . .	0	0.0
	Total . . . . .	2	25.0
Walworth	Public . . . . .	1	12.5
	Nonpublic . .	0	0.0
	Total . . . . .	1	12.5
Washington	Public . . . . .	0	0.0
	Nonpublic . .	0	0.0
	Total . . . . .	0	0.0
Waukesha	Public . . . . .	2 <sup>a</sup>	12.5
	Nonpublic . .	0	0.0
	Total . . . . .	2	12.5
Region	Public . . . . .	6	62.5
	Nonpublic . .	3	37.5
	Total . . . . .	9	100.0

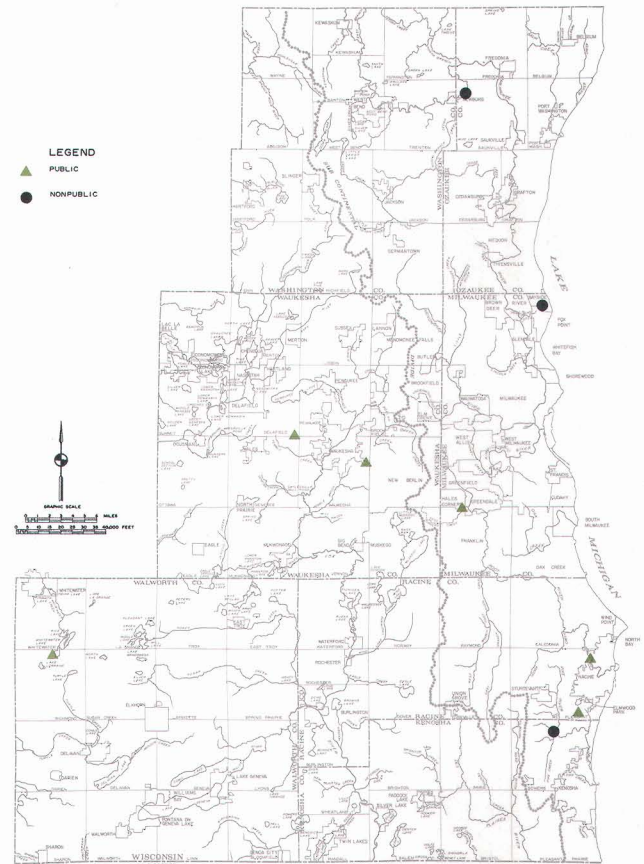
<sup>a</sup> Includes the nature center and trail at the Retzer Nature Area which has been classified as a natural area site.

Source: SEWRPC.

Because ski touring has only recently gained popularity as a recreational activity within the Region, the number of designated ski touring trails is still limited. A designated ski touring trail is a separated corridor for exclusive use by ski tourists. The widths of such trails vary depending upon the topography. On level lands, the minimum width for a one-way trail is about four feet. On downward slopes, the width requirements are considerably greater in order to allow "snow plow" techniques to control speed, while on uphill slopes, trail widths must accommodate "herring bone" or "side step" techniques. It

Map 54

### GENERAL USE OUTDOOR RECREATION SITES IN THE REGION WITH NATURE STUDY AREAS: 1973



Nature study areas provide a physical setting within which individuals can examine various aspects of their natural surroundings, particularly plant and animal life. There were nine general use publicly or privately owned outdoor recreation sites with designated nature study areas in the Region in 1973. Such sites provided one or more of the following: a tour conducted by a naturalist on a regular basis; a self-guided nature trail; and/or an interpretative nature center consisting of a structure displaying pertinent educational materials. Six of the nine sites with designated nature study areas were provided by the public sector.

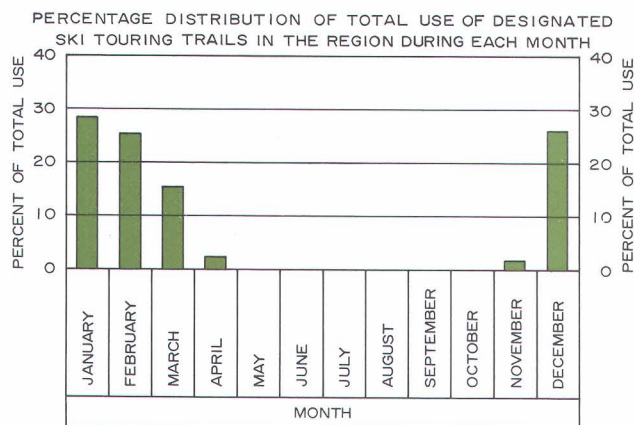
Source: SEWRPC.

should be noted that there is a wide range of skills involved in ski touring, and the ski touring skills of the potential participant should be considered in trail design and construction. Further, it should be noted that ski touring trails generally require grooming and maintenance.

As indicated in Table 64 and on Map 55, there was a total of 48 miles of designated ski touring trails located within a total of nine sites in the Region in 1973. Waukesha County, with three sites providing 18 miles of trails, accounted for one-third of the sites and almost 40 per-

Figure 35

**PERCENTAGE DISTRIBUTION OF TOTAL USE  
OF DESIGNATED SKI TOURING TRAILS  
IN THE REGION DURING EACH MONTH**



Source: SEWRPC.

Table 64

**SKI TOURING TRAILS AT GENERAL USE OUTDOOR  
RECREATION SITES IN THE REGION BY COUNTY: 1973**

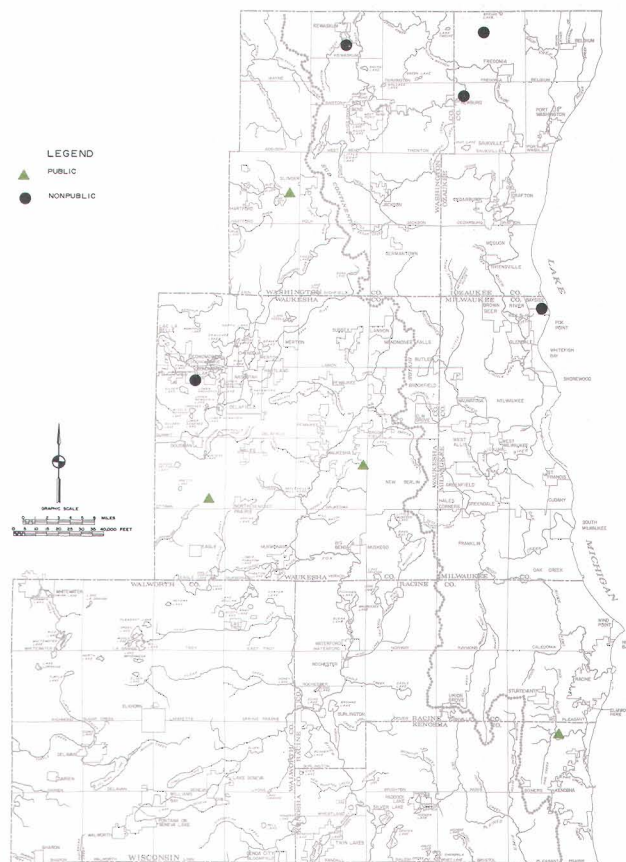
County	Ownership	Sites		Facilities	
		Number of Sites with Ski Touring Trails	Percent of Sites	Miles of Trails	Percent of Sites
Kenosha	Public. . . . .	1	11.1	4	8.0
	Nonpublic . .	0	0.0	0	0.0
	Total . . . . .	1	11.1	4	8.0
Milwaukee	Public. . . . .	0	0.0	0	0.0
	Nonpublic . .	1	11.1	9	19.0
	Total . . . . .	1	11.1	9	19.0
Ozaukee	Public. . . . .	0	0.0	0	0.0
	Nonpublic . .	2	22.2	11	23.0
	Total . . . . .	2	22.2	11	23.0
Racine	Public. . . . .	0	0.0	0	0.0
	Nonpublic . .	0	0.0	0	0.0
	Total . . . . .	0	0.0	0	0.0
Walworth	Public. . . . .	0	0.0	0	0.0
	Nonpublic . .	0	0.0	0	0.0
	Total . . . . .	0	0.0	0	0.0
Washington	Public. . . . .	1	11.1	4	8.0
	Nonpublic . .	1	11.1	2	4.0
	Total . . . . .	2	22.2	6	12.0
Waukesha	Public <sup>a</sup> . . . .	2	22.2	10	22.0
	Nonpublic . .	1	11.2	8	16.0
	Total . . . . .	3	33.4	18	38.0
Region	Public. . . . .	4	44.4	18	38.0
	Nonpublic . .	5	55.6	30	62.0
	Total . . . . .	9	100.0	48	100.0

<sup>a</sup> Includes seven miles of designated trail in Kettle Moraine Forest—southern unit.

Source: SEWRPC.

Map 55

**GENERAL USE OUTDOOR RECREATION SITES  
IN THE REGION WITH SKI TOURING TRAILS: 1973**



A total of nine general use publicly or privately owned outdoor recreation sites containing a total of 48 miles of designated ski touring trails existed in the Region in 1973. Over 55 percent of the sites and 62 percent of the lineal miles of ski touring trails were provided by the nonpublic sector. Waukesha County with three ski touring sites and a total of 18 miles of trails accounted for one-third of the sites and almost 40 percent of the lineal mileage of trails in the Region.

Source: SEWRPC.

cent of the mileage provided in the Region. Conversely, there were no ski touring trails open to the public in Racine and Walworth Counties in 1973.

It should be noted that designated ski touring trails represent only a small portion of all areas used for ski touring. Much ski touring occurs on golf courses, along parkways, or within other open areas which, although not designated for ski touring, are suitable for such activity.

**Snowmobiling:** Snowmobiling is an activity which may be undertaken for a variety of reasons including pleasure riding, touring, and racing. In addition, for some few persons, the snowmobile is actually a utilitarian means



of transportation. Under ideal conditions, recreational snowmobiling occurs on a trail through scenic areas having points of natural interest and suitable topography which add diversity to the snowmobile route.

Most age groups of both sexes participate in snowmobile activity, and the average length of time actually spent snowmobiling on a recreational outing is about two hours. As indicated in Figure 36, almost 60 percent of the participants residing in the Region snowmobile most often on weekends with day time and evening snowmobiling being equally popular. Approximately 70 percent of the participants in snowmobiling activity in the Region snowmobiled most often on nonpublic land and most often in their county of residence. Of the 26 recreation activities considered in this chapter, snowmobiling ranked fifth in relative popularity, with about 19 percent of the households in the Region participating in the activity.

Recreational snowmobiling is safest and most satisfying when it occurs on a designated snowmobile trail consisting of a separated corridor for the exclusive use of snowmobilers. Such trails are generally a minimum of four feet wide for a one way trail and 12 feet wide for a two way trail. The maximum grade should not exceed about 8 percent, although a grade of up to 20 percent is acceptable for short distances.

Due to popular demand for snowmobile facilities, planning for the development of snowmobile trails has increased rapidly in the recent past. As of 1976 there was a total of 133 miles of public snowmobiling trails in the Region, with 48 miles of such facilities provided in Ozaukee County, 51 miles in Racine County, and 17 miles provided in both Washington and Waukesha Counties, respectively (see Map 56).

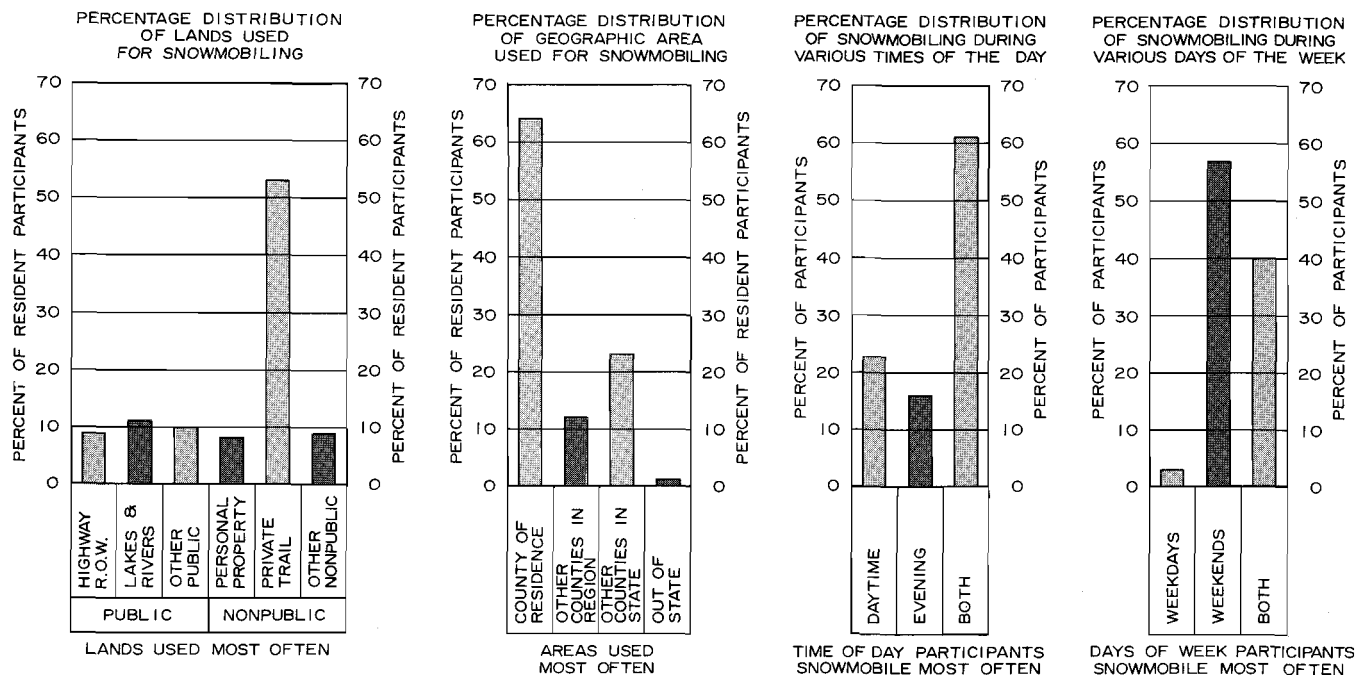
#### Extensive Water Based Outdoor Recreation Activities

Extensive water based outdoor recreation activities, as indicated in Table 47, include canoeing, fishing, ice fishing, motor boating, sailing, and water skiing. All extensive water based outdoor recreation activities are resource oriented inasmuch as they are inherently dependent upon suitable natural resource amenities, the most important of which are the major inland lakes in the Region. This section presents a description of the extensive water based recreation activities, including a description of the nature of each activity, the characteristics of the participants for each activity, and use of the major inland lakes for each activity. In addition, because access to the inland lakes is an important determinant of their use, this section also includes a description of boat access sites in the Region.

**Boat Access:** Boat access sites provide an opportunity to participate in extensive water based activities for those individuals who do not own land contiguous to a body

Figure 36

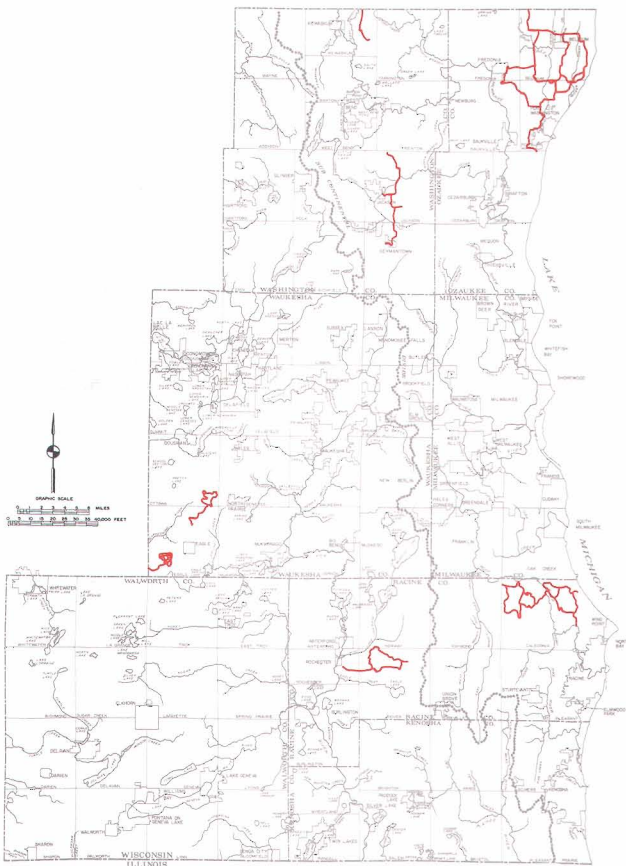
#### CHARACTERISTICS OF PARTICIPATION IN SNOWMOBILING ACTIVITY OF RESIDENTS IN THE REGION: 1974-1975



Source: SEWRPC.

Map 56

PUBLIC SNOWMOBILING TRAILS IN THE REGION: 1976



Recreational snowmobiling is safest and most satisfying when it occurs on a designated snowmobile trail consisting of a separate corridor for the exclusive use of snowmobilers. There were a total of 133 miles of designated public snowmobiling trails in the Region in 1976 with 48 miles of such trails located in Ozaukee County, 51 miles in Racine County, and 17 miles in both Waukesha and Washington Counties, respectively.

Source: SEWRPC.

of water. Such sites consist of a boat launch area which permits the launching and beaching of boats carried on a trailer and an area for the parking of automobiles and trailers. In addition, such sites sometimes include developed ramps and restroom facilities. As indicated in Table 65, there was a total of 155 access sites on the major inland lakes in the Region in 1973. It should be noted that no lakes have 50 or more acres of surface water in Milwaukee County. On a county basis, there were 53 sites which provided access to major inland lakes in Waukesha County. As further indicated in Table 65, Lake Geneva in Walworth County, the largest

inland lake in the Region, had the greatest number of access sites—15—while Delavan Lake in Walworth County and Pewaukee Lake in Waukesha County followed with nine access sites each. Map 57 shows the spatial distribution of boat access sites on the major inland lakes in the Region in 1973. It should be noted that an additional 18 access sites on other lakes, including nine sites on Lake Michigan and nine sites on lakes less than 50 acres in area, also are shown on Map 57.

Peak use of access sites in the Region occurred in summer. As indicated in Figure 37, about half of the total use of boat access sites occurred during the months of July and August. As further indicated in Figure 37, for about 90 percent of the access sites in the Region, the peak use of facilities was on weekends during the peak months. Finally, the use of boat access sites during peak months was rated as heavy on Sundays for over 60 percent of the sites and slight on weekdays for over half of the sites.

**Canoeing:** Canoeing is an activity which takes place on both lakes and rivers and ranges from brief paddling to overnight canoeing and camping outings. At its best, canoeing occurs on scenic bodies of water with points of natural interest. In the case of canoe trips, a linear route is desirable so that the canoeist is presented with a variety of natural and scenic features.

Young teens through middle aged adults of both sexes are the major participants in canoeing. Participation in canoeing activity in the Region occurs on weekends (see Figure 38). Of the 26 recreation activities considered in this chapter, canoeing ranked twenty-sixth in relative popularity, with about 2 percent of the households in the Region participating in the activity.

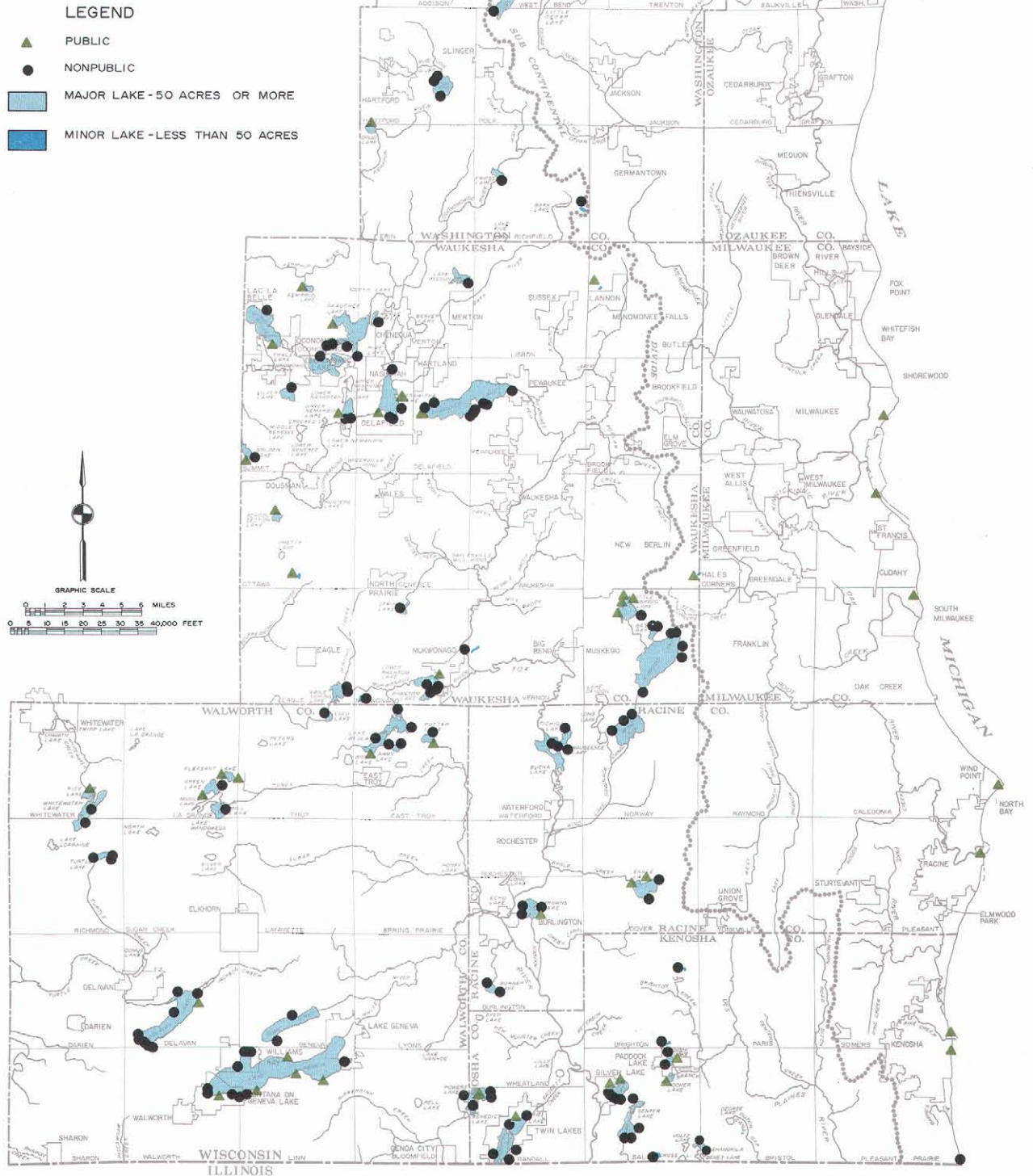
Canoeing activity on the major inland lakes in the Region generally takes place on those lakes which have a high percentage of the shoreline areas in a natural state and on large lakes which possess bays and inlets with areas of water sheltered from the wind. Canoeing commonly takes place on 42 of the 100 major lakes in the Region. The most popular lakes for canoeing in the Region are Lake Beulah in Walworth County and Okauchee and Pewaukee Lakes in Waukesha County. Canoeing can also occur on rivers and streams in the Region and is most enjoyable on rivers and streams having sufficient width and length to provide desirable continuity of travel.

Rivers having a minimum width of 50 feet for a distance of at least 10 miles provide the desirable continuity of travel for canoes and are thus termed “canoeable rivers” by the Commission. Portions of only two rivers in the Region have the necessary minimum width and distance to be so classified: a 64-mile reach of the Milwaukee River extending from the City of West Bend to its mouth in downtown Milwaukee and a 58-mile reach of the Fox River extending from a point just north of the City of Waukesha to the Wisconsin-Illinois boundary (see Map 58).



Map 57

# BOAT ACCESS SITES IN THE REGION: 1973



A total of 155 publicly and privately owned sites with boat access facilities existed on major inland lakes—that is, on lakes having a water surface area greater than 50 acres—in the Region in 1973. A total of 119 sites, or over 75 percent of the sites with boat access facilities, were provided by the nonpublic sector. Waukesha County with 53 access sites and Walworth County with 46 access sites together accounted for almost two-thirds of all the major inland lake access sites in the Region. Fifteen sites with access were located on Lake Geneva in Walworth County, while nine sites with access were located on Delavan Lake in Walworth County and Pewaukee Lake in Waukesha County, respectively. In addition to the major inland lake access sites, there were nine sites with access to Lake Michigan and nine sites with access to lakes less than 50 acres in area in the Region in 1973.

Source: SEWRPC.



Table 65

## DISTRIBUTION OF BOAT ACCESS SITES ON THE MAJOR INLAND LAKES IN THE REGION BY COUNTY: 1973

County	Lake	Surface Area (Acres)	Number of Access Sites		
			Public	Nonpublic	Total
Kenosha County	Benedict Lake	78.02		1	1
	Benet Lake/Lake Shangrila	153.60		2	2
	Camp Lake	461.00		3	3
	Center Lake	129.00		1	1
	Cross Lake	87.40			0
	Dyer Lake	56.00			0
	Elizabeth Lake	637.80		3	3
	George Lake	58.80			0
	Hooker Lake	87.00	1		1
	Lilly Lake	88.00			0
	Marie Lake	315.00	1	2	3
	Paddock Lake	112.00	1	2	3
	Powers Lake	459.00	1	3	4
	Silver Lake	464.00	2	5	7
	Voltz Lake	51.75			0
County Totals	Number of Lakes 15	3,238.37	6	22	28
Milwaukee County	None				
County Totals	Number of Lakes 0				
Ozaukee County	Mud Lake	245.40			0
	Spring Lake	57.40		1	1
County Totals	Number of Lakes 2	302.80	0	1	1
Racine County	Bohner Lake	135.40		2	2
	Browns Lake	396.00	1	3	4
	Buena Lake	241.00			0
	Eagle Lake	520.00	2	2	4
	Echo Lake	70.87			0
	Long Lake				
	(Town of Norway)	87.90			0
	Long Lake (Towns of Burlington and Rochester)	101.50			0
	Tichigan Lake	891.80		4	4
	Waubesee Lake	129.44			0
	Wind Lake	936.20		3	3
County Totals	Number of Lakes 10	3,510.11	3	14	17
Walworth County	Army Lake	78.00		1	1
	Booth Lake	113.08			0
	Comus Lake	117.00			0
	Cravath Lake	65.00			0
	Delavan Lake	2,072.00	1	8	9
	Green Lake	311.00	1	1	2
	Lake Beulah	834.00	1	4	5
	Lake Como	946.30		2	2
	Lake Geneva	5,262.40	5	10	15
	Lake La Grange	55.00			0
	Lake Lorraine	133.00			0
	Lake Wandawega	119.40			0
	Lulu Lake	84.26		1	1
	Middle Lake	259.00			0
	Mill Lake	271.00		1	1
	North Lake	191.00			0
	Pell Lake	86.14			0
	Peters Lake	64.25			0
	Pleasant Lake	154.50	2		2
	Potter Lake	162.00	1	1	2

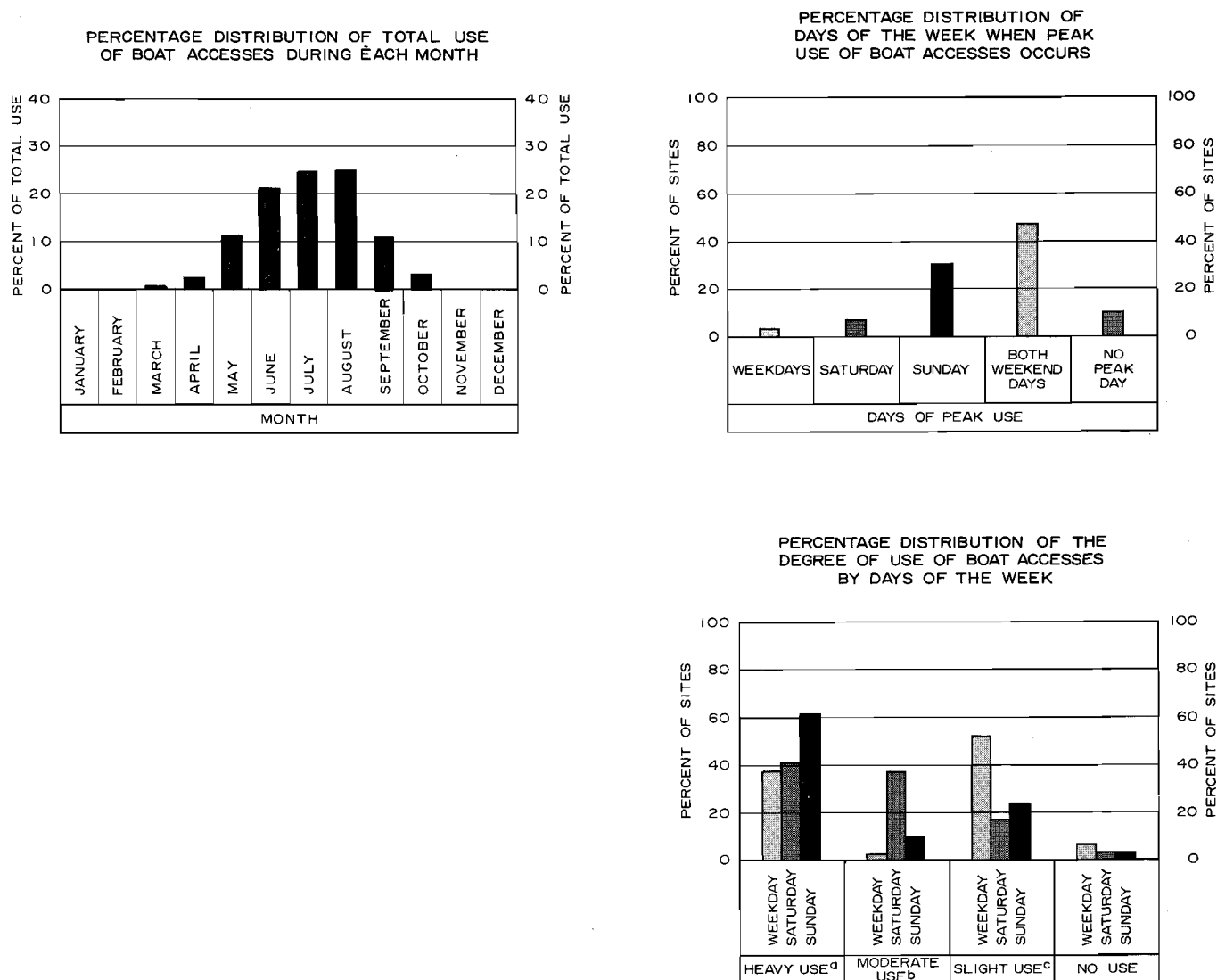
Table 65 (continued)

County	Lake	Surface Area (Acres)	Number of Access Sites		
			Public	Nonpublic	Total
	Rice Lake	137.00	1		1
	Silver Lake	84.50			0
	Tripp Lake	115.00			0
	Turtle Lake	140.00		3	3
	Whitewater Lake	640.00		2	2
	County Totals	Number of Lakes 25	12	34	46
Washington County	Bark Lake	65.00			0
	Barton Pond	67.00			0
	Cedar Lake	932.00		2	2
	Druid Lake	124.00	1		1
	Friess Lake	119.00		1	1
	Green Lake	71.20		1	1
	Lake Five	102.00			0
	Lake Twelve	52.60		1	1
	Little Cedar Lake	246.00			0
	Lucas Lake	77.70			0
	Pike Lake	522.00		3	3
	Silver Lake	118.00		1	1
	Smith Lake	85.50			0
	Wallace Lake	51.70			0
	West Bend Pond	67.00			0
	County Totals	Number of Lakes 15	1	9	10
Waukesha County	Ashippun Lake	84.00	1		1
	Beaver Lake	316.00			0
	Crooked Lake	58.00			0
	Eagle Spring Lake	310.50		2	2
	Fowler Lake	78.00			0
	Golden Lake	250.00	1	1	2
	Hunters Lake	65.00			0
	Lac La Belle	1,117.00	1	1	2
	Lake Denoon	162.37			0
	Lake Keesus	237.00		1	1
	Little Muskego Lake	506.38	4	1	5
	Lower Genesee Lake	66.00			0
	Lower Nashotah Lake	90.00			0
	Lower Nemahbin Lake	271.00			0
	Lower Phantom Lake	432.95	1		1
	Middle Genesee Lake	102.00			0
	Moose Lake	81.00		1	1
	Muskego Lake	2,177.00		7	7
	Nagawicka Lake	957.00	2	4	6
	North Lake	437.00			0
	Oconomowoc Lake	767.00		1	1
	Okauchee Lake	1,187.00	1	4	5
	Pewaukee Lake	2,493.00	1	8	9
	Phantom Lake	107.40		4	4
	Pine Lake	703.00			0
	Pretty Lake	64.00			0
	Saylesville Millpond	66.00			0
	School Section Lake	125.00	1		1
	Silver Lake	222.00		1	1
	Spring Lake	105.40		1	1
	Upper Nashotah Lake	133.00			0
	Upper Nemahbin Lake	283.00	1	2	3
	Waterville Pond	68.40			0
	County Totals	Number of Lakes 33	14	39	53
Region Totals	Number of Lakes 100	36,369.21	36	119	155

Source: SEWRPC.

Figure 37

# CHARACTERISTICS OF THE USE OF BOAT ACCESSES ON MAJOR INLAND LAKES IN THE REGION



<sup>a</sup> THE TERM "HEAVY USE" IS DEFINED AS USE IN WHICH THE FACILITY IS CROWDED AND OFTEN INADEQUATE TO MEET DEMAND, WITH THE FACILITY GENERALLY OPERATING AT OVER THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

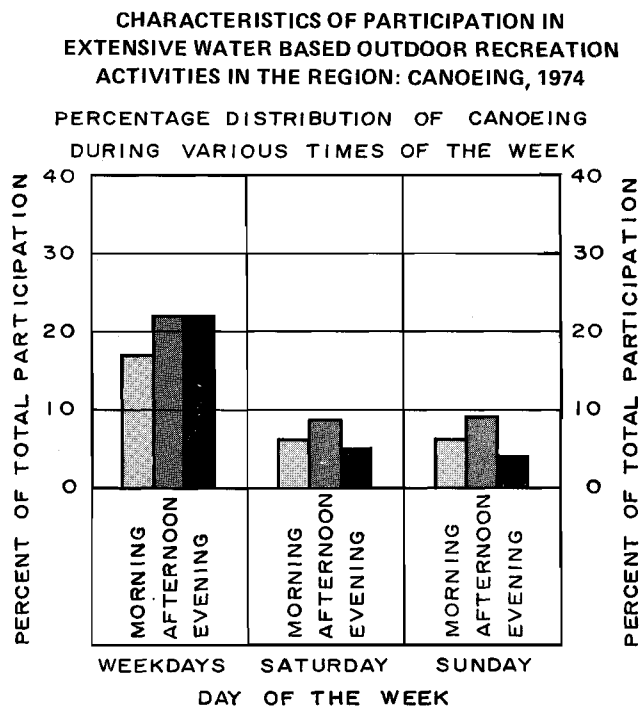
<sup>b</sup> THE TERM "MODERATE USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED FREQUENTLY, BUT IS GENERALLY ADEQUATE TO MEET DEMAND, WITH THE FACILITY OPERATING BETWEEN TWO-FIFTHS AND THREE-FOURTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

<sup>c</sup> THE TERM "SLIGHT USE" IS DEFINED AS USE IN WHICH THE FACILITY IS UTILIZED ONLY INFREQUENTLY, WITH THE FACILITY MORE THAN ADEQUATE TO MEET DEMAND, AND WITH THE FACILITY OPERATING AT LESS THAN TWO-FIFTHS OF ITS CAPACITY DURING THE PEAK MONTH(S) OF USE.

Source: SEWRPC.



Figure 38



Source: SEWRPC.

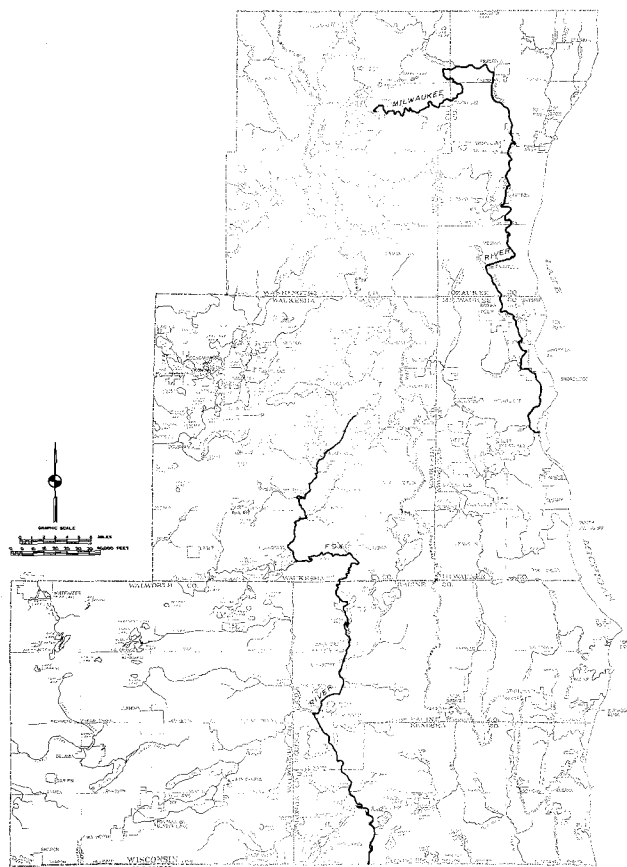
**Fishing:** Fishing is an activity which takes place on both lakes and rivers and ranges from shoreline fishing on small lagoons and streams to boat fishing on large lakes. Fishing requires a body of water with good water quality which supports an abundant fish population. All age groups of both sexes participate in fishing, although adult males comprise the majority of fishermen. The length of participation in fishing activity ranges up to six hours or more on a single outing. As indicated in Figure 39, about 35 percent of all fishing activity occurs on weekends. Fishing activity is relatively uniform throughout the day. Of the 26 recreation activities considered in this chapter, fishing ranked fourth in relative popularity with about 29 percent of the households in the Region participating in the activity.

Generally, large lakes which possess adequate spawning areas, depth, and structure support large fish populations. Fishing commonly takes place on 73 of the 100 major inland lakes in the Region. The most popular lakes for fishing are Elizabeth and Silver Lakes in Kenosha County, Wind Lake in Racine County, Beulah and Geneva Lakes in Walworth County, Big Cedar Lake in Washington County, and Nagawicka, Nemahbin, Okauchee, and Pewaukee Lakes in Waukesha County. It should also be noted that Lake Michigan, too, is heavily used for fishing.

**Ice Fishing:** Ice fishing generally takes place on lakes and ranges from short outings near the shoreline to all day outings, usually with the aid of warmth providing ice

Map 58

CANOEABLE RIVERS IN THE REGION: 1973



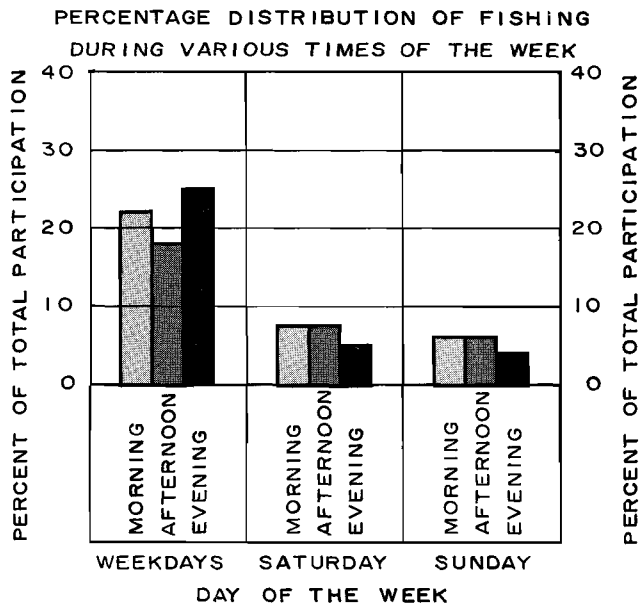
There were 122 miles of canoeable rivers—rivers having a minimum width of 50 feet over a distance of at least 10 miles—in the Region in 1973. This mileage was contained in two river reaches: a 64 mile reach of the Milwaukee River extending from the City of West Bend to its mouth in downtown Milwaukee and a 58 mile reach of the Fox River extending from a point just north of the City of Waukesha to the Wisconsin-Illinois boundary. Ozaukee County with 35 miles of canoeable rivers accounted for 28 percent of the lineal miles of canoeable rivers in the Region.

Source: SEWRPC.

shacks. Most age groups of both sexes participate in ice fishing although adult males comprise the majority of ice fishing participants. Of the 26 recreation activities considered in this chapter, ice fishing ranked sixth in relative popularity, with about 16 percent of the households in the Region participating in the activity. Ice fishing commonly takes place on 65 of the 100 major lakes in the Region with the most popular major inland lakes in the Region for ice fishing being Elizabeth, Powers, and Voltz Lakes in Kenosha County; Wind Lake in Racine County; Geneva, Whitewater, and the Lauderdale Lakes in Walworth County; and Denoon, Okauchee, Pewaukee, and the Phantom Lakes in Waukesha County.

Figure 39

CHARACTERISTICS OF PARTICIPATION IN  
EXTENSIVE WATER BASED OUTDOOR RECREATION  
ACTIVITIES IN THE REGION: FISHING, 1974



Source: SEWRPC.

**Motor Boating:** Motor boating is an activity which generally takes place on large lakes and ranges from leisurely outings to high speed racing. Motor boating requires large areas of surface water which are free of shallow rocky areas, weed growth, and underwater hazards.

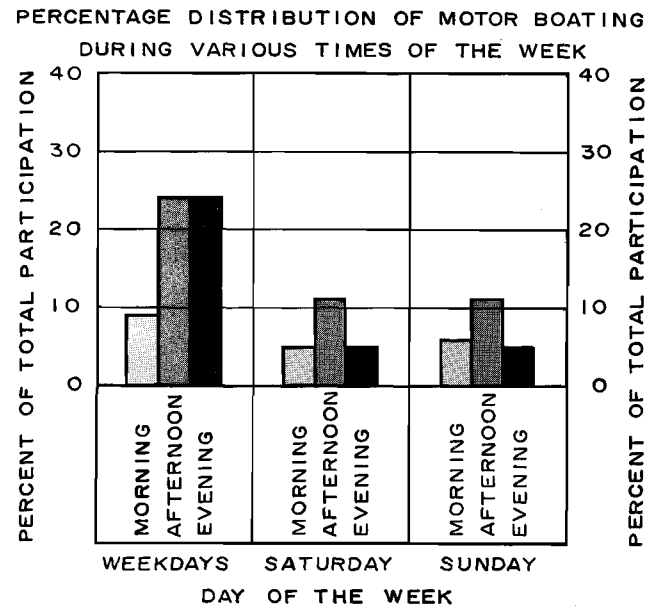
Young teens through middle aged adults of both sexes are the major participants in motor boating, and the average time of participation in the activity is generally less than three hours. As indicated in Figure 40, over 46 percent of the total participation occurs on weekends. About 46 percent of all motor boating occurs in the afternoon. Of the 26 recreation activities considered in this report, motor boating ranked eleventh in relative popularity, with about 13 percent of the households in the Region participating in the activity.

Generally, lakes with large surface water areas and access sites with adequate parking for cars and trailers are the most popular lakes for motor boating. Motor boating, commonly takes place on 60 of the 100 major lakes in the Region with the most popular major inland lakes for boating being Lake Geneva in Walworth County, Big Cedar Lake in Washington County, and LaBelle, Nagawicka, Okauchee, and Pewaukee Lakes in Waukesha County. In addition, Lake Michigan is also popular for motor boats of adequate size.

**Sailing:** Sailing is an activity which generally takes place on large lakes and ranges from sailing in small one-person sailboats on inland lakes to sailing in large boats on Lake Michigan. Sailing requires both large surface water areas

Figure 40

CHARACTERISTICS OF PARTICIPATION IN  
EXTENSIVE WATER BASED OUTDOOR RECREATION  
ACTIVITIES IN THE REGION: MOTOR BOATING, 1974



Source: SEWRPC.

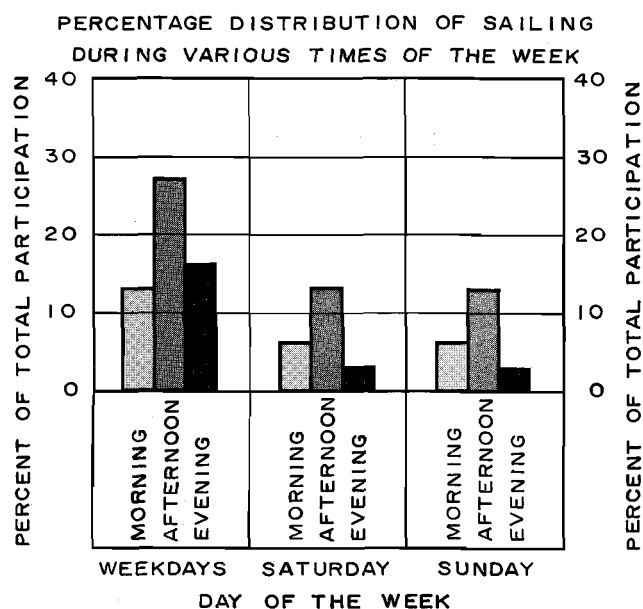
free of underwater obstructions and favorable wind conditions. Most age groups of both sexes participate in sailing, and the average time of participation in sailing activity is generally less than three hours. As indicated in Figure 41, about 45 percent of the sailing activity in the Region occurs on weekends. About 53 percent of all sailing activity occurs in the afternoon. Of the 26 recreation activities considered in this report, sailing ranked twenty-fifth in relative popularity with about 2 percent of the households in the Region participating in the activity.

Generally, sailing occurs on large lakes with a continuous expanse of surface water which is free of obstacles. Sailing commonly takes place on 48 of the 100 major lakes in the Region with the most popular major inlake lakes for sailing among residents of the Region being Lake Geneva in Walworth County; Big Cedar Lake in Washington County; and LaBelle, Nagawicka, North, Okauchee, and Pewaukee Lakes in Waukesha County. In addition, when weather conditions are suitable, Lake Michigan is popular for sailing.

**Water Skiing:** Water skiing is an activity which generally takes place on large lakes and requires a continuous expanse of surface water which is free of obstacles. Teenage and young adult groups of both sexes are the major participants in water skiing and the average time of participation in water skiing activity is generally less than three hours. As indicated in Figure 42, about 42 percent of all water skiing activity in the Region occurs on weekends. Over half of all water skiing activity in the Region occurs in the afternoon. Of the 26 recrea-

Figure 41

CHARACTERISTICS OF PARTICIPATION IN  
EXTENSIVE WATER BASED OUTDOOR RECREATION  
ACTIVITIES IN THE REGION: SAILING, 1974



Source: SEWRPC.

tion activities considered in this chapter, water skiing ranked twentieth in relative popularity, with about 4 percent of the households in the Region participating in the activity.

Generally, large inland lakes with a continuous expanse of surface water area are most heavily utilized for water skiing. Water skiing commonly takes place on 54 of the 100 major lakes in the Region with the most popular major inland lakes in the Region for water skiing being Browns Lake in Racine County, Beulah and Geneva Lakes in Walworth County, Big Cedar Lake in Washington, and LaBelle, Nagawicka, Okauchee, and Pewaukee Lakes in Waukesha County.

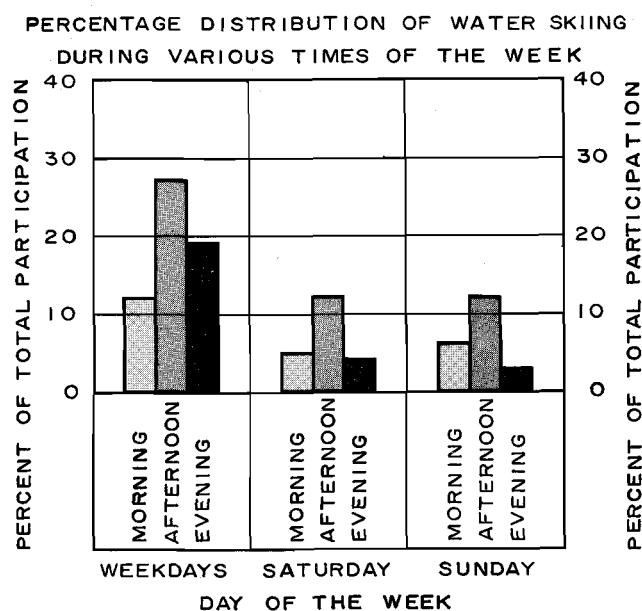
#### Relative Popularity of Outdoor Recreation Activities

Previous sections of this chapter have presented detailed information concerning the nature of outdoor recreation activities, the characteristics of participants, and the number and distribution as well as use of facilities provided. This section presents an estimate of the relative popularity of the 26 recreation activities discussed in the chapter.

The relative popularity of an outdoor recreation activity was measured by ranking that activity according to the approximate percentage of households in the Region that participated in each activity. A household was considered as a participant if one or more members of that household engaged in the activity during the calendar year. Accordingly, pleasure driving, an activity which has perhaps the greatest appeal to most age groups of both

Figure 42

CHARACTERISTICS OF PARTICIPATION IN  
EXTENSIVE WATER BASED OUTDOOR RECREATION  
ACTIVITIES IN THE REGION: WATER SKIING



Source: SEWRPC.

sexes, ranked first in relative popularity with about 46 percent of all households in the Region participating in the activity. As indicated in Table 66, beach swimming with 35 percent, picnicking with 34 percent, fishing with 29 percent, and snowmobiling with 19 percent, ranked second through fifth, respectively. Canoeing, with only 2 percent of the households in the Region participating, ranked twenty-sixth.

It is significant that 10 out of the 11 most popular activities—each having more than 13 percent of the households participating in the activity—were resource oriented, that is, were activities reliant upon natural resource amenities for the existence of the activity or were activities in which the quality of the recreational experience is significantly enhanced by the presence of the natural resource amenity.

#### SUMMARY

This chapter has presented data concerning outdoor recreation activities, facilities, and use. The provision of reliable planning data was accomplished through the conduct of a series of outdoor recreation surveys and inventories formulated to obtain information on the nature of outdoor recreation activities, the characteristics of participants, and the number and distribution as well as the use of facilities provided. Based upon analysis of this data, outdoor recreation activities were grouped into four general categories: intensive resource oriented activities, intensive nonresource oriented activities, extensive land based activities, and extensive water based

Table 66

**RELATIVE POPULARITY OF OUTDOOR RECREATION  
ACTIVITIES IN SOUTHEASTERN WISCONSIN: 1973**

Rank	Activity Name	Percent of Households Participating
1	Pleasure Driving	46.4
2	Swimming (Beach)	35.0
3	Picnicking	34.4
4	Fishing	29.1
5	Snowmobiling	18.8
6	Ice Fishing	16.3
7	Camping	16.0
8	Softball	15.8
9	Bicycling	15.3
10	Golf	13.3
11	Motor Boating	13.0
12	Swimming (Pool)	12.9
13	Hiking	12.8
14	Ice Skating	12.1
15	Playfield Activities	9.9
16	Tennis	9.8
17	Skiing (Downhill)	9.3
18	Basketball	8.3
19	Playground Activities	6.2
20	Water Skiing	3.6
21	Horseback Riding	3.4
22	Baseball	3.3
23	Nature Study	3.1
24	Ski Touring	3.0
25	Sailing	2.1
26	Canoeing	2.0

Source: SEWRPC.

activities. Significant findings related to outdoor recreational activities within each of these four general categories are as follows:

1. Intensive resource oriented activities—camping, golf, picnicking, downhill skiing, and beach swimming—were popular with most age groups of both sexes. Such activities are reliant on natural resource amenities insofar as the activity or the quality of the recreational experience is significantly enhanced by the presence of the natural resource amenity. Participants in such activities were willing to travel relatively long distances from their homes—25 miles or more; in fact, about two out of 10 participants in such activities in the Region were non-Wisconsin residents. Facilities for intensive resource oriented activities were provided by both the public and nonpublic sectors, with the majority of facilities for beach swimming and picnicking provided by the public sector and the majority of facilities for camping, golf, and downhill skiing provided by the non-

public sector. At least two-thirds of all intensive resource oriented activities in Walworth County were in nonpublic ownership. There were 204 swimming beaches with a total of about 60,300 linear feet of beach, 429 sites with picnic areas supplying a total of 15,590 picnic tables, 47 sites with camping areas providing 3,176 camp sites, 80 sites with 9 to 36 hole regulation golf courses providing a total of 1,350 regulation golf holes, and 21 ski hills providing 182 acres of developed ski slopes provided in the Region in 1973. Walworth County with 59 acres of developed ski slopes and over 1,000 camp sites provided, respectively, one-third and one-fourth of all such facilities in the Region, while Waukesha County provided the most golf courses—20—in the Region. Milwaukee County, however, provided almost 6,000 picnic tables, or about 40 percent of the regional total, and almost 15,000 linear feet of swimming beaches, or one-fourth of the regional total. It should be noted, however, that while Milwaukee County provided significant quantities of intensive resource oriented facilities especially for picnicking and beach swimming, it had the lowest per capita provision of any county for all intensive resource oriented facilities with the exception of ski hills.

2. Intensive nonresource oriented activities—baseball, basketball, ice skating, playfield and playground activities, softball, pool swimming, and tennis—were generally popular with school age children and young adults. Such activities require man-made facilities rather than natural resource amenities for participation in the activity. Participants in intensive nonresource oriented activities traveled relatively short distances from their homes—usually less than three miles—and facilities for such activities usually were provided in many general use sites. Totals of 216 baseball diamonds, 2,277 basketball goals, 292 ice skating rinks, 1,175 playfields, 945 playgrounds, 70 swimming pools, and 1,023 tennis courts were provided in the Region in 1973. Milwaukee County, while supplying the most facilities—at least one-third of the regional total—for each intensive nonresource oriented activity, still registered the lowest per capita provision of such facilities of all counties in the Region except for swimming pools.
3. Extensive land based activities—pleasure driving, snowmobiling, bicycling, hiking, horseback riding, nature study, and ski touring—were generally popular with most age groups of both sexes. The recreational experience of extensive land based activities is most satisfying on exclusive linear or trail facilities through scenic areas with points of historical or cultural interest and unique topographical features. There were limited quantities of designated “trail type” facilities in the Region. At the time of the inventory in the Region, there



were only 73 miles of scenic drives, 133 miles of public snowmobile trails, 38 miles of bike trails and 339 miles of bike routes, 104 miles of backpack hiking trails, 90 miles of horse trails, 8 nature study areas, and 48 miles of ski touring trails.

4. Extensive water based activities—fishing, ice fishing, motor boating, water skiing, sailing and canoeing—were generally popular with most age groups of both sexes. Generally, participation in such activities occurred on the 100 major inland lakes in the Region. The numbers of major lakes of the Region supporting extensive water based activities were as follows: fishing—73; ice fishing—65; motor boating—60, water skiing—54; sailing—48; and canoeing—42. Larger inland lakes, those having a surface area of 125 acres or more, were best suited and most often utilized for motor boating and water skiing as well as sailing, while fishing and ice fishing commonly occurred on lakes of all sizes that were capable of maintaining an adequate fish population. Walworth and Waukesha Counties combined have almost 60 percent of the major inland lakes in the Region and 73 percent of the surface water area of such lakes.
5. Popularity, as indicated by the percentage of households participating in a given recreation activity, ranged from a low of 2 percent of households participating in canoeing to over 46 percent of households participating in pleasure driving. The next three most popular activities and respective percentages of participating households were: beach swimming—35 percent of households participating; picnicking—34 percent of households participating; and fishing—29 percent of households participating. Ten out of the 11 most popular outdoor recreation activities presented in this report were resource oriented.

Conclusions: The following conclusions concerning participation in outdoor recreation activities in the Region can be drawn from data presented in this chapter:

- Participation in 18 of the 26 outdoor recreation activities discussed in this chapter depends upon a healthy as well as accessible natural resource base. The best remaining elements of this resource base are generally located in the outlying rural areas of the Region primarily in the Commission's designated primary environmental corridors. Protection of the primary environmental corridors and, thus, the best elements of the resource base is therefore necessary to assure adequate future opportunities for resource oriented outdoor recreation activities for the residents of the Region.
- Extensive land based recreation activities, ideally occur on trail facilities in areas with scenic, natural, historic, or cultural features. The number of such facilities in the Region, however, is extremely limited. In order to meet existing and future demand for such facilities, a system of

trail corridors which would maximize preservation and use of the primary environmental corridors of the Region should be included in the formulation of alternate park and open space plans.

- Regional park and open space plans which seek to utilize the Region's natural resource amenities must also be cognizant of the needs of those segments of the population—low income and elderly—who may wish to participate in resource oriented activities but because of a lack of available transportation may find it extremely difficult or impossible to do so. Such plans should, therefore, include recommendations which would facilitate utilization of sites with natural resource amenities by all segments of the population.
- Milwaukee County, in spite of its historic active role in the provision of recreational facilities, still has the lowest per capita provision of recreational facilities for both intensive resource and non-resource related activities—except swimming pools—of all counties in the Region. To maintain its well earned reputation of excellence in the provision of recreation and open space for the resident population continued efforts may be required to provide such facilities. Especially important in this respect is the provision of areas for resource oriented activities, which, in Milwaukee County because of urban pressures, are increasingly subject to conversion to urban uses.
- The nonpublic sector provides many of the facilities and activity areas for the pursuit of outdoor recreation activities—over 75 percent of the facilities in the Region for popular activities such as swimming, camping, and golfing were provided by commercial, organizational and private interest groups in 1973. Changes in the role of the nonpublic sector including the possible conversion of existing recreational activity areas to other urban uses would have important implications for the role of the public sector in providing opportunities for such outdoor recreation activities in the future.
- Certain geographic areas within the Region have an apparent abundance of outdoor recreation facilities and activity areas, as well as natural resource amenities, while shortages of the same facilities, activity areas, and natural resource amenities exist in other portions of the Region. Data on recreation facilities and use provided herein can serve on a basis for the development of recreation objectives and standards tailored specifically to the southeast Wisconsin Region. Through the application of such objectives and standards the measurement of existing and future outdoor recreation demands can be determined and judgments concerning both the magnitude and significance of disparities in the provision of recreational facilities can be made.

(This page intentionally left blank)

## Chapter VII

### EXISTING PARK AND OPEN SPACE LAWS, REGULATIONS, PLANS, AND ADMINISTRATION

#### INTRODUCTION

This chapter consists of a summary presentation of those laws and regulations which pertain to park and related open space preservation and development in the Region. Attention first is focused on the legal framework for park and related open space preservation and development at the federal, state, and local levels of government. Organization and staffing for the provision of park and related open space facilities at both the county and local levels then are examined, together with the status of local park and open space planning and the standards currently used in such planning. Finally, the chapter examines the use of land use controls for park and open space reservation and preservation purposes.

#### LEGAL FRAMEWORK FOR PARK AND OPEN SPACE PLANNING AND DEVELOPMENT

##### Federal Level

The seven-county Region served by the Southeastern Wisconsin Regional Planning Commission has almost no federally owned or controlled park lands, open space areas, or other recreational facilities.<sup>1</sup> This lack of federal ownership or supervision of park and recreation facilities should not, however, dictate that such potential ownership or supervision be entirely neglected. The potential for future federal involvement within the Region necessitates an adequate understanding of federal programs and policies. Accordingly, an agency-by-agency review and description of federal programs for park and related open space reservation and development are presented in the following section along with a description of related federal grant-in-aid programs.

U. S. Department of the Interior, National Park Service: The U. S. Department of the Interior, National Park Service, administers 30 million acres of land in 286 parks located in 47 states and the District of Columbia, Puerto Rico, and the Virgin Islands.<sup>2</sup> Although no national park land is located within the Southeastern Wisconsin Region, this Region has potential for the establishment and development of such park areas. A recent survey by the U. S. Department of the Interior, at the request of the U. S. Senate Interior Committee, recognized the need

for more national parks in and near large urban areas and the need for rapid acquisition and protection of open space in such areas. Recently, the National Park Service expanded its activities to include the provision and management of urban recreation areas. Traditional areas of concern to the National Park Service included: conservation and preservation of the natural resources of national park areas, fire suppression and rehabilitation of burned areas, new area studies, land use studies, water resource studies, wilderness studies, and cooperative programs with other federal, state, and local park agencies. The units of the National Park System fall into the three broad administrative designations of natural areas, historical areas, and recreational areas. Natural areas comprise all national parks and national monuments of scientific significance. The historical areas include lands of archaeological or historical importance and recreational areas include seashores, lakeshores, scenic parkways, scenic riverways, wild rivers, and other similar lands. The initial mandate of the national park and monument system was contained in the National Park Service Act of 1916.

. . . to conserve the scenery and the natural and historical objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations.<sup>3</sup>

U. S. Department of the Interior, Fish and Wildlife Service: Major tasks undertaken by the U. S. Department of the Interior, Fish and Wildlife Service, include habitat preservation; enhancement and regulation of wildlife resources including migratory and nonmigratory birds, mammals, and animal damage control; fishery resources; and protection of endangered species. As part of the ongoing work of the Service in wildlife resources, a system of national wildlife refuges is operated and maintained. Part of the function which these refuges perform is to preserve and protect outstanding ecological, scenic, and wilderness areas. These areas also provide an educational service in creating a public awareness of the impacts of various land and water decisions. The U. S. Fish and Wildlife Service, under the Endangered Species Act,<sup>4</sup> provides for state grant-in-aid programs to manage and protect threatened species through management of unique habitat lands. In addition, the Service,

<sup>1</sup>The single federal open space facility in the Region is a 40 acre wildlife and nature area operated by the U. S. Army adjacent to an Army Reserve Training Center on W. Silver Spring Drive in the City of Milwaukee.

<sup>2</sup>*Environment Reporter*, 51:4331, November 19, 1976, information from National Park Service testimony before the House Appropriations Committee.

<sup>3</sup>*United States Code*, hereafter cited as U.S.C., sec. 1 (1970).

<sup>4</sup>16 U.S.C. secs. 1531-41 (1969).

under the Pittman-Robertson Wildlife Restoration Act<sup>5</sup> and the Dingell-Johnson Fish Restoration Act,<sup>6</sup> can provide 75 percent financial reimbursement to a state for work performed on jointly approved wildlife and fish habitat restoration and management projects. At the present time, no national wildlife refuges are located within the Region, although the Horicon Marsh Refuge is located in an adjoining county.

U. S. Department of the Interior, Bureau of Outdoor Recreation: The U. S. Department of the Interior, Bureau of Outdoor Recreation, serves as the focal point in the federal government for outdoor recreation related activities. A major function of the Bureau is providing liaison with state recreational programs.

Planning and research are tasks of major importance in the Bureau's work schedule. The Bureau currently is compiling data to be included in the 1978 revision of the National Outdoor Recreation Plan, an assessment of the federal role in meeting recreational needs. In addition, the Bureau focuses its attention on various water and land resource studies, including a study of those rivers to be included in the Wild and Scenic River System, a study of hiking trail routes for inclusion in the National Trails System as mandated by the National Trails System Act, and a study of potential admissions of land in the National Wilderness System as required by the Wilderness Act.

A major role played by the Bureau of Outdoor Recreation is that of federal coordination and federal recreation program review. Major efforts within this assignment include implementation of the National Outdoor Recreation Plan; cooperative management of lands by federal, state, and local agencies; and recreation energy implications.

An additional program administered by the Bureau of Outdoor Recreation is one of technical and financial assistance to governmental units and private interests. The Bureau of Outdoor Recreation attempts to assist state and local governments in identifying recreation and open space potentials; identifying recreation and open space alternatives, including consideration of ecological, recreational, and open space values; and coordinating of various state, local, and federal recreation and open space funding programs.

As part of its funding responsibilities, the Bureau of Outdoor Recreation administers the provisions of the Land and Water Conservancy Act of 1965 (LAWCON).<sup>7</sup> The objective of this Act is to provide financial assistance to states and their political subdivisions for acquisition and development of public outdoor recreation areas and facilities. Eligible units of government include counties,

incorporated cities and villages, and school districts. The types of projects funded include land acquisition for new or existing parks, forests, and wildlife areas and development projects which contribute directly to outdoor recreation by the addition of basic facilities. Federal assistance through LAWCON may consist of up to 50 percent of the total project costs. Other requirements to be met before LAWCON funds are allocated include the following:

1. Applicants must submit a formally adopted comprehensive outdoor recreation plan that is consistent with the required state outdoor recreation plan to the Wisconsin Department of Natural Resources.
2. Applicants must submit a resolution adopted by the local unit containing a formal request for funds, allotting matching local funds, and accepting an obligation by the local unit to maintain the area or facility.
3. Applicants must submit the plan for areawide review and comment under Circular A-95 of the U. S. Office of Management and Budget.
4. Applicants must provide environmental information as required by the National Environmental Policy Act.

LAWCON funds are apportioned to Wisconsin each year and are allocated in the following manner: 40 percent to local governments,<sup>8</sup> 40 percent to state agencies, and 20 percent to a contingency fund for use by local governments or state agencies.<sup>9</sup>

In addition to the federal-state cooperation in the LAWCON program, four federal agencies also share in LAWCON funds. The agencies which have utilized LAWCON funds are the U. S. Fish and Wildlife Service, the National Park Service, the Bureau of Land Management, and the U. S. Forest Service. To date, the Land and Water Conservation fund has proven to be an important source of funds for the acquisition and development of recreational areas.

U. S. Department of Agriculture, Forest Service: The U. S. Department of Agriculture, Forest Service, has responsibility for the maintenance of the National Forest system, cooperative state and private forest programs, and various forestry research programs. Within the National Forest system itself, there are 187 million

<sup>5</sup> 16 U.S.C. sec. 669 (1970).

<sup>6</sup> 16 U.S.C. sec. 777 (1970).

<sup>7</sup> Public Law (P.L.) 88-578 as amended by P.L. 91-485.

<sup>8</sup> The local government allocation is distributed 70 percent on the basis of county population and 30 percent equally to all counties in the State.

<sup>9</sup> Wisconsin Administrative Code, Chapter NR 50, Administration of Outdoor Recreation Program Grants.



acres of federal land made up of 155 national forests.<sup>10</sup> In recent years, these forest lands have become increasingly important in providing recreational resources. In addition to the National Forest system, the U. S. Forest Service cooperates with state and local governments in the protection and management of over one-half billion acres of forest lands. Although there are no lands within the Region designated as National Forests, state and local forests within the Region are eligible for federal assistance provided by the U. S. Forest Service. In addition, the U. S. Forest Service provides technical forestry assistance for direct improvement of environmental conditions in urban and rural areas.

U. S. Department of Agriculture, Soil Conservation Service: The U. S. Department of Agriculture, under authority provided in the Food and Agriculture Act of 1962, provides technical and financial assistance to Resource Conservation and Development Project areas which are organized and sponsored by units of state and local governments. Project area sponsors initiate and direct a continuing planning process, develop and maintain an overall project plan for the area, and implement planned measures. The objective of the program, termed the Resource Conservation and Development (RC & D) program, is to expand economic opportunities for the people of an area by assisting them in preparing and carrying out plans of action for the orderly conservation, improvement, development, and wise use of natural resources. Agencies of the U. S. Department of Agriculture, under program leadership of the Soil Conservation Service, provide technical and financial assistance to local sponsors. Each RC & D Project has goals related specifically to its project area but, in general, such projects aim to: 1) develop land and water resources to provide recreation opportunities and wildlife habitat; 2) provide conservation measures for watershed protection and flood prevention; 3) assist and facilitate conservation projects on public lands; 4) promote historical and scenic attractions; and 5) assist and encourage other community development projects, encourage preservation and wise use of natural resources, and improve or expand recreation facilities. Technical and financial assistance is provided only to those project sponsors whose projects have been approved and authorized by the U. S. Secretary of Agriculture.

In 1973 the Soil and Water Conservation Districts of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties formed a board called the Southeastern Wisconsin RC & D Sponsors and submitted an application to the U. S. Secretary of Agriculture for designation of the seven-county area as a Resource Conservation and Development Project area. Such designation is awaiting approval of the Secretary of Agriculture. In 1975 the Southeastern Wisconsin Regional Planning Commission and the Southeastern Wisconsin RC & D

sponsors entered into an agreement under which the Regional Planning Commission acts as the planning arm of the RC & D project sponsors. Among the project measures recommended by the seven-county area sponsors for park and open space lands are the following: 1) purchase of lands for floodplain, urban parkway, and outdoor recreation use; 2) development of urban environmental corridors along rivers in the project area; 3) shoreline erosion abatement on Lake Michigan in conjunction with a public recreation area; and 4) water quality improvement and erosion control.

U. S. Department of Commerce, National Oceanic and Atmospheric Administration: The Coastal Zone Management Act of 1972<sup>11</sup> provided federal grants to assist states in the development and operation of management programs for coastal land and water resources. The U. S. Department of Commerce, National Oceanic and Atmospheric Administration, was delegated the task of administering this program. Planning grants are awarded to states upon their decision to participate in the development of management programs. A state management program must include a definition of "what shall constitute permissible land and water uses within the coastal zone which have a direct and significant impact on coastal waters."<sup>12</sup> In addition, the state management plan is required to recommend guidelines for priority uses of the coastal area and document the state's legal ability to implement the plan.

Four counties within the Region have lands which fall within the coastal zone because of their proximity to Lake Michigan. Because the Coastal Zone Management Program is intended to identify permissible uses of the land lying within the coastal zone, open space preservation and creation of parklands and scientific areas is likely to occur in coastal zone areas highly sensitive to man's uncontrolled activities. In Wisconsin, the coastal zone program is still in its initial stages, and it will be some time before the full effects of the coastal zone program may be accurately assessed.

U. S. Department of the Army, Corps of Engineers: Traditionally, one of the duties of the U. S. Army Corps of Engineers has been the construction of facilities related to inland navigation. A major area of concern in this Region is the Corps' activities in improvement of harbors and rivers for both recreational and commercial navigation. In addition, the Corps has also been involved with work projects of flood control and related purposes, including shore protection. Harbor construction and improvement, through dredging and breakwater construction and maintenance, provide an important vehicle for providing recreational opportunities for residents of the Region. The growing popularity of sport fishing in Lake Michigan is particularly involved. In addition, the Corps shoreland protection program may be a significant factor

<sup>10</sup> *Environment Reporter*, 51:0201, September 10, 1976, information from Forest Service testimony before the House Appropriations Subcommittee on Agriculture and related agencies.

<sup>11</sup> 16 U.S.C. secs. 1451-64 (1973).

<sup>12</sup> 16 U.S.C. sec. 1454(b) (1973).

in view of recurrent high water levels on Lake Michigan. Although projects undertaken by the Corps of Engineers often are directed particularly at navigation improvement, enhancement of recreational activities has also become highly important. Projects of the Corps of Engineers in the area include breakwater and pier construction and maintenance, harbor dredging, land extensions as a result of dredge and fill material placement, and shoreline protection.

#### State Level

Department of Natural Resources: The Department of Natural Resources (DNR) is the primary state agency with responsibility for park and open space development and preservation. The following sections discuss this responsibility by subarea, including state parks, state forests, scientific areas, state outdoor recreation programs, and miscellaneous outdoor recreation responsibilities.

State Parks: The Wisconsin Department of Natural Resources in Section 27.01 of the Wisconsin Statutes is given authority to select those areas which qualify as state parks for inclusion in the state park system. The DNR possesses the authority to make the necessary land purchases and develop these lands as appropriate to the reason for purchase.<sup>13</sup> Such parks are to be classified by the DNR for their most logical use. In addition, the DNR possesses authority to promulgate such rules as may be necessary for the administration of the parks and the conduct of its visitors. Complete supervision over state parks thus is given to the DNR:

It is declared to be the policy of the legislature to acquire, improve, preserve, and administer a system of areas to be known as the state parks of Wisconsin. The purpose of the state parks is to provide areas for public recreation and for public education in conservation and nature study. An area may qualify as a state park by reason of its scenery, its plants and wildlife, or its historical, archaeological or geographical interest. The department shall be responsible for the selection of a balanced system of state park areas and for the acquisition, development, and administration of the state parks.<sup>14</sup>

---

<sup>13</sup> *State parks are composed of areas of scenic, scientific, historical, archeological, or recreational activity of statewide importance to attract visitors from a large section of the State. The Bureau of Parks and Recreation of the Department of Natural Resources has the responsibility to conduct feasibility studies to determine the statewide significance, need, desirability, and suitability of areas of land proposed as state parks. The evaluation of such areas considers site location; natural and man-made features of the site; present site use; natural resource preservation needs of the area; recreation needs of the area; recreation use potential of the site; and site acquisition, development, and maintenance cost.*

State Forests: Section 28.01 of the Wisconsin Statutes delegates to the Wisconsin Department of Natural Resources authority to manage and direct the development of forestry in Wisconsin:

The department shall execute all matters pertaining to forestry within the jurisdiction of the state, direct the management of state forests, collect data relative to forest use and conditions, and advance the cause of forestry in the state.<sup>15</sup>

In addition, the DNR is given authority to acquire land for forestry purposes, sell timber from such lands, and administer the state forest lands. Section 28.03 of the Wisconsin Statutes designates the state forests, including the Kettle Moraine State Forest, which has parts of its northern and southern units located within the Region.<sup>16</sup> It is important to note that permitted uses of state forest lands include a wide range of outdoor recreational activities:

(d) Lands, acquisition. Acquire by purchase, lease or agreement, and receive by gifts or devise, lands or waters suitable for the purpose hereinafter enumerated, and maintain the same for the said purposes . . . For state forests for the purpose of growing timber, demonstrating forestry methods, protecting watersheds or providing public recreation.<sup>17</sup>

The designation of lands as state forest lands assumes that forestry practices will be the major permitted use; however, compatible multiple uses will also receive high priority.

Scientific Areas: Wisconsin was the first state in the United States to develop a scientific areas preservation system. The Scientific Areas Preservation Council, administratively placed in the DNR, has been given the authority to:

(1) Determine the acceptance or rejection of areas of special scientific interest offered as donations by individuals or organizations for preservation.

---

<sup>14</sup> *Wis. Stats. sec. 27.01 (1975); see also Wisconsin Administrative Code, chapters NR 41 and NR 45 for Department of Natural Resources rules on state parks and their management.*

<sup>15</sup> *Wis. Stats. sec. 28.01 (1975); see also Wisconsin Administrative Code, Chapter NR 40 for Department of Natural Resources rules on state forests.*

<sup>16</sup> *Wis. Stats. sec. 28.03 (1975).*

<sup>17</sup> *Wis. Stats. sec. 23.09(2)(d)(1) (1975).*

(2) Make recommendations to appropriate federal agencies or national scientific organizations of areas in the state that are considered worthy to be listed as scientific areas of national importance.

(3) Advise the department of natural resources and other agencies on matters pertaining to the acquisition, development, utilization, and maintenance of scientific areas, including determinations as to the extent of multiple use that may be allowed on approved scientific areas that are a part of a state park, state forest, public hunting ground or similar property of the department . . . .

(6) Take such other action as is deemed advisable to facilitate the administration, development, maintenance or protection of the scientific area system or any part thereof.<sup>18</sup>

Other recreational uses may be permitted if they are compatible with the preservation of these areas. A number of scientific preservation areas are located in the Region. It should be stressed, however, that the paramount purpose of this designation is preservation and therefore traditional recreational pursuits may be severely curtailed within these areas. At the present time, scientific areas and natural areas are located within state parks, forests, and wildlife areas; county parks and forest lands; and private lands owned by conservation organizations. These areas may be managed directly by DNR personnel, university groups, or through agreements with private groups. As of August 1975, a total of 123 areas with more than 16,000 acres comprised the state scientific area system. A goal of 210 scientific areas is contemplated.<sup>19</sup> The state scientific areas located within the Region are included in the park and open space sites inventory described in Chapter V of this report as natural area sites.

State Outdoor Recreation Program: The purpose of the Wisconsin Outdoor Recreation Act Program (ORAP) is set forth in Section 23.30 of the Wisconsin Statutes as follows:

The purpose of this section is to promote, encourage, coordinate and implement a comprehensive long-range plan to acquire, maintain and develop for public use those areas of the state best adapted to the development of a comprehensive system of state and local outdoor recreation facilities and services in all fields, including without limitation because of enumeration, parks, forests, camping grounds,

fishing and hunting grounds, related historical sites, highway scenic easements and local recreation programs, except spectator sports, and to facilitate and encourage the fullest public use thereof.<sup>20</sup>

Section 66.36 of the Wisconsin Statutes provides that cities, counties, villages, and towns may apply for state aids as provided in Section 23.09 of the Wisconsin Statutes. The requirements and procedure to be followed in submitting an application are as follows:

1. Applicants are required to submit to the Wisconsin Department of Natural Resources a formally adopted comprehensive outdoor recreation plan which conforms to the State Outdoor Recreation Plan.
2. Applicants also must submit a resolution adopted by the applicants' governing body containing a formal grant request, an indication of the local agency to act on behalf of the applicant, an allocation of sufficient funds, and finally an indication that the sponsor will maintain the facility.
3. The applicant must provide sufficient information to evaluate the effects of the proposed action on the quality of human environment pursuant to the requirement of the Wisconsin Environmental Policy Act, Section 1.11 of the Wisconsin Statutes.

The local aids are allocated on a county basis and are apportioned to the counties on the basis of 70 percent representing each county's proportional share of the state's population and 30 percent allotted equally to each county. State aids under this program are to be limited by administrative rule to no more than 50 percent of the cost of acquiring or developing recreational lands and facilities; and where federal LAWCON funds are involved, state and federal aids together may not exceed 75 percent of the total cost.

The State Outdoor Recreation Program is to be developed under the guidance of the Natural Resources Board. The program is to consider the following:

The outdoor recreation program is established as a continuing program to financially assist the state and local agency outdoor recreation program, including without limitation because of enumeration, lake rehabilitation, coho salmon production, wildlife management of county forests, public access, state park and forest recreation areas, fish and game habitat areas, youth conservation camps, creation of

<sup>18</sup> Wis. Stats. sec. 23.27 (1975).

<sup>19</sup> This information was obtained from a pamphlet entitled *Natural Areas and Scientific Areas* published by the Scientific Areas Preservation Council, Department of Natural Resources; Pub. No. 1-2800 (1973).

<sup>20</sup> Wis. Stats. sec. 23.30 (1975); see also Wisconsin Administrative Code, Chapter NR 50 for Department of Natural Resources rules relating to the Administration of Outdoor Recreation Program Grants.

new lakes, lake and stream classification, highway scenic easements, state aids for local governmental parks and other outdoor recreational facilities, acquisition and development, state aids for county forest recreation areas development, related historic sites, tourist information sites; recreational planning; scenic or wild river preservation and use; and conservation work program.<sup>21</sup>

Section 23.31 of the Wisconsin Statutes provides a funding provision for the Outdoor Recreation Program:

To provide and develop recreation facilities within this state, the natural resources board, with the approval of the governor . . . may direct that state debt be contracted for providing recreation resources facilities or making additions to existing recreation resource facilities.<sup>22</sup>

A plan of expenditures for recreation projects is submitted to the governor for approval. After such approval is granted, projects may be initiated.

Miscellaneous Outdoor Recreation Related Programs: The Department of Natural Resources is given authority to establish game refuges and fish refuges. In addition, the DNR may acquire land "for public shooting, trapping or fishing grounds or waters for the purpose of providing areas in which any citizen may hunt, trap or fish."<sup>23</sup>

In addition, Section 23.09(25) states that the DNR shall acquire, develop, and operate off-the-road motorcycle recreational areas. This Section also provides for the creation of a state motorcycle recreation advisory council.

Section 23.09(9) of the Wisconsin Statutes provides for state assistance to eligible towns, counties, cities, and villages of amounts equal to one-half of the approved project cost of acquiring and developing lands to provide public access to navigable waters. A project description must be furnished by the applicant providing justification for the proposed project. Criteria used in this evaluation include the characteristics of the water body, the level of use, and adequacy of the proposed site.

Department of Local Affairs and Development: The programs of the Wisconsin Department of Local Affairs and Development provide assistance to local units of government for improving the methods, procedures, and programs of local governments. As part of this task, the Wisconsin Department of Local Affairs and Development will "cooperate with and provide technical assistance to county, town, village, city and regional

planning commissions, parks or recreation boards, community development groups, community action agencies, and similar agencies created for the purposes of aiding and encouraging an orderly, productive and coordinated development of the state."<sup>24</sup> Other assistance which the Department of Local Affairs and Development may offer to local units of government on parks and outdoor recreation includes assistance in the administration of federal grant programs, service as an information clearinghouse, and development of model programs including zoning and planning.

The State Historical Society of Wisconsin: The State Historical Society has the authority to operate and maintain outdoor historic sites related to the state's outdoor recreation program.<sup>25</sup> Examples of such sites in or near the Region include the Old World Wisconsin Museum in Waukesha County and the Old Wade House located in Sheboygan County. In addition, the State Historical Society has the authority to "plan, develop and publicize a uniform official system of marking for state historical, archaeological, geological and legendary sites."<sup>26</sup>

#### Local Level

Counties: Counties have a wide range of park and open space planning and development authority and responsibility. The following section discusses such authority and responsibility in the subareas of county parks, county forests, forest croplands, woodland tax law, inland lake protection and rehabilitation, general authority for park and outdoor recreation, park and recreational planning, and funding sources.

County Parks: Section 27.02 of the Wisconsin Statutes empowers county boards to create county park commissions which "shall have charge and supervision of all county parks and all lands heretofore or hereafter acquired by the county for park or reservation purposes . . . subject to the general supervision of the county board and to such regulations as it may prescribe."<sup>27</sup>

Section 27.04 requires the county park commission to develop a comprehensive park plan for the entire county. The park commission shall consider "the health, comfort, enjoyment and general welfare of the people of the county, to the protection of streams, lakes and pools from pollution, to the use by the public of lakes, pools and the banks thereof to the reforestation for public use and enjoyment of tracts of land to the conservation of flooded areas, and to the preservation of phases of natural beauty and of historic or scientific interest."<sup>28</sup>

<sup>24</sup> Wis. Stats. sec. 22.13(2)(e) (1975).

<sup>25</sup> Wis. Stats. sec. 44.02(20) (1975).

<sup>26</sup> Wis. Stats. sec. 44.15(2) (1975).

<sup>27</sup> Wis. Stats. sec. 27.05 (1975).

<sup>28</sup> Wis. Stats. sec. 27.04 (1975).

<sup>21</sup> Wis. Stats. sec. 23.30(2) (1975).

<sup>22</sup> Wis. Stats. sec. 23.31 (1975).

<sup>23</sup> Wis. Stats. sec. 23.09(2)(d)(3) (1975).



The county board may then adopt the plan by ordinance. The county board also is given the authority to acquire lands necessary for a county park system by gift, purchase, condemnation, or otherwise. When condemnation powers are exercised, eminent domain procedures as outlined in Chapter 32 of the Wisconsin Statutes are to be followed. However, no county can condemn land for park purposes without the permission of the governing body of the municipality—city, village, or town—in which the land is located. Section 27.075 of the Wisconsin Statutes allows the county board to exercise municipal park powers in any town, city, or village located in such county at the request of a town, city, or village.

The county board is authorized to levy a tax upon the taxable property of the county for the purpose of park and recreation development.<sup>29</sup> This tax is to be collected and paid out of a separate fund only upon the order of the park commission for expenses incurred in the park program.

County Forests: Section 28.10 of the Wisconsin Statutes provides counties with the authority to establish a county public forest and acquire land for that purpose. The county board may designate a committee to administer the county forests, establish regulations for use of such forests, maintain and protect such forests, and establish a forest management program. County forests are to be managed as multiple use provisions allow:

The purpose of this section is to provide the basis for a permanent program of county forests and to enable and encourage the planned development and management of the county forests for optimum production of forest products together with recreational opportunities, wildlife, watershed protection and stabilization of streamflow, giving full recognition to the concept of multiple-use to assure maximum public benefits.<sup>30</sup>

In addition, if the Department of Natural Resources determines that a parcel of land for which an application has been filed for entry into the county forest program is not suited for timber production but is "suitable for scenic, outdoor recreation, public hunting and fishing, water conservation and other multiple-use purposes, it shall make an order of entry designating such lands as "county special-use lands."<sup>31</sup>

Finally, the general public is guaranteed "the privilege of entering such lands for the purpose of hunting, fishing, trapping and other recreation pursuits subject to such regulation and restrictions as may be established by lawful authority."<sup>32</sup>

---

<sup>29</sup> Wis. Stats. sec. 27.06 (1975).

<sup>30</sup> Wis. Stats. sec. 28.11(1) (1975).

<sup>31</sup> Wis. Stats. sec. 28.11(4)(c) (1975).

Forest Croplands: The Wisconsin legislature in 1928 enacted the Forest Crop Law which taxes forest land at a flat annual rate, with any timber products derived therefrom being taxed only at the time of harvesting. Only 400 acres of land in the seven-county Southeastern Wisconsin Region were entered in the forest crop program in 1977. Section 77.01 of the Wisconsin Statutes states the purpose of this program as follows:

It is the intent of this chapter to encourage a policy of protecting from destruction or premature cutting the forest growth in this state, and of reproducing, and growing for the future adequate crops through sound forestry practices of forest products on lands not more useful for other purposes, so that such lands shall continue to furnish recurring forest crops for commercial use with public hunting and fishing as extra public benefits, all in a manner which shall not hamper the towns in which such lands lie from receiving their just tax revenue from such lands.<sup>33</sup>

The basic provisions of the Forest Crop Law are the following:

1. The owner of an entire quarter section, fractional lot, or government lot may file a petition for entry of such land into the forest crop program with the Wisconsin Department of Natural Resources. Such a petition must be submitted by August 31 in order to be eligible for tax benefits the next calendar year.
2. The Department of Natural Resources shall hold a public hearing and make a finding of fact and enter the appropriate order.
3. The owner of the lands to be included within the forest crop program may choose either a 25 year or 50 year contract period.
4. No tax shall be levied on forest croplands except the annual tax or "acre share" of 20 cents per acre per year. This tax may be revised every 10 years.
5. If the land under a forest crop contract is sold, the buyer has the option of withdrawing the lands from the forest crop contract. Upon any withdrawal before the contract has expired, the owner must pay the difference between the annual real estate tax that would have been paid on the land and the forest crop law tax.

---

<sup>32</sup> Wis. Stats. sec. 28.11(4)(f) (1975).

<sup>33</sup> Wis. Stats. sec. 77.01 (1975).

6. Approval from the Department of Natural Resources is required before any timber is harvested and such timber shall be subject to a tax at the rate of 10 percent of the stumpage value of the timber harvested.

7. Any land included under a forest crop land contract must be open to the public for purposes of hunting and fishing.

Woodland Tax Law: Section 77.16 of the Wisconsin Statutes provides for a tax of 20 cents per acre on approved woodland tracts of less than 40 acres in area. An application of inclusion of land under the woodland tax law must be made to the Department of Natural Resources. The Department shall examine the land and determine if the land is more suitable for growing timber and forest products than for any other purpose. An applicant, town board, or county board may petition the Department for a public hearing to take testimony and hear evidence on whether such lands shall be included in a woodland tax program. After approval is granted, the Department of Natural Resources shall file an order approving the application and such order shall constitute a 10 year contract running with the land. The owner of land approved for entry into the woodland tax program must "promote the growth of trees and shall prohibit grazing and burning on lands entered under the woodland tax law."<sup>34</sup> If the Department finds that the owners have not complied with the provisions of section 77.16, the Department shall issue an order removing the land from the woodland tax law classification. The major differences between the forest crop law and the woodland tax law are that the former is for greater than 40 acre tracts and the latter for less than 40 acre tracts of woodlands. In addition, the woodland tax law contains no requirement for public entry. Almost 10,900 acres of land in the seven-county Southeastern Wisconsin Region were entered in the woodland program in 1977.

Inland Lake Protection and Rehabilitation: An inland lake protection and rehabilitation district may be established by the county board after appropriate hearings and other required procedures have been complied with. Any village or city must approve inclusion within the boundaries of such district. The concept of an inland lake district is founded on the legislative intent as found in Section 33.001 of the Wisconsin Statutes:

The legislature finds environmental values, wildlife, public rights in navigable waters and the public welfare are threatened by the deterioration of public lakes; that the protection and rehabilitation of the public inland lakes of this state are in the best interest of the citizens of this state; that the public health and welfare will be benefited thereby; that the current state effort to abate water pollution will not undo the eutrophic and

other deteriorated conditions of many lakes; that lakes form an important basis of the state's recreation industry; that the increasing recreational usage of the waters of this state justifies state action to enhance and restore the potential of our inland lakes to satisfy the needs of the citizenry . . . .<sup>35</sup>

An inland lake protection and rehabilitation district may initiate research plan lake rehabilitation projects and adopt and implement lake rehabilitation plans. It is clear that diminishing recreational value and usage derived from some inland lakes was a major reason for the creation of such districts.

General County Park and Recreational Authority: Among the general statutory powers over recreation and parks given to county boards are the following: to acquire, lease, or rent property for parks or recreation; construct, maintain, and finance county-owned buildings, including "swimming pools, stadiums, golf courses, tennis courts, parks, playgrounds, bathing beaches, bathhouses and other recreational facilities."<sup>36</sup> In addition, a county may designate a county recreation committee whose purpose is to "create, provide and conduct and assist in creating, promoting and conducting recreational activities in the county . . . ."<sup>37</sup> This committee could be created in addition to a county park commission, the latter having primary responsibility for land and facility development, and the former having primary responsibility for the conduct of recreation activities.

County Park and Recreational Planning: As part of the general zoning power granted to counties, counties may enact zoning ordinances which will "promote the public health, safety, convenience and general welfare . . . to insure adequate highway utility, health, educational and recreational facilities."<sup>38</sup> In addition to the county park plan mentioned earlier, a county planning and zoning committee may direct the preparation of a county development plan which may "identify goals and objectives for the future physical development of the county with respect to: public and private use of land and other natural resources; highways including bridges, viaducts, parkways and other public ways; parks, playgrounds, hunting and fishing grounds, forests and other facilities of a recreational nature . . . ."<sup>39</sup>

<sup>35</sup> Wis. Stats. sec. 33.001 (1975); see also NR 60 for Department of Natural Resources rules relating to public inland lake protection and rehabilitation.

<sup>36</sup> Wis. Stats. sec. 59.07(1) (1975).

<sup>37</sup> Wis. Stats. sec. 59.07(26) (1975).

<sup>38</sup> Wis. Stats. sec. 59.97(1) (1975).

<sup>39</sup> Wis. Stats. sec. 59.97(3) (1975).

<sup>34</sup> Wis. Stats. sec. 77.16 (1975).

Finally, counties are empowered to enact shoreland zoning ordinances designed to protect wetlands adjacent to navigable waters from unreasonable physical development.

*Funding Sources for County Recreation and Park Programs:* Section 66.36 of the Wisconsin Statutes provides authority for counties to apply for and accept state aids for the acquisition and development of recreational lands. By statute, state aid under this section cannot exceed 50 percent of the cost of acquiring the property, and maintenance and operation costs of parks and other recreational facilities shall not be eligible. No usage of such acquired lands shall be inconsistent with the original purposes of aid conveyance. Such local aid shall be allocated by the state on the basis of a priority system based on comprehensive plans submitted with the local applications.

State aid to counties for development of recreational facilities on county forest lands is made available through Section 23.09(11) of the Wisconsin Statutes. The term outdoor recreational facility has been defined to include "the development of picnic and camping grounds, nature trails, snowmobile trails and areas, beaches and bathhouses, toilets, shelters, wells and pumps, and fireplaces."<sup>40</sup>

Expenses attributable to operation and maintenance are not eligible. In addition, state aids may not be greater than 50 percent of the cost of an individual project. Finally, the Department of Natural Resources, in making its deliberations vis-a-vis a county request, "shall give careful consideration to whether or not the proposal is an integral part of an official comprehensive land and water use plan for the area as well as the relationship of the project to similar projects on other public lands."<sup>41</sup>

State aid to counties is also available for the purpose of establishing county fish and game projects or development of game and nongame habitat in county forests. The former program includes the creation of impoundments, construction of nature trails, and stream lake and spring pond rehabilitation and improvement. Grants for development of habitat in county forests must be consistent with the comprehensive forest land use plan.

State aid also is available to a county which indicates by resolution its desire to develop site plans for outdoor recreation facilities.<sup>42</sup> Such requests must be submitted in the same manner as requests for aids to counties for development of recreational facilities are submitted.

Counties are eligible to submit requests to the State for aids for snowmobile purposes. Such aids may be used to "purchase lands or secure easements, leases, permits, or other appropriate agreements, written or oral, per-

mitting use of private property for snowmobile trails, facilities and areas, if such easements, leases, permits, or other agreements provide access to the trail, facility or area."<sup>43</sup>

As already noted, counties also are eligible to receive up to 50 percent funding of a project through the land and water conservation fund (LAWCON). These aids may be granted for either land acquisition or development projects. To be eligible, a county must submit an application containing a comprehensive outdoor plan and must have adopted the appropriate resolution containing the following: a formal request for the grant; an allocation of significant funds; and a commitment that the county will maintain the area or facility.

*Cities:* Like counties, cities have park and open space authority and responsibility. The following section discusses their varied authorities and responsibilities under the subareas of parks, forests, harbor construction and improvement, inland lake protection and rehabilitation, park and recreation planning, and park and recreation aid.

*Parks:* Section 27.08 of the Wisconsin Statutes provides cities with the authority to create by ordinance a board of park commissioners. The duties of this park board are to acquire property for park purposes by lease or purchase and to manage, control, improve, and care for all public parks within the city. In addition to the board of park commissioners, a board of public land commissioners may be created by city ordinance. The board of public land commissioners is to consist of the commissioner of public works, the city engineer, and three resident citizens. This board has the authority to convert streets and highways designated by the common council into parkways or boulevards. To implement such a conversion, the board may acquire land on either side of a street or public highway for the above stated purpose. In addition, a public land fund is created in which proceeds from the resale of land and all land purchase appropriations made by the common council shall be placed. The proceeds of this fund are to be utilized to make the necessary land purchases. In addition, Section 27.115 provides that a city may grant or convey to nonstock incorporated yacht clubs title to any submerged land in exchange for lands of the yacht club corporation for its exclusive occupancy use and enjoyment.

Section 62.23(17) states that cities have the broad authority to: "acquire by gift, lease, purchase or condemnation of any lands (a) within its corporate limits for establishing, laying out, widening, enlarging, extending and maintaining memorial grounds, streets, squares, parkways, boulevards, parks, playgrounds, sites for public buildings, and reservations in and about and along leading to any or all of the same . . . ."<sup>44</sup>

<sup>40</sup> Wis. Stats. sec. 23.09(11)(b) (1975).

<sup>41</sup> Wis. Stats. sec. 23.09(11)(e) (1975).

<sup>42</sup> Wis. Stats. sec. 23.09(24) (1975).

<sup>43</sup> Wis. Stats. sec. 23.09(26) (1975).

<sup>44</sup> Wis. Stats. sec. 62.23(17) (1975).

Forests: Section 28.20 of the Wisconsin Statutes provides cities with the authority to acquire land and appropriate funds for the purpose of establishing a community forest. Such a forest may be located outside the city limits. Authority also is given to properly manage such forests and sell any merchantable timber derived therefrom.

Harbor Construction and Improvements: Municipalities are given the authority to make harbor improvements including filling, excavating, dredging, and improving harbor structures. In addition, authority is granted under which municipalities may undertake cooperative efforts or receive governmental aid in the dredging of harbor channels or initiating flood control projects. Any land needed in a harbor improvement project may be condemned for the purposes.

Inland Lake Protection and Rehabilitation: Cities may by resolution establish an inland lake protection and rehabilitation district. The district may acquire, hold, and dispose of real property and carry out general programs of lake protection and rehabilitation. Management of the affairs of this district shall be delegated to a board of governors. In view of the multiple recreational opportunities inherent in the presence of a lake, rehabilitation and protection of such lakes can contribute greatly to maintaining and/or increasing the number of recreational options available to city residents. It was noted earlier in this chapter that one of the purposes of passing the legislation authorizing creation of lake districts was the recognition of the vital importance which lakes play in creating recreational opportunities.

Park and Recreation Planning: A city council may by ordinance create a city plan commission consisting of the mayor, city engineer, president of the park board, an alderman, and three citizens. It is the duty of the city plan commission to make and adopt a master plan for the development of the city. The plan shall show the general location, character, and extent of:

streets, highways, freeways, street grades, roadways, walks, bridges, viaducts, parking areas, tunnels, public places and areas, parks, parkways, playgrounds, sites for public buildings and structures, airports, pierhead and bulkhead lines, waterways, routes for railroads, street railways and busses, and the general location and extent of . . . the acceptance, widening, narrowing, extension, relocation, removal, vacation, abandonment or change of use of any of the foregoing public ways, grounds, places, spaces, buildings, properties, utilities, routes, or terminals, the general location, character and extent of community centers and neighborhood units, the general location of blighted districts and slum areas, and a comprehensive zoning plan.<sup>45</sup>

<sup>45</sup> Wis. Stats. sec. 62.23(2) (1975).

In addition, the city council must refer to the city plan commission for its consideration and report, before final consideration by the city council members, matters concerning "the location, acceptance, extension, alteration, vacation, abandonment, change of use, sale, acquisition of land for or lease of land for any street, alley or other public way, park, playground, airport . . . ."<sup>46</sup>

Other planning powers possessed by the city include official map and zoning powers. City councils are authorized to establish an official map of the city showing streets, highways, parkways, parks, and playgrounds. This map is to be final and conclusive for the location and width of these streets, highways, and parkways and for the location of parks and playgrounds shown on the official map. City officials, after proper proceedings and public notice, are empowered to change the official map.<sup>47</sup>

City councils are given the power to zone for the purpose of promoting the health, safety, morals, or general welfare of the people. Such zoning may regulate placement and size of buildings, density, open space requirements and compatible usage. In addition, cities must enact floodplain zoning under threat of state-imposed floodplain zoning. Such a floodplain zoning ordinance must be adopted "for an area where appreciable damage from floods is likely to occur."<sup>48</sup> The floodplain ordinance must be reasonable and effective. The practical result of such a requirement, coupled with federal flood insurance program standards, is one of creating greater amounts of open space.

Park and Outdoor Recreation Aid to Cities: Section 66.36 of the Wisconsin Statutes empowers cities to apply for and accept state aids for acquisition and development of recreational lands. Such an application must be consistent with a local comprehensive plan and the State Outdoor Recreation Plan. By statute, up to 50 percent of the costs may be paid by the State. Such costs are not inclusive of operation and maintenance, and the usage of such lands cannot deviate from the original application. In addition, a city resolution similar to the county resolution discussed earlier must be adopted.

Aid is also available to cities which indicate by resolution a desire to develop site plans for outdoor recreation facilities. Cities must apply to the Department of Natural Resources. Once again, state aid is limited to 50 percent of the cost of such a project. In addition, the Wisconsin Department of Natural Resources will consider whether the proposal is part of an official comprehensive land use plan for the area.

<sup>46</sup> Wis. Stats. sec. 62.23(5) (1975).

<sup>47</sup> Wis. Stats. sec. 62.23(6) (1975).

<sup>48</sup> Wis. Stats. sec. 87.30 (1975); see also Wisconsin Administrative Code, Chapter NR 116 for Department of Natural Resources rules relating to Wisconsin floodplain management program.



Federal Land and Water Conservation (LAWCON) funds are available to cities for land acquisition and development projects for public outdoor recreation lands and facilities. An interested city must submit a comprehensive outdoor recreation plan which conforms to the State Outdoor Recreation Plan. In addition, a resolution must be adopted by the city indicating a formal request for a grant, budgeting funds for the project, and committing the city to maintaining the area or facility.

Villages: Villages have park and open space planning and development powers and responsibilities similar to those of cities. The following section discusses these powers and responsibilities by the subareas of parks, forests, inland lake protection and rehabilitation, recreation and park planning, and park and recreation aid.

Parks: Section 27.13 of the Wisconsin Statutes provides villages with the authority to maintain a system of parks:

Every town and village may provide and maintain parks, parkways, boulevards or pleasure drives pursuant to the provision of this chapter which are applicable to cities.<sup>49</sup>

In addition, Section 61.34 provides that:

The Village Board may acquire property, real or personal, within or without the village for parks, libraries, historic places, recreation, beautification, streets, waterworks, sewage or waste disposal, harbors, improvement of watercourses, public grounds, vehicle parking areas and for any other public purpose.<sup>50</sup>

Forests: Provision is made for ownership and maintenance of a community forest by a village. Village forests, like city forests, need not be located within the village limits.

Inland Lake Protection and Rehabilitation: A village may by resolution establish a public inland lake protection and rehabilitation district if the village encompasses all the frontage of the lake within the village boundaries. The legislature stated in Section 33.001 of the Wisconsin Statutes that "increasing recreational usage of the waters of this state justifies state action to enhance and restore the potential of our inland lakes."<sup>51</sup>

Recreation and Park Planning: Section 61.35 of the Wisconsin Statutes states that the provisions of Wisconsin Statute 62.23 (city planning) shall apply to villages. In addition:

The powers and duties conferred and imposed by said section upon mayors, councils and specified city officials are hereby conferred upon presidents, village boards and village officials performing duties similar to the duties of such specified city officials respectively.<sup>52</sup>

The prior discussion of city plan commissions, master plans, and mapping and zoning powers is equally applicable to village planning, especially vis-a-vis outdoor recreation and park planning.

Park and Recreation Aid: Villages are eligible to apply for and receive state aids for the acquisition and development of recreational lands as provided by Section 66.36 and 23.09 of the Wisconsin Statutes. Requirements for aid up to 50 percent of the total acquisition and construction costs are that the project must be in accord with comprehensive plans submitted with the application and consistent with the state comprehensive outdoor plan as drawn up by the Wisconsin Department of Natural Resources, and the village must have adopted a resolution similar to that required of cities and counties and discussed earlier. In addition, villages are eligible to apply through the Wisconsin Department of Natural Resources for federal land and water conservation fund (LAWCON) grants. The requirements, procedures, and restrictions placed upon eligible units of government were discussed earlier in this chapter.

Towns: The following section discusses town park and open space planning and development authority and responsibility under the subareas of parks, forests, recreation authority, inland lake protection and rehabilitation, park and recreation planning, and park and recreation aids.

Parks: Section 27.13 of the Wisconsin Statutes declares that towns may provide and maintain parks, parkways, boulevards, or pleasure drives pursuant to the provisions which grant park authority to cities. Section 60.181 further provides that a town may provide for a park commission of seven members appointed by the town board. The powers of the commission will be to lay out, maintain and improve parks and open spaces, and to accept or acquire property for park purposes.

Forests: Towns are allowed to acquire land and engage in forestry practices for purposes of initiating or acquiring a community forest. Such forests must be located within the town limits.

Recreation Authority: Pursuant to Sections 66.527 and 60.18(18n) of the Wisconsin Statutes, towns are given the authority to establish a recreation authority. Such a department of recreation will consist of three members appointed by the town chairman. In addition, two or more towns and/or school districts may jointly form such a recreation authority. This recreation board is

<sup>49</sup> Wis. Stats. sec. 27.13 (1975).

<sup>50</sup> Wis. Stats. sec. 61.34(3) (1975).

<sup>51</sup> Wis. Stats. sec. 33.001 (1975).

<sup>52</sup> Wis. Stats. sec. 61.35 (1975).

"authorized to conduct the activities of such public recreation department, to expend funds therefor, to employ a supervisor of recreation, to employ assistants, to purchase equipment and supplies, and generally to supervise the administration, maintenance, and operation of such department and recreational activities authorized by the board."<sup>53</sup> In addition, the recreation board is authorized to accept gifts and bequests of land and use the same.

*Inland Lake Protection and Rehabilitation:* Towns are eligible to establish by resolution a public inland lake protection and rehabilitation district if the town encompasses all the frontage of the lake within its boundaries. The town is also empowered by Section 33.23 of the Wisconsin Statutes to approve the formation of a public inland lake protection and rehabilitation district which is coterminous with the boundaries of the town sanitary district and which also encompasses all the frontage of a lake within its boundaries. A major policy reason for the creation of these districts was the preservation and enhancement of recreational activities presented by lakes.

*Town Park and Recreation Planning:* The town park commission is given authority to:

make a thorough study with reference to making reservation of lands therein for public uses and laying out ample open spaces, parks, highways, roads, boulevards; make plans and maps of a comprehensive town highway and park system; gather such information in relation thereto as it may deem expedient; and report the same to the town meeting . . . .<sup>54</sup>

In counties with no county zoning ordinance, a town may enact an ordinance which regulates, restricts, and determines the areas within which recreation, agriculture, and forestry may be conducted. In addition, town boards are granted village powers pursuant to Section 60.18(12) of the Wisconsin Statutes and, by a resolution adopted pursuant to the above statute, shall have the power to adopt zoning ordinances in the same manner as villages as provided in Section 61.35 (village planning). However, where a county zoning ordinance has been adopted, the exercise of the above power shall be subject to approval by referendum of the town electors, and any zoning ordinance adopted by the town board shall be subject to county board approval.<sup>55</sup>

*Town Park and Recreation Aids:* Towns are eligible to apply for state aids for the acquisition of recreational lands pursuant to Sections 66.36 and 23.09(20). Such a request must contain a comprehensive plan not in conflict with the state comprehensive outdoor recreation

plan, must be for acquisition and development of recreational lands, and is limited to 50 percent funding. The required resolution must also be adopted by the town board. Towns are eligible to apply through the Wisconsin Department of Natural Resources for federal land and water conservation fund (LAWCON) grants. The requirement procedures and restrictions placed upon eligible units of government was discussed earlier in this chapter.

*School Districts:* School districts have limited outdoor recreation and open space preservation functions. Section 28.20 permits any school district to acquire land and engage in forestry and expend funds for this purpose. The school forest need not be located within the village or city limits in which the school is located.

Under Section 66.527 of the Wisconsin Statutes, school districts may delegate the power to establish, maintain, and operate a department of recreation to a board of recreation consisting of three members chosen by the presiding officer of the school district. The recreation board so chosen has the authority to perform the same function as the town recreation authority described earlier. In addition, the recreation board is authorized to accept bequests of land and use the same. School districts are authorized by Section 120.10(11) to vote a tax for the purpose of establishing a recreation authority.

School boards of cities of the 1st, 2nd, or 3rd class may make use of school buildings and grounds for civic purposes including recreational purposes.

Boards of school directors in cities of the 1st, 2nd, or 3rd class may, on their own initiative, and shall, upon petition as provided in sub.(2) establish and maintain for children and adult persons, in the school buildings and on the school grounds under the custody and management of such boards . . . public playgrounds, public baths and similar activities and accommodations to be determined by such boards; and may cooperate by agreement, with other commissioners or boards having the custody and management in such cities of public parks . . . to provide the equipment supervision, instruction and oversight necessary to carry on such public educational and recreational activities in and upon such other buildings and grounds.<sup>56</sup>

*Intergovernmental Cooperation:* A key provision of the Wisconsin Statutes allows for various units of government to engage in joint recreational efforts. Section 66.30 provides authority for any municipality to contract with another municipality for the furnishing of services or the joint exercise of any authority authorized by the Statutes. Municipality is defined to include the State of Wisconsin or any of its departments or agencies, counties, villages, cities, towns, school districts, and public inland lake

<sup>53</sup> Wis. Stats. sec. 66.527(2)(d) (1975).

<sup>54</sup> Wis. Stats. sec. 60.183 (1975).

<sup>55</sup> Wis. Stats. sec. 60.74(7) (1975).

<sup>56</sup> Wis. Stats. sec. 120.61(1) (1975).

protection and rehabilitation districts. Section 66.067 indicates that swimming pools, tennis courts, parks, playgrounds, golf links, bathing beaches, and boathouses are among the uses for which joint exercise of municipal power is permitted. The possibilities for intergovernmental cooperation for outdoor recreational and park purposes are great, and limited to the extent of the power possessed by the municipalities themselves.

## LOCAL PARK AND OPEN SPACE ORGANIZATION AND STAFFING

### County Park and Recreation Agencies

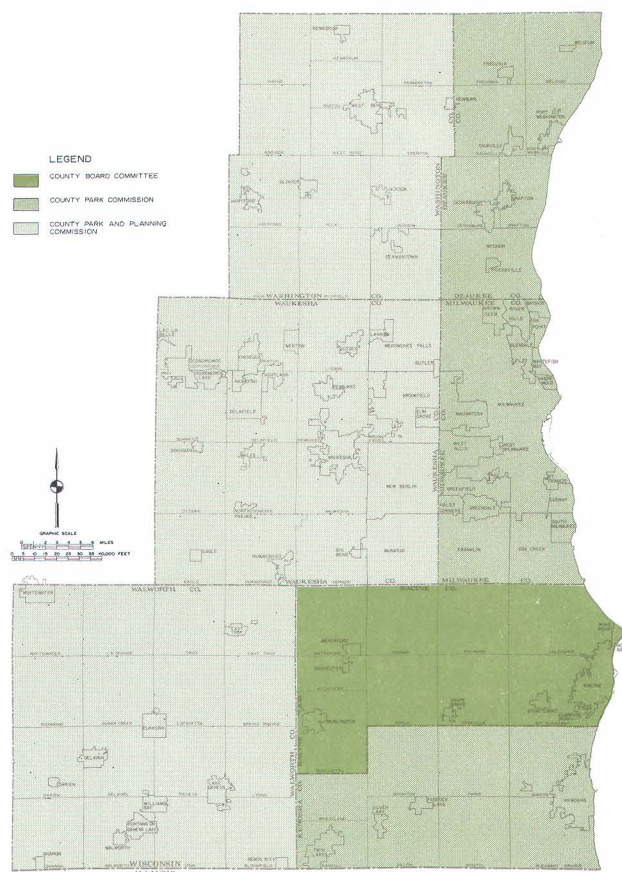
Counties have several options available to them in considering how they will act to provide needed park and open space facilities. Within the Region, three different organizational approaches have been used by counties in addressing park and open space concerns. The available options are to form either a county park commission or a county park and planning commission or to utilize a county board committee. As shown on Map 59, Ozaukee, Milwaukee, and Kenosha Counties have created a County Park Commission under authority of Section 27.02 of the Wisconsin Statutes. Such a Park Commission consists of seven members with terms of seven years. In counties with populations greater than 500,000, not more than one of the seven commission members may be a member of the county board. The park commission has the general power of supervising all county parks and lands subsequently acquired by the county for parks or recreation purposes. In addition, the county park commission may acquire land for park purposes in the name of the county and with the approval and consent of the county board.

Also as shown on Map 59, three counties—Washington, Waukesha, and Walworth—have elected to combine the county park and planning functions into a single agency authorized by Section 59.97(2) of the Wisconsin Statutes. The County Park and Planning Commission possesses the authority granted to it by Section 27.02 of the Wisconsin Statutes and described above. Racine County has elected to address matters relating to county parks and recreation within a County Board Committee. As shown on Map 61, all seven counties in the Southeastern Wisconsin Region have fulltime county park and recreation staffs.

**City, Village, and Town Park and Recreation Agencies**  
Map 60 indicates those cities, villages, and towns which have created either a local park or recreation board or commission, or a park or recreation committee of the local governing body. Of the 147 local units of government in the Region, not including counties, 81, or about 55 percent, have acted to create a local park and recreation agency. These 81 local units of government include 47 percent of the total population of the Region and 36 percent of the total area. Of this total of 81 local units of government, 66—including 20 cities, 30 villages, and 16 towns—have acted to create a special local park or recreation board or commission. The remaining 15, including three cities and 12 villages, have acted to create a special park or recreation committee of the

Map 59

### COUNTIES WITH PARK AND RECREATION AGENCIES IN THE REGION: 1976



Under existing State Statutes, counties have the option of forming a County Park Commission or a County Park and Planning Commission, or designating a County Board Committee to provide park and open space facilities and services. Within the Region, all three organizational approaches are being utilized. Kenosha, Milwaukee, and Ozaukee Counties have created County Park Commissions; Walworth, Washington, and Waukesha Counties have created County Park and Planning Commissions; and Racine County has created a Highway and Parks Committee of the County Board.

Source: SEWRPC.

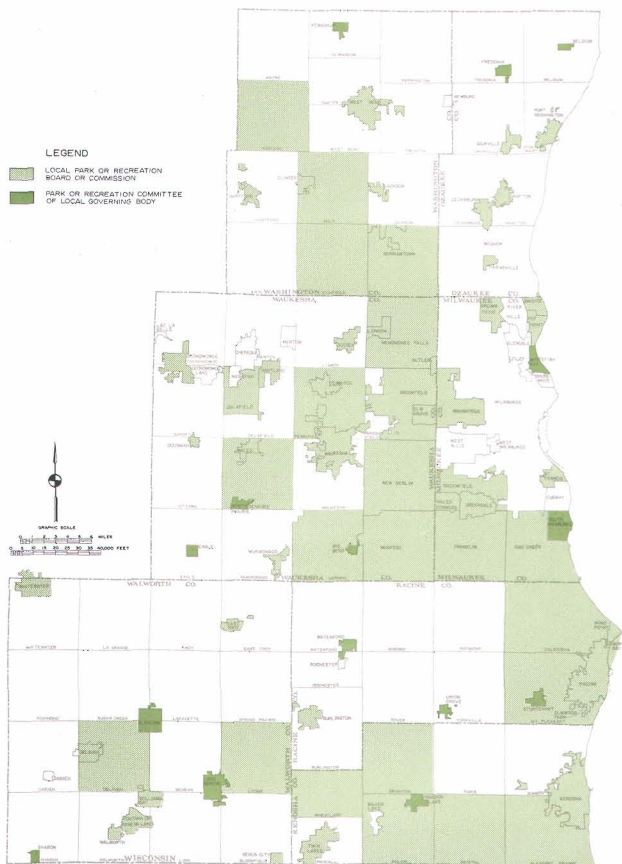
local government body and charge that committee with park and outdoor recreation planning and development responsibilities.

Cities and villages may create a board of park commissioners pursuant to Sections 27.08 and 27.13 of the Wisconsin Statutes. This board of park commissioners is empowered and directed to govern, manage, control, improve, and care for all public parks, parkways, boulevards, and pleasure drives. In addition, the board of park commissions is authorized to acquire property for park, parkway, boulevards, or pleasure drive purposes. Section 27.11(1) of the Wisconsin Statutes provides the



Map 60

**LOCAL UNITS OF GOVERNMENT  
WITH PARK AND RECREATION  
AGENCIES IN THE REGION: 1976**



A total of 81, or about 55 percent of the 147 local units of government in the Region in 1976, have acted to create a local park and recreation agency. Of this total, 66 communities have acted to create a special local park or recreation board or commission while the remaining 15 communities have acted to create a special park or recreation committee of the local government body. These 81 communities encompass approximately 960 square miles, or 36 percent of the total area of the Region, and have a resident population of almost 840,000, or about 47 percent of the total population of the Region.

Source: SEWRPC.

authority to create by ordinance a board of public land commissioners consisting of the commissioner of public works, city engineer, and three citizens. The board has the authority to convert streets and highways designated by the general governing body into parkways or boulevards. The board of park commissioners may determine the amount of tax to be levied with a maximum levy of 85 hundredths of a mill. The proceeds from this tax shall be segregated into the park and boulevard fund and only used for park or boulevard acquisitions, improvements, or maintenance. Section 60.181 of the Wisconsin Statutes

provides authority for the creation of a town park commission composed of seven members to be appointed by the town board. The commission is empowered to make a thorough study of the town for the purpose of reservation of lands for public purposes. The Commission is to have charge and supervision of all lands acquired by the town for park purposes. Map 61 indicates those cities, villages, and towns which have full-time park and recreation planning, development, and operation staffs in the Region. A total of 29 of the 147 local units of government in the Region, not including counties, representing about 20 percent of such governments, have full-time park and recreation staffs. These 29 local units of government include 23 cities and six villages and encompass approximately 380 square miles, or about 14 percent of the total area of the Region, and have a population of 745,000, or about 42 percent of the total population of the Region. The City of Milwaukee does not have a full-time park and recreation staff; the operation of recreation programs in the City is the responsibility of the Milwaukee Public Schools, Division of Municipal Recreation and Adult Education. If the City of Milwaukee were included by virtue of the recreation staff of the Milwaukee Public Schools, communities with full-time park and recreation staff would encompass approximately 480 square miles, or 18 percent of the total area of the Region and have a population of over 1,415,000, or about 79 percent of the total population of the Region.

**LOCAL PARK AND OPEN SPACE PLANNING**

**County Park and Recreation Plans**

As shown on Map 62, six of the seven counties of southeastern Wisconsin have completed and adopted park and outdoor recreation plans. Authority for the preparation of such a park and outdoor recreation plan is found in Section 27.04 of the Wisconsin Statutes.

The Commission shall make a thorough study of the county with reference to making reservations and acquisitions of lands therein for public uses, the improvement of such lands for parks, playgrounds, forest reservation, parkways and boulevards; make surveys, layout maps, other plans and maps of a comprehensive county park system . . . the Commission shall give consideration, among other matters to the health, comfort, enjoyment and general welfare of the people of the county . . .<sup>57</sup>

In addition, the county planning and zoning authority may include as part of the county development plan:

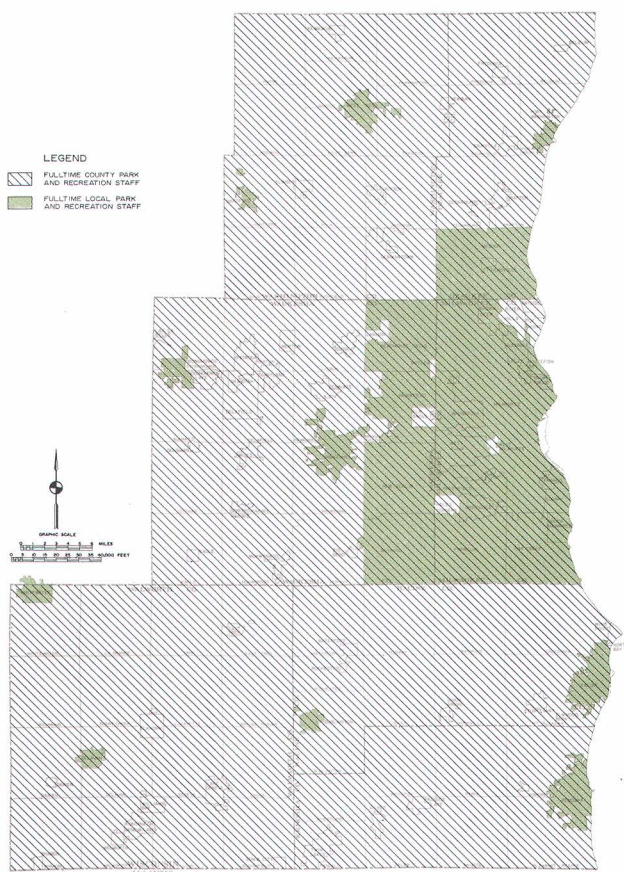
goals and objectives for the future physical development of the county with respect to: public and private use of land and other natural resources; highways including bridges, viaducts,

<sup>57</sup> Wis. Stats. sec. 27.04(1) (1975).



Map 61

### COUNTIES AND LOCAL UNITS OF GOVERNMENT WITH FULLTIME PARK AND RECREATION PLANNING, DEVELOPMENT, AND OPERATION STAFFS IN THE REGION: 1976



A total of 29, or about 20 percent of the 147 local units of government in the Region in 1976, have fulltime park and recreation staffs. These communities encompass approximately 380 square miles, or about 14 percent of the total area of the Region; and have a population of 745,000, or about 42 percent of the total population of the Region. The City of Milwaukee does not have a fulltime park and recreation staff; the operation of recreation programs in the City is the responsibility of the Milwaukee Public Schools, Division of Municipal Recreation and Adult Education. Including the City of Milwaukee, by virtue of the recreation staff of the Milwaukee Public Schools, communities with fulltime park and recreation staff would encompass approximately 480 square miles, or 18 percent of the total area of the Region, and have a population of over 1,415,000, or about 79 percent of the total population of the Region. All seven counties in the Region have fulltime park and recreation staffs.

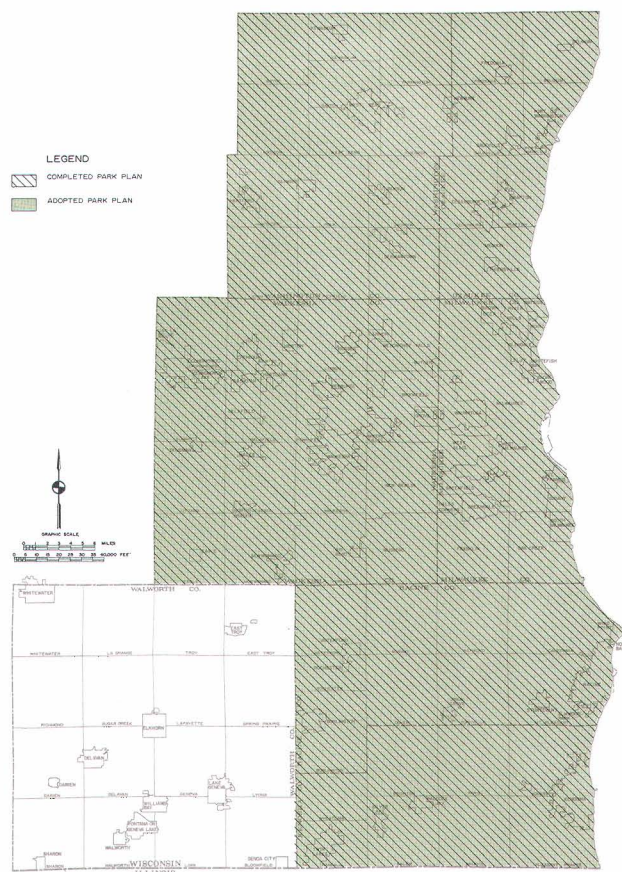
Source: SEWRPC.

parkways, and other public ways; parks, playgrounds, hunting and fishing grounds, forests and other facilities of a recreational nature.<sup>58</sup>

Such plans may be adopted by the county board by ordinance.

Map 62

### COUNTIES WITH PARK AND OUTDOOR RECREATION PLANS IN THE REGION: 1976



Each county park planning agency in the Region has authority to develop plans for a comprehensive county park system. Six of the seven counties in southeastern Wisconsin have completed and adopted a park and outdoor recreation plan, and these adopted plans were incorporated to the maximum extent possible in the recommended regional park and open space plan.

Source: SEWRPC.

#### City, Village, and Town Park and Recreation Plans

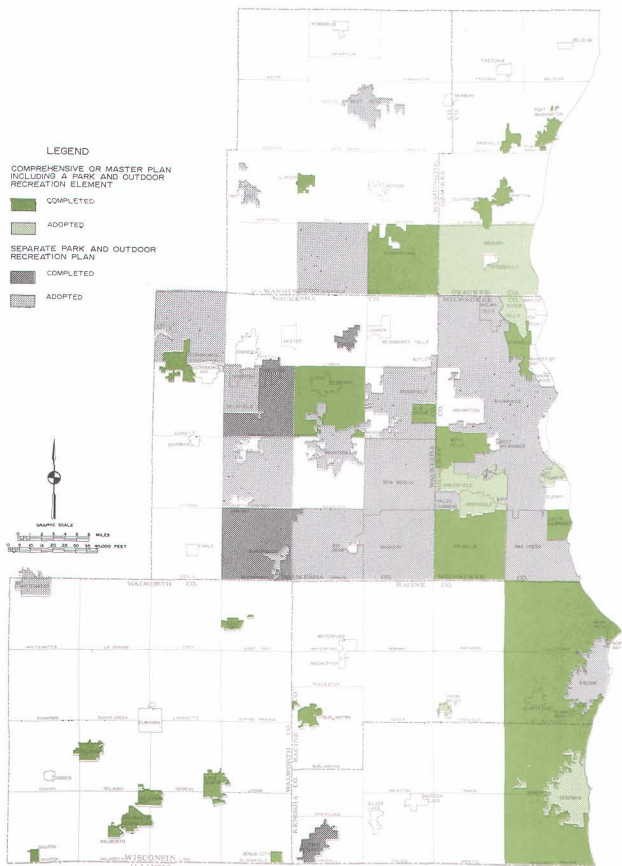
Map 63 indicates those local units of government in the Region which have completed, but not adopted, and those which have completed and adopted comprehensive master plans which include a park or recreation element or separate park and outdoor recreation plans. Of the total of 147 cities, villages, and towns in the Region, 63, or about 43 percent, have either completed or completed and adopted such a comprehensive plan which includes a park and outdoor recreation element, or a separate park and outdoor recreation plan. These

<sup>58</sup> Wis. Stats. sec. 59.97(3)(b)(2) (1975).



Map 63

**LOCAL UNITS OF GOVERNMENT WITH  
PARK AND OUTDOOR RECREATION  
PLANS IN THE REGION: 1976**



A total of 63, or about 43 percent of the 147 local units of government in the Region in 1976, either have completed, or have completed and adopted, a comprehensive plan which includes a park and outdoor recreation element or a separate park and outdoor recreation plan. Data from the Commission's regional park and open space planning program is available to assist communities in the refinement of existing local park and outdoor recreation plans and in the formulation of new local park and outdoor plans for those communities that do not have such plans. Communities with a comprehensive plan, which includes a park and outdoor recreation element or a separate park and outdoor recreation plan, encompass an area of over 900 square miles or about one-third of the area of the Region and have a resident population of almost 1,460,000, or about 82 percent of the total population of the Region.

Source: SEWRPC.

63 local units of government encompass an area of over 900 square miles or about one-third of the area of the Region and have a resident population of almost 1,460,000, or about 82 percent of the total population of the Region. Only 20 of these local units of government have formally adopted such plans or plan elements.

Comprehensive master plans may be developed by cities and villages pursuant to Sections 62.23 and 61.35 of the Wisconsin Statutes. The city or village planning commission shall develop a master plan for the physical development of the municipality. Such a plan may include the general location and character of "roadways, walks, bridges, viaducts, parking areas, tunnels, public places and areas, parks, parkways, playgrounds, sites for public buildings and structures, airports, pierheads and bulkhead lines waterways . . ."<sup>59</sup>

Towns are given authority to cooperate with the county planning done pursuant to Section 59.97 of the Wisconsin Statutes relating to the creation of the county development plan. In addition, the town park commission may "make a thorough study of the town with reference to making reservations of lands therein for public uses and laying out ample open spaces, parks, highways, roads and boulevards; make plans and maps of a comprehensive town highway and park system."<sup>60</sup>

Map 64 identifies those local units of government in the Region with state certified park plans. Three of the seven counties in the Region—Milwaukee, Racine, and Waukesha—currently (January 1977) have state certified park plans. In addition, 25 of the 147 cities, villages, and towns in the Region, or about 17 percent, have such state certified plans, including 12 cities, nine villages, and four towns. This certification indicates eligibility for funding under the federal Land and Water Conservation fund (LAWCON) and Wisconsin Outdoor Recreation grant programs whose eligibility requirements were discussed earlier in this chapter. The 25 communities with state certified plans encompass an area of about 430 square miles, or about 16 percent of the total area of the Region, and have a resident population of 1,020,000, or about 57 percent of the total population of the Region. Tables 67 and 68 present summaries of the standards set forth by counties and municipalities, respectively, in their park and recreation plans.

## USE OF LAND USE CONTROLS FOR PARK AND OPEN SPACE PRESERVATION

### Zoning

Among the types of zoning included in the discussion and in use within the Region are special park and recreation zoning, floodland zoning, and open space zoning including conservancy, exclusive agricultural, and county estate zoning. Maps 65 through 69 indicate those counties or municipalities which currently utilize these specialized forms of zoning.

Special Park and Recreation Districts: Map 65 indicates those municipalities which have enacted special park and recreation zoning districts. A total of 25 local units of government have such a district, including three cities, 10 villages, and 12 towns. This represents about 17 per-

<sup>59</sup> Wis. Stats. sec. 62.23(2) (1975).

<sup>60</sup> Wis. Stats. sec. 60.183 (1975).

Table 67

## COMPILATION OF SELECTED COUNTY PARK PLANNING STANDARDS IN THE REGION: 1975

County	Park Planning Standards			
	Park Type	Service Area	Site Size	Acres Required Per 1,000 Population
Kenosha	--	All sites within 30-45 minutes driving time of all residents	Minimum 250 acres	10
Milwaukee	Playground	1/4-1/2 mile radius	Minimum 3 acres	1.25
	Playfield	1/2-1 mile radius	Minimum 10 acres	1.25
	Neighborhood	1/2-1 mile radius	Minimum 8 acres	1.00
	Community	1-2 miles radius	Minimum 30 acres	1.00
	Metropolitan	3-4 miles radius	Minimum 100 acres	5.50
	Regional	No standard	Minimum 250 acres	4.00 <sup>a</sup>
	Parkway	No standard	No standard	No standard
Ozaukee	Playground	1/4 mile radius	0-5 acres	1.0
	Neighborhood	1/2 mile radius	2-10 acres	1.5
	Community	3-6 miles radius	10 acres	2.0
	Metropolitan	3-4 miles radius	50 acres	5.5
	Regional	Countywide	150-350 acres	4.0
	Special	No standard	No standard	No standard
				Municipal and School County
Racine	--	--	--	15
Washington	--	--	--	15
Waukesha	Regional	Within 5 miles of every resident	250 acres	10
	Metropolitan	3-4 miles	100 acres	

<sup>a</sup>Milwaukee County can only provide a portion of this regional standard.

Source: SEWRPC.

cent of the total of 147 local units of government in the Region and includes 14 percent of the total population of the Region and 20 percent of the total area. This type of zoning restricts the usage of a specified district for park use only. This has the practical effect of preserving and protecting potential park sites from development for other than park purposes in that a change of zoning is needed before other uses are permitted. Park and recreation zoning districts also serve to protect the primary environmental corridors by assuring that such corridors will be maintained in compatible recreation use. The 25 communities with special park and recreation zoning districts have used such zoning to protect about 4,800 acres of primary environmental corridor lands in the Region. Cities are given authority to divide a city into districts and within each district "regulate and restrict the erection, construction, reconstruction, alteration or use of buildings, structures, or land."<sup>61</sup> Villages are

given this same authority through the enactment of an ordinance pursuant to Section 61.35 of the Wisconsin Statutes. Towns possess the same authority by virtue of Section 60.74 of the Wisconsin Statutes.

**Floodland Zoning:** Map 66 indicates the status of floodland zoning in the Region as of December 31, 1976. Those villages or cities with floodland zoning ordinances approved and adopted and those pending approval are indicated. A total of 14 of the 28 cities in the Region have adopted floodland zoning ordinances which have been approved by the Department of Natural Resources. A total of 17 of the 54 villages in the Region have such adopted and approved ordinances, while one village has an adopted ordinance that is pending DNR approval. All six counties in the Region with unincorporated area have adopted floodland zoning ordinances of which two—Ozaukee and Washington Counties—have been approved by the DNR. These 14 cities, 18 villages, and the unincorporated areas of six counties include 41 percent of the total population of the Region and

<sup>61</sup> Wis. Stats. sec. 62.23(7)(b) (1975).

Table 68

**COMPILATION OF SELECTED CITY, VILLAGE, AND TOWN  
PARK PLANNING STANDARDS IN THE REGION: 1975**

Civil Division	Park Planning Standards			
	Park Type	Service Area	Site Size	Acres Required Per 1,000 Population
Kenosha County City of Kenosha	Playground Neighborhood Playfield Regional	30 acres 20-30 acres 30-40 acres 250 acres	-- -- -- --	10
Milwaukee County City of Glendale	Small Neighborhood Playfield or Community Large	-- -- -- --	2 acres 10-40 acres 20-50 acres 100+ acres	10
City of Milwaukee	Playground Playfield Neighborhood Community Metropolitan Regional Parkway	1/4-1/2 mile radius 1/2-1 mile radius 1/2-1 mile radius 1-2 miles radius 3-4 miles radius No standard No standard	Minimum 3 acres Minimum 10 acres Minimum 8 acres Minimum 30 acres Minimum 100 acres Minimum 250 acres No standard	1.25 1.25 1.00 1.00 5.50 4.00 No standard
Racine County City of Racine	Neighborhood Community Recreation Large Urban Extra-urban Environmental Corridor	1/2 mile 2 neighborhoods Urban area 1 hour driving time Metro area	-- -- -- -- --	2.5 2.5 5.0 15 --
City of Burlington Village of Elmwood Park	-- --	-- --	-- --	10 6.4
Walworth County City of Whiewater	Playground Neighborhood Community Special Purpose	1/4 mile 1/2 mile 2 Miles --	4 acres 5-10 acres 25 acres --	15 10
Washington County City of Hartford	Playground Neighborhood Community Special Purpose	1/4 mile 1/2 square mile 2 miles --	2 acres 4-10 acres 25 acres --	10
Town of Richfield	Neighborhood Neighborhood Playground Community	-- 1/4 mile 1/2 mile	1 acre -- --	12
Village of Germantown City of West Bend	-- Play Lot Playground Neighborhood District/Community Large Urban Special Recreation	-- 1/8 mile 1/4 mile 1/2 mile 1/2-1 1/2 miles -- --	-- 3/4-1 1/2 acres 2 1/2-5 acres 5-25 acres 25-100 acres 100-250 acres --	10 12
Waukesha County Participating Communities in County Planning Effort <sup>a</sup>	Play Lots Neighborhood Playfield Community Playgrounds, Neighborhood Parks, School Playgrounds	1 block to 1 mile 1/2 mile 3/4-1 1/2 miles 1 1/2-2 1/2 miles --	2,500 square feet 8 acres 10 acres 30 acres --	-- -- -- -- 12.5
City of New Berlin	Playgrounds, Neighborhood Parks, School Playgrounds	--	--	--
City of Oconomowoc	Playgrounds Playfields Neighborhood	1/2-3/4 mile -- --	2 1/2-5 acres 15-20 acres Not less than 4 acres	10
City of Waukesha	Tot Lot Neighborhood Playfield	1 block 1/2 mile 4-5 square miles	-- -- 15-20 acres	10

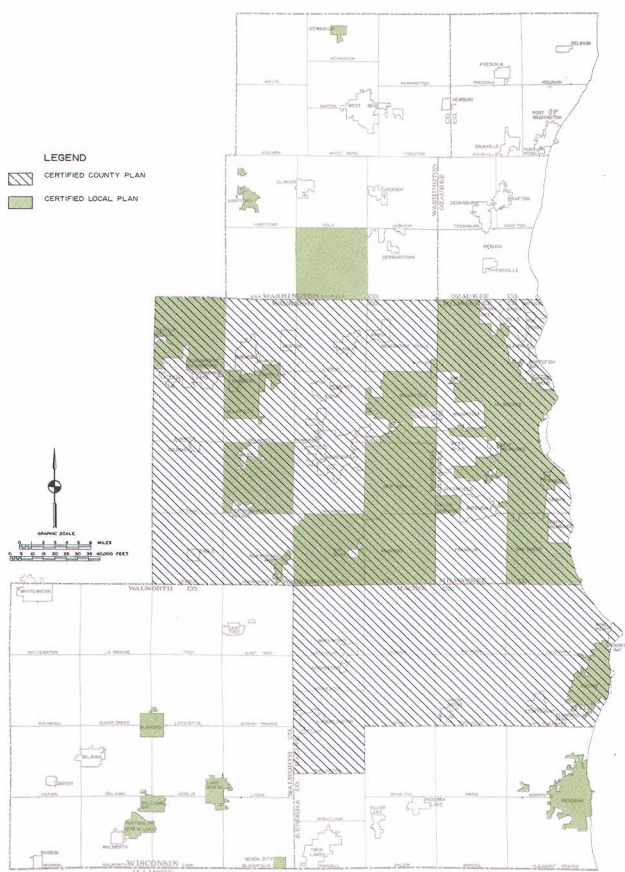
<sup>a</sup> Cities of Brookfield, Delafield, and Muskego; Towns of Delafield, Genesee, Oconomowoc, and Vernon; and Villages of Butler, Mukwonago, Nashotah, and Sussex.

Source: SEWRPC.



Map 64

### COUNTY AND LOCAL UNITS OF GOVERNMENT WITH STATE CERTIFIED PARK AND OUTDOOR RECREATION PLANS IN THE REGION: JANUARY 1977

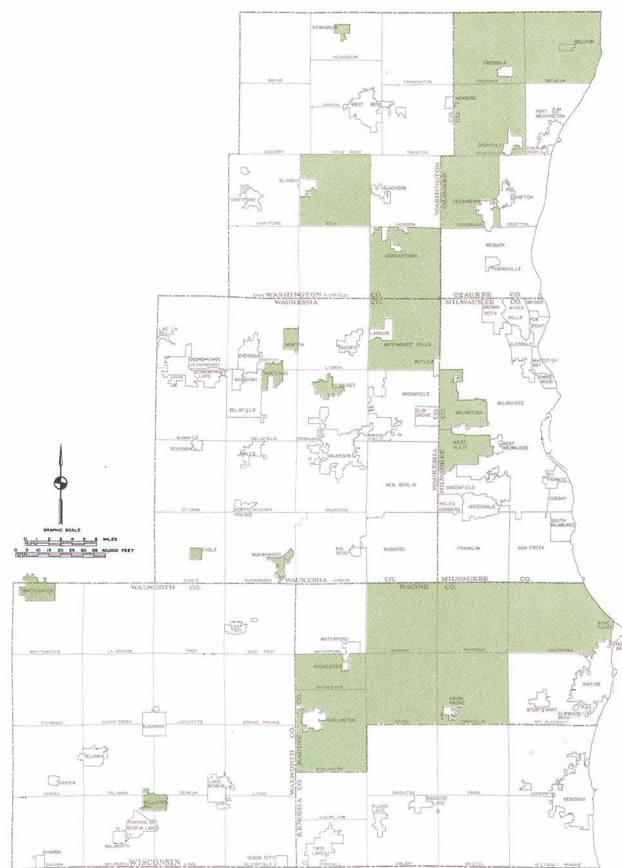


As of January 1977, three of the seven counties in the Region—Milwaukee, Racine, and Waukesha—had a state certified park plan. These three counties encompass an area of about 1,160 square miles, or about 43 percent of the total area of the Region, and have a resident population of 1,454,000, or about 81 percent of the total population of the Region. In addition, 25 communities, or about 17 percent of those in the Region, have such state certified plans. These 25 communities encompass an area of about 430 square miles, or about 16 percent of the total area of the Region, and have a resident population of 1,020,000, or about 57 percent of the total population of the Region. A state certified plan indicates eligibility for financial aids for park and open space acquisition and development under the federal Land and Water Conservation Fund and the Wisconsin Outdoor Recreation grant programs. One of the purposes of a regional park and open space planning program is to assist all of the constituent counties and municipalities in achieving certified plans and thereby eligibility for state and federal grants in support of park and open space land acquisition and development.

Source: SEWRPC.

Map 65

### LOCAL UNITS OF GOVERNMENT WITH SPECIAL PARK AND RECREATION ZONING DISTRICTS IN THE REGION: 1972



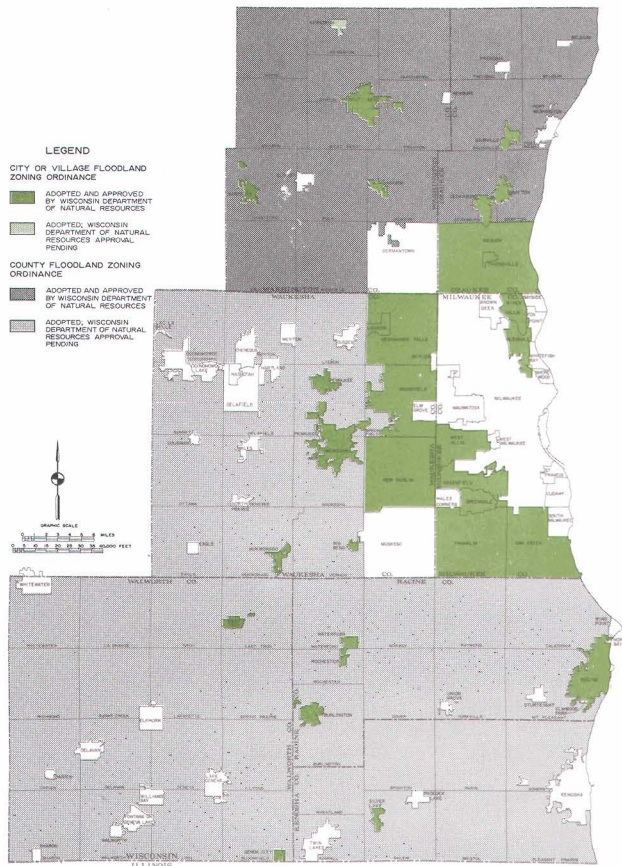
A special park and recreation zoning district restricts the use of the zoned areas to public or private park purposes and has the practical effect of preserving and protecting both existing and potential park sites from development for other than park purposes. In the absence of such zoning, valuable recreation lands—especially private recreational lands—may be lost through conversion to other uses without the community having the opportunity to retain such lands in the public interest for recreational purposes. Park and recreation zoning districts also serve to protect primary environmental corridors by assuring that such corridors will be maintained in compatible recreation use. In 1972, a total of 25, or about 17 percent of the 147 units of government in the Region, had created special park and recreation zoning districts. These districts protect about 4,800 acres of primary environmental corridor lands, or about 1.4 percent of the corridor area in the Region.

Source: SEWRPC.



Map 66

**STATUS OF FLOODLAND ZONING IN COUNTIES, CITIES,  
AND VILLAGES IN THE REGION: DECEMBER 31, 1976**



Protection of floodland areas through the adoption and implementation of floodland zoning will minimize future flood damage and associated economic loss, inconvenience, and mental anguish caused to occupants of floodlands during periods of flooding. Since many floodland areas are located within the primary environmental corridors, such ordinances also will assist in preserving these corridors and maintain them in a natural state for compatible park and open space purposes. A total of 32 cities and villages in the Region in 1976 have adopted floodland zoning ordinances which either have been approved or have approval pending by the Wisconsin Department of Natural Resources (DNR). In addition, all six counties in the Region with unincorporated areas have adopted floodland zoning ordinances which either have been approved or have approval pending by the DNR. These county and local floodland zoning ordinances protect over 94,000 acres of primary environmental corridor, or about 27 percent of the corridor area in the Region.

Source: SEWRPC.

88 percent of the total area. Cities and villages may enact zoning ordinances to regulate and restrict the density "of population, and the location and use of buildings, structures and land for trade, industry, residence or other purposes."<sup>62</sup>

Counties may adopt floodland zoning ordinances to restrict "(T)he areas in and along or in or along natural watercourses, channels, streams and creeks in which trades or industries, filling or dumping, erection of structures and the location of buildings may be prohibited or restricted."<sup>63</sup> If cities, villages, and counties do not enact floodland zoning ordinances, the Wisconsin Department of Natural Resources is authorized to adopt a floodland zoning ordinance applicable to such county, village, or city. Since many floodland areas are located in primary environmental corridors, such ordinances also assist in preserving these corridors and maintaining them in a natural state for compatible park and open space purposes. Counties and local floodland zoning ordinances protect over 94,000 acres of primary environmental corridor, or about 27 percent of the corridor area in the Region.

**Open Space Zoning:** Maps 67, 68, and 69 show the three types of open space zoning used within the Region. All three—conservancy zoning, exclusive agricultural zoning, and country estate zoning—preserve existing open spaces. As shown on Map 67, a total of 70 of the 147 local units of government in the Region, or about 48 percent, have established conservancy districts in their zoning ordinances, including eight cities, 18 villages, and 44 towns. These 70 local units of government include 20 percent of the total population of the Region and 63 percent of the total area. Conservancy zoning is important to the preservation of the primary environmental corridor. The 70 communities with conservancy zoning districts protect over 57,000 acres of primary environmental corridor lands, or about 16 percent of the corridor area in the Region. As shown on Map 68, a total of 40 local units of government, or about 27 percent, have established exclusive agricultural districts in their zoning ordinance, that is, an agricultural zoning district with a minimum farm size of at least five acres, including eight villages and 32 towns. These 40 local units of government include 10 percent of the total population of the Region and 44 percent of the total area. Exclusive agricultural zoning districts protect about 300 square miles of prime agricultural lands or about 43 percent of the total prime agricultural acreage in the Region. Finally, Map 69 identifies the eight local units of government in the Region which have established country estate zoning districts in their local zoning ordinances. These eight consist of one city, one village, and six towns and include 3 percent of the total population of the Region and 9 percent of the total area. Country estate zoning provides for residential use on lot sizes at least five acres in area. If properly applied, such low density zoning can contribute to the

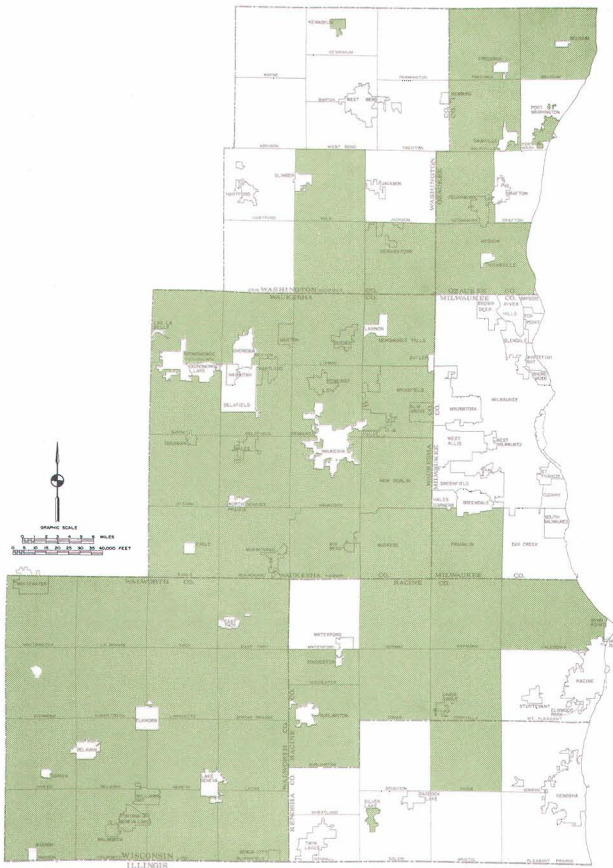
<sup>62</sup> Wis. Stats. sec. 62.23(7)(a) (1975).

<sup>63</sup> Wis. Stats. sec. 59.97(4)(c) (1975).



Map 67

**LOCAL UNITS OF GOVERNMENT WITH CONSERVANCY ZONING DISTRICTS IN THE REGION: 1972**



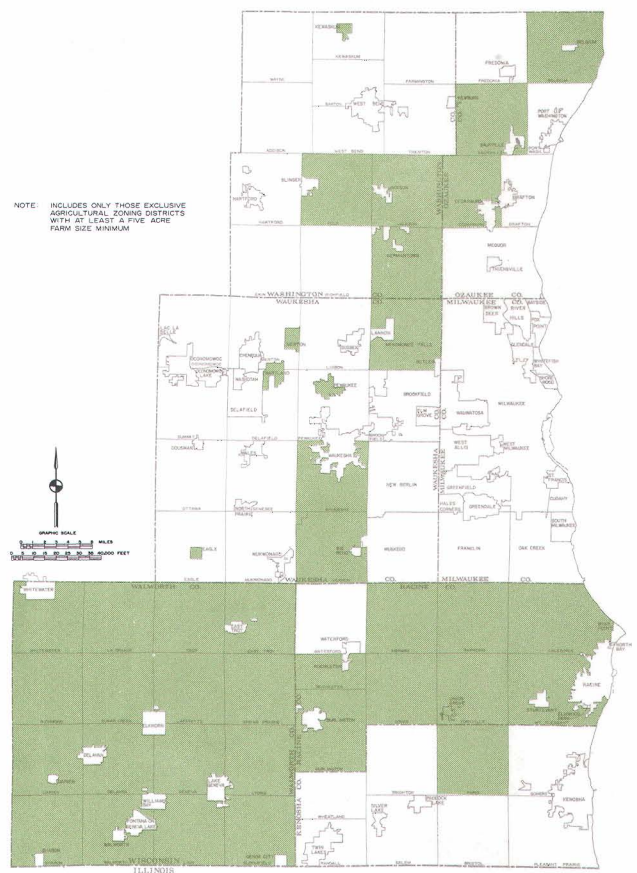
Sound conservancy zoning is important to the preservation of the primary environmental corridors of the Region as well as to the preservation of scattered woodlands and wetlands not lying within such corridors. These areas, and especially the high quality woodlands and wetlands located in the primary environmental corridor, provide potential park and open space sites and contribute significantly to maintenance of the overall quality of the environment in the Region. In 1972 a total of 70 local units of government, or about 48 percent of the 147 local units of government in the Region, had established conservancy districts in their zoning ordinances. These districts protect over 57,000 acres of primary environmental corridor lands, or about 16 percent of the corridor area in the Region.

Source: SEWRPC.

protection of the natural resource base and especially the high quality elements of that base in the primary environmental corridors of the Region. Country estate zoning districts protect about 946 acres of primary environmental corridor in the Region. Authority has previously been cited which enables cities, towns, villages, and counties to enact these types of zoning regulations.

Map 68

**LOCAL UNITS OF GOVERNMENT WITH EXCLUSIVE AGRICULTURAL ZONING DISTRICTS IN THE REGION: 1976**



Exclusive agricultural zoning districts prohibit nonfarm related residential and other urban development and, thus, protect valuable farmland from incompatible land use development. Such farmlands contribute to the economic base of the Region; are required for the production of certain food commodities which require nearby population concentrations for an efficient production-distribution relationship; provide open space which gives form and structure to urban development; and serve to maintain the natural beauty and unique cultural heritage of southeastern Wisconsin. In 1976, a total of 40 local units of government, or about 27 percent of the 147 local units of government in the Region, had established exclusive agricultural districts in their zoning ordinances. These exclusive agricultural districts protect about 300 square miles of prime agricultural lands, or about 43 percent of the total prime agricultural acreage in the Region.

Source: SEWRPC.

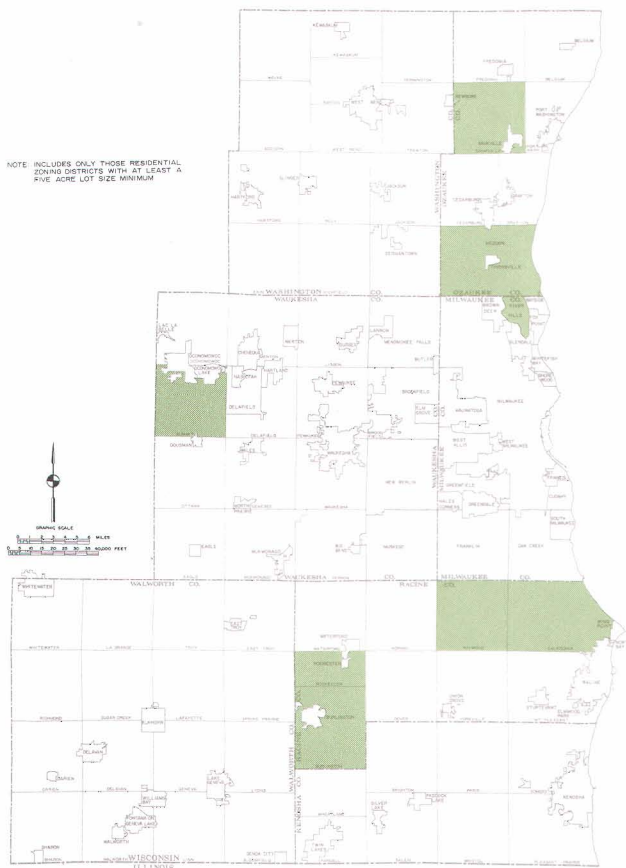
**Subdivision Control Ordinances**

Subdivision control ordinances are very important techniques enabling cities, villages, towns, and counties to preserve land areas for park and open space purposes. The legislative intent concerning subdivision control indicates a range of purposes:



Map 69

**LOCAL UNITS OF GOVERNMENT WITH COUNTRY ESTATE ZONING DISTRICTS IN THE REGION: 1972**



Residential development associated with country estate zoning districts which permit only very low density—at least five acres per dwelling unit—can, if properly applied, contribute to the protection of the natural resource base and especially the high quality elements of that base in the primary environmental corridors of the Region. Such zoning can also help maintain the aesthetic character of the Region. Properly done, such very low density development does not require urban services such as sanitary sewer and water supply; disrupt natural drainage patterns; preserves woodlands, wetlands, and wildlife habitat; and maintains the open appearance of the landscape, whether prairies or woodlands. In 1972, only eight local units of government, or 5 percent of the 147 local units in the Region, had established country estate zoning districts in their local zoning ordinances. These districts protect 946 acres of primary environmental corridor, or less than 1 percent of the corridor area in the Region.

Source: SEWRPC.

The purpose of this section is to promote the public health, safety and general welfare of the community and the regulations authorized to be made are designed to lessen congestion in the streets and highways; to further the orderly layout and use of land; to secure safety from fire, panic and other dangers; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate adequate provision for transportation, water sewerage, schools, parks, playgrounds and other public requirements; to facilitate the further resubdivision of larger tracts into smaller parcels of land.<sup>64</sup>

Any city, village, town, or county which has established a planning agency may adopt ordinances governing the subdivision of land. In addition, subdivision control ordinances may require that mapping, surveying, monumenting, and other approving requirements be applied to the subdivision. These requirements may be in addition to any state-imposed requirements if the subdivision is of the type required by statutes to be submitted for state review. Map 70 identifies those counties and cities, villages, and towns which have enacted subdivision control ordinances with a parkland dedication and/or fee in lieu requirement or a requirement that “consideration be given” to the dedication or reservation of park lands. There were 111 communities with such requirements which represent 76 percent of the 147 local units of government in the Region in 1976. These communities encompass an area of about 2,120 square miles or about 79 percent of the total area of the Region, and have a population of 803,000 or about 45 percent of the total population of the Region. The particular dedication or fee in lieu requirements in each local subdivision control ordinance are summarized in Table 69.

**Official Maps**

Villages and cities have clear official mapping powers expressed in detail in Wisconsin Statute 62.23(6). Towns with village powers probably have official mapping powers, but towns without village powers have no mapping powers. Counties have limited official map powers derived from state statutes. Wisconsin Statute 62.23(6) permits the mapping of streets, highways, parkways, and playgrounds. The process is first to map the areas of concern for any of these purposes and then adopt an ordinance making the map official. To assure that structures will not be built in the mapped street, parkway, or park, Wisconsin Statute 62.23(6)(d) requires the issuance of a building permit. Any structure built without such a permit will not receive compensation when the land is ultimately used by the municipality. Counties are provided some mapping authority by Section 236.46 for “the future location of streets or highways or parkways, and the extension or widening of existing streets and highways.”<sup>65</sup>

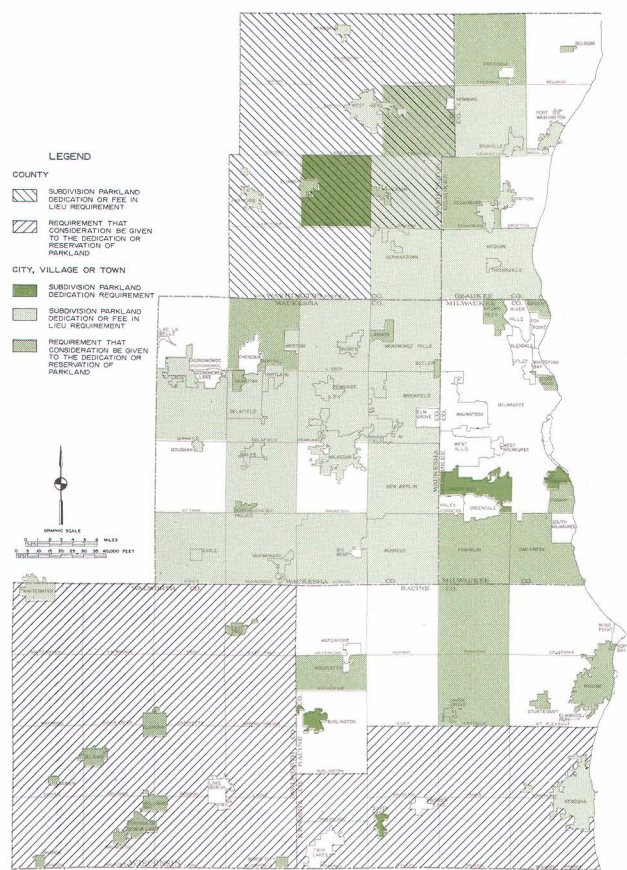
<sup>64</sup> Wis. Stats. sec. 236.45(1) (1975).

<sup>65</sup> Wis. Stats. sec. 236.46(1)(a) (1975).



Map 70

**LOCAL UNITS OF GOVERNMENT WITH  
SUBDIVISION CONTROL ORDINANCES WITH  
PARKLAND DEDICATION REQUIREMENT: 1976**



Counties, cities, villages, and towns which have established a planning agency may adopt ordinances governing the subdivision of land. Fifty-six communities, as part of a local or county adopted subdivision control ordinance, have a subdivision parkland dedication requirement or fee in lieu requirement. In addition, 55 communities, as part of a local or county adopted subdivision control ordinance, include a requirement that "consideration be given" to the dedication or reservation of park lands. In total, these 111 communities, which represent 76 percent of the 147 local units of government in the Region in 1976, encompass an area of about 2,120 square miles, or about 79 percent of the total area of the Region, and have a population of 803,000, or about 45 percent of the total population of the Region.

Source: SEWRPC.

Map 71 indicates those cities, towns, and villages that have adopted official maps, and those municipalities in which the official map protects future parklands. Of the 147 local units of government in the Region, 40, or about 27 percent, have adopted an official map, including 15 cities and 25 villages. Of these 40 local units of

government, 16—seven cities and nine villages—utilize the official map to protect future park lands. These 16 local units of government encompass about 125 square miles, or about 5 percent of the total area of the Region and have a population of 181,800, or about 10 percent of the total population of the Region.

## SUMMARY

This chapter has provided a brief description of existing park and open space laws, regulations, and administration. A very brief summary was made of federal, state, and local level agencies and programs involved in park outdoor recreation and open space planning, development, and preservation. Although there are no significant federal park and recreational facilities located in the Region, the federal program still is important to park and open space preservation and development within the Region. Federal Land and Water Conservation Fund appropriations are made available to state and local units of government. State parks and forests are physically present within the Region and are an important source of recreation for the residents of this Region. In addition, the Wisconsin Outdoor Recreation Act (ORAP) program has provided important aids to municipalities in furthering outdoor recreation and park opportunities available to the residents of the Region.

On the local level, the county is the most active unit of government in the area of parks and outdoor recreational activities. County parks, forests, snowmobile and hiking trails, and preserved open spaces are major sources of recreation for the population of the Region. In addition, counties are eligible to receive aid from the State for many specific projects, including snowmobile trails, fish and game habitat improvement, recreational site planning, picnic and camping grounds, and the development of other recreational facilities. Cities and villages also play an important role in providing outdoor recreation and park facilities within their incorporated areas and are important especially for those residents unable to travel far.

Inventories were conducted of local park and open space organization and staffing, local park and open space planning, and the use of land use controls at the local level for park and open space land preservation. The seven counties in southeastern Wisconsin have selected three different organizational approaches to performing the park and open space function. Ozaukee, Milwaukee, and Kenosha Counties have created county park commissions; Walworth, Washington, and Waukesha Counties have created county park and planning commissions; and Racine County has placed the county park and planning function in a county board committee. Of the 147 local units of government in the Region, 81, or about 55 percent, have acted to create a local park and recreation agency. Of this total, 66 have acted to create a special local park or recreation board or commission, while 15 have created a special park or recreation committee of the local governing body.

Table 69

**SUMMARY OF LOCAL SUBDIVISION CONTROL ORDINANCES IN THE REGION  
REQUIRING PARKLAND DEDICATION OR FEES IN LIEU: 1975**

Civil Division	Parkland Dedication Reservation Requirement	Fee in Lieu
<b>Kenosha County</b>	Areas designated on plan shall be reserved for purchase by the municipality for a three year period	
City of Kenosha . . . . .	5 percent of area of subdivision	\$50 per lot, less than 10,000 square feet; \$75 per lot, more than 10,000 square feet
Village of Silver Lake . . . . .	5 percent to 15 percent of area of subdivision	None
<b>Milwaukee County</b>	--	
Village of Bayside . . . . .	Consideration shall be given for the reservation of land	None
Village of Brown Deer . . . . .	Area on plan shall be dedicated or consideration given	None
City of Cudahy . . . . .	Consideration shall be given for the reservation of land	None
City of Franklin . . . . .	Consideration shall be given for the reservation of land	None
City of Greenfield . . . . .	Plan Commission may require 10 percent of net area of subdivision	None
City of Oak Creek . . . . .	Areas designated on plan shall be dedicated as determined by Plan Commission	None
City of St. Francis . . . . .	5 percent of area of subdivision	None
Village of Shorewood . . . . .	Consideration shall be given for the reservation of land	None
<b>Ozaukee County</b>	--	
Village of Belgium . . . . .	Areas designated on plan shall be dedicated	None
City of Cedarburg . . . . .	Areas designated on plan shall be dedicated with amount of land equal to: \$200 Single Family \$ 50 1-Bedroom \$125 2-Bedroom Multifamily \$200 3-Bedroom	
Town of Cedarburg . . . . .	Consideration shall be given for the reservation of land	None
Town of Fredonia . . . . .	Plan Commission may require	None
Village of Grafton . . . . .	Amount of land equal to \$300 per lot or \$300 per unit in multifamily	Money equal in value to the required dedication: 40 percent schools, 60 percent parks
City of Mequon . . . . .	Amount of land equal to \$400 per lot; multifamily \$400 per unit	Amount in money or lots equal to maximum required dedication
City of Port Washington . . . . .	Amount of land equal to \$50 per lot	\$50 per lot
Town of Saukville . . . . .	5 percent of area of subdivision	Money, land, or combination equal in value to area required
Village of Saukville . . . . .	Areas designated on plan shall be dedicated	\$150 per unit
Village of Thiensville . . . . .	Areas designated on plan shall be dedicated	Proportionate share of acquisition of site if subdivision benefits
<b>Racine County</b>	--	
City of Burlington . . . . .	5 percent of area of subdivision	None
Village of Elmwood Park . . . . .	Site shall be dedicated if shown on Village plans	Proportionate share of acquisition of site if subdivision benefits
Town of Raymond . . . . .	Consideration shall be given for the reservation of land	None
City of Racine . . . . .	Consideration shall be given for the reservation of land	None
Town of Rochester . . . . .	Consideration shall be given for the reservation of land	None
Village of Sturtevant . . . . .	Consideration shall be given for the reservation of land	None
Village of Union Grove . . . . .	Plan Commission may require	None
Town of Yorkville . . . . .	Consideration shall be given for the reservation of land	--

Table 69 (continued)

Civil Division	Parkland Dedication Reservation Requirement	Fee in Lieu
Walworth County	Areas designated on plan shall be reserved for purchase by the municipality for a three year period	None
Village of Darien . . . . .	Plan Commission may require	None
City of Delavan . . . . .	Consideration shall be given for the reservation of land	None
Village of East Troy . . . . .	Consideration shall be given for the reservation of land	None
City of Elkhorn . . . . .	Areas designated on plan shall be dedicated	None
Village of Fontana on Geneva Lake . . . . .	Plan Commission may require	None
Village of Genoa City . . . . .	Plan Commission may require	None
Village of Sharon . . . . .	Plan Commission may require	None
Village of Walworth . . . . .	Plan Commission may require	None
City of Whitewater . . . . .	Not more than 5 percent of subdivision	Equal to value of required land, prior to subdivision
Village of Williams Bay . . . . .	If not on plan, consideration shall be given	None
Washington County	1 acre per 15 units	\$150 per unit minimum
Town of Germantown . . . . .	Amount of land equal to \$50 per lot	None
Village of Germantown . . . . .	Amount of land equal to \$200 per lot	\$200 per unit; PUD fee determined by Plan Commission
City of Hartford . . . . .	5 percent of net area of subdivision	\$200 per unit
Town of Jackson . . . . .	Amount of land equal to \$150 per unit	\$150 per unit
Village of Jackson . . . . .	Consideration shall be given for the reservation of sites	None
Village of Kewaskum . . . . .	Amount of land equal to \$200 per lot	\$200 per unit
Town of Polk . . . . .	Area proposed in plan shall be reserved	None
Town of Trenton . . . . .	5 percent of net area of subdivision	5 percent of assessed value of platted area
City of West Bend . . . . .	5 percent of net area of subdivision	5 percent of assessed value of platted area
Waukesha County	1 acre per 15 acres <sup>a</sup>	Fair market value of dedication requirement <sup>b</sup>
City of Brookfield . . . . .	1 acre per 15 units	Determined by Plan Commission
Town of Brookfield . . . . .	1 acre per 20 lots	Determined by Plan Commission
Village of Butler . . . . .	If required by park plan	None
City of Delafield . . . . .	1/20 acre per unit	Fair and full market value of dedication requirement
Town of Delafield . . . . .	Amount of land equal to \$200 per lot	\$200 per lot
Village of Dousman . . . . .	Amount of land equal to \$100 per lot	\$100 per lot
Town of Eagle . . . . .	1/2 acre = 7 units	Fair market value of dedication requirement
	1 acre = 15 units Depending on zoning	
	3 acres = 30 units	
Village of Eagle . . . . .	1 acre per 15 units	\$200 per unit; 40 percent for parks and 60 percent for schools
Town of Genesee . . . . .	Amount of land equal to \$200 per lot	\$200 per lot
Village of Hartland . . . . .	Amount of land equal to \$200 per lot	\$100 per lot single family
	\$50 per bedroom in one-bedroom apartment plus \$75.00 for each additional bedroom with a maximum of \$200 per unit	\$25 per one-bedroom unit plus \$37.50 for each additional bedroom (school, repeat for parks)
Town of Lisbon . . . . .	Amount of land equal to \$300 per lot	\$300 per lot, \$200 school, and \$100 parks
Village of Lannon . . . . .	Reservation if required by master plan or official map	None
Village of Menomonee Falls . . . . .	Amount of land equal to \$200 per lot	\$200 per lot, \$120 school, and \$80 park
Town of Merton . . . . .	Reservation if required by comprehensive or official map	None
Village of Merton . . . . .	Amount of land equal to \$300 per lot	\$300 per lot, \$200 school, and \$100 park
Town of Mukwonago . . . . .	Amount of land equal to \$300 per lot	\$300 per lot, \$250 school, and \$50 park
Village of Mukwonago . . . . .	1 acre per 15 units	\$200 per unit, \$60 school, and \$40 park
City of Muskego . . . . .	1 acre per 15 units	\$100 per unit
Village of Nashotah . . . . .	Consideration shall be given for the reservation of land	None
Village of North Prairie . . . . .	Consideration shall be given for the reservation of land	None
City of New Berlin . . . . .	1 acre per 100 people—parks	Amount equal in value to acreage dedication
	1 acre per 50 children—schools	
City of Oconomowoc . . . . .	5 percent of net area of subdivision	\$200 per unit (single family) plus \$100 for each additional unit (multifamily)
Town of Pewaukee . . . . .	Amount of land equal to \$150 per lot	\$150
Village of Pewaukee . . . . .	1 acre per 15 units	Established by Plan Commission
Town of Summit . . . . .	Amount of land equal to \$200 per lot	\$200 per lot, \$120 school, and \$80 park
Village of Sussex . . . . .	Amount of land equal to \$200 per lot	\$200 per lot, \$100 school, and \$100 park
	\$200 per unit (multifamily)	
Town of Vernon . . . . .	0.045 acre per unit	\$300 per unit
Village of Wales . . . . .	Amount of land equal to \$200 per lot	\$200 per lot, \$120 school, and \$80 park
City of Waukesha . . . . .	1 acre per 100 people in subdivision	Amount equal to 1 acre per 100 people in subdivision

<sup>a</sup> This county requirement is applied only in shoreland areas in unincorporated townships.

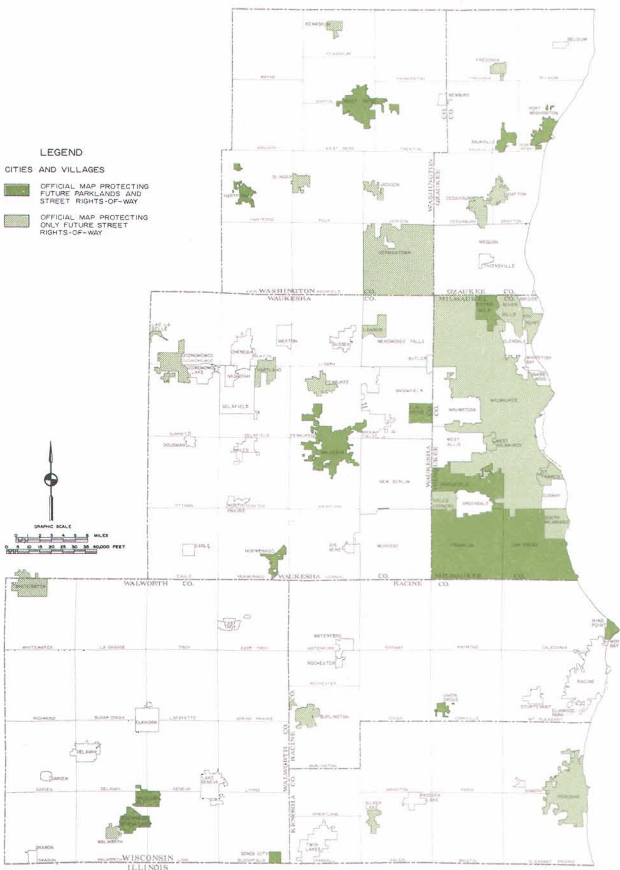
<sup>b</sup> Fees generated from this requirement are applied to a segregated town fund for the acquisition of shoreland areas only.

Source: SEWRPC.



Map 71

**LOCAL UNITS OF GOVERNMENT WITH OFFICIAL MAPS  
IN THE REGION PROTECTING FUTURE PARKLANDS: 1972**



Villages and cities have official mapping powers which can be used to protect proposed parks and parkways from development prior to public acquisition. In the Region in 1972, 25 villages and 15 cities have adopted an official map. Of these cities and villages, 16—nine villages and seven cities—utilize the official map to protect proposed park and parkway lands. These 16 communities encompass about 125 square miles, or 5 percent of the total area of the Region, and have a population of 181,800, or about 10 percent of the total population of the Region.

Source: SEWRPC.

All seven counties in the Region have fulltime county park and recreation staffs. Of the 147 local units of government in the Region, 29—including 23 cities and six villages—or about 20 percent, have fulltime park and recreation staffs.

Six of the seven counties in southeastern Wisconsin completed and adopted park and outdoor recreation plans. Of the 147 cities, villages, and towns in the Region, 63, or about 43 percent, have either completed or completed and adopted a comprehensive plan which includes a park and outdoor recreation element or a separate park and outdoor recreation plan. Three of the seven counties in the Region—Milwaukee, Racine, and Waukesha—currently have state certified plans. In addition, the State has certified 25 local park plans for 12 cities, nine villages, and four towns.

A total of 25 local units of government have special park and recreation zoning districts in their zoning ordinance to protect potential park sites from incompatible development. A total of 14 of the 28 cities in the Region, 18 of the 54 villages in the Region, and all six counties in the Region with unincorporated area have adopted floodland zoning ordinances which can be utilized to preserve and protect park and open space lands. In addition, 70 of the 147 local units of government in the Region have conservancy districts in their zoning ordinances, 40 local units of government have exclusive agricultural zoning districts, and eight local units of government have country estate zoning districts, all of which can be appropriately utilized to preserve and protect open space lands. There were 111 communities that, as part of county or locally adopted subdivision control ordinance, have a parkland dedication requirement or fee in lieu requirement or include a requirement that "consideration be given" to the dedication or reservation of park lands. Finally, 40 of the cities, villages, and towns in the Region have an adopted official map. Of this total, 16 are currently utilizing that map to protect future park and open space lands.



## Chapter VIII

### FINANCIAL RESOURCES

#### INTRODUCTION

Previous chapters of this report have presented information on existing park and open space sites and the existing use of those sites. The present chapter is concerned with a closely related subject, public revenues and expenditures for park and recreation purposes. An understanding of recent trends in park and recreation revenues and expenditures is important for providing the background against which the fiscal feasibility of future park and open space plan elements can be evaluated. Accordingly, under the regional park study, an inventory of revenues and expenditures for public park and recreation purposes was conducted within the Region for the 10 year period from 1964 through 1974. This chapter presents the findings of that financial resource inventory. The inventory was intended to determine direct county, city, village, and town revenues and expenditures for park and recreation purposes as well as state expenditures for park and open space land acquisition in the Region. As noted in Chapter VII, there are almost no federally owned open space areas in the Region. Federal level agencies may, however, have an important impact on implementation of the regional park and open space plan either through the administration of federal park and open space aid programs or through direct park and open space acquisition and development activities.

An important factor in a meaningful analysis of changes in park and recreation revenue and expenditure levels of local units of government is the overall rate of price inflation. One measure of this inflation rate is the consumer price index, which purports to measure average changes in the price of goods and services. Changes in park and recreation revenue and expenditure levels were, therefore, related to this index to measure real changes. From 1964 to 1974, the consumer price index increased by 54 percent, or at an annual compound rate of 4.4 percent, with the most rapid increases in the consumer price index occurring at the end of this 10 year period.

The first section of this chapter describes the trend of local park and recreation expenditures in the Region in the recent past while the second section describes the trend of local park and recreation revenues. In general, the financial resource data is presented in summary form for cities, villages, towns, and counties in the Region. Park and recreation revenue and disbursement patterns for the City of Milwaukee and Milwaukee County are, however, presented separately from those of other city and county units of government in the Region primarily because of the sheer size of these revenues and expenditures, and also because the revenue and expenditure patterns of these two government entities vary significantly from those of many other cities, villages, and counties in the Region.

#### EXPENDITURES

Under the financial resource inventory, data was collected on expenditures by local units of government in the Region for park and recreation purposes during the period from 1964 through 1974. The expenditures summarized in this section include amounts spent for the acquisition, development, operation, and maintenance of park facilities as well as for recreation programming. It should be noted that expenditures associated with spectator-oriented special use sites such as stadia, zoos, and fairgrounds were excluded from the financial resource inventory. In addition, expenditures related to public indoor recreation facilities such as auditoria, community or youth centers, and natatoria were, to the extent possible, excluded from the inventory.

Expenditures are classified in this chapter as either expenses or outlays. Expenses are defined as payments for operation and maintenance purposes and may be expected to approximate a relatively smooth trend over time. Outlays are defined as payments for real estate acquisition, site development or improvement, and the purchase of major equipment. The trend in outlays for park and recreation purposes may be expected to be somewhat sporadic because the design of park and recreation facilities must at least consider, if not meet, possible future as well as existing demand for parks and open space.

In addition to providing data on total park and recreation expenditures, this section provides data on per capita expenditures. In addition, park and recreation expenditures are compared to total public expenditures for all purposes. It is useful to understand the trend in per capita expenditures for parks and recreation and the proportionate share of total public expenditures historically allocated to park and recreation purposes for preparing forecasts of probable future funds available for park plan implementation.

Park and Recreation Expenditure Trends in the Region  
Between 1964 and 1974 total expenditures by local units of government in the Region for park and recreation purposes approximately doubled, increasing from \$17.9 million in 1964 to \$36.1 million in 1974 (see Figure 43). Since the rate of increase in total expenditures—101 percent—was substantially greater than the rate of price inflation over the same 10 year period—54 percent—much of the increase was real, and, discounting increases in the population served, reflects increases in both the quality and quantity of park and recreation programs.

Expenses for operation and maintenance represented a large proportion—84 percent—of all park and recreation expenditures in 1974, with the balance of expendi-

tures consisting of outlays for park acquisition and development. As indicated in Table 70, park and recreation expenses for operation and maintenance purposes increased dramatically from \$12.8 million in 1964 to \$30.3 million in 1974, an increase of 137 percent. It should be noted that the increase in expenses reflects not only an increase in funding for the operation and maintenance of park facilities but also a significant increase in amounts spent for recreation programs.

The level of outlays for park acquisition and development increased by only \$0.6 million, or 12 percent, between 1964 and 1974. The level of outlays for park acquisition and development was relatively high between 1964 and 1968, averaging \$6.3 million per year during this time, as a result of large capital outlays for park purposes by Milwaukee County. Between 1970 and 1974, however, the level of outlays for park purposes declined to an annual average of \$4.4 million.

As further indicated in Table 70, park and recreation expenditures by Milwaukee County comprised a very large proportion—58 percent—of all park and recreation expenditures by local units of government in the Region in 1974. Park and recreation expenditures by the City of Milwaukee represented another 14 percent of the total. Park and recreation expenditures by Milwaukee County

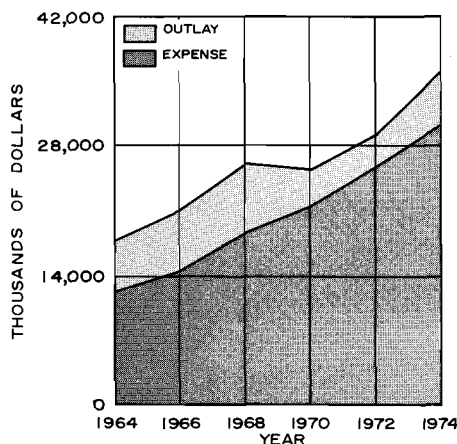
and the City of Milwaukee combined, therefore, represented almost 72 percent of all park and recreation expenditures by local units of government in the Region in 1974. This figure is slightly lower than the proportionate share of expenditures by Milwaukee County and the City of Milwaukee—75 percent—in 1964.

Expenditures for parks and recreation on a per capita basis also increased substantially between 1964 and 1974. Per capita expenditures by all local units of government in the Region increased by \$9.15, or 84 percent, from \$10.90 per person in 1964 to \$20.05 per person in 1974 (see Figure 44). Per capita expenses for operation and maintenance increased from \$7.77 in 1964 to \$16.84 in 1974, an increase of \$9.07 per capita, or 117 percent. The level of outlays for park acquisition and development on a per capita basis was about the same in 1974 as in 1964, with minor variation occurring during the 10 year period.

While total park and recreation expenditures in the Region increased substantially between 1964 and 1974, park and recreation expenditures as a proportion of all local expenditures increased slightly, from 4.4 percent in 1964 to 4.9 percent in 1968, then decreased to 3.3 percent in 1972, and finally increased to 3.9 percent in 1974. As indicated in Figure 45, the relatively large

Figure 43

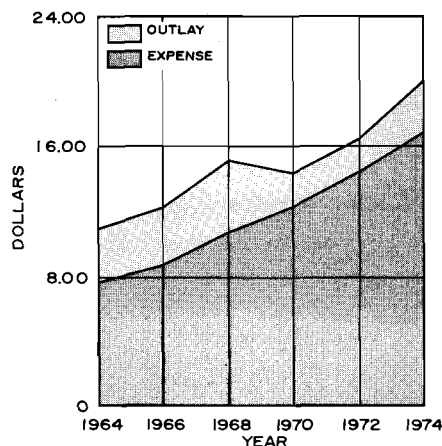
**TOTAL PARK AND RECREATION EXPENDITURES FOR ALL GENERAL PURPOSE UNITS OF GOVERNMENT IN THE REGION: 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit; Milwaukee County Park Commission; City of Milwaukee, Bureau of Traffic Engineering; Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; and SEWRPC.

Figure 44

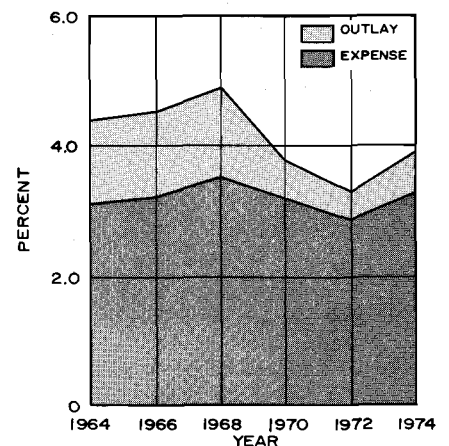
**PER CAPITA PARK AND RECREATION EXPENDITURES FOR ALL GENERAL PURPOSE UNITS OF GOVERNMENT IN THE REGION: 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit; Milwaukee County Park Commission; City of Milwaukee, Bureau of Traffic Engineering; Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; and SEWRPC.

Figure 45

**PARK AND RECREATION EXPENDITURES AS A PERCENT OF TOTAL EXPENDITURES FOR ALL GENERAL PURPOSE UNITS OF GOVERNMENT IN THE REGION: 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit; Milwaukee County Park Commission; City of Milwaukee, Bureau of Traffic Engineering; Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; and SEWRPC.

proportionate share of total expenditures during the late 1960's is due primarily to the high level of outlays for acquisition and development during that time.

**County Park and Recreation Expenditures:** Total expenditures for park and recreation by counties in the Region, excluding Milwaukee County, increased by 242 percent, from \$0.9 million in 1964 to \$3.1 million in 1974. County expenditures for parks and recreation represented 8.5 percent of all expenditures for parks and recreation by local units of government in the Region in 1974, up slightly from 5.0 percent in 1964.

As indicated in Figure 46, there were substantial increases in both county park expenses and outlays between 1964 and 1974. Expenses by counties for park operation and maintenance increased by 320 percent, from \$0.6 million in 1964 to \$2.3 million in 1974. County outlays for park acquisition and development more than doubled, increasing from \$345,000 in 1964 to \$744,000 in 1974.

On a per capita basis, county park and recreation expenditures increased from \$1.49 in 1964 to \$4.01 in 1974, or by 169 percent (see Figure 47). Per capita county expenses for park operation and maintenance increased by \$2.12, or 230 percent, while per capita county outlays increased by \$0.40, or 70 percent, during this time.

As indicated in Figure 48, park and recreation expenditures as a proportion total county expenditures varied considerably between 1964 and 1974, reaching a high of 3.5 percent in 1966 and a low of 2.2 percent in 1972. An examination of Figure 48, indicates that this variation results from changes in the level of county outlays for park acquisition and development. Conversely, the portion of all county expenditures consisting of park maintenance and operation expenses remained relatively constant, ranging between 1.5 percent and 2.1 percent during the inventory period.

**Milwaukee County:** As previously indicated, Milwaukee County accounts for more than half of all local expenditures for park and recreation in the Region. The high level of expenditures is directly related to the County's excellent and widely acclaimed park system. Total park and recreation expenditures by Milwaukee County increased from \$10.2 million in 1964 to \$20.9 million in 1974, an increase of 105 percent.<sup>1</sup> Milwaukee County expenses for park operation and maintenance increased steadily from \$6.9 million in 1964 to \$17.9 million in 1974, a 159 percent increase during the 10 year period. The trend in Milwaukee County outlays for park acquisition and development between 1964 and 1974 was much more sporadic, achieving a high of \$4.4 million in 1968 and declining to a low of \$0.8 million in 1970 (see Figure 49).

Per capita expenditures for park and recreation increased by 107 percent, from \$9.74 per person in 1964 to \$20.20 per person in 1974 (see Figure 50). The level of per capita expenditures for parks and recreation for Milwaukee County was five times greater than the level of per capita expenditures for park and recreation purposes for the other six counties of the Region combined in 1974.

The high priority that parks and recreation receive in Milwaukee County is also evident in the proportionate share of total County appropriations allocated to park and recreation purposes. Thus, expenditures for parks and recreation accounted for 7.0 percent of all County expenditures in 1974, considerably higher than the figure

<sup>1</sup> Park and recreation expenditures by Milwaukee County presented in this chapter exclude expenditures associated with the County's major spectator-oriented special use sites such as Zoological Gardens and Milwaukee County Stadium.

Table 70

**PARK AND RECREATION EXPENDITURES FOR LOCAL UNITS OF GOVERNMENT  
IN THE REGION BY TYPE OF GOVERNMENTAL UNIT: 1964 and 1974**

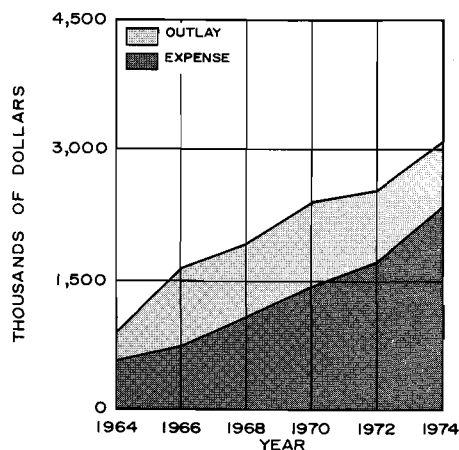
Type of Governmental Unit	Park and Recreation Expenditures													
	1964				1974				Change: 1964-1974					
	Expense (in dollars)	Outlay (in dollars)	Total	Percent of Region	Expense (in dollars)	Outlay (in dollars)	Total	Percent of Region	Expense		Outlay		Total	
									Dollars	Percent	Dollars	Percent	Dollars	Percent
Counties (excluding Milwaukee) . . .	554,417	344,610	899,027	5.0	2,329,052	744,000	3,073,052	8.5	1,774,635	320.1	399,390	115.9	2,174,025	241.8
Milwaukee County . . . . .	6,938,128	3,225,300	10,163,428	56.6	17,940,584	2,923,200	20,863,784	57.8	11,002,456	158.6	-302,100	- 9.4	10,700,356	105.3
Cities (excluding Milwaukee) . . .	2,438,133	510,399	2,948,532	16.4	4,458,272	1,345,418	5,803,690	16.1	2,020,139	82.9	835,019	163.6	2,855,158	96.8
City of Milwaukee . . . . .	2,459,427	869,600	3,319,027	18.5	4,549,752	411,865	4,961,617	13.8	2,090,325	85.0	-447,735	- 52.1	1,642,590	49.5
Villages . . . . .	363,610	198,602	562,212	3.2	882,638	336,454	1,219,092	3.4	519,028	142.7	137,852	69.4	656,880	116.8
Towns . . . . .	39,133	16,478	55,611	0.3	131,189	9,432	140,621	0.4	92,056	235.2	- 7,046	- 42.8	85,010	152.9
Region Total	12,792,848	5,154,989	17,947,837	100.0	30,291,487	5,770,369	36,061,856	100.0	17,498,639	136.8	615,380	11.9	18,114,019	100.9

Source: Wisconsin Department of Revenue, Bureau of Municipal Audit; Milwaukee County Park Commission; City of Milwaukee, Bureau of Traffic Engineering; Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; and SEWRPC.



Figure 46

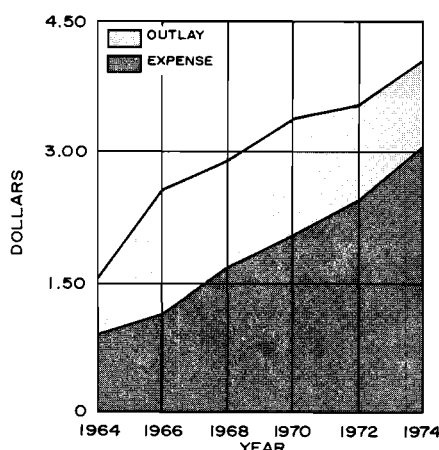
**TOTAL PARK AND RECREATION EXPENDITURES FOR ALL COUNTIES IN THE REGION EXCLUDING MILWAUKEE COUNTY 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

Figure 47

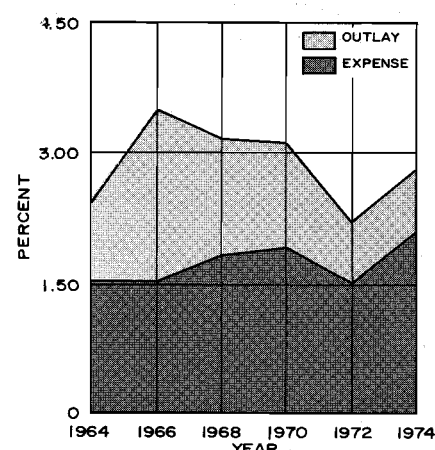
**PER CAPITA PARK AND RECREATION EXPENDITURES FOR ALL COUNTIES IN THE REGION EXCLUDING MILWAUKEE COUNTY 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

Figure 48

**PARK AND RECREATION EXPENDITURES AS A PERCENT OF TOTAL EXPENDITURES FOR ALL COUNTIES IN THE REGION EXCLUDING MILWAUKEE COUNTY 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

of 2.8 percent for the remaining six counties in the Region. As indicated in Figure 51, park and recreation expenditures accounted for an unusually high proportion of all County expenditures between 1964 and 1968, averaging 8.6 percent during these years, owing to a high level of capital outlay for park acquisition and development during this time.

**City Park and Recreation Expenditures:** The combined expenditures for park and recreation purposes by all cities in the Region, excluding the City of Milwaukee, stood at \$5.8 million in 1974, representing about 16 percent of all local park and recreation expenditures in the Region. Between 1964 and 1974, city expenditures for parks and recreation increased by \$2.9 million or 97 percent, with steady increases occurring in operation and maintenance expenses as well as in outlays for park acquisition and development (see Figure 52). As indicated in Figure 53, the increase in park and recreation expenditures by cities in the Region resulted in an increase in per capita expenditures, which reached a high of \$8.70 per person for city residents in 1974, an increase of \$3.49 per person, or 67 percent, over the 1964 level.

Park and recreation expenditures as a proportion of all city expenditures fluctuated considerably between 1964 and 1974. As indicated in Figure 54, this proportion reached a high of 4.0 percent in 1968 and a low of 3.0 percent in 1972.

**City of Milwaukee:** The City of Milwaukee conducts a major playground and recreation program through the Division of Municipal Recreation and Adult Education of the Milwaukee Public Schools. The Division of Municipal Recreation and Adult Education maintains playgrounds and playfields and conducts an extensive recreation program at these sites.<sup>2</sup> Land acquisition for playground purposes and playground development, however, are largely the responsibility of the City itself.

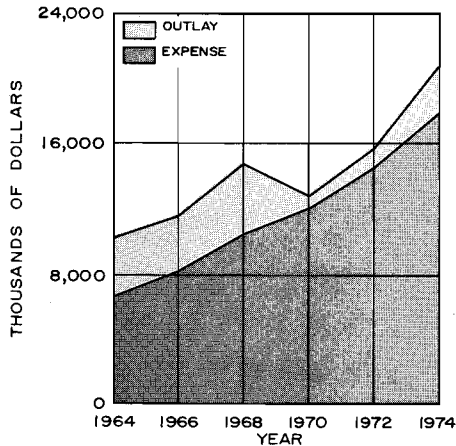
Total expenditures for parks and recreation in the City of Milwaukee increased by \$1.7 million, or 50 percent, from \$3.3 million in 1964 to \$5.0 million in 1974 (see Figure 55). City park and recreation expenses increased substantially, by \$2.1 million, or 85 percent, between 1964 and 1974,<sup>3</sup> while outlays for playground acquisition and development actually declined somewhat from a level of \$0.9 million in 1964 to \$0.4 million in 1974. It is important to recognize that a large portion

<sup>2</sup>In addition, the Bureau of Municipal Recreation and Adult Recreation also conducts recreation programs on portions of certain Milwaukee County park lands.

<sup>3</sup>Expenses by the City of Milwaukee presented in this section include operation and maintenance expenditures for both indoor and outdoor recreation programs of the Division of Municipal Recreation and Adult Education of the Milwaukee Public Schools.

Figure 49

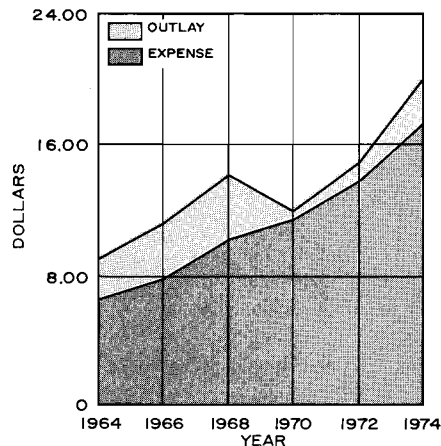
**TOTAL PARK AND RECREATION EXPENDITURES FOR MILWAUKEE COUNTY 1964-1974**



Source: Milwaukee County Park Commission and SEWRPC.

Figure 50

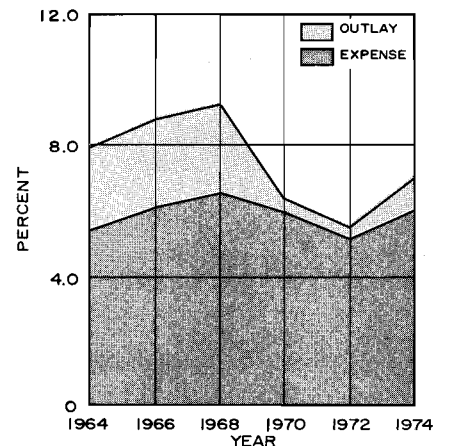
**PER CAPITA PARK AND RECREATION EXPENDITURES FOR MILWAUKEE COUNTY 1964-1974**



Source: Milwaukee County Park Commission and SEWRPC.

Figure 51

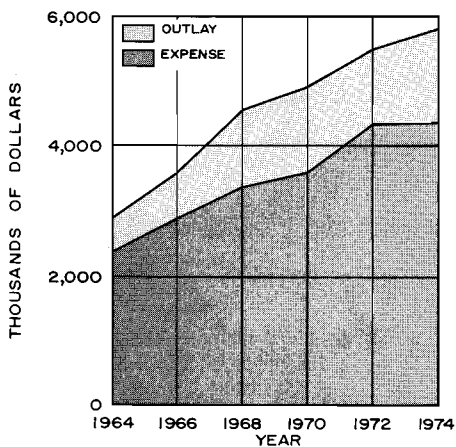
**PARK AND RECREATION EXPENDITURES AS A PERCENT OF TOTAL EXPENDITURES FOR MILWAUKEE COUNTY 1964-1974**



Source: Milwaukee County Park Commission and SEWRPC.

Figure 52

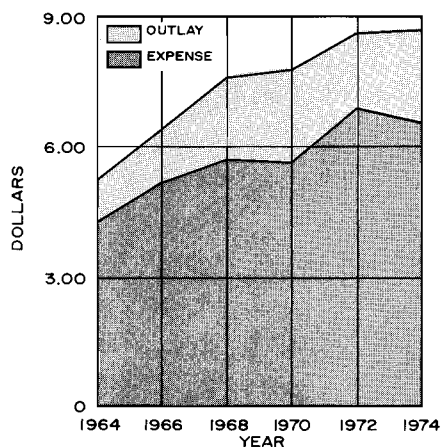
**TOTAL PARK AND RECREATION EXPENDITURES FOR ALL CITIES IN THE REGION EXCLUDING THE CITY OF MILWAUKEE 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

Figure 53

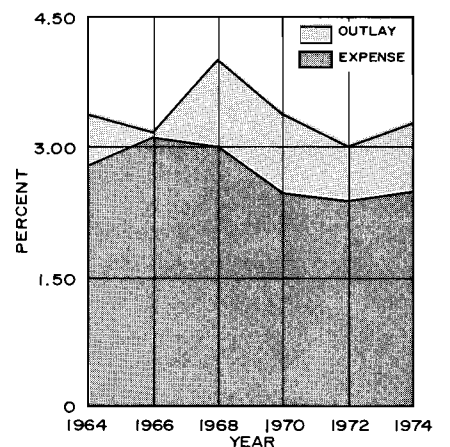
**PER CAPITA PARK AND RECREATION EXPENDITURES FOR ALL CITIES IN THE REGION EXCLUDING THE CITY OF MILWAUKEE 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

Figure 54

**PARK AND RECREATION EXPENDITURES AS A PERCENT OF TOTAL EXPENDITURES FOR ALL CITIES IN THE REGION EXCLUDING THE CITY OF MILWAUKEE 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

of City park and recreation expenses consists of amounts for recreation programming. For example, in 1974 more than half of all City of Milwaukee park and recreation expenses were used for recreation program activities, exclusive of site maintenance operations.

The overall increase in City of Milwaukee expenditures for park and recreation has been accompanied by an increase in per capita expenditures for City residents from \$4.53 in 1964 to \$7.26 in 1974, an increase of 60 percent (see Figure 56). As indicated in Figure 57, however, the proportion of all City of Milwaukee expenditures consisting of expenditures for park and recreation declined from 2.6 percent in 1964 to 2.1 percent in 1974, primarily as a result of a decline in outlays for playground and playfield acquisition and development.

**Village Park and Recreation Expenditures:** Village expenditures for park and recreation purposes in the Region represented about 3 percent of all park and recreation expenditures by local units of government in the Region in 1974. As indicated in Figure 58, the combined expenditures for park and recreation purposes by all villages in the Region more than doubled during the past 10 years, increasing from \$562,000 in 1964 to \$1,219,000 in 1974. Village expenses for park operation and maintenance increased steadily from \$364,000 in 1964 to \$883,000 in 1974. The level of outlays for park acquisition and development fluctuated considerably during the 10-year period, reaching a high of \$431,000 in 1968 and declining to a low of \$164,000 in 1972.

Per capita expenditures for park and recreation purposes by villages in the Region increased by 66 percent, from \$3.42 in 1964 to \$5.69 in 1974 (see Figure 59). As indicated in Figure 60, however, the proportion of all village expenditures consisting of expenditures for parks and recreation has declined from a high of 3.7 percent in 1968 to a low of 2.3 percent in 1974.

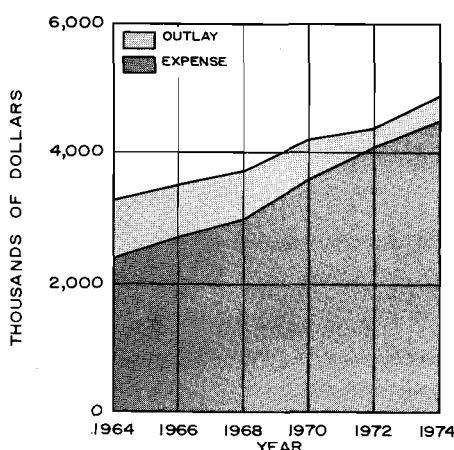
**Town, Park, and Recreation Expenditures:** Town governments in the Region have historically allocated relatively small amounts of revenue to park and recreation uses. In 1974 the combined expenditures for parks and recreation by towns in the Region comprised only 0.4 percent of all local expenditures for park and recreation purposes in the Region. While town park expenditures more than doubled between 1964 and 1974, the level of per capita park expenditures for towns remained very low—\$0.60 per person in 1974 (see Figures 61 and 62). As indicated in Figure 63, only 0.9 percent of all town expenditures in 1974 consisted of expenditures for park and recreation uses.

## REVENUES

Local public revenue to finance the expenditures for park and recreation purposes described in the previous section are derived from three major sources—departmental earnings, state and federal aids for parks and recreation, and locally appropriated funds. Recent trends for each of these revenue sources are presented below.

Figure 55

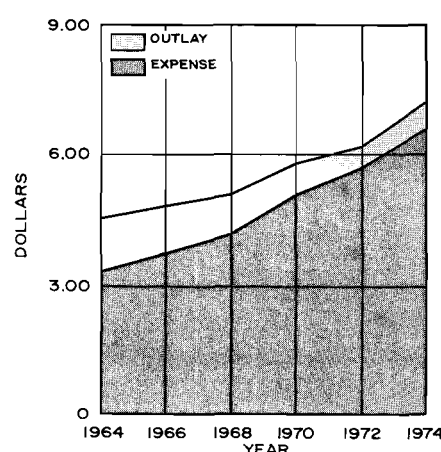
**TOTAL PARK AND RECREATION EXPENDITURES FOR THE CITY OF MILWAUKEE 1964-1974**



Source: Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; City of Milwaukee, Bureau of Traffic Engineering; and SEWRPC.

Figure 56

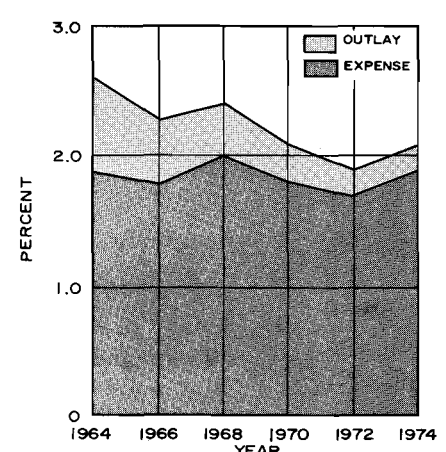
**PER CAPITA PARK AND RECREATION EXPENDITURES FOR THE CITY OF MILWAUKEE 1964-1974**



Source: Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; City of Milwaukee, Bureau of Traffic Engineering; and SEWRPC.

Figure 57

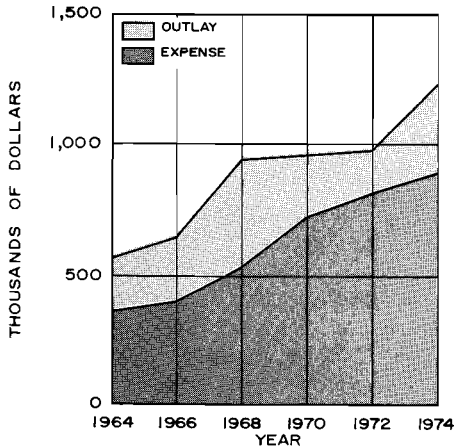
**PARK AND RECREATION EXPENDITURES AS A PERCENT OF TOTAL EXPENDITURES FOR THE CITY OF MILWAUKEE 1964-1974**



Source: Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; City of Milwaukee, Bureau of Traffic Engineering; and SEWRPC.

Figure 58

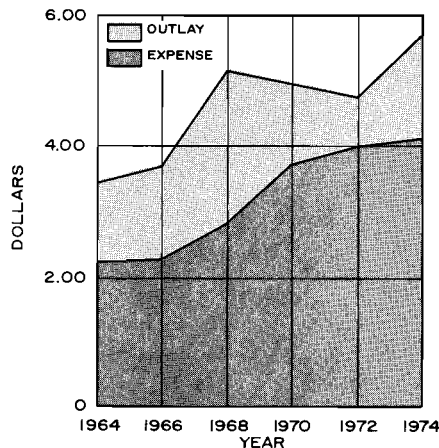
**TOTAL PARK AND RECREATION EXPENDITURES FOR ALL VILLAGES IN THE REGION: 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

Figure 59

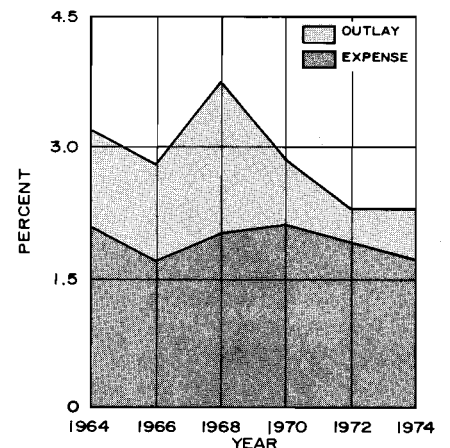
**PER CAPITA PARK AND RECREATION EXPENDITURES FOR ALL VILLAGES IN THE REGION: 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

Figure 60

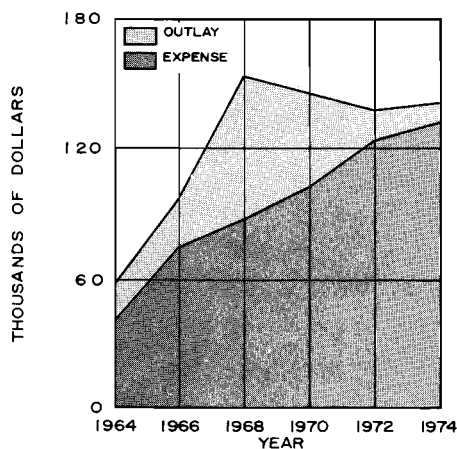
**PARK AND RECREATION EXPENDITURES AS A PERCENT OF TOTAL EXPENDITURES FOR ALL VILLAGES IN THE REGION 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

Figure 61

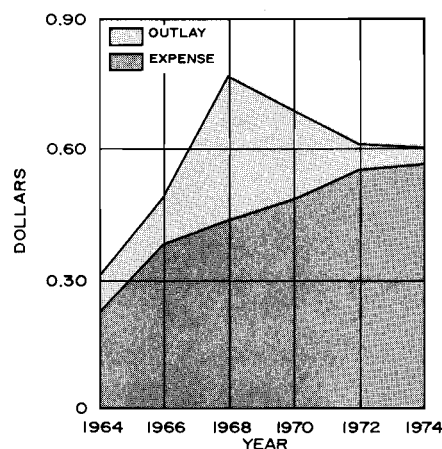
**TOTAL PARK AND RECREATION EXPENDITURES FOR ALL TOWNS IN THE REGION 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

Figure 62

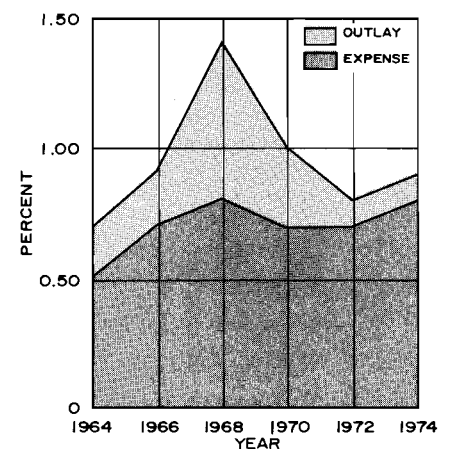
**PER CAPITA PARK AND RECREATION EXPENDITURES FOR ALL TOWNS IN THE REGION 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.

Figure 63

**PARK AND RECREATION EXPENDITURES AS A PERCENT OF TOTAL EXPENDITURES FOR ALL TOWNS IN THE REGION 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit, and SEWRPC.



### Park and Recreation Departmental Earnings

Park and recreation departmental earnings, consisting of admission charges, rental fees, permits, and other miscellaneous fees and sales represent an important source of revenue for financing park and recreation maintenance and operation costs. Park and recreation departmental earnings for local units of government in the Region increased by 263 percent, from \$1.5 million in 1964 to \$5.5 million in 1974. As indicated in Table 71, park and recreation departmental earnings increased rapidly for each type of local governmental unit except for towns between 1964 and 1974, with the combined park and recreation earnings for all towns in the Region actually declining slightly during the 10-year period.

As further indicated in Table 71, park and recreation departmental earnings for Milwaukee County stood at \$3.5 million in 1974, representing 64 percent of all local park and recreation earnings in the Region. The combined park and recreation earnings for the remaining six counties in the Region totaled \$1.0 million in 1974, representing 19 percent of the regional total. Park and recreation earnings for the Region's seven counties thus accounted for 83 percent of all local park and recreation departmental earnings in the Region in 1974. At the other extreme, park and recreation earnings for all towns in the Region combined totaled only \$10,800, or 0.2 percent of the regional total.

A major consideration in the park planning purposes is the degree to which departmental earnings offset operation and maintenance expenses. Figure 64 presents a comparison of the level of park and recreation departmental earnings with the level of expenses for park operation and maintenance purposes for the various types of local units of government for the years 1964 through 1974. As indicated in Figure 64, the proportion of local park and recreation expenses offset by departmental earnings for all local units of government in the Region combined stood at 18.3 percent in 1974, somewhat higher than the figure of 11.9 percent in 1964. The proportion of park and recreation expenses offset by departmental revenue was relatively low, 3.1 percent, for

the City of Milwaukee in 1974. Conversely, departmental earnings offset an unusually high proportion of park and recreation expenses in the six counties of the Region excluding Milwaukee as a result of large amounts of revenue generated as user fees from public golf courses.

### Park and Recreation Aids

Federal and state aids represent an important source of revenue for financing local park acquisition and development costs. A summary indicating the total amount of federal and state park aids to local units of government in the Region for the 10-year period from 1964 through 1974 is presented in Table 72, with annual aid levels presented in Table 73.

As indicated in Table 72, between 1964 and 1974 federal and state park and recreation aids to local units of government in the Region totaled \$10.5 million, with \$8.5 million, or 81 percent of this total, granted under federal aid programs and the balance consisting of state aids. Federal park aids to local units of government in the Region during this period were granted either through the Federal Land and Water Conservation Program (LAWCON), under which aids totaling \$4.3 million were paid to local units of government in southeastern Wisconsin, or through the Federal Open Space Land Program, under which aids totaling \$4.2 million were paid to local units of government in the Region. State park aids to local units of government in the Region from 1964 through 1974 were granted primarily through the Outdoor Recreation Aids Program, under which aids of \$1.9 million were paid to local units of government in the Region, with minor amounts also granted as snowmobile aids, water access aids, and county conservation aids.

As further indicated in Table 72, Milwaukee County received about 36 percent of all state and federal park aids to local units of government in the Region between 1964 and 1974. The remaining six counties in the Region received another 31 percent of the total. The seven counties in southeastern Wisconsin, therefore, received about two-thirds of all state and federal park aids paid to local

Table 71

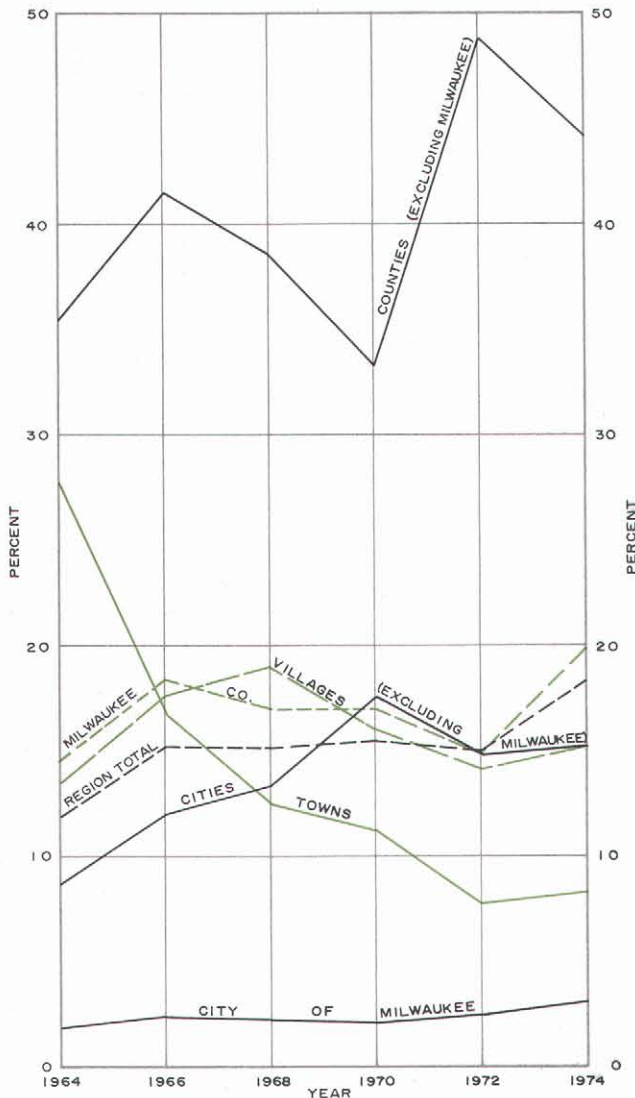
### PARK AND RECREATION DEPARTMENTAL EARNINGS FOR LOCAL UNITS OF GOVERNMENT IN THE REGION BY TYPE OF GOVERNMENTAL UNIT: 1964-1974

Type of Governmental Unit	Park and Recreation Departmental Earnings													
	1964		1966		1968		1970		1972		1974		Change: 1964-1974	
	Dollars	Percent of Region	Dollars	Percent of Region	Dollars	Percent of Region	Dollars	Percent of Region	Dollars	Percent of Region	Dollars	Percent of Region	Dollars	Percent
Counties (excluding Milwaukee) . .	201,252	13.2	291,280	12.8	415,780	14.7	476,909	14.3	827,885	21.5	1,031,369	18.6	830,117	412.5
Milwaukee County . . . . .	1,003,082	65.9	1,479,180	65.2	1,760,958	62.5	2,026,140	60.6	2,138,959	55.5	3,536,733	63.9	2,533,651	252.6
Cities (excluding Milwaukee) . .	213,205	14.0	352,350	15.5	467,481	16.6	637,248	19.1	658,703	17.1	682,017	12.3	468,812	219.9
City of Milwaukee . . . . .	46,000	3.0	66,000	2.9	68,000	2.4	75,700	2.3	103,000	2.7	139,617	2.5	93,617	203.5
Villages . . . . .	49,216	3.2	68,809	3.0	96,658	3.4	113,918	3.4	113,112	2.9	134,713	2.5	85,497	173.7
Towns . . . . .	10,846	0.7	12,352	0.6	10,858	0.4	11,482	0.3	9,521	0.3	10,764	0.2	- 82	- 0.8
Region Total	1,523,601	100.0	2,269,971	100.0	2,819,735	100.0	3,341,397	100.0	3,851,180	100.0	5,535,213	100.0	4,011,612	263.3

Source: Wisconsin Department of Revenue, Bureau of Municipal Audit; Milwaukee County Park Commission; Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; and SEWRPC.

Figure 64

**PARK AND RECREATION DEPARTMENTAL EARNINGS  
AS A PERCENT OF EXPENSES FOR PARK AND  
RECREATION OPERATION AND MAINTENANCE FOR  
LOCAL UNITS OF GOVERNMENT IN THE REGION  
BY TYPE OF GOVERNMENTAL UNIT: 1964-1974**



Source: Wisconsin Department of Revenue, Bureau of Municipal Audit; Milwaukee County Park Commission; Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; and SEWRPC.

units of government in the Region during the last 10 years. Conversely, town governments in southeastern Wisconsin received less than 1 percent of state and federal park aids granted to local units of government in the Region during this time.

Table 74 presents a comparison of the level of state and federal aids to local units of government in the Region with the level of local outlays for park and recreation acquisition and development. As indicated in this table, state and federal park and recreation aids to all local units of government in the Region combined averaged \$0.6 million per year between 1964 and 1968, while outlays for park acquisition and development averaged \$6.3 million per year during this time. Accordingly, state and federal park and recreation aids offset an annual average of 9 percent of all local outlays for park acquisition and development in the Region between 1964 and 1968. As further indicated in Table 74, the proportion of local outlays for park and acquisition and development offset by state and federal park aids has increased since 1970. Thus, state and federal park and recreation aids to all local units of government in the Region averaged \$1.3 million per year between 1970 and 1974, while local outlays for park acquisition and development averaged \$4.4 million per year during this time. State and federal park and recreation aids, therefore, offset an average of 30 percent of all local outlays for park acquisition and development in southeastern Wisconsin between 1970 and 1974, a considerable increase over the 1964-1968 percentage.

It should be noted that there was considerable variation among local units of government in the Region on the proportion of park outlays offset by state and federal aids. Thus, state and federal park aids amounted to more than half of all park and recreation outlays by towns in the Region between 1970 and 1974. In contrast, state and federal park and recreation aids offset only 18 percent of all outlays for playgrounds and playfields in the City of Milwaukee during this period.

#### Locally Appropriated Funds

Local park and recreation expenditures which are not offset by departmental earnings or state and federal park and recreation aids must be financed with locally appropriated funds derived either from the local property tax, debt receipts (bond issues), or other general revenue sources. Locally appropriated funds for park and recreation purposes may, therefore, be estimated as the residual obtained by subtracting from the total amount of park and recreation expenditures, including both expenses and outlays, the amount of departmental earnings and the amount of state and federal park and recreation aids. Using this methodology, the average annual local appropriation for park and recreation purposes for the years 1964-1968 and 1970-1974 was calculated for the various types of local governmental units in the Region (see Table 75).

The annual amount of revenue appropriated for park and recreation purposes by local units of government in the Region averaged \$24.7 million for the years 1970-1974, an increase of \$5.7 million, or 30 percent, over the average annual local appropriation of \$19.0 million for the years 1964-1968. As indicated in Table 75, however, the proportion of all local park and recreation revenue consisting of locally appropriated funds declined from an average of 87 percent for the years 1964-1968 to an

Table 72

**STATE AND FEDERAL PARK AND RECREATION AIDS TO LOCAL UNITS  
OF GOVERNMENT IN THE REGION BY PROGRAM TYPE: 1964-1974**

Type of Governmental Unit	State and Federal Park and Recreation Aids to Local Units of Government: 1964-1974														
	Federal Land and Water Conservation Program <sup>a</sup>		Federal Open Space Land Program <sup>b</sup>		State Outdoor Recreation Aids Program <sup>c</sup>		State Snowmobile Aids <sup>c</sup>		State Water Access Aids <sup>c</sup>		County Conservation Aids <sup>c</sup>		Total		
	Dollars	Percent of Total	Dollars	Percent of Total	Dollars	Percent of Total	Dollars	Percent of Total	Dollars	Percent of Total	Dollars	Percent of Total	Dollars	Percent of Total	Percent of Region
Counties (excluding Milwaukee) . .	1,575,936	48.7	659,504	20.4	884,121	27.3	30,521	0.9	20,970	0.7	65,301	2.0	3,236,353	100.0	30.8
Milwaukee County . . . . .	1,429,429	37.4	2,131,204	55.7	259,075	6.8	--	--	--	--	3,870	0.1	3,823,578	100.0	36.4
Cities (excluding Milwaukee) . .	633,030	35.9	603,833	34.3	500,879	28.4	--	--	25,000	1.4	--	--	1,762,742	100.0	16.8
City of Milwaukee . . . . .	353,111	37.8	580,844	62.2	--	--	--	--	--	--	--	--	933,955	100.0	8.9
Villages . . . . .	270,452	39.7	216,409	31.8	192,717	28.3	1,267	0.2	--	--	--	--	680,845	100.0	6.5
Towns . . . . .	52,379	76.1	--	--	16,441	23.9	--	--	--	--	--	--	68,820	100.0	0.6
Region Total	4,314,337	41.1	4,191,794	39.9	1,853,233	17.6	31,788	0.3	45,970	0.4	69,171	0.7	10,506,293	100.0	100.0

<sup>a</sup> Administered by the Wisconsin Department of Revenue pursuant to the Federal Land and Water Conservation Act of 1965 (LAWCON). The program is administered nationally by the U. S. Department of Interior, Bureau of Outdoor Recreation.

<sup>b</sup> Administered by the U. S. Department of Housing and Urban Development pursuant to the Housing and Urban Development Act of 1970.

<sup>c</sup> Administered by the Wisconsin Department of Natural Resources Pursuant to Section 23.09 of the Wisconsin Statutes.

Source: U. S. Department of Housing and Urban Development; Wisconsin Department of Natural Resources; and SEWRPC.

average of 82 percent for the years 1970-1974 as a result of increases in the level of departmental earnings and the level of state and federal park and recreation aids.

As further indicated in Table 75, the proportion of all local park and recreation revenues consisting of locally appropriated funds varied considerably among various local units of government in southeastern Wisconsin, ranging from a low of 56 percent for the six counties of the Region excluding Milwaukee County for the years 1970-1974 to a high of 96 percent for the City of Milwaukee during a similar period. It should be noted that the proportion of local park and recreation revenues consisting of locally appropriated funds declined at least slightly for each type of governmental unit between the 1964-1968 and 1970-1974 time periods.

#### STATE PARK AND OPEN SPACE EXPENDITURES

While this chapter thus far has focused on local expenditures and revenues for parks and recreation, it is important to recognize that the State, in addition to providing aid to local park acquisition and development efforts, also directly acquires recreation and open space lands in the Region and throughout the State. The State of Wisconsin Department of Natural Resources (DNR), through the Bureaus of Parks and Recreation, Forestry, and Fish and Wildlife Management, has acquired substantial amounts of land in Wisconsin for use as state parks, state forests, and state scientific and wildlife areas. In 1974, the State owned or controlled more than 976,000 acres of land for recreation and open space uses of all kinds. The State acquires and maintains in public ownership areas of significant natural resource value which are generally of areawide significance. State parks and

open space sites typically are intended to serve the population of substate regions and state and interstate recreation users.

As indicated in Table 76, there were 39,500 acres of state owned and controlled park and open space land in southeastern Wisconsin in 1974, representing 4.0 percent of all state park and open space lands. Of those 39,500 acres, about 38,800 acres, or 98 percent, are held in fee simple ownership. Almost three-fourths of all state recreation and open space lands in the Region were located in Walworth, Washington, and Waukesha Counties. The Department of Natural Resources does not own any land in Milwaukee County (see Table 77).

Since the institution of a state acquisition program in 1876, the State had expended \$8,456,000 as of 1974 for the acquisition in whole or in part of park and open space lands in the Region, accounting for 15.3 percent of the total expenditures by the State for park and open space lands in the State. Between 1964 and 1974, the State expended \$6,132,000 for park and open space lands in the Region compared to \$31,989,000 for the balance of the State.

Because of the heavy concentration of the state's population within the Southeastern Wisconsin Region, the amount of state park and open space land in the Region, when analyzed on a per capita basis, is extremely low. As indicated in Table 76, there was an average of only 0.02 acres of park and open space lands provided by the State per person in the Region in 1974, compared to 0.34 acres per person provided in the balance of the State, and 0.21 acres per person in the State overall. Since the initiation of its program, the State has

Table 73

**STATE AND FEDERAL PARK AND RECREATION AIDS TO LOCAL UNITS  
OF GOVERNMENT IN THE REGION BY PROGRAM TYPE AND BY YEAR: 1964-1974**

Type of Governmental Unit	Aid Program	State and Federal Park and Open Space Aids to Local Units of Government (in dollars)										
		1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Counties (excluding Milwaukee)	Land and Water Conservation Program	--	4,945	221,124	168,538	76,000	--	--	705,278	114,983	179,106	105,962
	Open Space Land Program	--	--	163,621	172,592	51,129	--	86,946	--	144,361	--	40,855
	Outdoor Recreation Aids Program	19,995	117,530	85,000	95,887	42,675	92,001	178,599	104,579	103,138	23,700	21,017
	Snowmobile Aids	--	--	--	--	--	--	--	1,307	0	10,098	19,116
	Water Access Aids	11,970	--	--	--	--	--	9,000	--	--	--	--
	County Conservation Aids	--	3,577	6,242	7,794	7,794	7,271	7,794	6,651	4,896	6,696	6,586
	Total	31,965	126,052	475,987	444,811	177,598	99,272	282,339	817,815	367,378	219,600	193,536
Milwaukee County	Land and Water Conservation Program	--	306,200	25,170	96,390	26,000	71,500	--	195,000	111,250	372,332	225,587
	Open Space Land Program	--	498,362	123,723	55,500	17,500	545,449	432,052	306,853	15,000	136,765	--
	Outdoor Recreation Aids Program	--	--	--	7,700	--	35,750	123,500	36,500	55,625	--	--
	Snowmobile Aids	--	--	--	--	--	--	--	--	--	--	--
	Water Access Aids	--	--	--	--	--	--	--	--	--	--	--
	County Conservation Aids	--	--	--	--	--	--	774	774	774	774	774
	Total	--	804,562	148,893	159,590	43,500	652,699	556,326	539,127	182,649	509,871	226,361
Cities (excluding Milwaukee)	Land and Water Conservation Program	--	14,685	10,300	14,182	--	--	163,000	58,493	216,763	139,907	15,700
	Open Space Land Program	--	--	8,293	--	46,325	50,000	120,758	30,500	--	347,957	--
	Outdoor Recreation Aids Program	--	--	--	--	--	--	58,800	3,450	300,475	65,000	73,154
	Snowmobile Aids	--	--	--	--	--	--	--	--	--	--	--
	Water Access Aids	--	--	--	--	--	--	--	--	--	25,000	--
	Total	--	14,685	18,593	14,182	46,325	50,000	342,558	92,443	517,238	577,864	88,854
City of Milwaukee	Land and Water Conservation Program	--	84,361	--	--	--	--	--	--	--	--	268,750
	Open Space Land Program	--	--	--	--	224,238	226,307	62,695	50,324	17,280	--	--
	Outdoor Recreation Aids Program	--	--	--	--	--	--	--	--	--	--	--
	Snowmobile Aids	--	--	--	--	--	--	--	--	--	--	--
	Water Access Aids	--	--	--	--	--	--	--	--	--	--	--
	Total	--	84,361	--	--	224,238	226,307	62,695	50,324	17,280	--	268,750
Villages	Land and Water Conservation Program	--	--	--	52,835	--	16,250	9,500	77,347	69,800	--	44,720
	Open Space Land Program	--	--	--	--	--	--	29,497	--	186,912	--	--
	Outdoor Recreation Aids Program	--	--	--	--	--	--	97,617	8,750	13,800	34,500	38,050
	Snowmobile Aids	--	--	--	--	--	--	--	--	--	--	1,267
	Water Access Aids	--	--	--	--	--	--	--	--	--	--	--
	Total	--	--	--	52,835	--	16,250	136,614	86,097	270,512	34,500	84,037
Towns	Land and Water Conservation Program	--	--	--	7,413	--	--	--	--	31,466	--	13,500
	Open Space Land Program	--	--	--	--	--	--	--	--	--	--	--
	Outdoor Recreation Aids Program	--	--	--	--	--	--	--	--	3,106	--	13,335
	Snowmobile Aids	--	--	--	--	--	--	--	--	--	--	--
	Water Access Aids	--	--	--	--	--	--	--	--	--	--	--
	Total	--	--	--	7,413	--	--	--	--	34,572	--	26,835
Region Total	Land and Water Conservation Program	--	410,191	256,594	339,358	102,000	87,750	172,500	1,036,118	544,262	691,345	674,219
	Open Space Land Program	--	498,362	295,637	228,092	339,192	821,756	731,948	387,677	363,553	484,722	40,855
	Outdoor Recreation Aids Program	19,995	117,530	85,000	103,587	42,675	127,751	458,516	153,279	476,144	123,200	145,556
	Snowmobile Aids	--	--	--	--	--	--	--	1,307	--	10,098	20,383
	Water Access Aids	11,970	--	--	--	--	--	9,000	--	--	25,000	--
	County Conservation Aids	--	3,577	6,242	7,794	7,794	7,271	8,568	7,425	5,670	7,470	7,360
	Total	31,965	1,029,660	643,473	678,831	491,661	1,044,528	1,380,532	1,585,806	1,389,629	1,341,835	888,373

Source: U. S. Department of Housing and Urban Development; Wisconsin Department of Natural Resources; and SEWRPC.



Table 74

**COMPARISON OF AVERAGE ANNUAL STATE AND FEDERAL AIDS FOR PARKS AND RECREATION  
WITH AVERAGE ANNUAL OUTLAYS FOR PARK ACQUISITION AND DEVELOPMENT FOR LOCAL UNITS  
OF GOVERNMENT IN THE REGION BY TYPE OF GOVERNMENTAL UNIT: 1964-1968 and 1970-1974**

Type of Governmental Unit	1964-1968			1970-1974		
	Average Annual Outlay (in dollars)	Average Annual State and Federal Aids		Average Annual Outlay (in dollars)	Average Annual State and Federal Aids	
		Dollars	Percent of Average Annual Outlay		Dollars	Percent of Average Annual Outlay
Counties (excluding Milwaukee) . . .	697,579	251,283	36.0	825,989	376,134	45.5
Milwaukee County . . . . .	3,697,369	231,309	6.3	1,600,933	402,867	25.2
Cities (excluding Milwaukee) . . .	791,368	18,757	2.4	1,263,545	323,791	25.6
City of Milwaukee . . . . .	776,300	61,720	8.0	441,781	79,810	18.1
Villages . . . . .	291,446	10,567	3.6	246,822	122,352	49.6
Towns . . . . .	35,211	1,483	4.2	22,385	12,281	54.9
Region Total	6,289,273	575,119	9.1	4,401,455	1,317,235	29.9

Source: U. S. Department of Housing and Urban Development; Wisconsin Department of Natural Resources; Wisconsin Department of Revenue, Bureau of Municipal Audit; Milwaukee County Park Commission; City of Milwaukee Bureau of Traffic Engineering; Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; and SEWRPC.

Table 75

**DISTRIBUTION OF PARK AND RECREATION REVENUE BY MAJOR REVENUE CATEGORIES FOR LOCAL UNITS  
OF GOVERNMENT IN THE REGION BY TYPE OF GOVERNMENTAL UNIT: 1964-1968 and 1970-1974**

Type of Governmental Unit	1964-1968							1970-1974						
	Average Annual Expenditures (in dollars)	Average Annual Revenue						Average Annual Expenditures (in dollars)	Average Annual Revenue					
		Departmental Earnings		State and Federal Aids		Local Appropriation			Departmental Earnings		State and Federal Aids		Local Appropriation	
		Dollars	Percent of Total Revenue	Dollars	Percent of Total Revenue	Dollars	Percent of Total Revenue		Dollars	Percent of Total Revenue	Dollars	Percent of Total Revenue	Dollars	Percent of Total Revenue
Counties (excluding Milwaukee) . .	1,474,677	302,771	20.5	251,283	17.1	920,623	62.4	2,644,290	778,721	29.5	376,134	14.2	1,489,435	56.3
Milwaukee County . . . . .	12,165,475	1,414,407	11.6	231,309	1.9	10,519,759	86.5	16,398,724	2,567,277	15.6	402,867	2.5	13,428,580	81.9
Cities (excluding Milwaukee) . .	3,746,374	344,345	9.2	18,757	0.5	3,383,272	90.3	5,434,726	659,323	12.1	323,791	6.0	4,451,612	81.9
City of Milwaukee . . . . .	3,538,577	60,000	1.7	61,720	1.7	3,416,857	96.6	4,558,972	106,106	2.3	79,810	1.8	4,373,056	95.9
Villages . . . . .	713,430	71,561	10.0	10,567	1.5	631,302	88.5	1,047,513	120,581	11.5	122,352	11.7	804,580	76.8
Towns . . . . .	101,995	11,352	11.1	1,483	1.5	89,160	87.4	141,336	10,589	7.5	12,281	8.7	118,466	83.8
Region Total	21,740,528	2,204,436	10.1	575,119	2.7	18,960,973	87.2	30,225,561	4,242,597	14.0	1,317,235	4.4	24,665,729	81.6

Source: U. S. Department of Housing and Urban Development; Wisconsin Department of Natural Resources; Wisconsin Department of Revenue, Bureau of Municipal Audit; Milwaukee County Park Commission; City of Milwaukee, Bureau of Traffic Engineering; Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; and SEWRPC.

Table 76

## WISCONSIN DEPARTMENT OF NATURAL RESOURCES RECREATION AND OPEN SPACE LAND ACQUISITION: JUNE 1974

Area	Area Controlled							Cost						
	As of June 1964		July 1964-June 1974		As of June 1974			As of June 1964		July 1964-June 1974		As of June 1974		
	Total Acres	Percent of State	Total Acres	Percent of State	Total Acres	Percent of State	Acres Per Person	Total Outlay (in dollars)	Percent of State	Total Outlay (in dollars)	Percent of State	Total Outlay (in dollars)	Percent of State	Outlay Per Person (in dollars)
Southeastern Wisconsin Region	23,040	3.1	16,437	6.8	39,477	4.0	0.02	2,323,231	13.4	6,132,379	16.1	8,455,610	15.3	4.70
Balance of State	713,164	96.9	224,025	93.2	937,189	96.0	0.34	14,950,208	86.6	31,988,557	83.9	46,938,765	84.7	16.84
State Total	736,204	100.0	240,462	100.0	976,666	100.0	0.21	17,273,439	100.0	38,120,936	100.0	55,394,375	100.0	12.08

<sup>a</sup> Includes lands controlled by the Wisconsin Department of Natural Resources, Bureau of Parks and Recreation, Bureau of Fish and Wildlife Management, Bureau of Forestry, and Bureau of Vacation and Travel.

<sup>b</sup> Controlled through fee simple purchase or purchase of easement.

Source: Wisconsin Department of Natural Resources and SEWRPC.

Table 77

WISCONSIN DEPARTMENT OF NATURAL RESOURCE RECREATION AND OPEN SPACE LAND BY COUNTY WITHIN THE SOUTHEASTERN WISCONSIN REGION  
June 1974

County	Acres	Percent of Region	Percent of State
Kenosha . . . . .	6,175	15.6	0.6
Milwaukee . . . . .	--	--	--
Ozaukee . . . . .	1,946	4.9	0.2
Racine . . . . .	2,832	7.2	0.3
Walworth . . . . .	7,689	19.5	0.8
Washington . . . . .	8,209	20.8	0.8
Waukesha . . . . .	12,626	32.0	1.3
Region Total	39,477	100.0	4.0
Balance of State	937,189	--	96.0
State Total	976,666	--	100.0

<sup>a</sup> Includes lands of the Wisconsin Department of Natural Resources, Bureau of Parks and Recreation, Bureau of Fish and Wildlife Management, Bureau of Forestry, and Bureau of Vacation and Travel.

<sup>b</sup> Controlled through fee simple purchase or purchase of easement.

Source: Wisconsin Department of Natural Resources and SEWRPC.

expended an average of \$4.70 per person for the acquisition in whole or in part of park and open space lands in the Region compared to \$16.84 per person in the balance of the State and \$12.08 per person for the State overall.

Thus, the Southeastern Wisconsin Region with approximately 40 percent of the state's population and tangible wealth has only 4 percent of the state's park and open space lands. While it may be argued that state monies can purchase more lands—because of the lower cost per acre—

in the less densely populated rural areas of the State, it may also be argued that the greatest need for such park and open space lands is in the Southeastern Wisconsin Region where the greatest concentration of population exists. It may be argued further that it is within the Southeastern Wisconsin Region, one of the rapidly urbanizing portions of the State where the greatest loss of existing potential park and open space land is likely to occur and where the State, therefore, should be considering expending additional funds both to protect significant environmentally fragile open space lands from conversion to incompatible urban uses and to provide for the future recreational demands of the Region.

## SUMMARY

This chapter has presented a description of trends in local park and recreation expenditures and revenues in the Southeastern Wisconsin Region between 1964 and 1974 based upon the financial resources inventory conducted under the regional park and open space study. An understanding of these trends provides a background against which the fiscal feasibility of future park and open space plans can be evaluated. The major findings of the park and recreation financial resources inventory are summarized below:

1. Total expenditures by local units of government in the Region for park and recreation purposes increased from \$17.9 million in 1964 to \$36.1 million in 1974, or by 101 percent, a substantially faster growth rate than the 54 percent increase in the consumer price index during this period. This overall increase in park and recreation expenditures was accompanied by an 84 percent increase in per capita expenditures for park and recreation purposes from a level of \$10.90 per person in 1964 to a level of \$20.05 per person in 1974. While total park and recreation expenditures in the Region increased substantially between 1964 and 1974, the proportion of all

local expenditures allocated for park and recreation uses increased only slightly, from 4.4 percent in 1964 to 4.9 percent in 1968, then declined to 3.3 percent in 1972, and finally increased to 3.9 percent in 1974.

2. Expenses for park and recreation operation and maintenance represented a large proportion, 84 percent, of all park and recreation expenditures in 1974, with the balance of expenditures consisting of outlays for park acquisition and development. Park and recreation expenses for operation and maintenance purposes increased from \$12.8 million in 1964 to \$30.3 million in 1974, an increase of 137 percent. This increase in expenses reflects not only an increase in spending for the operation and maintenance of the park facilities but also a significant increase in amounts spent for recreation programs.
3. The level of outlays for park acquisition and development increased by only \$0.6 million, or 12 percent, between 1964 and 1974. The level of outlays for park acquisition and development was relatively high between 1964 and 1968, averaging \$6.3 million per year during this time, reflecting large capital outlays by Milwaukee County. Between 1970 and 1974, however, the level of outlays for park purposes declined to an annual average of \$4.4 million.
4. There is considerable variation among local units of government in the Region with respect to the level of expenditures for park and recreation purposes. For example, Milwaukee County alone accounted for 58 percent of all local expenditures for parks and recreation in the Region in 1974, spending an average of \$20.20 per person for County residents. Conversely, park and recreation expenditures for all towns in the Region combined represented less than 1 percent of the regional total in 1974, with towns spending an average of only \$0.60 per person for town residents.
5. Local public revenue to finance park and recreation expenditures may be derived from departmental earnings, state and federal aids, and locally appropriated funds. Park and recreation departmental earnings for all local units of government in the Region, including admission charges, rental fees, permits, and other miscellaneous fees and sales, increased by 263 percent, from \$1.5 million in 1964 to \$5.5 million in 1974. Park and recreation departmental earnings offset 18 percent of all park and recreation, operation and maintenance expenses for local units of government in the Region in 1974, somewhat higher than the figure of 12 percent in 1964.
6. State and federal aids for park and recreation purposes to local units of government in the Region totaled \$10.5 million between 1964 and 1974, with \$8.5 million, or 81 percent of this total, granted under federal aid programs and the

balance consisting of state aids. State and federal aids to local units of government in southeastern Wisconsin offset 30 percent of all local outlays for park and acquisition and development in the Region for the years 1970-1974, a considerable increase over the 1964-1968 proportion of 9 percent.

7. Locally appropriated funds for park and recreation purposes, derived from the local property tax, debt receipts, or other general revenue sources, averaged \$24.7 million for the years 1970-1974, an increase of \$5.7 million, or 30 percent, from the average annual local appropriation of \$19.0 million for the years 1964-1968. The proportion of all local park and recreation revenues consisting of locally appropriated funds declined from an average of 87 percent for the years 1964-1968 to an average of 82 percent for the years 1970-1974 as a result of increases in the level of departmental earnings and the level of state and federal park and recreation aids.
8. Direct expenditures by the Wisconsin Department of Natural Resources (DNR) for recreation and open space land in southeastern Wisconsin totaled \$8.5 million as of June 1974, in comparison to \$46.9 million for the balance of the State. The DNR owns or controls through lease agreements 39,500 acres of land in the Region compared to 937,200 acres in the balance of the State. Because of the heavy concentration of the state's population within southeastern Wisconsin, there was an average of only 0.02 acres of park and open space land provided by the State per person in the Region in 1974, compared to 0.34 acres per person provided in the balance of the State, and 0.21 per person in the State overall.

As indicated in this chapter, Milwaukee County currently accounts for a large proportion, 58 percent, of all local park and recreation expenditures in the Region. Milwaukee County has traditionally assigned a high priority to parks and recreation, and the operation of the Milwaukee County park system is closely scaled to, and coordinated with, the changing needs of the metropolitan area. The current decentralization of population into the adjacent counties, however, will undoubtedly create more pressure for similar facilities in the suburban and outlying areas of the Region. An increase in the proportionate share of local revenue allocated to park and recreation expenditures—especially to outlays for park acquisition and development—may be required in the outlying communities and counties of the Region in order to meet growing recreation demands and open space needs. The determination of probable future levels of local park and recreation expenditures required in southeastern Wisconsin can be determined only after existing and probable future outdoor recreation demands and open space needs have been identified and alternative plans prepared to meet these demands and needs. The public cost associated with each alternative plan can then be scaled against the probable future level of local park and recreation revenues in the plan evaluation process.

## Chapter IX

### POTENTIAL PARK SITES INVENTORY

#### INTRODUCTION

As indicated in Chapter VI, certain outdoor recreation activities are intrinsically dependent upon the natural resource base for their very conduct, as in the case of nature study, while others are heavily dependent on natural resource amenities to enhance the quality of the recreational experience, as in the case of picnicking. To some extent, sites needed to meet the demand for such recreational activities can be created through earth moving, water impounding, and planting activity. Usually, however, it is far more economical to satisfy the demand for outdoor recreation activities by developing parks at sites where appropriate natural resource amenities already exist. This approach requires long range planning, including the identification of suitable potential park sites at which the demand for resource-oriented recreational activities can be met and the preservation of such sites for park purposes.

Recognizing the need to preserve high value resource areas to meet the recreational demand of the existing and future population in the Region, the Commission in 1963 undertook a major work effort involving the identification and description of the best remaining potential park sites in southeastern Wisconsin. Fourteen broad recreational resource areas and 606 specific potential park sites were identified within the Region as part of this inventory. In 1968, as part of the Commission's continuing land use-transportation study, an additional 58 sites were added, bringing the total number of potential park sites in the Region at that time to 664. In 1975, as part of the regional park and open space planning program, 121 sites were added to the inventory bringing the total number of potential park sites identified to 785. In addition, the regional park and open space planning program included a reexamination of potential park sites identified in the 1963 and 1968 inventories to identify the changes in land use within and adjacent to each site which may have occurred during the intervening time.

This chapter, then summarizes the findings of the 1963 potential park sites inventory and subsequent revisions of the inventory as well as the findings of the potential park sites reevaluation conducted under the regional park planning program. In addition, this chapter presents a description of those areas in the Region which may be particularly suited to trail-oriented outdoor recreation activities. The first section of this chapter presents a brief description of the inventory and reevaluation methodology. The second section consists of a summary of land use changes that have occurred within and adjacent to the potential park sites of the Region between 1963 and 1975. The third section presents a description of the potential park sites remaining in the Region in 1975,

including a summary of the development possibilities of the remaining potential park sites in terms of various resource-oriented outdoor recreational activities. The final section of this chapter presents both a discussion of the suitability of primary environmental corridors for trail-oriented outdoor recreation activities and an inventory of existing utility and railroad rights-of-way which have potential for use as recreation trails.

#### METHODOLOGY

The procedures utilized in the potential park sites inventory have been described in detail in previous Commission publications and, accordingly, only a brief summary of the inventory methodology is presented here.<sup>1</sup> The first inventory phase consisted of an attempt to identify and delineate all remaining potential park sites within the Region that are related to natural resource base amenities. This was accomplished through personal interviews with park officials and citizen interest groups so that the inventory, in effect, consisted of a collation of all sites considered to have potential for recreational use by local officials and interest groups.

The second inventory phase consisted of a field inspection of the identified potential park sites, with pertinent data about each site being recorded on an inventory form, a copy of which is presented in Appendix K. Included on this form is an identification of major resource-oriented recreational activities for which the site may be particularly suited. In addition, value ratings were determined for each site after analysis of the available physical planning data for its potential park use. No consideration was given in the value rating to site cost, ownership, or specific demand for park facilities in any particular area of the Region.

Sites rated as high value are those areas which possess the most favorable developmental potential for the type of development recommended, and for which the inventory results revealed no serious development limitations. Sites rated as medium value possess certain minor development limitations, as revealed by the inventory. Such sites may take on added value as the demand for park sites within the Region increases. Sites rated as low value possess some major development limitations and, therefore, have relatively poor potential for development as park sites without major modification.

---

<sup>1</sup>See "Inventory of Potential Park and Related Open Space Sites," SEWRPC *Technical Record*, Volume 1, No. 4, and SEWRPC *Technical Report No. 1, Potential Parks and Related Open Spaces*.



The potential park sites reevaluation undertaken as part of the regional park and open space study involved the examination of potential park sites identified in the 1963 potential parks inventory and 1968 inventory update, utilizing 1975 aerial photos at a scale of 1"=400' as source material. The aerial photographs were examined to monitor changes in land use which have occurred within and adjacent to each site since the 1963 and 1968 inventories. The purpose of the potential park reevaluation was twofold: 1) to identify those potential park sites which either in part or total had actually been committed to recreation or open space use from 1963 to 1975; and 2) to identify those potential park sites which either in part or in whole had been lost to urban encroachment during the same period.

The potential park sites reevaluation included the delineation and measurement of those portions of each original potential park site which were actually converted to urban use as well as those portions which, although unchanged in use, were effectively lost for future park purposes because of adjacent developmental changes. Figure 65 provides an illustration of the manner in which both actual and additional effective site losses to urban development would typically occur along with the coding procedure utilized. The potential park sites reevaluation also included the identification and measurement of those portions of each original potential park site which were actually committed to recreation or open space use through acquisition or development by the public and nonpublic sectors. In certain situations, the acquisition or development for recreation use of one portion of a potential park site had the effect of isolating another portion of the site which, although unchanged in use, could not by itself be considered a viable potential park. Such isolated areas were deleted from the inventory of remaining potential parks. It should be recognized, however, that the existing recreational development could be extended into such an area at some future time, thereby realizing its recreational potential.

Several qualifications are necessary for a complete understanding of the scope and implications of the potential park sites inventory. First, it should be recognized that the primary purpose of the potential park sites inventory was the identification of the best remaining areas which had potential for acquisition and use as public parks to satisfy existing and future demand for resource-oriented recreation activities. In addition to meeting recreation demand, the development for park purposes of any of the identified potential park sites would also act to preserve and enhance the natural resource base. It should, nevertheless, be understood that the overriding concern in the potential parks inventory was the suitability of each site as a location for resource-oriented recreational activities rather than its value in terms of resource conservation.

Second, the identification of potential park sites was intended to assist the federal, state, and local units and agencies of government in the preparation, adoption, and implementation of park land acquisition and development plans and programs. The identification also was

intended to assist in the preservation of the potential park sites until the best use of each site could be determined within the framework of local planning programs. It was not proposed that all 785 potential sites, which have a combined area of over 140,000 acres, be converted to park use. Although the level of park land development required to meet the existing and future outdoor recreation demand in the Region had not been determined in 1963 or 1968, it was apparent that only a relatively small percentage of the identified potential park sites would be needed for public parks. It should be noted, however, that while all potential park sites may not be required as public recreation areas, such sites must also serve as a reservoir for future private recreation development within the Region and, therefore, indiscriminate urban encroachment into these sites should be discouraged until the proper use of the sites can be determined on the basis of more detailed local planning.

Third, because a regional park planning program cannot reasonably undertake site-specific planning for small parks—in particular, Type IV parks, or parks less than 25 acres in area—resource areas less than 25 acres in size were excluded from consideration as potential park sites. The fact that most resource-oriented recreational activities, including golf, camping, and hiking, require a relatively large amount of space also justifies this minimum size limitation. The 1963 potential parks inventory and the 1968 inventory update did, in fact, identify some potential park sites which had an area of less than 25 acres. As indicated in Table 78, 34 sites contained less than 25 acres at the time of their identification in the 1963 potential parks inventory or 1968 inventory update. For reasons cited above, these were excluded from consideration in this chapter. Of this total, 24 sites were initially rated low value, seven were rated medium value, and three were rated high value. The total area contained in these 34 sites was 554 acres, or 0.4 percent of the combined area of all potential park sites identified in the 1963 potential parks inventory or subsequent inventory updates.

#### POTENTIAL PARK SITES REEVALUATION

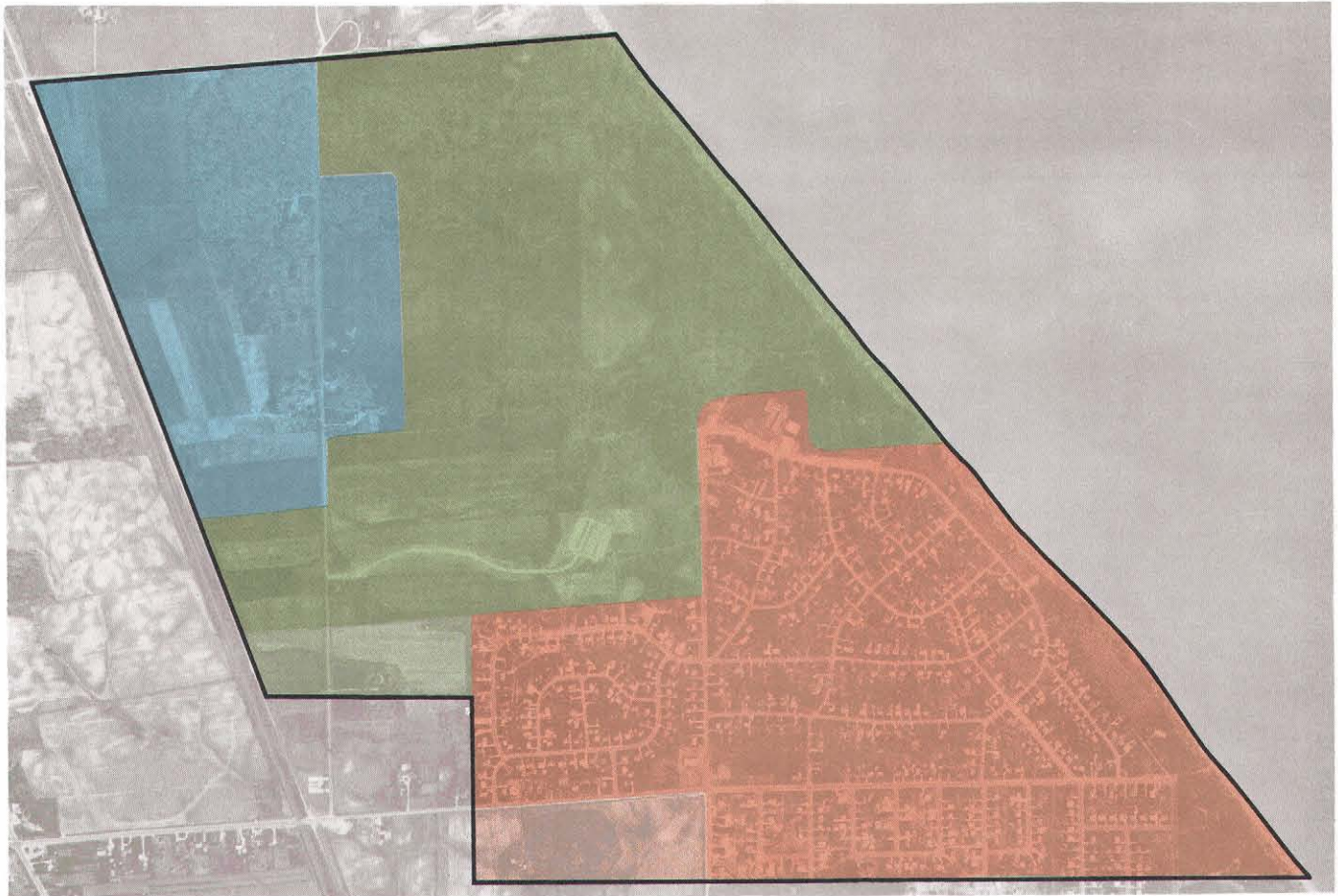
A total of 751 potential park sites, each having an area of 25 acres or greater, were identified as part of the 1963 potential parks inventory or 1968 and 1975 inventory updates (see Table 79 and Map 72). The total area within these potential park sites was 140,000 acres. Between 1963 and 1975, many potential park sites were committed in part or in whole to recreation or open space use through acquisition or development by the public and private sectors. Thus, as of April 1975, 30 potential park sites were committed in their entirety and an additional 158 potential park sites<sup>2</sup> were partially committed to recreation and open space use. A total of

---

<sup>2</sup>It should be noted that 80 of these 158 sites also experienced partial conversion to urban use between 1963 and 1975 and, furthermore, that 18 of these 80 sites were committed in their entirety to recreation or open space use and to urban development.

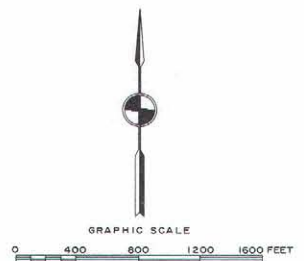
Figure 65

## REEVALUATION OF A SAMPLE 1963 POTENTIAL PARK SITE IN THE REGION: 1975



## LEGEND

- ORIGINAL POTENTIAL PARK SITE  
DELINEATION: 1963
- ACREAGE CONVERTED TO URBAN  
USE BETWEEN 1963 AND 1975
- ADDITIONAL EFFECTIVE ACREAGE  
LOSS DUE TO ACREAGE CONVERTED  
TO URBAN USE BETWEEN 1963  
AND 1975
- ACREAGE CONVERTED TO OUTDOOR  
RECREATION USE BETWEEN 1963  
AND 1975
- ADDITIONAL EFFECTIVE ACREAGE  
LOSS DUE TO ACREAGE CONVERTED  
TO OUTDOOR RECREATION USE  
BETWEEN 1963 AND 1975
- REMAINING POTENTIAL PARK SITE:  
1975



The potential park site reevaluation undertaken as part of the regional park and open space study involved the examination of 1975, 1" = 400' aerial photographs to determine changes in land use which occurred within or adjacent to the potential park sites identified in the Commission's 1963 potential parks inventory and in their 1968 potential parks inventory update. An evaluation was made to identify those potential park sites which either in part or total, have actually been committed to recreation or open space use or which have been lost to urban encroachment during the 1963-1975 time period. The above 1963 potential park site located in the Town of Caledonia encompassed an area of approximately 650 acres. Between 1963 and 1975 about 250 acres of this site were converted to urban use through the development of a residential subdivision. An additional 30 acres, although unchanged in use, were deleted from the potential park site as a result of the placement of the subdivision, which effectively isolated a southern

portion of the original potential park site to the extent that the remnant parcel no longer constituted a viable potential park site. About 250 acres of the potential park site were actually converted to an outdoor recreation site between 1963 and 1975. An additional 20 acres were deleted from the original potential park site, although unchanged in use, as a result of recreational development which effectively isolated a southeastern portion of the original potential park site. Thus, of the 650 acres contained within the original 1963 potential park site boundary, approximately 550 acres were deleted from the potential park site as a result of actual or effective acreage lost to urban development or outdoor recreation between 1963 and 1975. Approximately 100 acres of the original 650 acre site remains and constitutes a viable potential park site in 1975.

Source: SEWRPC.

Table 78

**SIZE OF ORIGINAL POTENTIAL PARK SITES IDENTIFIED UNDER THE POTENTIAL PARK SITES INVENTORY  
AND INVENTORY UPDATES IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY**

County	Site Value	Original Sites Identified Under Potential Park Inventory or Inventory Updates								
		Less than 25 Acres			25 Acres or More			Total		
		Number	Area		Number	Area		Number	Area	
			Acres	Percent		Acres	Percent		Acres	Percent
Kenosha	High	0	0	0.0	14	2,630	100.0	14	2,630	100.0
	Medium	1	16	0.5	25	3,249	99.5	26	3,265	100.0
	Low	1	15	0.4	29	4,042	99.6	30	4,057	100.0
	Total	2	31	0.3	68	9,921	99.7	70	9,952	100.0
Milwaukee	High	0	0	0.0	13	2,832	100.0	13	2,832	100.0
	Medium	0	0	0.0	13	1,720	100.0	13	1,720	100.0
	Low	0	0	0.0	7	572	100.0	7	572	100.0
	Total	0	0	0.0	33	5,124	100.0	33	5,124	100.0
Ozaukee	High	0	0	0.0	27	5,023	100.0	27	5,023	100.0
	Medium	0	0	0.0	18	3,688	100.0	18	3,688	100.0
	Low	3	43	2.0	22	2,060	98.0	25	2,103	100.0
	Total	3	43	0.4	67	10,771	99.6	70	10,814	100.0
Racine	High	2	34	0.5	31	6,593	99.5	33	6,627	100.0
	Medium	3	30	0.5	40	6,346	99.5	43	6,376	100.0
	Low	1	13	0.4	35	3,206	99.6	36	3,219	100.0
	Total	6	77	0.5	106	16,145	99.5	112	16,222	100.0
Walworth	High	0	0	0.0	61	19,470	100.0	61	19,470	100.0
	Medium	1	24	0.3	57	8,211	99.7	58	8,235	100.0
	Low	14	269	3.9	67	6,586	96.1	81	6,855	100.0
	Total	15	293	0.8	185	34,267	99.2	200	34,560	100.0
Washington	High	1	12	0.1	39	11,178	99.9	40	11,190	100.0
	Medium	1	21	0.5	26	4,163	99.5	27	4,184	100.0
	Low	4	33	0.7	32	4,984	99.3	36	5,017	100.0
	Total	6	66	0.3	97	20,325	99.7	103	20,391	100.0
Waukesha	High	0	0	0.0	62	16,877	100.0	62	16,877	100.0
	Medium	1	22	0.1	73	16,344	99.9	74	16,366	100.0
	Low	1	22	0.2	60	10,333	99.8	61	10,355	100.0
	Total	2	44	0.1	195	43,554	99.9	197	43,598	100.0
Region	High	3	46	0.1	247	64,603	99.9	250	64,649	100.0
	Medium	7	113	0.3	252	43,721	99.7	259	43,834	100.0
	Low	24	395	1.2	252	31,783	98.8	276	32,178	100.0
	Total	34	554	0.4	751	140,107	99.6	785	140,661	100.0

Source: SEWRPC.

Table 79

## POTENTIAL PARK SITES REEVALUATION IN THE REGION BY COUNTY: 1963-1975

County	Site Value	Original Sites		Sites Committed to Recreation and Open Space Use Only				Sites Converted to Urban Development Only				Sites Committed in Part to Recreation or Open Space Use and Converted in Part to Urban Development								Total Acres Actually Committed to Recreation and Open Space Use	Total Additional Acres Deleted From Inventory Due to Recreation and Open Space	Total Acres Actually Converted to Urban Development	Total Additional Effective Loss Due to Urban Development (acres)	Site Value Changes				Remaining Sites		
				Number of Sites			Additional Acres Deleted From Inventory Committed to Recreation and Open Space Use	Number of Sites			Acres Actually Converted to Urban Development	Number of Sites			Acres Actually Committed to Recreation and Open Space	Additional Acres Deleted From Inventory Due to Recreation and Open Space	Acres Actually Converted to Urban Development	Additional Effective Loss Due to Urban Development (acres)												
		Partially Committed	Entirely Committed	Total	Partially Converted	Entirely Converted		Total	Partially Converted	Entirely Converted		Total	Partially Committed	Entirely Committed					Total					Partially Converted	Entirely Converted	Total	Number	Acres	Number	Acres
		Number	Acres																						Loss	Gain	Number	Acres		
Kenosha	High	14	2,630	0	3	3	528	202	1	0	1	17	0	0	1	4	0	78	128	532	202	95	128	1	30	0	0	9	1,643	
	Medium	25	3,249	3	0	3	114	0	3	0	3	47	0	4	0	4	216	15	68	10	332	15	115	10	0	1	30	2,807		
	Low	29	4,042	3	1	4	542	79	8	1	9	187	19	1	1	2	80	3	91	12	622	82	278	31	0	0	0	26	3,029	
	Total	68	9,921	6	4	10	1,184	281	12	1	13	251	19	5	2	7	302	18	237	150	1,486	299	488	169	--	--	--	61	7,479	
Milwaukee	High	13	2,832	3	2	5	838	123	3	0	3	62	2	2	1	3	430	0	28	10	1,268	123	90	12	3	426	0	0	7	913
	Medium	13	1,720	1	0	1	50	7	3	1	4	187	42	2	3	5	271	13	81	12	321	20	268	54	2	174	2	395	9	1,278
	Low	7	572	1	1	2	77	15	0	0	0	0	0	1	1	2	165	7	49	2	242	22	49	2	0	0	3	205	8	462
	Total	33	5,124	5	3	8	965	145	6	1	7	249	44	5	5	10	866	20	158	24	1,831	165	407	68	--	--	--	--	24	2,853
Ozaukee	High	27	5,023	6	2	8	475	14	7	0	7	83	14	2	0	2	73	5	16	8	548	19	99	22	0	0	0	0	25	4,335
	Medium	18	3,688	1	0	1	169	2	5	0	5	78	78	41	1	0	1	8	17	63	0	177	19	141	41	0	0	0	18	3,310
	Low	22	2,060	2	0	2	104	5	3	1	4	80	46	0	0	0	0	0	0	0	104	5	80	45	0	0	0	0	21	1,826
	Total	67	10,771	9	2	11	748	21	15	1	16	241	100	3	0	3	81	22	79	8	829	43	320	108	--	--	--	--	64	9,471
Racine	High	31	6,593	3	3	6	516	90	8	1	9	171	33	5	1	6	336	90	120	17	852	180	291	50	1	110	0	0	25	5,110
	Medium	40	6,346	5	3	8	270	41	10	2	12	151	57	4	2	6	264	138	207	91	534	179	358	148	3	119	0	0	30	5,008
	Low	35	3,206	2	1	3	92	1	7	3	10	161	86	1	1	2	10	30	18	4	102	31	179	90	0	0	4	229	34	3,033
	Total	106	16,145	10	7	17	878	132	25	6	31	483	176	10	4	14	610	258	345	112	1,488	390	828	288	--	--	--	--	89	13,151
Walworth	High	57	19,470	14	4	18	1,447	391	13	0	13	255	237	11	1	12	577	52	372	25	2,024	443	627	262	2	198	0	0	54	15,816
	Medium	57	8,211	4	4	8	461	119	9	0	9	79	15	1	1	2	109	1	49	14	570	120	128	29	0	0	2	198	54	7,562
	Low	67	6,586	4	3	7	447	178	11	1	12	142	86	3	1	4	358	55	279	64	806	233	421	150	0	0	0	62	4,977	
	Total	185	34,267	22	11	33	2,355	688	33	1	34	476	338	15	3	18	1,044	108	700	103	3,399	796	1,176	441	--	--	--	--	170	28,455
Washington	High	39	11,178	8	0	8	452	40	8	1	9	153	62	5	0	5	1,017	73	93	16	1,469	113	246	78	1	740	0	0	37	8,532
	Medium	26	4,163	5	0	5	461	26	4	0	4	26	10	0	0	0	0	0	0	0	461	26	26	10	0	0	0	0	26	3,640
	Low	32	4,984	3	0	3	108	11	6	1	7	55	39	2	1	3	75	0	82	27	183	11	137	66	0	0	1	740	31	5,327
	Total	97	20,325	16	0	16	1,021	77	18	2	20	234	111	7	1	8	1,092	73	175	43	2,113	150	409	154	--	--	--	--	194	17,499
Waukesha	High	62	16,877	5	2	7	704	57	20	0	20	645	172	9	1	10	327	17	606	180	1,031	74	1,251	352	5	617	0	0	54	13,552
	Medium	73	16,344	3	1	4	207	84	24	1	25	968	313	3	2	5	190	22	201	37	397	106	1,169	350	3	194	5	617	71	14,745
	Low	60	10,333	2	0	2	81	0	16	8	24	835	217	5	0	5	183	30	104	10	264	30	939	227	0	0	3	94	55	9,067
	Total	195	43,554	10	3	13	992	141	60	9	69	2,448	702	17	3	20	700	69	911	227	1,692	210	3,359	929	--	--	--	--	180	37,364
Region Total	High	247	64,603	39	16	55	4,960	917	60	2	62	1,386	520	34	5	39	2,764	237	1,313	384	7,724	1,154	2,689	904	13	2,121	0	0	211	50,001
	Medium	252	43,721	22	8	30	1,732	279	58	4	62	1,536	478	15	8	23	1,060	206	669	10	2,792	485	2,205	642	8	487	10	1,240	234	38,350
	Low	252	31,763	17	6	23	1,451	289	51	15	66	1,460	492	13	5	18	871	125	623	119	2,322	414	2,083	611	0	11	1,368	237	27,721	
	Total	751	140,107	78	30	108	8,143	1,485	169	21	190	4,382	1,490	62	18	80	4,695	568	2,605	667	12,838	2,053	6,987	2,157	--	--	--	--	682	116,072

Source: SEWRPC.



Map 72

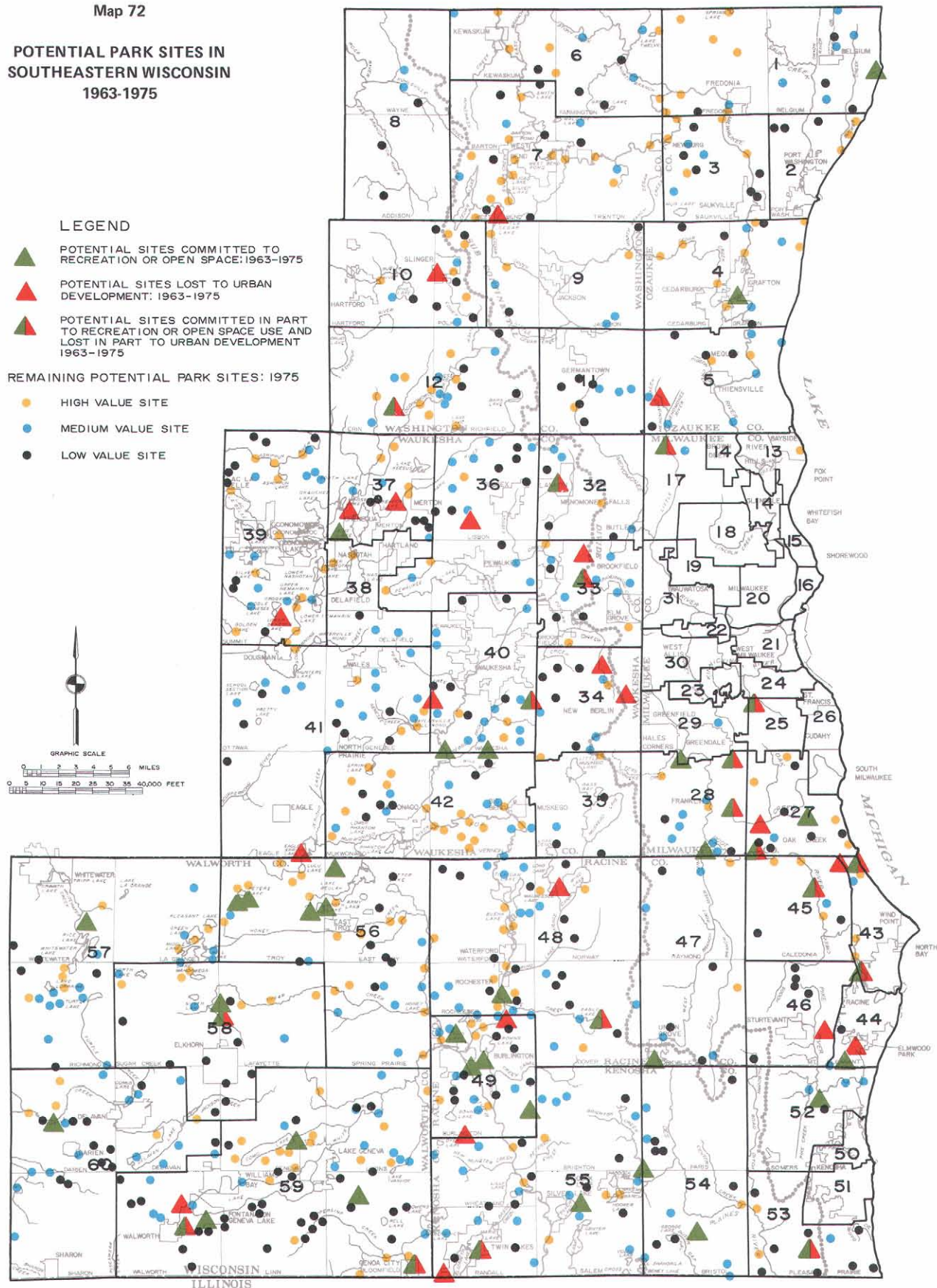
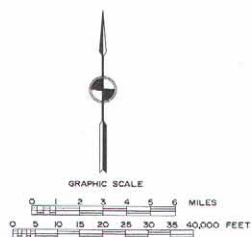
# POTENTIAL PARK SITES IN SOUTHEASTERN WISCONSIN 1963-1975

## LEGEND

-  POTENTIAL SITES COMMITTED TO RECREATION OR OPEN SPACE: 1963-1975
-  POTENTIAL SITES LOST TO URBAN DEVELOPMENT: 1963-1975
-  POTENTIAL SITES COMMITTED IN PART TO RECREATION OR OPEN SPACE USE AND LOST IN PART TO URBAN DEVELOPMENT 1963-1975

## REMAINING POTENTIAL PARK SITES: 1975

-  HIGH VALUE SITE
-  MEDIUM VALUE SITE
-  LOW VALUE SITE



In 1975 there remained a total of 682 potential park sites totaling over 116,000 acres. Of the remaining sites, 211 were identified as possessing high value recreation resources, 234 possessed medium value recreation resources, and 237 possessed low value recreation resources. Almost 90 percent of the 211 high value sites were located in the primary environmental corridors of the Region.

Source: SEWRPC.

12,838 acres, or 9.2 percent of the original potential park site acreage, were actually committed to recreation and open space use through public or nonpublic acquisition or development. It should be noted that 2,053 acres, or 1.5 percent of the original potential park acreage, were deleted from the inventory of remaining potential park sites as a result of such activity. A more detailed description of the acquisition and development of potential park sites for recreation and open space use between 1963 and 1975 is presented in a later part of this section.

Conversely, between 1963 and 1975, 21 of the original 751 potential sites in the Region were lost in their entirety to urban development. Furthermore, portions of 249 other potential park sites were lost to urban use.<sup>3</sup> A total of 6,987 acres, or 5.0 percent of the original potential park site acreage, were actually converted to urban use between 1963 and 1975 while an additional 2,157 acres, or 1.5 percent of the original potential park site acreage, were effectively lost as a result of this urban encroachment. A more detailed description of urban encroachment into potential park sites in southeastern Wisconsin between 1963 and 1975 is presented below.

It should also be noted that, because of developmental changes occurring within or adjacent to potential park sites between 1963 and 1975, several high and medium value sites were lowered in recreational value, resulting in a loss of 13 high value sites, and a net gain of two medium value sites and 11 low value sites. These site value changes resulted in a loss of 2,121 acres of high value sites and a net gain of 773 acres of medium value sites and 1,368 acres of low value sites (see Table 79).

#### Potential Park Sites Committed to Recreation and Open Space Use

As previously indicated, 12,838 acres of potential park sites were committed to recreation and open space use between 1963 and 1975 through acquisition or development by the public and nonpublic sectors. It is significant that much of this acquisition and development activity occurred within high value potential park sites. Thus, of the total area committed to recreation and open space use, 7,724 acres were in high value sites, 2,792 acres were in medium value sites, and 2,322 acres were in low value sites (see Table 80). Sixteen high value potential park sites were committed in their entirety to recreation and open space use while another 78 high value sites were partially committed to such uses. Eight medium value sites and six low value sites also were committed in their entirety to recreation and open space use while an additional 45 medium value sites and 35 low value sites were partially developed or acquired for recreation or open space use.

---

<sup>3</sup>Significantly, 80 of these 249 sites were also committed in part to recreation and open space use between 1963 and 1975, and 18 of these sites were committed in their entirety to recreation or open space use and to urban development.

Of the 12,838 acres of potential park sites committed to recreation and open space use between 1963 and 1975, 7,736 acres, or 60 percent, were developed or acquired by the State or by local units of government in the Region, and the remainder were developed or acquired by the nonpublic sector. The total potential park site acreage committed to recreation or open space use by the public sector between 1963 and 1975 was distributed by site value as follows: 5,278 acres, or 68 percent, within high value sites; 1,576 acres, or 20 percent, within medium value sites; and 882 acres, or 12 percent, within low value sites. A total of 20 potential park sites, including 11 high value sites, were committed in their entirety to recreation and open space use through public development or acquisition. An additional 80 potential park sites,<sup>4</sup> including 44 high value sites, were partially committed to public recreation and open space use.

Importantly, of the eight potential park sites considered in 1963 to be of statewide significance, six were recommended for acquisition as regional park sites in the adopted regional land use plan. As of 1973, all or parts of four of these sites, namely, Harrington Beach in Ozaukee County, Pike Lake in Washington County, Monches in Waukesha County, and Cliffside in Racine County, had been acquired for public use. No action has yet been taken on the proposed Paradise Valley site in Washington County or the Sugar Creek site in Walworth County.

Further analysis of the data presented in Table 80 indicates that 5,102 acres of potential park sites were committed to recreation use between 1963 and 1975 by the nonpublic sector, including civic, charitable, or religious organizations, commercial enterprises, and private interest groups. About 2,446 acres, or 48 percent of this total, were located within high value sites. Nine potential park sites including four high value sites, were committed in their entirety to recreation use by the nonpublic sector. Another 88 potential park sites<sup>5</sup> were partially developed for recreation uses by the nonpublic sector, with 41 of these sites being of high value. Such nonpublic recreational development serves to meet a portion of the existing demand for resource-oriented recreational activities and, to some extent, enhances the underlying natural resource base. It should be recognized, however, that the nonpublic development of potential park sites for recreation purposes does not assure their permanent preservation for recreational use and that such sites may be redeveloped for urban uses in the future.

There was considerable variation among the seven counties on the amount of acquisition and development of

---

<sup>4</sup>Nine of these 80 sites also were partially developed for recreational purposes by the nonpublic sector and one of these nine sites was committed in its entirety to public and nonpublic recreation uses.

<sup>5</sup>Nine of these 88 sites were also partially developed or acquired by the public sector and one of these nine sites was committed in its entirety to public and nonpublic recreation uses.

Table 80

## POTENTIAL PARK SITES COMMITTED TO RECREATION AND OPEN SPACE USE IN THE REGION BY COUNTY: 1963-1975

County	Site Value	Original Sites		Sites Committed to Public Recreation and Open Space Use Only				Sites Committed to Nonpublic Recreation and Open Space Use Only				Sites Committed to Both Public and Nonpublic Recreation and Open Space Use					Total Site Commitments to Recreation and Open Space Use					
				Number of Sites			Acres Committed to Public Use	Number of Sites			Acres Committed to Nonpublic Use	Number of Sites			Acres Committed to Public Use	Acres Committed to Nonpublic Use	Number of Sites			Area Committed to Recreation and Open Space Use		
		Number	Acres	Partially Committed	Entirely Committed	Total		Partially Committed	Entirely Committed	Total		Partially Committed	Entirely Committed	Total			Partially Committed	Entirely Committed	Total	Public (acres)	Nonpublic (acres)	Total (acres)
Kenosha	High	14	2,630	0	3	3	528	1	0	1	4	0	0	0	0	0	1	3	4	528	4	532
	Medium	25	3,249	3	0	3	215	4	0	4	117	0	0	0	0	0	7	0	7	215	117	332
	Low	29	4,042	1	1	2	102	3	0	3	443	1	0	1	50	27	5	1	6	152	470	622
	Total	68	9,921	4	4	8	845	8	0	8	564	1	0	1	50	27	13	4	17	895	591	1,486
Milwaukee	High	13	2,832	5	2	7	1,205	1	0	1	63	0	0	0	0	0	6	2	8	1,205	63	1,268
	Medium	13	1,720	5	0	5	278	1	0	1	43	0	0	0	0	0	6	0	6	278	43	321
	Low	7	572	3	1	4	242	0	0	0	0	0	0	0	0	0	3	1	4	242	0	242
	Total	33	5,124	13	3	16	1,725	2	0	2	106	0	0	0	0	0	15	3	18	1,725	106	1,831
Ozaukee	High	27	5,023	2	1	3	309	6	0	6	205	0	1	1	29	5	8	2	10	338	210	548
	Medium	18	3,688	0	0	0	0	2	0	2	177	0	0	0	0	0	2	0	2	0	177	177
	Low	22	2,060	0	0	0	0	2	0	2	104	0	0	0	0	0	2	0	2	0	104	104
	Total	67	10,771	2	1	3	309	10	0	10	486	0	1	1	29	5	12	2	14	338	491	829
Racine	High	31	6,593	7	2	9	692	1	1	2	87	1	0	1	51	22	9	3	12	743	109	852
	Medium	40	6,346	5	3	8	374	6	0	6	160	0	0	0	0	0	11	3	14	374	160	534
	Low	35	3,206	2	1	3	84	2	0	2	18	0	0	0	0	0	4	1	5	84	18	102
	Total	106	16,145	14	6	20	1,150	9	1	10	265	1	0	1	51	22	24	7	31	1,201	287	1,488
Walworth	High	61	19,470	10	1	11	619	14	3	17	1,104	2	0	2	4	297	26	4	30	623	1,401	2,024
	Medium	57	8,211	0	2	2	119	6	2	8	451	0	0	0	0	0	6	4	10	119	451	570
	Low	67	6,586	4	1	5	340	3	2	5	208	1	0	1	1	256	8	3	11	341	464	805
	Total	185	34,267	14	4	18	1,078	23	7	30	1,763	3	0	3	5	553	40	11	51	1,083	2,316	3,399
Washington	High	39	11,178	5	0	5	803	6	0	6	306	2	0	2	123	237	13	0	13	926	543	1,469
	Medium	26	4,163	2	0	2	377	3	0	3	84	0	0	0	0	0	5	0	5	377	84	461
	Low	32	4,984	1	0	1	24	5	0	5	159	0	0	0	0	0	6	0	6	24	159	183
	Total	97	20,325	8	0	8	1,204	14	0	14	549	2	0	2	123	237	24	0	24	1,327	786	2,113
Waukesha	High	62	16,877	9	2	11	915	6	0	6	116	0	0	0	0	0	15	2	17	915	116	1,031
	Medium	73	16,344	6	0	6	213	2	1	3	184	0	0	0	0	0	8	1	9	213	184	397
	Low	60	10,333	1	0	1	24	5	0	5	215	1	0	1	15	10	7	0	7	39	225	264
	Total	195	43,554	16	2	18	1,152	13	1	14	515	1	0	1	15	10	30	3	33	1,167	525	1,692
Region Total	High	247	64,603	38	11	49	5,071	35	4	39	1,885	5	1	6	207	561	78	16	94	5,278	2,446	7,724
	Medium	252	43,721	21	5	26	1,576	24	3	27	1,216	0	0	0	0	0	45	8	53	1,576	1,216	2,792
	Low	252	31,783	12	4	16	816	20	2	22	1,147	3	0	3	66	293	35	6	41	882	1,440	2,322
	Total	751	140,107	71	20	91	7,463	79	9	88	4,248	8	1	9	273	854	158	30	188	7,736	5,102	12,838

Source: SEWRPC.

potential park sites for recreation and open space use between 1963 and 1975. Thus, among the seven counties, the potential park site acreage committed to recreation and open space use by both the public and nonpublic sectors ranged from the low of 829 acres in Ozaukee County to a high of 3,399 acres in Walworth County. A large share of all private recreational development within potential park sites, 2,316 of the 5,102 acres, occurred in Walworth County. In contrast, only 106 acres of potential park sites were developed for recreation uses by the nonpublic sector in Milwaukee County between 1963 and 1975. It should be noted, however, that more than 1,700 acres of potential park sites were committed to public recreation or open space uses in Milwaukee County during this period, the highest figure among the seven counties. The substantial public commitment of potential park sites to recreation and open space use in Milwaukee County is especially significant in view of the high demand for resource-oriented recreation activities generated by a population of over one million people and the small number of potential park areas remaining within the County.

#### Urban Encroachment Within Potential Park Sites

Potential park sites which are free from serious development limitations may provide a highly desirable aesthetic attraction for residential development and other forms of urban land use. In this regard, 9,144 acres of potential park sites, or 6.5 percent of the original potential park site acreage, were lost to urban development between 1963 and 1975 with 6,987 acres of potential park sites actually converted to urban use and an additional 2,157 acres effectively lost as viable potential park areas as a result of such development (see Table 81). Twenty-one potential park sites were lost in their entirety as a result of urban encroachment and an additional 249 potential park sites were partially converted to urban use.

Only two high value potential park sites, totaling 90 acres, were lost in their entirety to urban development between 1963 and 1975. Portions of 99 other high value potential park sites, however, were converted to urban use, resulting in a loss of an additional 3,513 acres. A total of 3,603 acres of high value potential park sites, then, were lost as a result of urban encroachment between 1963 and 1975, representing 5.6 percent of the original high value potential park site acreage. About 2,800 acres of medium value potential park sites, representing 6.5 percent of the original medium value potential park site acreage, were lost to urban encroachment between 1963 and 1975. Almost 2,700 acres of low value potential park sites, representing 8.5 percent of the original low value potential park site acreage, also were lost as a result of urban development during this time.

Among the seven counties, the level of urban encroachment within potential park sites was highest in Waukesha County, where 4,288 acres of potential park sites, representing almost 10 percent of the potential park site acreage within the County, were lost as a result of urban development. Further analysis of the data set forth in Table 81 indicates that Waukesha County accounted for almost one-half of all of the loss of poten-

tial park sites to urban encroachment within the Region between 1963 and 1975. The least amount of urban encroachment within potential park sites occurred in Ozaukee County, where 428 acres of potential park area, including 121 acres of high value sites, were lost due to urban development.

#### REMAINING POTENTIAL PARK SITES

Despite a considerable decrease in the number of potential park sites in southeastern Wisconsin as a result of urban encroachment since 1963, there remained 682 potential park sites, each with an area 25 acres or greater, totaling about 116,000 acres in the Region in 1975 (see Table 82). Of these 682 potential park sites, 211 were high value sites having a combined area of 50,001 acres, or 43 percent of the remaining potential park area in the Region. There were 234 medium value potential park sites and 237 low value potential park sites in the Region in 1975, totaling 38,350 acres and 27,721 acres, respectively.

As further indicated in Table 82, 180 potential park sites totaling about 37,400 acres, or 32 percent of the remaining potential park site acreage in southeastern Wisconsin, were located in Waukesha County. Walworth County and Waukesha County each accounted for 54 of the remaining 211 high value potential park sites in the Region, with the remaining high value potential park area in these Counties totaling 15,900 acres and 13,600 acres, respectively. Conversely, Milwaukee County contained only 24 potential park sites in 1975, of which only seven were high value. The remaining potential park area in Milwaukee County, 2,653 acres, represents only 2 percent of the regional total.

Referring again to Map 72, it is apparent that there are few remaining potential park sites located within the three urbanized areas of the Region. In this regard, there are no remaining potential park sites in planning analysis areas 50 and 51, which include most of the City of Kenosha, and only six potential park sites left in planning analysis areas 43 and 44, which include virtually all the City of Racine. There is one remaining potential park site in the City of Milwaukee, a medium value site in planning analysis area 17. All but two of the remaining 24 potential park sites in Milwaukee County are located in the southern portion of the County, in the Cities of Franklin, Greenfield, and Oak Creek. Summary data concerning the remaining potential park sites in southeastern Wisconsin is presented on a planning analysis area basis in Appendix L.

#### Development Possibilities

During the field inspection phase of the potential park sites inventory, a determination was made on the development potential of each site for resource-oriented outdoor recreation activities including picnicking, swimming, nature study, camping, hiking, and golf. Each of these activities relies on a combination of natural resource amenities to facilitate a high quality recreational experience. The determination of specific development possibilities was based upon the surveyor's analysis of the type and quality of natural resource amenities at



Table 81

## URBAN ENCROACHMENT ON POTENTIAL PARK SITES IN THE REGION BY COUNTY: 1963-1975

County	Site Value	Original Sites		Number of Sites	Actual Change to Urban Development (acres)	Additional Effective Loss Due to Urban Development (acres)	Site Loss to Urban Encroachment					
							Total Loss Due to Urban Development					
							Partial Site Loss		Entire Site Loss		Total Area Loss	
		Number	Acres				Number	Acres	Number	Acres	Acres	Percent of Original Area
Kenosha	High	14	2,630	2	95	128	2	223	0	0	223	8.5
	Medium	25	3,249	7	115	10	7	125	0	0	125	3.8
	Low	29	4,042	11	278	31	10	279	1	30	309	7.6
	Total	68	9,921	20	488	169	19	627	1	30	657	6.6
Milwaukee	High	13	2,832	6	90	12	6	102	0	0	102	3.6
	Medium	13	1,720	9	268	54	8	248	1	74	322	18.7
	Low	7	572	2	49	2	2	51	0	0	51	8.9
	Total	33	5,124	17	407	68	16	401	1	74	475	9.3
Ozaukee	High	27	5,023	9	99	22	9	121	0	0	121	2.4
	Medium	18	3,688	6	141	41	6	182	0	0	182	4.9
	Low	22	2,060	4	80	45	3	72	1	53	125	6.1
	Total	67	10,771	19	320	108	18	375	1	53	428	4.0
Racine	High	31	6,593	15	291	50	14	279	1	62	341	5.2
	Medium	40	6,346	18	358	148	16	409	2	97	506	8.0
	Low	35	3,206	12	179	90	9	155	3	114	269	8.4
	Total	106	16,145	45	828	288	39	843	6	273	1,116	6.9
Walworth	High	61	19,470	25	627	262	25	889	0	0	688	4.6
	Medium	57	8,211	11	128	29	11	157	0	0	157	1.9
	Low	67	6,586	16	421	150	15	493	1	78	571	8.7
	Total	185	34,267	52	1,176	441	51	1,539	1	78	1,617	4.7
Washington	High	39	11,178	14	246	78	13	296	1	28	324	2.9
	Medium	26	4,163	4	26	10	4	36	0	0	36	0.9
	Low	36	4,984	10	137	66	9	159	1	44	203	4.1
	Total	97	20,325	28	409	154	26	491	2	72	563	2.8
Waukesha	High	62	16,877	30	1,251	352	30	1,603	0	0	1,603	9.5
	Medium	73	16,344	30	1,169	350	29	1,481	1	38	1,519	9.3
	Low	60	10,333	29	939	227	21	542	8	624	1,166	11.3
	Total	195	43,554	89	3,359	929	80	3,626	9	662	4,288	9.8
Region Total	High	247	64,603	101	2,699	904	99	3,513	2	90	3,603	5.6
	Medium	252	43,721	85	2,205	642	81	2,638	4	209	2,847	6.5
	Low	252	31,783	84	2,083	611	69	1,751	15	943	2,694	8.5
	Total	751	140,107	270	6,987	2,157	249	7,902	21	1,242	9,144	6.5

Source: SEWRPC.

Table 82

## SPECIFIC DEVELOPMENT POSSIBILITIES AT REMAINING POTENTIAL PARK SITES IN THE REGION BY COUNTY: 1975

County	Site Value	Remaining Potential Park Sites			Remaining Potential Park Sites by Specific Development Possibility											
		Number	Area		Swimming		Picnicking		Nature Study		Campground		Hiking Trails		Golf	
			Acres	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region
Kenosha	High	9	1,643	1.4	1	1.3	9	1.5	5	1.0	--	--	2	0.5	3	2.7
	Medium	26	2,807	2.4	1	1.3	26	4.5	25	4.8	14	4.0	16	4.1	3	2.7
	Low	26	3,029	2.6	3	4.0	22	3.8	17	3.3	13	3.7	6	1.6	--	--
	Total	61	7,479	6.4	5	6.6	57	9.8	47	9.1	27	7.7	24	6.2	6	5.4
Milwaukee	High	7	913	0.8	1	1.3	7	1.2	5	1.0	--	--	4	1.0	3	2.7
	Medium	9	1,278	1.1	--	--	9	1.5	9	1.7	--	--	9	2.3	5	4.5
	Low	8	462	0.4	1	1.3	8	1.4	7	1.3	--	--	4	1.0	4	3.6
	Total	24	2,653	2.3	2	2.6	24	4.1	21	4.0	--	--	17	4.3	12	10.8
Ozaukee	High	25	4,335	3.7	9	11.9	25	4.3	25	4.8	18	5.1	21	5.4	1	0.9
	Medium	18	3,310	2.9	2	2.6	15	2.6	16	3.1	11	3.1	13	3.3	6	5.4
	Low	21	1,826	1.6	1	1.3	12	2.1	17	3.3	7	2.0	9	2.3	--	--
	Total	64	9,471	8.2	12	15.8	52	9.0	58	11.2	36	10.2	43	11.0	7	6.3
Racine	High	25	5,110	4.4	5	6.6	25	4.3	18	3.4	11	3.1	20	5.1	7	6.3
	Medium	30	5,008	4.3	1	1.3	27	4.6	24	4.6	15	4.2	23	5.9	4	3.6
	Low	34	3,033	2.6	2	2.6	23	4.0	22	4.2	15	4.2	18	4.6	4	3.6
	Total	89	13,151	11.3	8	10.5	75	12.9	64	12.2	41	11.5	61	15.6	15	13.5
Walworth	High	54	15,916	13.7	11	14.5	53	9.1	49	9.4	41	11.6	43	11.0	9	8.1
	Medium	54	7,562	6.5	2	2.6	52	9.0	38	7.3	36	10.2	25	6.4	11	9.9
	Low	62	4,977	4.3	1	1.3	34	5.8	20	3.8	13	3.7	9	2.3	1	0.9
	Total	170	28,455	24.5	14	18.4	139	23.9	107	20.5	90	25.5	77	19.7	21	18.9
Washington	High	37	8,532	7.4	11	14.5	34	5.9	37	7.1	25	7.1	30	7.7	6	5.4
	Medium	26	3,640	3.1	1	1.3	24	4.1	24	4.6	20	5.7	19	4.9	4	3.6
	Low	31	5,327	4.6	2	2.6	16	2.7	25	4.8	4	1.1	11	2.8	4	3.6
	Total	94	17,499	15.1	14	18.4	74	12.7	86	16.5	49	13.9	60	15.4	14	12.6
Waukesha	High	54	13,552	11.7	13	17.1	53	9.1	45	8.6	40	11.4	34	8.8	10	9.0
	Medium	71	14,745	12.7	7	9.3	66	11.4	63	12.0	52	14.7	51	13.1	15	13.6
	Low	55	9,067	7.8	1	1.3	41	7.1	32	6.1	18	5.1	23	5.9	11	9.9
	Total	180	37,364	32.2	21	27.7	160	27.6	140	26.7	110	31.2	108	27.8	36	32.5
Region Total	High	211	50,001	43.1	51	67.2	206	35.4	184	35.2	135	38.3	154	39.5	39	35.1
	Medium	234	38,350	33.0	14	18.4	219	37.7	199	38.0	148	41.9	156	40.0	48	43.3
	Low	237	27,721	23.9	11	14.4	156	26.9	140	26.8	70	19.8	80	20.5	24	21.6
	Total	682	116,072	100.0	76	100.0	581	100.0	523	100.0	353	100.0	390	100.0	111	100.0

Source: SEWRPC.

each site and the natural resource requirements of the respective activities. This section presents a summary of the potential park inventory findings concerning the specific development possibilities of the potential park sites remaining in the Region in 1975.

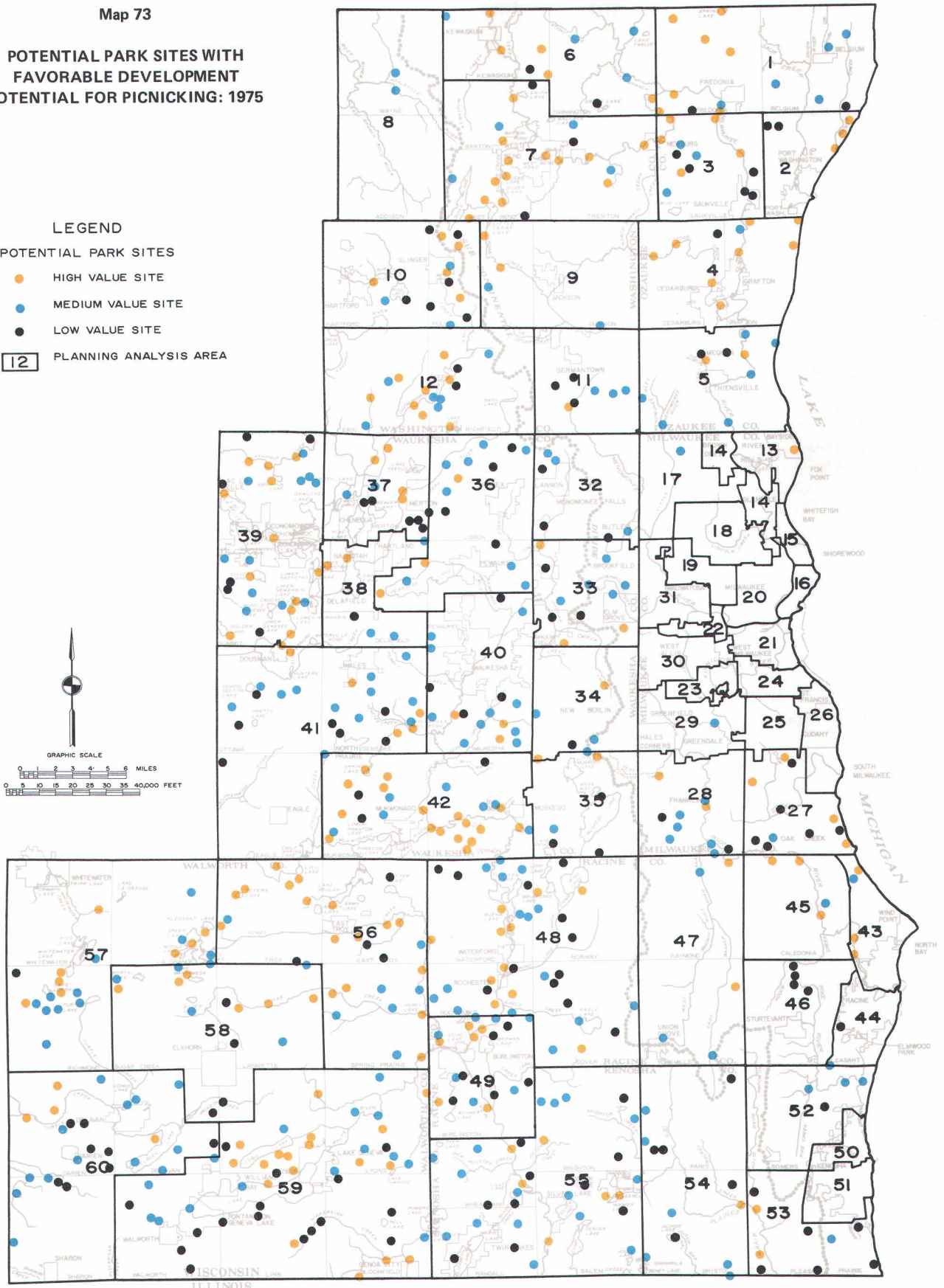
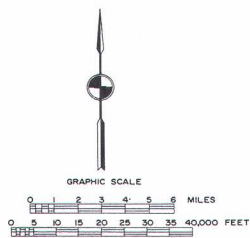
Potential park sites considered to have favorable development potential for picnicking are those sites which have interesting topography providing scenic views and those that can be served with access roads and automobile parking areas. A high value potential picnic site would, in addition, have a stand of shade trees and surface water while a medium value potential picnic site would have at least one of these resource amenities. As indicated in Table 82, 581 of the remaining 682 poten-

tial park sites in the Region were judged suitable for picnicking. All but five of the remaining 211 high value potential park sites and all but 15 of the remaining 234 medium value potential park sites were considered suitable for development as picnic areas. Conversely, only 156 of the remaining 237 low value sites in the Region had favorable potential for development as picnic grounds. As shown on Map 73, at least five potential park sites have potential for development for picnicking in each of the 60 planning analysis areas in the Region with the exception of planning areas 13-26 and 29-31 in Milwaukee County, planning areas 43-46 in eastern Racine County, planning areas 50-52 in eastern Kenosha County, and planning area 8 in Washington County.

Map 73

**POTENTIAL PARK SITES WITH  
FAVORABLE DEVELOPMENT  
POTENTIAL FOR PICNICKING: 1975**

- LEGEND**
- POTENTIAL PARK SITES
- HIGH VALUE SITE
  - MEDIUM VALUE SITE
  - LOW VALUE SITE
- 12 PLANNING ANALYSIS AREA



Potential park sites having favorable development potential for picnicking are those sites that have interesting topography providing scenic views and that can be served with access roads and automobile parking areas. A high value potential picnic site should, in addition, have a stand of shade trees and a body of surface water, while a medium value potential picnic area would have at least one of these resource amenities. A total of 581, or about 85 percent, of the remaining 682 potential park sites in the Region in 1975 was considered suitable for picnicking. The total included 206 high value sites, 219 medium value sites, and 156 low value sites. Sites suitable for picnicking were located throughout the Southeastern Wisconsin Region including many sites in or adjacent to highly urbanized Milwaukee County and eastern portions of Racine and Kenosha Counties.

Source: SEWRPC.

Potential park sites considered as having potential for development for swimming are those sites which have a natural beach area or which have an area that could readily be developed as a beach. The value of the potential swimming site was determined on the basis of the size of the beach and the site development potential for supporting such activities as picnicking or camping. Seventy-six potential park sites were considered as having favorable development potential for swimming. Fifty-one of these 76 sites are high value, 14 are medium value, and 11 are low value. From analysis of Map 74, it is evident that most of the remaining potential park sites in southeastern Wisconsin with potential for development for swimming are located in the outlying areas of the Region, a considerable distance from the largest population centers of the Region. Only five remaining potential park sites have good development potential for swimming in Milwaukee County and the eastern portions of Kenosha, Racine, and Waukesha Counties.

Sites considered suitable as nature study areas are wetland areas or woodland areas that have a variety of species of vegetation or wildlife. High value potential nature study areas have both woodlands and wetland areas while medium and low value sites typically have only one of these natural resource amenities. Interesting topography, such as an upland wooded area suitable for trail development, was considered to significantly enhance the value of the site for nature study purposes. As further indicated in Table 82, 523 of the remaining 682 potential park sites in the Region were considered suitable for nature study. The total included 184 high value sites, 199 medium value sites, and 140 low value sites. As shown in Map 75, there was at least one high value potential park site with favorable development potential for nature study purposes in each planning analysis area with the exception of planning areas 14-26 and 29-31 in Milwaukee County, planning areas 44 and 46 in Racine County, planning areas 50-54 in Kenosha County, planning area 8 in Washington County, and planning area 35 in Waukesha County.

Sites designated as suitable for campground development are large wooded areas which are ungrazed, having their understory intact. Surface water and interesting topography providing seclusion for individual campsites were important additional determinants of the sites' value for campground development. It should be noted that all areas designated as potential campgrounds in the potential park sites inventory are somewhat removed from existing urban development. A total of 353 potential park sites in the Region were judged as having favorable development potential as campgrounds. Of this total, 110 potential park sites, or 31 percent of the total, were located in Waukesha County. Conversely, there are no remaining potential park sites suitable for camping in Milwaukee County. There is only one remaining high value potential park site with favorable development potential for camping in the eastern half of Racine County and none in the eastern half of Kenosha County (see Map 76).

Sites recommended for the development of hiking trails are large sites having diversified topography and vegeta-

tion. Proximity to a lake, stream, or river was considered to significantly enhance the value of the site for potential hiking use. A total of 390 potential park sites, including 154 high value sites, were identified as having favorable development potential for hiking trails. The distribution by planning analysis area of the remaining potential park sites in the Region having favorable development potential for hiking trails is shown on Map 77.

Sites considered as having favorable development potential for golf purposes are large areas at which the arrangement of vegetation and topographic features is suitable for the layout of golf courses. In this regard, for example, a completely wooded site would be unsuitable for potential golf course development. Interesting topography and surface water for the development of water hazards were considered to significantly increase the value of the site for potential golf course development. Of the remaining 682 potential park sites in the Region, 111 of these were judged suitable for golf development, with almost one-third of these sites located in Waukesha County (see Table 82 and Map 78).

#### The Relationship of Potential Park Sites to Primary Environmental Corridors

As indicated in Chapter IV, primary environmental corridors are defined as elongated areas which encompass the best remaining elements of the natural resource base. The preservation of the primary environmental corridors in essentially natural open use, including limited agricultural and country estate type residential use, is one of the principal objectives of the adopted regional land use plan. Primary environmental corridors also contain many of the best remaining potential park sites in the Region. In addition to meeting the demand for resource-oriented recreational activities, the public acquisition for recreation use of potential park sites located within the primary environmental corridor of the Region also serves to permanently preserve that portion of the corridor in a manner consistent with the adopted regional land use plan.

As indicated in Table 83, a total of 420 potential park sites, or 62 percent of the remaining potential park sites in southeastern Wisconsin, were located in part or in whole within the Region's primary environmental corridors. Of these 420 sites, 52 were situated entirely within primary environmental corridors while portions of another 368 were situated partially within primary environmental corridors. The large number of potential park sites which are situated partially within primary environmental corridors reflects the fact that, in the original delineation of potential park sites, local park officials frequently included open space areas which were without significant natural resource amenities in order to provide space for supporting facilities as well as to provide meaningful site delineations in terms of existing physical and ownership boundaries. These "nonresource" areas, consisting primarily of agricultural lands, are not part of the primary environmental corridors.

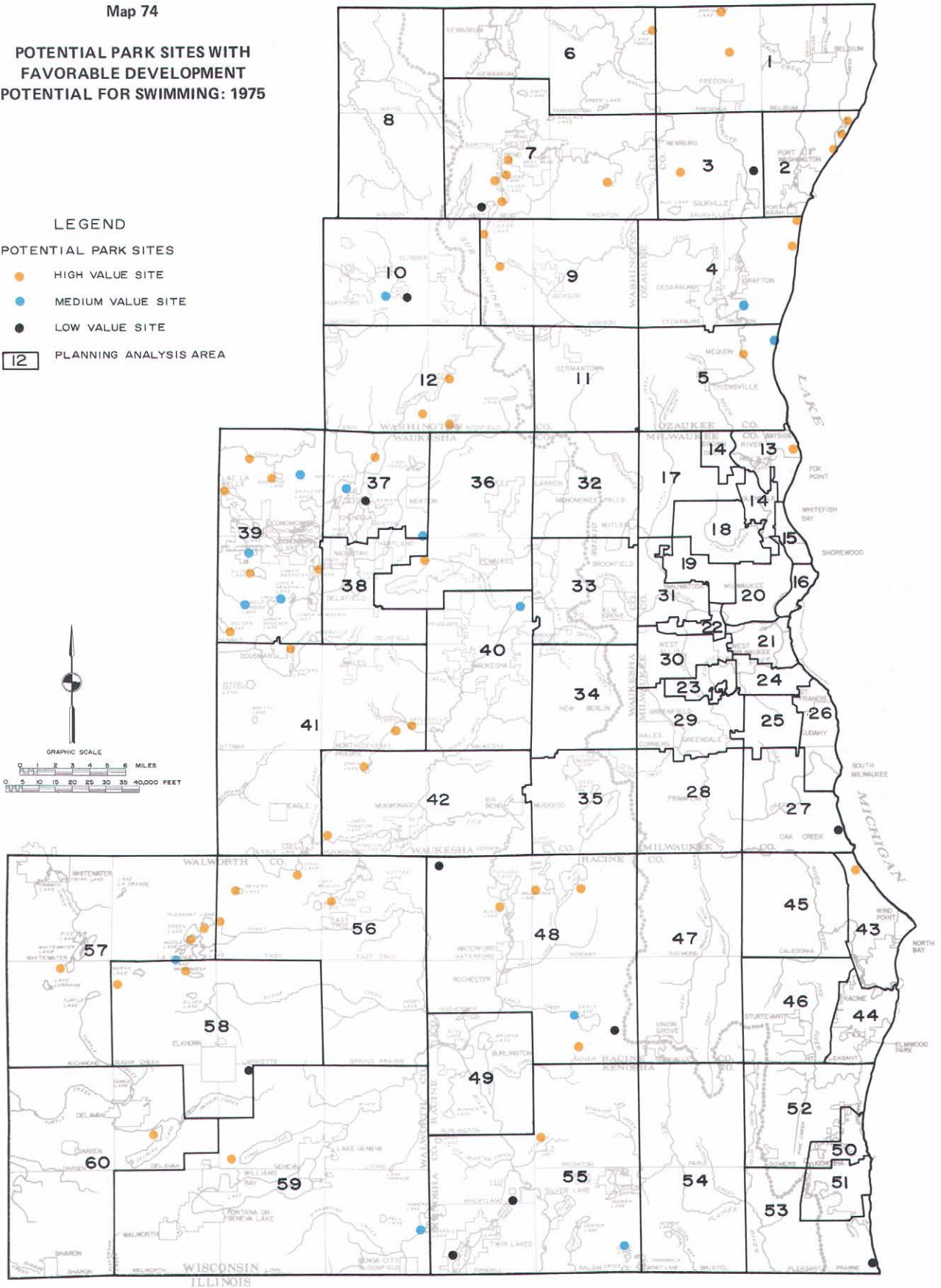
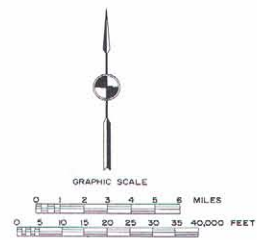
RETURN TO  
SOUTHEASTERN WISCONSIN  
REGIONAL PLANNING COMMISSION  
PLANNING LIBRARY



Map 74

**POTENTIAL PARK SITES WITH  
FAVORABLE DEVELOPMENT  
POTENTIAL FOR SWIMMING: 1975**

- LEGEND**
- POTENTIAL PARK SITES
- HIGH VALUE SITE
  - MEDIUM VALUE SITE
  - LOW VALUE SITE
  - 12 PLANNING ANALYSIS AREA



Potential park sites having favorable development potential for swimming facilities are those sites which have a natural beach area or an area which could readily be developed as a beach. The value of the potential swimming site was determined on the basis of the size of the beach and the site development potential for supporting activities such as picnicking or camping. A total of 76, or about 11 percent, of the 682 potential park sites in the Region in 1975 was considered suitable for swimming. The total included 51 high value sites, 14 medium value sites, and 11 low value sites. Most of the remaining potential park sites with development possibilities for swimming were located in the outlying areas of the Region. Only five remaining potential park sites with development possibilities for swimming were located in Milwaukee County and the eastern portions of Kenosha, Racine, and Waukesha Counties.

Source: SEWRPC.

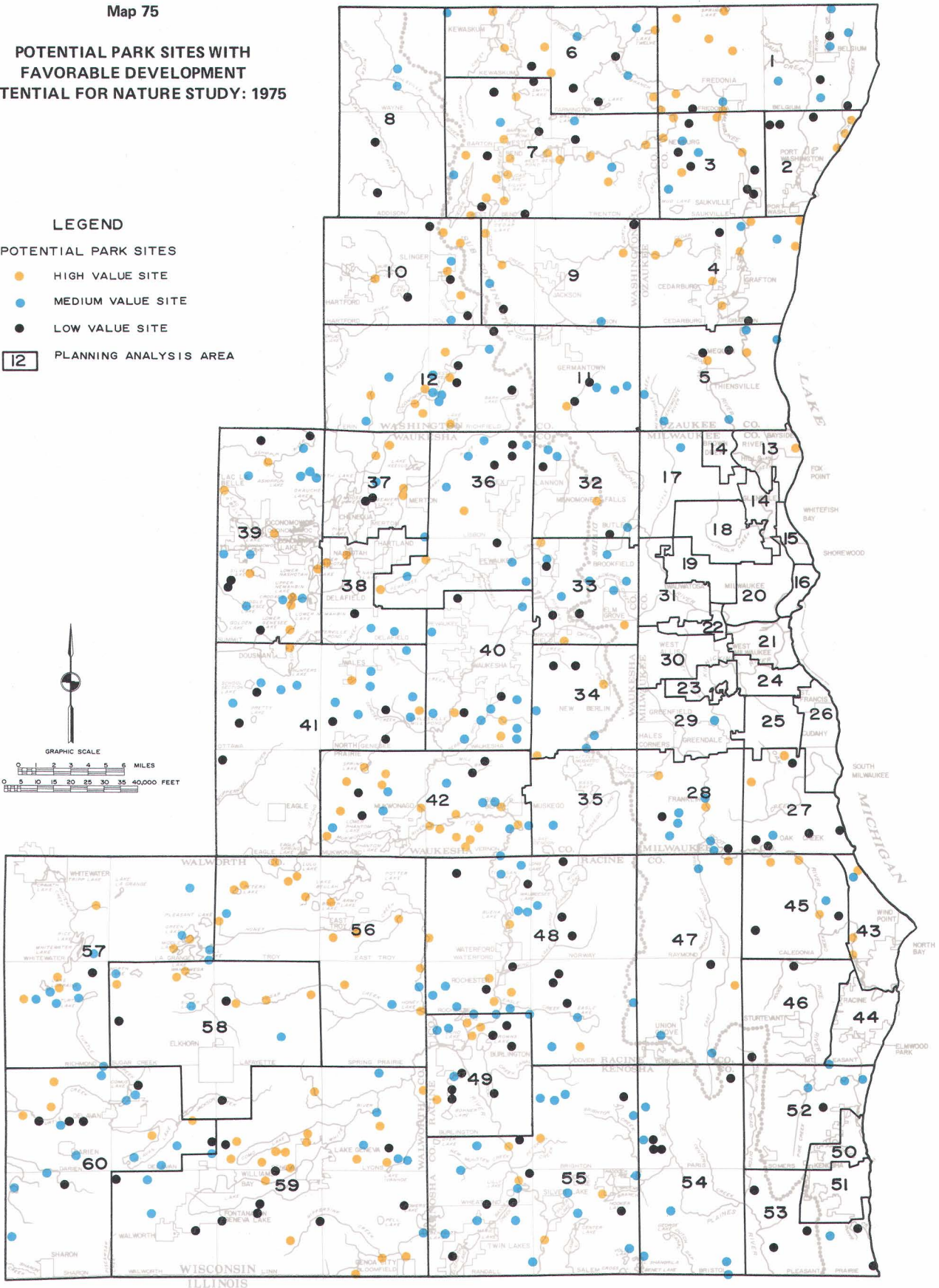
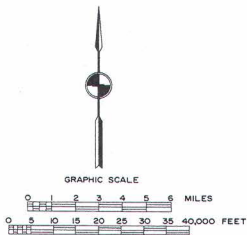
Map 75

**POTENTIAL PARK SITES WITH  
FAVORABLE DEVELOPMENT  
POTENTIAL FOR NATURE STUDY: 1975**

**LEGEND**

POTENTIAL PARK SITES

- HIGH VALUE SITE
- MEDIUM VALUE SITE
- LOW VALUE SITE
- 12 PLANNING ANALYSIS AREA



Potential park sites having favorable development potential for nature study areas are those sites that have wetland or woodland areas with a variety of species of vegetation or wildlife. High value potential nature study areas have both woodland and wetland areas, while medium and low value sites typically have only one of these natural resource amenities. Interesting topography such as an upland wooded area suitable for trail development was considered to significantly enhance the value of the site for nature study purposes. A total of 523, or about 77 percent of the remaining 682 potential park sites in the Region in 1975 was considered suitable for nature study. The total included 184 high value sites, 199 medium value sites, and 140 low value sites. There were high and medium value potential park sites with favorable development possibilities for nature study purposes in each of the planning analysis in the Region with the exception of certain highly urbanized planning analysis areas located primarily in the Milwaukee, Racine, and Kenosha urban areas.

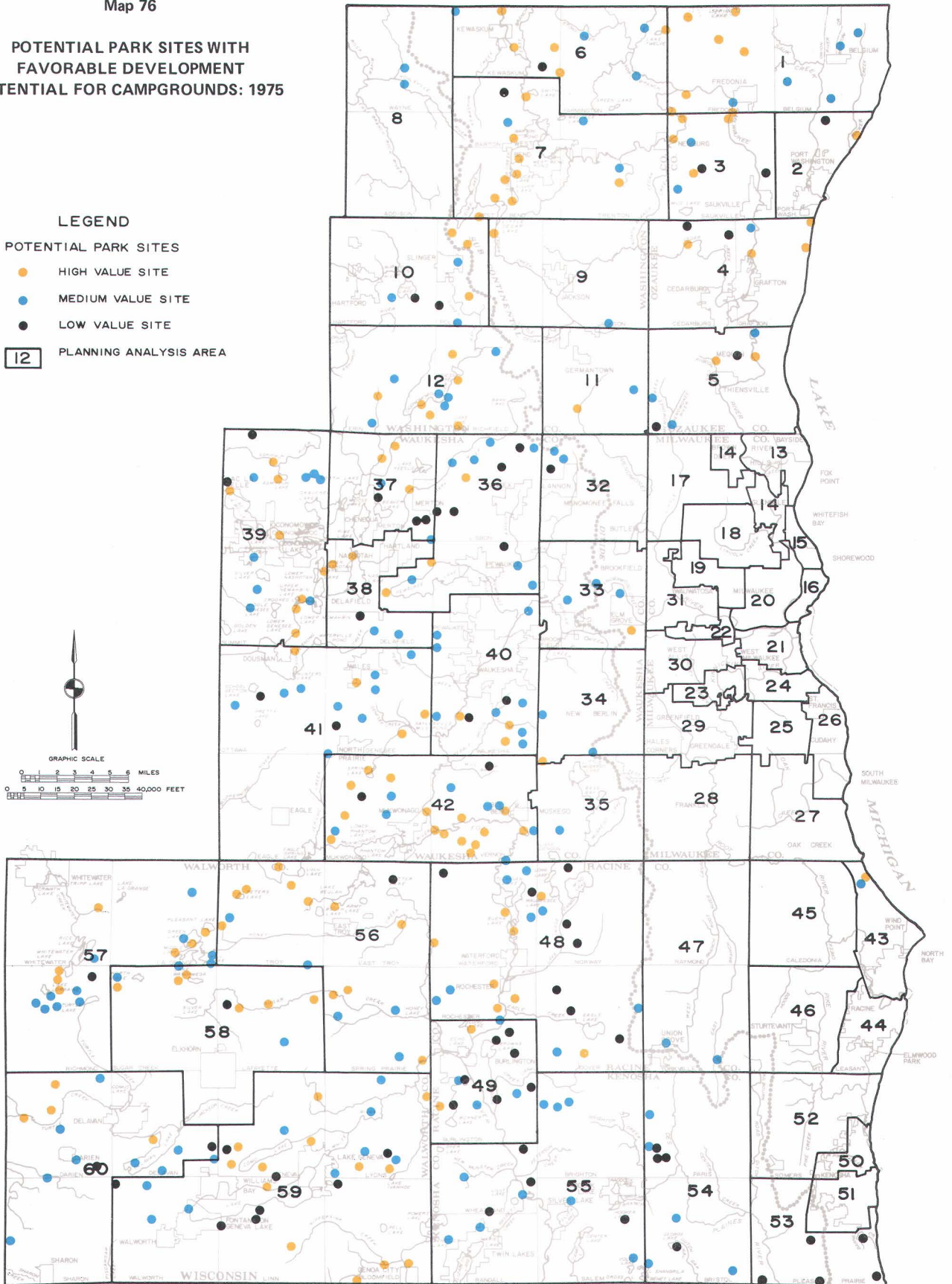
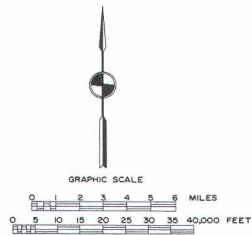
Source: SEWRPC.



Map 76

**POTENTIAL PARK SITES WITH  
FAVORABLE DEVELOPMENT  
POTENTIAL FOR CAMPGROUNDS: 1975**

- LEGEND**
- POTENTIAL PARK SITES
- HIGH VALUE SITE
  - MEDIUM VALUE SITE
  - LOW VALUE SITE
  - 12 PLANNING ANALYSIS AREA



Potential park sites having favorable development potential for campgrounds are large, ungrazed, wooded areas. Surface water and interesting topography providing seclusion for individual campsites were important additional factors in determining the value of the site for campground development. A total of 353, or about 52 percent, of the 682 potential park sites in the Region in 1975 was considered suitable for campgrounds. The total included 135 high value sites, 148 medium value sites, and 70 low value sites. Virtually all of these potential park sites were removed from existing urban development. Over 100 potential park sites, or about 30 percent of the total 353 potential park sites with campground development possibilities, were located in Waukesha County.

Source: SEWRPC.

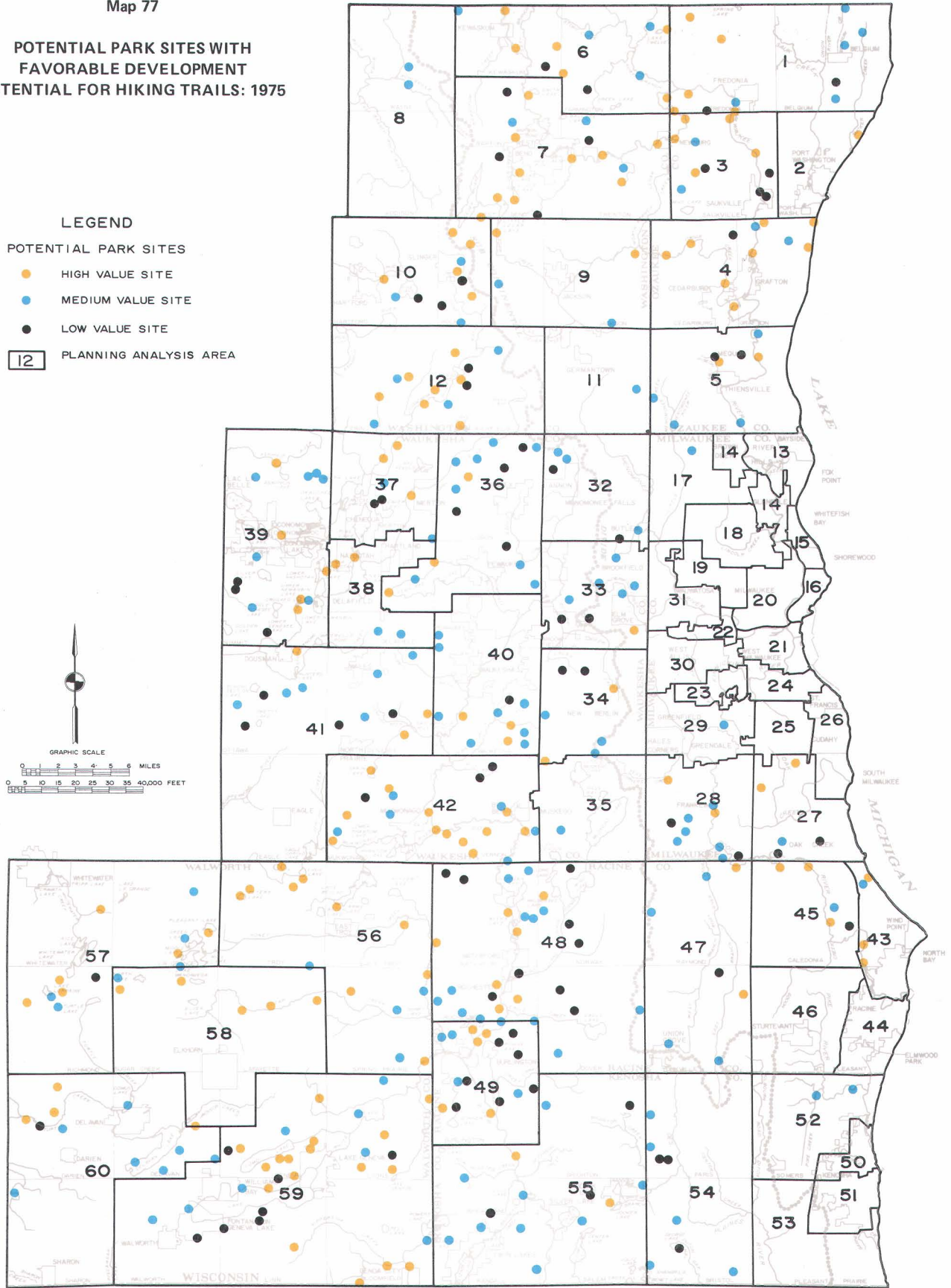
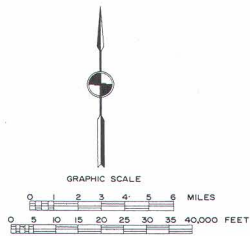
Map 77

POTENTIAL PARK SITES WITH  
FAVORABLE DEVELOPMENT  
POTENTIAL FOR HIKING TRAILS: 1975

LEGEND

POTENTIAL PARK SITES

- HIGH VALUE SITE
- MEDIUM VALUE SITE
- LOW VALUE SITE
- 12 PLANNING ANALYSIS AREA



Potential park sites having favorable development potential for hiking trails are large sites with diversified topography and vegetation. Proximity to a lake, stream, or river was considered to significantly enhance the value of the site for potential hiking use. A total of 390, or about 57 percent of the remaining 682 potential park sites in the Region in 1975 was considered suitable for hiking trails. The total included 154 high value sites, 156 medium value sites, and 80 low value sites. Sites suitable for hiking trails were located throughout the Region with significant concentrations of such sites located within the high value resource areas including the main stems of the Milwaukee and Fox Rivers and the Kettle Moraine areas of Washington, Waukesha, and Walworth Counties.

Source: SEWRPC.



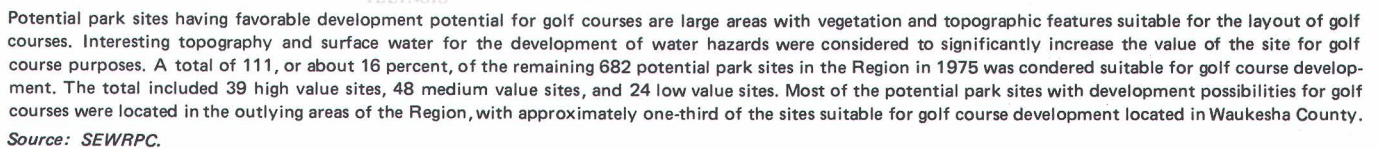


Table 83

## RELATIONSHIP OF POTENTIAL PARK SITES TO PRIMARY ENVIRONMENTAL CORRIDORS IN THE REGION BY COUNTY: 1975

County	Site Value	Remaining Potential Park Sites by Relationship to Primary Environmental Corridor											Total Remaining Sites	
		Entirely Within Corridor			Partially Within Corridor				Entirely Outside Corridor					
		Sites		Acres	Sites		Acres		Sites		Acres			
		Number	Percent of Total		Number	Percent of Total	Within Corridors	Outside Corridors	Number	Percent of Acres				
Kenosha	High	1	11.1	205	7	77.8	497	843	1	11.1	98	9	1,643	
	Medium	2	7.7	82	10	38.5	754	512	14	53.8	1,459	26	2,807	
	Low	1	3.8	60	9	34.6	1,123	770	16	61.6	1,076	26	3,029	
	Total	4	6.6	347	26	42.6	2,374	2,125	31	50.8	2,633	61	7,479	
Milwaukee	High	0	0	0	1	14.3	100	228	6	85.7	585	7	913	
	Medium	0	0	0	6	66.7	416	416	3	33.3	446	9	1,278	
	Low	1	12.5	111	4	50.0	106	148	3	37.5	97	8	462	
	Total	1	4.2	111	11	45.8	622	792	12	50.0	1,128	24	2,653	
Ozaukee	High	3	12.0	225	22	88.0	2,144	1,966	0	0	0	25	4,335	
	Medium	2	11.1	169	9	50.0	1,203	983	7	38.9	955	18	3,310	
	Low	1	4.8	93	9	42.8	469	321	11	52.4	943	21	1,826	
	Total	6	9.4	487	40	62.5	3,816	3,270	18	28.1	1,898	64	9,471	
Racine	High	1	4.0	131	22	88.0	2,696	2,139	2	8.0	144	25	5,110	
	Medium	2	6.6	124	14	46.7	1,632	1,865	14	46.7	1,387	30	5,008	
	Low	3	8.8	273	8	23.5	468	554	23	67.1	1,738	34	3,033	
	Total	6	6.8	528	44	49.4	4,796	4,558	39	43.8	3,269	89	13,151	
Walworth	High	7	13.0	650	45	83.3	9,783	4,796	2	3.7	687	54	15,916	
	Medium	6	11.1	1,061	23	42.6	2,219	1,214	25	46.3	3,068	54	7,562	
	Low	3	4.8	226	17	27.4	981	554	42	67.8	3,216	62	4,977	
	Total	16	9.4	1,937	85	50.0	12,983	6,564	69	40.6	6,971	170	28,455	
Washington	High	5	13.5	505	26	70.3	4,356	2,539	6	16.2	1,132	37	8,532	
	Medium	1	3.8	56	17	65.4	2,007	928	8	30.8	649	26	3,640	
	Low	3	9.7	264	19	61.3	2,141	1,905	9	29.0	1,017	31	5,327	
	Total	9	9.6	825	62	65.9	8,504	5,372	23	24.5	2,798	94	17,499	
Waukesha	High	3	5.6	536	40	74.0	6,260	4,552	11	20.4	2,204	54	13,552	
	Medium	2	2.8	159	38	53.5	4,643	4,142	31	43.7	5,801	71	14,745	
	Low	5	9.0	569	22	40.0	3,076	1,538	28	51.0	3,884	55	9,067	
	Total	10	5.6	1,264	100	55.6	13,979	10,232	70	38.8	11,889	180	37,364	
Region Total	High	20	9.5	2,252	163	77.2	25,836	17,063	28	13.3	4,850	211	50,001	
	Medium	15	6.4	1,651	117	50.0	12,874	10,060	102	43.6	13,765	234	38,350	
	Low	17	7.2	1,596	88	37.1	8,364	5,790	132	55.7	11,971	237	27,721	
	Total	52	7.6	5,499	368	54.0	47,074	32,913	262	38.4	30,586	682	116,072	

Source: SEWRPC.

From further analysis of data set forth in Table 83, it is apparent that most high value potential park sites—183 sites, or 87 percent of the remaining 211 high value sites in the Region—are located in part or in whole within the Region's primary environmental corridors. The proportion of medium and low value potential park sites situated within the primary environmental corridors is considerably lower. Thus, 132 medium value potential park sites, or 56 percent of the remaining 234 medium value sites in the Region, and 105 low value potential park sites, or 44 percent of the remaining 273 low value sites in the Region, are situated partially or entirely within primary environmental corridors.

Among the seven counties, the proportion of potential park sites situated in part or in whole within primary environmental corridors ranged from a low of 49 percent in Kenosha County to a high of 76 percent in Washington County. Significantly, for each county in the Region with the exception of Milwaukee at least 80 percent of the remaining high value potential park sites were located in part or in whole within primary environmental corridors. Conversely, only one of the seven remaining high value potential park sites in Milwaukee County was located in a primary environmental corridor.

## POTENTIAL RECREATION TRAIL SITES

Extensive land based outdoor recreation activities (see Chapter VI), such as hiking, biking, and horseback riding, are resource-oriented activities and thus rely on suitable natural resource amenities to enhance the quality of the recreational experience. To provide a high quality recreational experience for these activities, a trail facility with a variety of natural, historic, cultural, scenic, and topographical features is particularly desirable. Since trail facilities require long, linear expanses of land with suitable resource amenities, trail facilities often cannot be provided within a single park. There are two important types of linear expanses of land in the Region—primary environmental corridors and railroad or electric power right-of-ways—which offer opportunities for the provision of trail facilities.

### Primary Environmental Corridors

As previously noted in Chapter IV, one of the most important tasks undertaken by the Commission was the identification and delineation of those areas of the Region in which concentrations of certain ecologically important natural resources exist. Such areas normally include one or more of the following seven elements of the natural resource base which are essential to the maintenance of both the ecological balance and natural beauty of the Region: 1) lakes and streams and the associated undeveloped shorelands and floodlands, 2) woodlands, 3) wetlands, 4) wildlife habitat areas, 5) rugged terrain and high relief topography, 6) significant geological formations and physiographic features, and 7) wet, poorly drained, and organic soils. These seven elements comprise integral parts of the natural resource base. Four additional elements, although not part of the resource base per se, are closely related to or centered on that basis and are important considerations in identifying and delineating areas with scenic, recreational, and historic value. These additional elements are: 1) existing outdoor recreation sites, 2) potential outdoor recreation sites, 3) historic sites and structures, and 4) significant scenic areas and vistas. The delineation of these 11 natural resource and natural resource related elements results in an essentially linear pattern of relatively narrow, elongated areas which have been termed environmental corridors by the Commission. Primary environmental corridors are defined as those areas which encompass three or more of the aforementioned 11 environmental elements. Since primary environmental corridors contain a wide variety of natural resource amenities, they are ideally suited for the development of trail facilities. As shown on Map 79, primary environmental corridors are located throughout the Region and encompass 347,000 acres, or about 20 percent of the total area of the Region. These corridors, if fully utilized, could provide about 1,000 linear miles of trail facilities in the Region.

### Railroad and Electric Power Rights-of-Way

Railroad rights-of-way traverse a variety of urban and rural lands and, if abandoned, often can be utilized to provide certain types of recreation facilities, such as hiking, biking, or snowmobile trails. Similarly, electric power rights-of-way, in addition to their primary power

transmission purposes, might also be used for certain recreation trail facilities. While railroad and electric power rights-of-way do not often encompass the natural resource amenities ordinarily designed for recreation trail facilities, such rights-of-way being linear in nature and usually under a single ownership could easily be converted to recreation use and thus should be considered as potential locations for recreational trail facilities.

As shown on Map 79, there was a total of about 1,415 miles of railroad and electric power rights-of-way in the Region in 1975. About 560 miles, or 40 percent of this total, consisted of existing railroad rights-of-way; 100 miles, or 7 percent, consisted of abandoned railroad rights-of-way; almost 170 miles, or 12 percent, consisted of the abandoned interurban<sup>6</sup> rights-of-way; and 585 miles, or 41 percent, consisted of transmission rights-of-way maintained by the Wisconsin Electric Power Company.

## SUMMARY

The Southeastern Wisconsin Region contains many natural resource amenities which provide a reservoir of potential park sites that can be utilized to meet the existing and future demand for recreational activities. Recognizing the need to preserve high value resource areas to meet the recreational demand of the existing and future population in the Region, the Commission in 1963 undertook a major work effort involving the identification and description of the best remaining potential park sites in southeastern Wisconsin. Revisions of this potential park sites inventory were conducted in 1968 as part of the Commission's continuing land use-transportation study and in 1975 under the regional park and open space planning program. In addition, the regional park and open space planning program included a re-examination of potential park sites identified in the 1963 and 1968 inventories to identify changes in land use within and adjacent to each site which may have occurred during the intervening time. This chapter has described the developmental changes that have taken place within and adjacent to potential park sites in the Region since 1963 and has described the most important characteristics of potential park sites remaining in the Region in 1975. The major findings of the potential park sites inventory and reevaluation are summarized below:

1. A total of 751 potential park sites, each having an area of more than 25 acres, was identified as part of the Commission's 1963 potential parks inventory and 1968 and 1975 inventory updates. Of the 751 original potential park sites, 247 were identified as high value sites, 252 as medium value, and 252 as low value. The total area within these potential park sites was 140,000 acres.

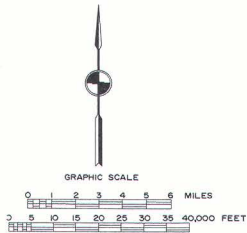
<sup>6</sup> *The Milwaukee Electric Railway and Light Company provided intercity rail transportation services for various cities in the Region until 1951. Segments of the rail right-of-way were subsequently acquired by the Wisconsin Electric Power Company.*



Map 79

# LANDS WITH DEVELOPMENT POTENTIAL FOR TRAIL FACILITIES IN THE REGION

- LEGEND**
- POWER TRANSMISSION RIGHT-OF-WAY (MINIMUM 138 KILOVOLT)
  - EXISTING RAILROAD RIGHT-OF-WAY
  - ABANDONED RAILROAD RIGHT-OF-WAY
  - ABANDONED INTERURBAN RIGHT-OF-WAY
  - PRIMARY ENVIRONMENTAL CORRIDOR



Primary environmental corridors, because of their elongated linear form and variety of natural resource and resource-related elements, are well suited to providing opportunities for trail-oriented outdoor recreation activities such as biking and hiking. The primary environmental corridors are located throughout the Region and encompass 347,000 acres, or about 20 percent of the total area of the Region. These corridors, if fully utilized, could provide about 1,000 linear miles of trail facilities in the Region. Certain railroad and power rights-of-way, though they may not possess the natural resource amenities ordinarily desired for recreation trails, are readily converted to recreation trail use because they are linear and generally under a single ownership. There was a total of 1,415 miles of railroad and electric power rights-of-way in the Region in 1975. About 560 miles, or 40 percent of this total, consisted of existing railroad rights-of-way; 100 miles, or 7 percent, consisted of railroad rights-of-way abandoned since 1914; 170 miles, or 12 percent, consisted of abandoned interurban rights-of-way; and 585 miles, or 41 percent, consisted of other power transmission rights-of-way maintained by the Wisconsin Electric Power Company.

Source: SEWRPC.



2. Between 1963 and 1975, many potential park sites were committed in part or whole to recreation or open space use through acquisition or development by the public and nonpublic sectors. Thus, as of April 1975, 30 potential park sites were committed in their entirety and an additional 158 potential park sites were partially committed to recreation and open space use. A total of 12,838 acres, or 9.2 percent of the original potential park site acreage, were actually committed to recreation or open space use through public and nonpublic acquisition.
3. Of the 12,838 acres of potential park sites actually committed to recreation or open space use, 7,724 acres were high value sites, 2,792 acres were medium value sites, and 2,322 acres were low value sites. Sixteen high value potential park sites were committed in their entirety to recreation or open space use while another 78 high value sites were partially committed to such uses. Eight medium value sites and six low value sites were also committed in their entirety to recreation or open space use while an additional 45 medium value sites and 35 low value sites were partially developed or acquired for such purposes. Of total potential park acreage actually committed to recreation or open space use between 1963 and 1975, 7,736 acres, or 60 percent, were developed or acquired by the State or by local units of government in the Region and the balance was developed by the nonpublic sector.
4. Of the original 751 potential park sites in the Region, 21 were lost in their entirety as a result of urban development within these sites. Moreover, portions of 249 other potential park sites were converted to urban use. A total of 6,987 acres, or 5.0 percent of the original potential park site acreage, was actually converted to urban use between 1963 and 1975 while an additional 2,157 acres, or 1.5 percent of the original potential park site acreage, were effectively lost as a result of this urban encroachment. The total potential park area lost as a result of urban encroachment was distributed by site value as follows: high value sites—3,603 acres; medium value sites—2,847 acres; low value sites—2,694 acres.
5. Despite a considerable decrease in the potential park area in southeastern Wisconsin as a result of urban encroachment since 1963, there remained 682 potential park sites, totaling about 116,000 acres, in the Region in 1975. Of these 682 potential park sites, 211 were high value sites having a combined area of 50,001 acres, or 43 percent of the remaining potential park area in the Region. There were 234 medium value potential park sites and 237 low value potential park sites in the Region in 1975, totaling 38,350 acres and 27,721 acres, respectively.
6. The remaining potential park sites in southeastern Wisconsin are concentrated to a significant extent in the outlying areas of the Region. Thus, 180 potential park sites totaling about 37,400 acres, or 32 percent of the remaining potential park acreage in the Region, were located in Waukesha County. Another 170 potential park sites totaling 28,500 acres, or 25 percent of the remaining potential park site acreage in the Region, were located in Walworth County. Walworth and Waukesha Counties each contained 54 high value potential park sites and together accounted for more than half of the remaining high value potential park sites of the Region. Conversely, there are relatively few remaining potential park sites located in the three urbanized areas of the Region. In this regard, there were no remaining potential park sites in the City of Kenosha and only one in the City of Milwaukee in 1975. Milwaukee County contained only 24 potential park sites in 1975, of which only seven were high value. The remaining potential park area in Milwaukee County, 2,653 acres, represents only 2 percent of the remaining potential park areas of the Region.
7. Most of the remaining potential park sites—581 of a total of 682—have favorable development potential for picnicking, while only 76 are suitable for swimming. Site suitability with respect to certain other resource-oriented recreational activities is as follows: nature study—523 sites, camping—353 sites; hiking—390 sites; golf—111 sites.
8. A total of 420 potential park sites, or 62 percent of the remaining potential park sites in southeastern Wisconsin, are located in part or in whole within the primary environmental corridors of the Region. Most of the high value potential park sites—183 sites, or 87 percent of the remaining 211 high value sites in the Region—are located partially or entirely within the primary environmental corridors. A total of 132 medium value potential park sites, or 56 percent of the remaining medium value sites in the Region, and 105 low value potential park sites, or 44 percent of the remaining 273 low value sites in the Region, are situated in part or in whole within primary environmental corridors.

Primary environmental corridors, because of their elongated linear form and variety of natural resource and resource related elements, are well suited to the provision of opportunities for trail oriented outdoor recreation activities such as biking and hiking. The primary environmental corridors are located throughout the Region and encompass 347,000 acres, or about 20 percent of the total area of the Region. These corridors, if fully utilized, could provide about 1,000 linear miles of trail facilities in the Region. Certain railroad and power rights-of-way though they may not possess the natural resource ameni-

ties ordinarily desired for recreation trails but because they are linear and generally under a single ownership, could be converted to recreation trail use. There was a total of 1,415 miles of railroad and electric power rights-of-way in the Region in 1975. About 560 miles, or 40 percent, consisted of existing railroad rights-of-way; 100 miles, or 7 percent, consisted of railroad rights-of-ways abandoned since 1914; 170 miles, or 12 percent, consisted of abandoned interurban rights-of-way; and 585 miles, or 41 percent, consisted of other power transmission rights-of-way maintained by the Wisconsin Electric Power Company.

In summary, the Southeastern Wisconsin Region still contains an abundance of potential park sites with favorable development potential for a variety of resource-oriented recreational activities. The following conclusions about the quantity and spatial distribution of these potential park sites may be drawn from the inventory data presented in this chapter:

- It is probable that only a portion of the remaining potential park sites will be required to meet the recreational demands within the Region through the plan design year. It is important to recognize, however, that these valuable resource areas must serve the Region, in effect, for all time. Consequently, the remaining potential park sites should be preserved from incompatible land use development until the best use of these lands can be determined through sound local planning programs.
- The remaining potential park sites are not uniformly distributed throughout southeastern Wisconsin but are concentrated, to a significant extent, in the outlying areas of the Region. While the remaining potential park areas in southeastern Wisconsin may far exceed the recreational requirements of the regional population overall, there may be shortages of potential park land in certain subareas of the Region, especially in the older cities of the Region.
- Almost half of the remaining potential park area within southeastern Wisconsin lies within the primary environmental corridors of the Region. In the selection of potential park sites for public acquisition and development to meet the existing and anticipated future demand for resource-oriented activities, special consideration should be given to those sites which are located within the delineated primary environmental corridors. In addition to meeting recreation demands, the public acquisition of such sites can serve to permanently preserve in essentially natural open use that portion of the corridor in accordance with the recommendations of the adopted regional land use plan. It should also be noted that, while high value potential park sites have the most favorable development potential for the various resource-oriented recreational activities, the public acquisition of medium and low value potential park sites located within the primary environmental corridors may take on increased importance because of the supplemental benefits of corridor preservation.
- About 40 percent of the potential park area committed to recreation and open space use between 1963 and 1975 was developed by the nonpublic sector, including civic, charitable, and religious organizations, commercial enterprises, and private interest groups. Such nonpublic recreation development serves to meet a portion of the existing demand for resource-oriented recreational facilities and enhances the natural resource base. It should be understood, however, that the nonpublic development of potential park sites for recreation purposes does not assure their permanent preservation for recreation use and such sites may be converted to other uses in the future. Potential park sites, especially high value sites, which have been developed by the nonpublic sector, should remain under consideration in the selection of areas for public recreation land acquisition and development.

(This page intentionally left blank)

## Chapter X

### IMPACT OF PUBLIC OPEN SPACE LANDS ON RESIDENTIAL PROPERTY VALUES BASED ON ANALYSES IN MILWAUKEE COUNTY

#### INTRODUCTION

Public open space lands such as parks and parkways are an important determinant of the quality of life within a community. Additionally, public open space lands may have a profound effect on the immediate neighborhood in which the public open space lands are located. The effects of public open space lands on the overall community generally are positive. Benefits arise from the fact that such public areas either provide facilities required to meet certain recreational needs of the residents of the community or these public open space lands serve to protect and enhance the underlying and sustaining natural resource base—with many public open space lands providing both of these benefits—thereby contributing to the overall wholesomeness of the community environment.

The effects of public open space lands on the immediate location of recreational land are, however, not quite so readily specified. On one hand, residents living adjacent to a public open space area may benefit appreciably from convenient access to any outdoor recreation facilities provided in that area as well as from the vista and impression of open space which the public land may afford. On the other hand, residents in the immediate vicinity of a public open space that is intensively used for recreational purposes may suffer certain negative effects associated with the location, such as increased traffic and parking problems, noise, rowdiness, and undesirable glare from nighttime lighting of athletic fields.

The advantages and disadvantages of proximity to a public open-space area may influence the value of adjacent property and therefore may affect the local property tax base. Any decisions involving acquisition and development of public open space lands should consider what impact that acquisition and development may have upon real property values and, therefore, upon the property tax base. Historically, in considering the effect of public park or parkway development on the property tax base, the strongest concern has focused on potential loss of tax revenue from private development that may not occur in that locale. While this potential tax loss remains an important concern, it should not be allowed to outweigh the effects of public open space areas on nearby property values. The purpose of this chapter is precisely that: to investigate the effects of public open space lands on residential areas, with emphasis on the extent to which residential property values are influenced by proximity to public open space areas.

Research to date on the effects of public open space lands on the surrounding neighborhood is limited; consequently, an analysis of the impact of such public lands on the value of nearby residential properties undertaken

as part of the regional park and open space planning program required the collection and collation of a considerable body of data. The first phase of the data collection process consisted of a personal interview survey of assessors, appraisers, and developers to determine whether variations in the value of residential lots and of the total housing package occur as a result of proximity to various types of public open space lands. While the results of these initial interviews were necessarily qualitative in nature, the responses provided an indication of the general effect of public open space lands on the value of nearby residential properties and, furthermore, provided valuable direction for the quantitative phase of the investigation.

The second phase of the inventory process consisted of collection and collation of census housing value data as well as of actual sales data and of tax assessment information for residential properties located adjacent to public open space lands to facilitate quantification of the impact of such lands on the value of residential properties.

The third phase of the inventory process consisted of a survey of households living in the immediate vicinity of public open space lands to determine commonly perceived advantages and disadvantages of living near such public recreation and open space lands. Public attitudes toward the advantages of a residential location in proximity to public open space lands may influence the market value of real property; therefore, these attitudes were investigated as part of the land value study.

A description of the methodology used in, and findings of, the three inventories is presented in the first three sections of this chapter. The implications of the findings of the land value study for public open space planning and development are discussed in the final section of the chapter. It should be noted that this study concerning the impact of public lands on surrounding residential properties was requested and specially funded by the Milwaukee County Planning Commission. While the study focuses primarily on public open space lands in Milwaukee County, the conclusions of the study should be applicable within urban areas throughout the Region. Most of the county-owned recreation sites and open space land in Milwaukee County consists of parks and parkways and, consequently, the areas selected for study were residential areas located adjacent to public parks and parkways in Milwaukee County. Because of certain very basic differences between the character of park and of parkway lands, an effort was made in the study to distinguish between the impact of parks and parkways.

As indicated in Chapter II of this report, the term "park" was defined for the purpose of the study as a publicly owned open space area, the primary purpose of which is



to provide space and facilities for the pursuit of outdoor recreational activities. The term "parkway" was defined as an elongated, publicly owned open space generally located in and along the primary environmental corridors of the Region. Its primary purpose is to protect and enhance the natural resource base. Parkway in Milwaukee County frequently connect major parks and, moreover, may also provide space and facilities for certain outdoor recreational activities. Because of the basic difference in function, parks are apt to impact residential areas in a somewhat different manner from parkways.

In addition to distinguishing between the impact of parks and parkways on real property values, an effort was made to identify any variation in such impact resulting from the characteristics of specific types of parks. A broad range of park types has been developed in Milwaukee County and throughout southeastern Wisconsin, and it is possible that the impact of parkland on the value of adjacent residential property varies with such characteristics as park size, the type of facilities and attendant use, the service area, and the degree to which natural resource amenities contribute to the recreational value of the park. The park classification system developed for use throughout the regional park and open space study and described in Chapter II of this report was used in the land value study to explore the possible variation in the impact of parks on land value as related to park type (see Map 80). In addition to the four major park types defined in Chapter II, however, a fifth category of parks was defined for the purposes of this land value study—namely, Lake Michigan parks, which consist of public parks lying along the Lake Michigan shoreline and which, in Milwaukee County, include such parks as Lake Park, Grant Park, Sheridan Park, and Wauwatosa Park. This fifth park category was established in recognition of the fact that the Lake Michigan shoreland is a unique area in which land development patterns and real estate values have been as much affected by the presence of the lake itself as by the development of public parks in that area. It should be recognized that under the Commission's park classification system, large parks along the Lake Michigan shoreland generally are Type I parks—that is, parks which have a multicounty service area and which rely heavily for recreational value and character on natural resource amenities. Lake Michigan parks are treated separately in this chapter only because of their unique impact on property values which is largely due to the presence of the Lake.

It also should be noted that various types of parkways have been developed in Milwaukee County, and it is possible that the impact of parkways on property values varies with such parkway characteristics as size and the degree to which the parkway protects and enhances the natural resource base. To explore the possible effects of parkway types, parkways were divided into three groups on the basis of the nature and variety of the elements of the natural resource base encompassed.

Type I parkways were defined as parkways which encompass a large variety of significant natural resource amenities. In Milwaukee County, Type I parkways include the

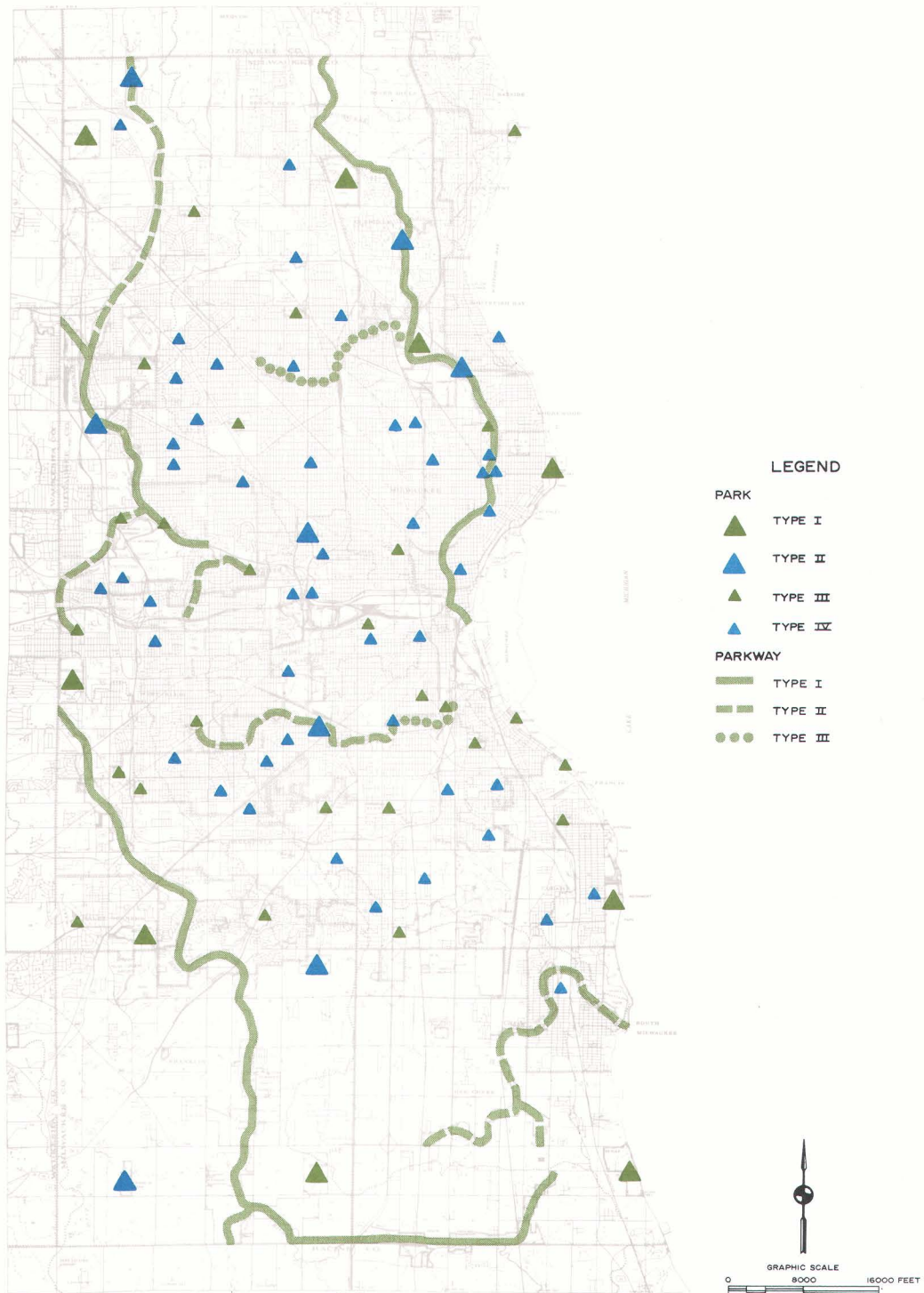
Milwaukee River Parkway, the Menomonee River Parkway, and the Root River Parkway. Type I parkways in Milwaukee County contain the largest rivers in the County in terms of both width and surface area. Two of the Type I parkways—namely, the Root River Parkway and the Milwaukee River Parkway—are situated within primary environmental corridors which were identified in the Commission's potential park sites inventory as possessing recreational resource values of regional significance. In comparison to Type I parkways, Type II parkways contain a smaller variety of natural resource amenities. Type II parkways in Milwaukee County include Honey Creek Parkway, the Oak Creek Parkway, the Underwood Creek Parkway, and the upper portion of the Kinnickinnic River Parkway. Type I parkways in Milwaukee County generally lie in the more recently developed areas of the County while Type II parkways generally lie in the older, more intensively developed portions of the County. Consequently, the development of Type I parkways was generally less constrained by existing land development patterns. Type III parkways were defined as parkways which function primarily as storm water drainageways and which generally do not serve to protect and enhance significant elements of the natural resource base. In Milwaukee County, Type III parkways include Lincoln Creek Parkway and the lower portion of the Kinnickinnic River Parkway.<sup>1</sup>

Throughout the land value study, an effort was made to distinguish among the impacts of the various types of parks and parkways outlined above. Under some of the analysis elements undertaken as part of the land value study, it was necessary to group the results for two or more types of open space land because of insufficient data to allow for the separate analysis of each type of open space. It should also be noted that data available for the Type III parkways were so limited as to make reliable determination of the impact of such parkways difficult under most of the analysis elements of the land value study.

---

<sup>1</sup>All parkways in Milwaukee County occupy primary environmental corridors. As conceived by the Commission, primary environmental corridors are elongated areas which contain three or more elements of the natural resource base or elements which are closely related to or centered on that base. Type I parkways generally contain more natural resource amenities than Type II or Type III parkways. Seven elements of the natural resource base considered in the Commission's identification of primary environmental corridors include 1) lakes, rivers, and streams, and their associated floodplains; 2) wetlands; 3) woodlands; 4) wildlife habitat areas; 5) rugged terrain and high relief topography; 6) significant geological formations and physiographic features; and 7) wet or poorly drained soils. Four other elements related to the natural resource base considered in the Commission's identification of primary environmental corridors include 1) existing outdoor recreation sites; 2) potential outdoor recreation sites; 3) historic sites; and 4) significant scenic areas and vistas.

## COUNTY OWNED PARKS AND PARKWAYS IN MILWAUKEE COUNTY: 1973



Under the land value study, an effort was made to identify the impact on property values of various types of parks and parkways in Milwaukee County. To explore the possible effects of parkway types, parkways were divided into three groups on the basis of the nature and variety of the natural resource amenities encompassed. Type I parkways encompass a large variety of significant resource amenities, including the county's largest rivers. Type II parkways contain a smaller variety of natural resource amenities but, nevertheless, significantly enhance the natural resource base. Type III parkways function primarily as storm water drainageways which generally do not serve to protect and enhance the natural resource base. The park classification system developed for use throughout the regional park and open space study and described in Chapter II of this report was utilized in the land value study to explore possible variation in the impact of parks as related to park types. Type I parks—large parks of 250 acres or more in area which rely heavily for recreational value and character on natural resource amenities—generally are located on or very close to Type I parkways or the Lake Michigan shoreline. Type II parks which range from 100 to 249 acres in size, Type III parks which range from 25 to 99 acres in size, and Type IV parks which are under 25 acres in size are well distributed throughout the entire County.

Source: SEWRPC.

The analyses undertaken as part of the land value study focused on the value of adjacent single-family residential property. While there appears to be a trend that undeveloped lands adjacent to parks and parkways are being developed at higher residential densities, including the development of multifamily housing and planned unit developments, the effect of park and open space lands on these types of residential uses has not been assessed as part of this study.

#### INTERVIEWS WITH APPRAISERS, ASSESSORS, AND DEVELOPERS

Because of their thorough knowledge of property values, appraisers, assessors, and developers represent a valuable source of information in analysis of the impact on property values of public parks and parkways. Accordingly, personal interviews were conducted with selected members of these three groups to obtain their perceptions on any variations in residential property values that may result from proximity to public parks and parkways.

Six appraisers, six assessors, and six developers were selected for personal interviewing. The assessors interviewed in the land value study were employed by six municipalities in Milwaukee County, each of which contains county-owned park or parkway lands. The appraisers included in the survey were chosen at random from a list of appraisers who work extensively in the Milwaukee metropolitan area. The developers selected for personal interviews were developers who had relatively recent experience in the development for residential use of land located adjacent to park or parkway lands in Milwaukee County.

During the interviews, the respondents were asked (1) to provide general observations on the impact of public open space lands on the value of adjacent residential property—land and improvements; (2) to distinguish between the effects of parks and parkways on adjacent property values; and (3) to provide quantitative estimates of the impact.

In general, the observations of the three groups interviewed were quite uniform, and their responses were not sufficiently varied to warrant individual presentation of the results for each group. All respondents indicated that any analysis of the impact of public parks and parkways on the value of adjacent residential property is a difficult and complex task because many factors interact to determine the value of any given property, with proximity to public open-space lands being just one of these factors. While recognizing that proximity to a public park or parkway may have an impact on residential property values, the respondents frequently cited other factors which must also be considered significant, including: the age and character of the neighborhood; ethnic groups; zoning; the level and quality of local municipal services, especially the quality of schools; the property tax level; flood hazards; relative safety of the area; its relation to transportation facilities; the relation to other land uses; and the age, size, type, and condition of the residential unit which may occupy a given site. Property values are

determined by a combination of these and other factors, and to isolate the effect of a single factor such as locational proximity to a public park or parkway is, therefore, very difficult. Each residential property is virtually unique and great caution is necessary in attempting to draw generalized conclusions about the impact of public parks and parkways on the value of nearby residential property. Indeed, in view of the many factors acting together to ultimately determine residential property values, some respondents were reluctant to generalize about the effect of public parks and parkways on adjacent residential areas.

The appraisers, assessors, and developers interviewed as part of this land value study indicated that public parks and parkways do indeed have a different effect on the value of adjacent residential property. As indicated in Table 84, only two of the 18 respondents stated that public parks, in general, have a positive effect on the value of nearby residential property; three respondents indicated that public parks, in general, have no impact whatsoever on the value of adjacent residential property; and two respondents offered no general opinion. The majority of the respondents—11 of 18—indicated that the effect of public parks on the value of adjacent residential property depends on the characteristics of the park and, in particular, on the type of recreational facilities provided and the type of use generated. In this regard, there was general agreement among these 11 respondents that parks which are designed to preserve and enhance the natural resource base and which provide extensive areas for passive recreational activities, such as picnicking or nature study, will have a positive effect on the value of adjacent residential property. Conversely, it was the consensus of these 11 respondents that parks which are oriented toward providing facilities for intensive, active recreational activities such as softball, basketball, or tennis will have a much smaller positive impact on the value of adjacent residential property or will have no impact at all. The positive impact of this type of park is perceived to be lower because such parks contribute less to the natural beauty of the area and, at the same time, may generate undesirable effects such as increased traffic and parking problems, noise, or glare from the nighttime lighting of athletic facilities. In addition to the type of facilities and the attendant use, the impact of parks on the value of adjacent residential property also depends on such factors as the incidence of crime or rowdiness in the park and the level of park maintenance. Indeed, of the 11 respondents who stated that the impact of public parks depends on the park characteristics, seven indicated that a combination of such factors as a high volume of users and the associated traffic and parking problems, glare from the lighting of athletic fields, poor park maintenance, or rowdiness may actually have a negative impact on the value of adjacent residential property.

In contrast to the situation with respect to public parks, there was a definite consensus among the respondents that public parkways generally have a positive impact on the value of adjacent residential property. As indicated in Table 84, 14 of the 18 respondents stated that public parkways generally have a positive effect on the value of

Table 84

**RESULTS OF A SURVEY OF SELECTED APPRAISERS, ASSESSORS, AND DEVELOPERS CONCERNING  
THE FISCAL IMPACT OF PUBLIC OPEN SPACE LANDS ON THE VALUE OF ADJACENT RESIDENTIAL PROPERTY**

Impact of Public Open Space Lands on the Value of Adjacent Residential Property	Impact of Public Parks				Impact of Public Parkways			
	On Value of Adjacent Residential Package (Land and Improvements)	On Value of Adjacent Residential Land	On Residential Property Values Overall		On Value of Adjacent Residential Package (Land and Improvements)	On Value of Adjacent Residential Land	On Residential Property Values Overall	
	Number of Respondents	Number of Respondents	Number of Respondents	Percent of Total	Number of Respondents	Number of Respondents	Number of Respondents	Percent of Total
Generally Positive Impact . . . . .	1	1	2	11	2	12	14	78
Generally Negative Impact . . . . .	0	0	0	0	0	0	0	0
Impact Depends on Characteristics of Open Space								
Impact May Be Positive in Some Areas								
While There Is No Impact Whatsoever in								
Other Areas; Negative Impact Is Unlikely . . . . .	1	3	4	22	0	2	2	11
Impact May Be Positive in Some Areas								
While There Is No Impact Whatsoever in								
Other Areas; Negative Impact Is Likely								
in Certain Areas . . . . .	5	2	7	39	0	0	0	0
No Impact Whatsoever . . . . .	3	0	3	17	1	1	2	11
No Response . . . . .	2	--	2	11	--	--	0	0
<b>Total</b>	<b>12</b>	<b>6</b>	<b>18</b>	<b>100</b>	<b>3</b>	<b>15</b>	<b>18</b>	<b>100</b>

Source: SEWRPC.

adjacent residential property; only two respondents indicated that the impact of the parkway depends on parkway characteristics; and two respondents indicated that proximity to a public parkway has no impact on property values whatsoever. Respondents generally agreed that public parkways increase the value of adjacent residential property because they enhance the natural beauty of the area and provide convenient access to open space for various extensive recreational uses, while at the same time being generally free from the nuisances sometimes associated with parks which primarily provide facilities for active recreational pursuits. Certain respondents indicated that flooding in several older residential parkway areas and the driving of automobiles at illegal speeds on parkway drives may have a negative influence on property values. Aside from these nuisances, however, the consensus among the respondents was that proximity to a public parkway is a desirable feature in residential development, generally resulting in an increase in the value of the property which is adjacent to the parkway area.

As further indicated in Table 84, in their observations on the impact of public parkways on the value of adjacent residential property, a majority of the respondents—15 of 18—restricted themselves to a consideration of land values rather than the values of the housing package including both land and improvements. The reason for confining their observations to land values is that the impact of public parkways on land costs is more readily discernable. Residential lots generally are more homogenous in size and more uniform in characteristics than are housing units; therefore, the analysis of one determinant of value, proximity to public parkways, is more readily attained for land alone than for the total housing package. While acknowledging that proximity to a public parkway may increase the value of land and improvements, most of the respondents confined their comments to that component of the residential package for which the impact of the parkway is most readily identified, the value of land.

As indicated in the introduction to this chapter, data concerning the impact of public recreation sites and open-space areas on the value of adjacent residential property are scarce. Indeed, none of the appraisers, assessors, and developers interviewed as part of this land value study had conducted any formal study of the impact of public lands on adjacent property. It should be noted, however, that of 12 respondents who indicated that public parkways generally have a positive impact on the value of adjacent residential land, seven respondents offered estimates of the premium which prospective purchasers are typically willing to pay for a lot adjacent to a parkway, as compared to a similar lot located at some distance from the parkway. These premium estimates were expressed in percentage terms and ranged from a low of 5 percent to a high of 25 percent, the mean being 16 percent.

It should be noted that virtually all of the respondents agreed that the most significant effects of public parks and parkways on residential property values are confined to properties located immediately adjacent to and within sight of the open space land. For example, a residential property abutting a public park or parkway or a property located across the street from a park or parkway may be significantly affected while a property located on the far side of the block is not likely to be affected—especially if the property has no view to the park.

Except for the estimates of the premium paid for residential lots along public parkways described above, the responses of the appraisers, assessors, and developers interviewed as part of the land value study were necessarily qualitative and generalized. The observations served, however, to identify some of the problems which had to be considered in the conduct of the land value study and thereby provided guidance and direction for the quantitative phase of the analysis, which is summarized in the following section.



## VALUE OF RESIDENTIAL PROPERTY LOCATED NEAR PARKS AND PARKWAYS

In any analysis of residential property values it is necessary to distinguish between market values and locally assessed property values. The market value of a residential parcel is the dollar amount for which the parcel could be sold in a transaction willingly entered into between a buyer and a seller utilizing objective and impersonal bargaining. The locally assessed value of a residential parcel is the dollar value which is placed upon the property by the local assessor and which, in conjunction with the property tax rate, determines the amount of property taxes to be levied on the residential parcel for a given year. Theoretically, real property is assessed at the full value which could ordinarily be obtained in a private sales transaction. In practice, however, property is often assessed at some fraction of this full market value, the fraction varying among communities. According to state statute, the determinants of value to be considered in the assessment process include the location of the parcel under consideration. Presumably, variations in the value of residential property generated by proximity to public open space lands would be reflected in the assessed value of the residential property. As part of this land value study, separate analyses were conducted to measure the impact of parks and parkways on the market value and the locally assessed value of adjacent residential property.

### MARKET VALUES

The appraisers, assessors, and developers interviewed as part of the land value study frequently observed that, because many factors interact to determine the value of a given property, the isolation of the effect of a single factor such as proximity to a park or parkway is a difficult and complex task. Accordingly, in order to quantify the impact of parks and parkways on the market value of residential property as precisely as possible, three different analyses were undertaken. Under one analysis, housing value information collected by the U. S. Bureau of the Census was examined in order to identify existing patterns for the market value of residential property around parks and parkways in Milwaukee County. Under the other two analyses, a comparison was made of actual sale prices for residential properties which are located adjacent to parks and parkways with sale prices of similar residential properties which are somewhat removed from the parks and parkways in order to identify the premium which the public is willing to pay for a location near such public open space lands. A description of the methodology and findings of these three analyses is presented in this section.

#### Residential Property Value Analysis: Census Housing Value Data

The first analysis element undertaken under the land value study consisted of a comparative analysis of housing value data collected by the U. S. Bureau of the Census<sup>2</sup> in order to determine the manner and extent to which the market value of residential property varies depending on location near different types of parks and parkways. It is noteworthy that, while this analysis was

intended to reveal the patterns of property values around parks and parkways, the results of the analysis did not indicate whether the identified variation in property values was due to a genuine difference in the characteristics of the property or whether the variation primarily reflected proximity to public open space lands for otherwise comparable property. This determination could not be made because characteristics of the residential structures were not identified in this analysis. Other analyses of residential market values undertaken as part of the land value study did, however, provide insight in this regard.

As a part of each decennial census of population and housing, the U. S. Bureau of the Census obtains and tabulates the value of single-family owner-occupied housing units located on lots of less than 10 acres. Although it does not reveal the value of individual residential properties, the Census Bureau does provide the average value of single-family housing units for each city block in the urbanized areas of the Region. The analysis procedure used in the value study involved a comparison of the average value of the housing units located on city blocks immediately adjacent to a park or parkway in Milwaukee County with the average value of housing units located on city blocks slightly removed from the park or parkway. The city blocks which were included in the analysis are shown on Map 81.

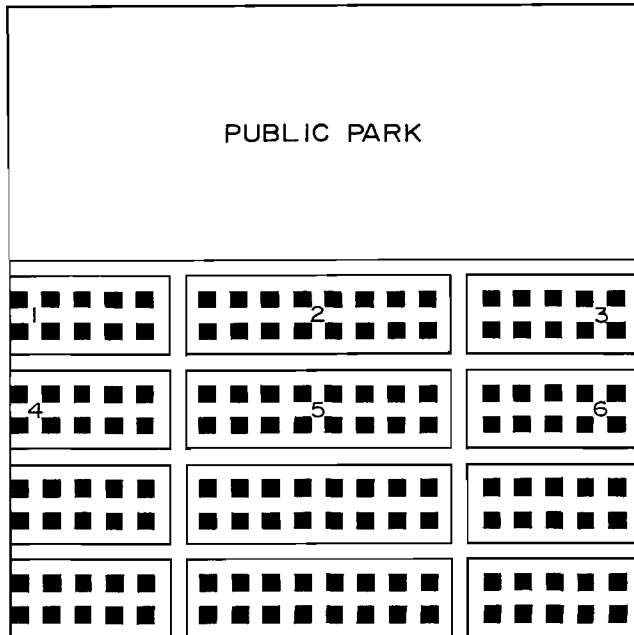
The results of the survey of appraisers, assessors, and developers provided valuable guidance in determining specific procedures to be used in this analysis. For example, survey respondents indicated that the most significant effects of parks and parkways on property values are confined to properties located immediately adjacent to the public open space land. Therefore, any impact of parks and parkways would be reflected only in the average value for city blocks in which a substantial part of all housing units on the block is situated immediately adjacent to the public open space. Accordingly, the analysis included only those city blocks in which at least half of the housing units were located immediately adjacent to a park or parkway.

Figures 66 and 67 illustrate a typical example of the manner in which this criterion was applied. For purposes of this analysis, blocks 1, 2, and 3 in Figure 66 would be designated as "adjacent" blocks because each block contains an equal number of residential properties located immediately adjacent to the public park and slightly removed from the park. The properties located immediately adjacent to the park are sufficient in number to significantly influence the average value for all properties on the block. Blocks 4, 5, and 6 in Figure 66 would be designated as "removed" blocks in this example. The

<sup>2</sup>The U. S. Bureau of the Census tabulates housing value data on the basis of the census respondent's indication of the dollar amount a property would sell for if placed on the real estate market. The census data thus provides only an estimate of actual market values, which may overstate or understate the actual situation.

Figure 66

EXAMPLE OF CITY BLOCKS TYPICALLY INCLUDED IN THE ANALYSIS OF 1970 CENSUS HOUSING VALUE DATA



Source: SEWRPC.

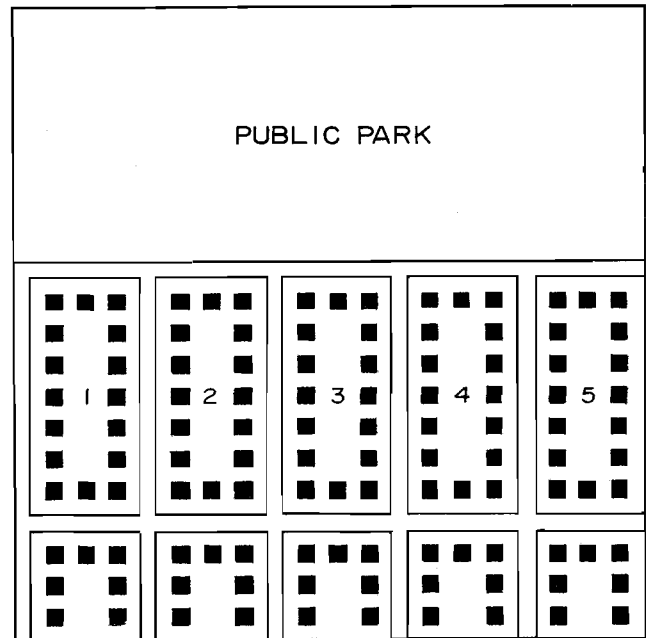
average values for blocks, 1, 2, and 3 would then be compared with the average values for blocks 4, 5, and 6 in the analysis.

Conversely, blocks 1-5 in Figure 67 would not be included in the analysis even though they are located adjacent to a public park. Any significant impact of the park on property values would be confined to the several units in each block which are located immediately adjacent to the parkland. These housing units represent a small proportion of all units on each block and, therefore, they would not significantly influence the average value of all single-family units on the block.

The first work element of this analysis consisted of identifying all city blocks which are located adjacent to parks and parkways in Milwaukee County and which meet the criteria described above, utilizing SEWRPC aerial photographs. A total of 78 "adjacent" blocks associated with 32 different parks was identified in this manner (see Map 81). A total of 84 "adjacent" blocks associated with eight different parkways was similarly identified. For each "adjacent" block included in the analysis, one or more city blocks located away from the public open space were identified, with these "removed" blocks typically lying next to the "adjacent" blocks on the side opposite the open space land. The average value of single-family housing units for each adjacent and removed block was then extracted from the 1970 census.

Figure 67

EXAMPLE OF CITY BLOCKS TYPICALLY EXCLUDED FROM THE ANALYSIS OF 1970 CENSUS HOUSING VALUE DATA

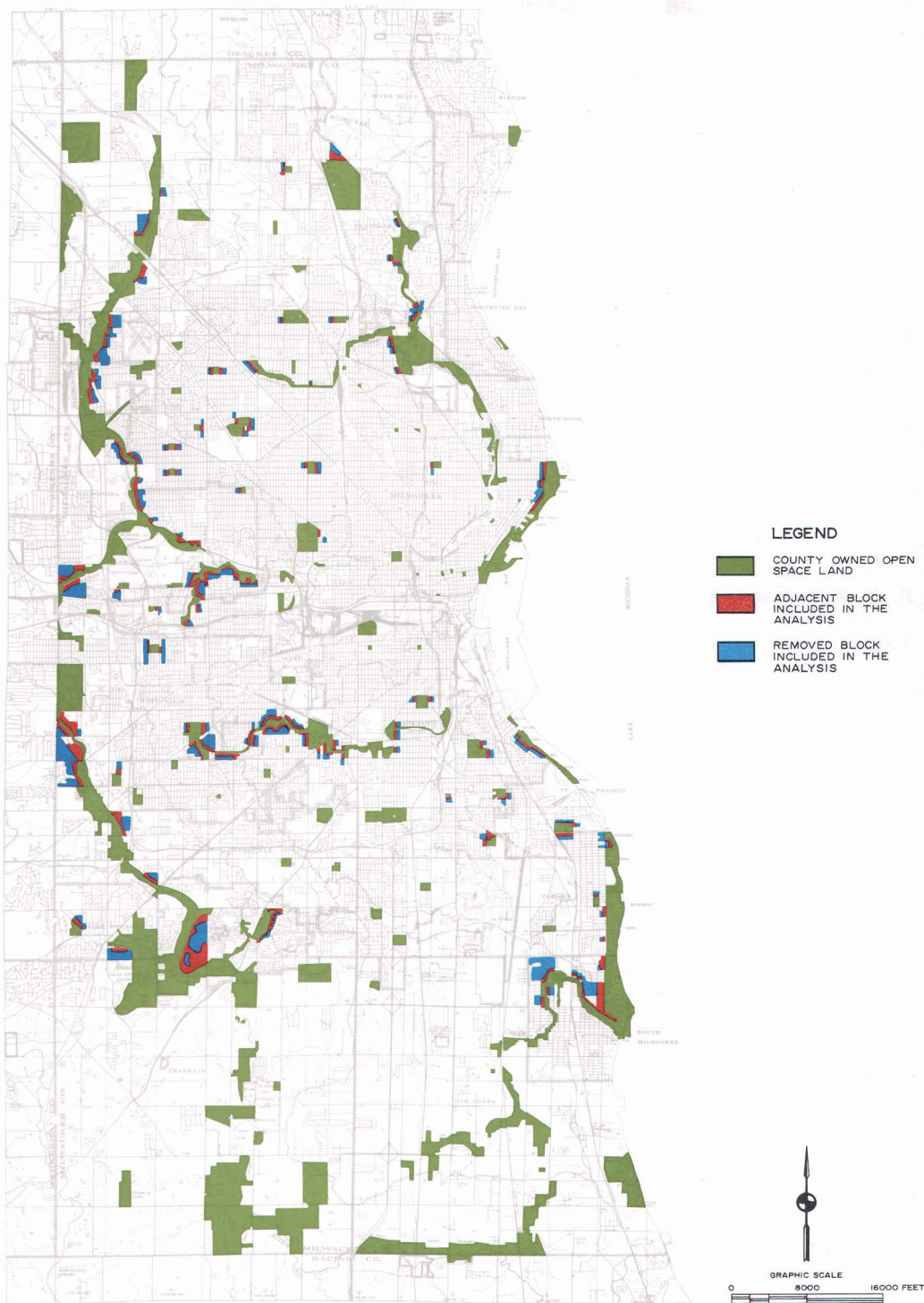


Source: SEWRPC.

The results of a comparison of property values for adjacent and removed blocks are summarized in Table 85, with the results stratified by type of public open space.<sup>3</sup> For each type of open space, the average value of single-family housing for adjacent blocks was greater than the average value of single-family housing for the removed blocks. The greatest difference in this regard is associated with Lake Michigan parks. Thus, on the average, the value of housing on city blocks located adjacent to Lake Michigan parks was greater by more than \$5,000, or 19 percent, than the value of housing located on city

<sup>3</sup>The results for park Types I, II, and III were necessarily grouped together because there was insufficient data to allow for the separate analysis of each park type. Although they differ in overall size, these park types are similar in the sense that they generally preserve and enhance the natural resource base in addition to providing space and facilities for various recreational pursuits. In contrast, Type IV parks are oriented toward the provision of recreational facilities and provide relatively little "green" space. It should also be noted that for purposes of this analysis, virtually no census housing value information was available for Type III parkways such as Lincoln Creek Parkway and the lower portion of the Kinnickinnic River Parkway, which serve primarily as drainageways for storm water and do not significantly enhance the natural resource base.

## ANALYSIS OF RESIDENTIAL PROPERTY VALUES IN MILWAUKEE COUNTY



Single family housing data tabulated by the U. S. Bureau of the Census was analyzed under the land value study to determine the manner and extent to which the market value of residential property varies depending on location near different types of parks and parkways. Although it does not reveal the value of individual residential properties, the Census Bureau does provide the average value of single family housing units for city blocks in urbanized areas. The analysis procedure involved a comparison of the average value of housing units located on city blocks immediately adjacent to a park or parkway with the average value of housing units located on city blocks slightly removed from the park or parkway. A total of 78 adjacent blocks associated with 32 different parks and a total of 84 adjacent blocks associated with eight different parkways were included in the analysis. For each type of open space considered, the average value of single family housing for adjacent blocks was greater than the average value of single family housing for the removed blocks. The greatest difference in this regard—19 percent—is associated with parks along the Lake Michigan shoreline. Excluding Lake Michigan parks, the greatest difference between adjacent and removed property values—9 percent—is associated with Type I parkways.

Source: SEWRPC.

Table 85

**VALUE OF SINGLE-FAMILY OWNER-OCCUPIED HOUSING UNITS  
BY PROXIMITY TO PUBLIC OPEN SPACE LANDS IN MILWAUKEE COUNTY: 1970**

Type of Open Space	Number of City Blocks Located Adjacent to Public Open Space for Which Value Was Tabulated	Average Value of Single-Family Housing Units on Selected City Blocks by Proximity to Public Open Space			
		Adjacent to Public Open Space	Removed from Public Open Space	Difference Between Value of Adjacent and Removed Blocks	
		Dollars	Dollars	Dollars <sup>a</sup>	Percent <sup>b</sup>
Parks					
Types I, <sup>c</sup> II, <sup>d</sup> , and III <sup>e</sup>	28	21,975	20,289	1,686	8.3
Type IV <sup>f</sup>	26	20,723	20,527	196	1.0
Lake Michigan Parks <sup>g</sup>	24	32,454	27,188	5,266	19.4
Parkways					
Type I <sup>h</sup>	32	37,134	34,131	3,003	8.8
Type II <sup>i</sup>	52	26,438	26,359	79	0.3

<sup>a</sup> Absolute difference is calculated as the average for adjacent blocks minus the average for removed blocks.

<sup>b</sup> Percent difference is calculated as the absolute difference divided by the average for removed blocks.

<sup>c</sup> Type I parks are large parks, 250 or more acres in area, having a multicounty service area. Such parks rely heavily for recreational value and character on natural resource amenities to the degree that such amenities should dictate the location and extent of this type of park. Type I parks typically provide space and facilities for such recreational activities as camping, picnicking, swimming, and golf.

<sup>d</sup> Type II parks are large parks, ranging in area from 100 to 249 acres, having a countywide or multicomunity service area. Like Type I parks, Type II parks rely for their recreational value and character on natural resource amenities and typically provide space and facilities for such activities as camping, golf, picnicking, and swimming.

<sup>e</sup> Type III parks are intermediate size parks—ranging in area from 25 to 99 acres—having a multineighborhood service area. Such parks rely more heavily on the developmental characteristics of the area to be served than on natural resource amenities for location and are usually more intensively developed for active recreation use than Type I or Type II parks.

<sup>f</sup> Type IV parks are small parks—usually less than 25 acres in area—which have a neighborhood or subneighborhood as a service area. Such sites usually provide for active, intensive recreational use and typically include such facilities as baseball and softball diamonds and tennis courts.

<sup>g</sup> Lake Michigan parks are parks which are located along the Lake Michigan shoreline.

<sup>h</sup> Type I parkways are parkways which encompass a large variety of significant natural resource amenities. Type I parkways in Milwaukee County include the Menomonee River parkway, the Milwaukee River parkway, and the Root River parkway.

<sup>i</sup> Type II parkways are parkways which significantly preserve and enhance the natural resource base but which, in comparison to Type I parkways, contain a smaller variety of natural resource amenities. In Milwaukee County, Type II parkways include Honey Creek parkway, the Little Menomonee River parkway, Oak Creek parkway, Underwood Creek parkway, and the upper portion of the Kinnickinnic River parkway.

Source: U. S. Bureau of the Census and SEWRPC.

blocks slightly removed from these parks. As previously indicated, however, the Lake Michigan shoreland is a unique area in which land development patterns and real estate values have been as much influenced by the presence of the Lake itself as by the development of public parks in that area. Accordingly, isolating the impact of public parks on the value of adjacent residential property in the Lake Michigan area is extremely difficult.

Excluding Lake Michigan parks, the greatest difference between adjacent and removed property values is associated with Type I parkways—that is, parkways which significantly protect and enhance high value elements of the natural resource base, such as the Menomonee River, the Milwaukee River, and the Root River Parkways. The average value of housing located in city blocks adjacent to Type I parkways was greater by about \$3,000, or



9 percent, than the average value of housing on city blocks somewhat removed from such parkways.

The difference between adjacent and removed property values also was significant for Types I, II, and III parks, with the average value of housing on city blocks located adjacent to such parks being higher by about \$1,700, or 8 percent, than the average value of city blocks located away from these parks. Conversely, there was, on the average, little difference in property values between adjacent and removed city blocks around Type IV parks and Type II parkways.

It also is apparent from Table 85 that property values around Type I parkways are, in general, significantly higher than property values in the vicinity of other types of public open space land in Milwaukee County—including Lake Michigan parks. Thus, the average value of property on city blocks situated adjacent to Type I parkways is more than \$37,000 while the corresponding figure for the other types of open space ranges from \$20,700 for Type IV parks to \$32,500 for Lake Michigan parks. In this respect, Type I parkways appear to enhance the property tax base more dramatically than other types of open space land.

This analysis of property values requires qualification in two respects. First of all, while the value of adjacent residential properties was greater on the average than the value of removed properties for all parks included in the study, the reverse situation existed for certain individual open space areas. Table 86 presents the results of a comparison of the average value of adjacent property with the average value of removed property on an individual basis for each park or parkway for which data was obtained. As indicated in this table, the value of adjacent property was lower than the value of removed property for 10 of

32 parks included in this analysis, with seven of these 10 being Type IV parks. For parkways in Milwaukee County, the value of adjacent property was less than the value of removed property for only one of eight parkways included in the analysis—Oak Creek Parkway.

Secondly, it should be recognized that many of the “adjacent” city blocks included in this analysis contained housing units situated immediately next to a park or parkway as well as housing units which are slightly removed from the park or parkway—that is, located on the side of the block opposite from the public open space land. According to the survey findings of appraisers, assessors, and developers, the value of the latter properties would not be significantly increased by the open space land. In these situations, the average value for all properties on a given “adjacent” block, as tabulated by the Census Bureau, tends to understate the value of those housing units on the blocks which are located immediately adjacent to the park or parkway. Thus, the average value of properties which are actually located immediately adjacent to a public open space area may be somewhat higher than the average value for residential property on “adjacent” blocks as indicated in Table 85.

Consideration of Figure 68 can facilitate a better understanding of this problem. Figure 68 depicts city blocks adjacent to and removed from public open space lands which are typical of the city blocks included in this property value analysis. According to responses of the appraisers, assessors, and developers, any significant positive impact of public open space lands on property values is confined to properties located on side A of block 1. In general, the value of property located on side B of block 1 is not significantly influenced by the open space land. The average value for all housing units on block 1 as tabulated by the Census Bureau is, there-

Table 86

DETAILED RESULTS OF THE ANALYSIS OF PROPERTY VALUES  
AROUND PUBLIC OPEN SPACE LANDS IN MILWAUKEE COUNTY: 1970

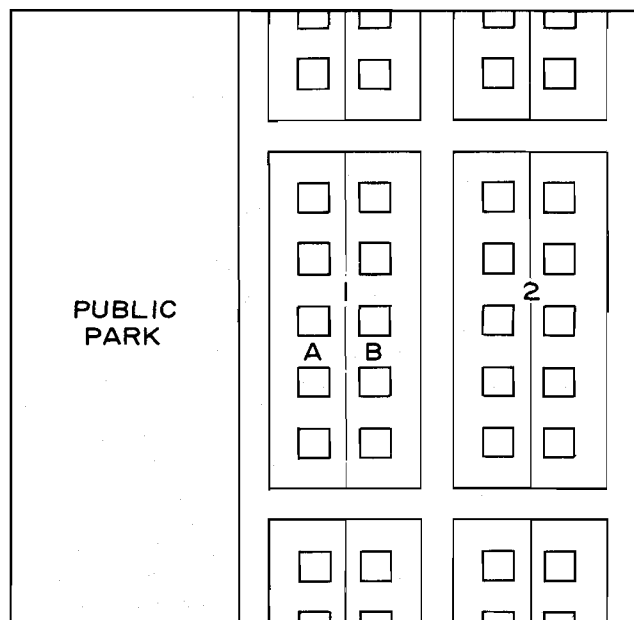
Type of Open Space	Open Space Lands For Which the Average Value of Single-Family Housing on Selected Adjacent Blocks Was Lower Than the Average Value of Single-Family Housing on Selected Removed Blocks by the Percentage Difference in Average Value Between Adjacent and Removed Blocks <sup>a</sup>						Open Space Lands For Which the Average Value of Single-Family Housing on Selected Adjacent Blocks Was Greater Than the Average Value of Single-Family Housing on Selected Removed Blocks by the Percentage Difference in Average Value Between Adjacent and Removed Blocks <sup>a</sup>					
	0.1-0.9 Percent	1.0-4.9 Percent	5.0-9.9 Percent	10.0-14.9 Percent	15.0 Percent or More	Total	0.1-0.9 Percent	1.0-4.9 Percent	5.0-9.9 Percent	10.0-14.9 Percent	15.0 Percent or More	Total
<b>Parks</b>												
Types I, II, and III . . .	0	1	1	1	0	3	0	2	2	4	1	9
Type IV . . . . .	0	3	3	0	1	7	1	2	3	1	2	9
Lake Michigan Parks . .	0	0	0	0	0	0	0	0	1	0	3	4
<b>Parkways</b>												
Type I . . . . .	0	0	0	0	0	0	0	0	3	0	0	3
Type II . . . . .	0	0	1	0	0	1	0	2	2	0	0	4

<sup>a</sup> Calculated as difference between the average values of adjacent and removed blocks divided by the average value of the removed blocks.

Source: U. S. Bureau of the Census and SEWRPC.

Figure 68

EXAMPLE OF TYPICAL CITY BLOCK INCLUDED IN THE  
ANALYSIS OF 1970 CENSUS HOUSING VALUE DATA



Source: SEWRPC.

fore, likely to be less than the value of properties on side A of the block but greater than the value of properties on side B.

Using SEWRPC aerial photographs, it was determined that approximately 90 percent of the "adjacent" blocks included in this analysis contained an equal number of housing units situated immediately adjacent to and slightly removed from the public open space area. By assuming that the housing situated on that side of an "adjacent" block which is opposite from the open space (housing on side B of block 1 in the above example) is similar in value to housing on the "removed" block (block 2 in the above example), it was possible to estimate the value of housing which is located immediately adjacent to the open space (housing on side A of block 1 in the above example).

This estimated average value of single-family housing situated immediately adjacent to public open-space lands is compared with the average value of "removed" property in Table 87, with the results presented separately for several major types of public open space areas. The differences between the average value of "adjacent" and "removed" properties presented in Table 87 are almost twice as large as the corresponding differences previously indicated in Table 85. The largest difference in this regard—approximately \$10,000—occurs for Lake Michigan parks. Excluding Lake Michigan parks, the difference in value between "adjacent" and "removed" properties ranges from \$150 for Type II parkways to about \$5,700 for Type I parkways.

Table 87

ESTIMATED VALUE OF SINGLE-FAMILY HOUSING UNITS  
BY PROXIMITY TO PUBLIC OPEN SPACE LANDS IN MILWAUKEE COUNTY: 1970

Type of Open Space	Estimated Average Value of Single-Family Housing Units on Selected City Blocks by Proximity to Public Open Space			
	Immediately Adjacent to Public Open Space	Removed from Public Open Space	Difference Between Estimated Value of Adjacent and Removed Properties	
	Dollars	Dollars	Dollars <sup>a</sup>	Percent <sup>b</sup>
<b>Parks</b>				
Types I, II, and III . . . . .	23,493	20,289	3,204	15.8
Type IV . . . . .	20,899	20,527	372	1.8
Lake Michigan Parks . . . . .	37,193	27,188	10,005	36.8
<b>Parkways</b>				
Type I . . . . .	39,836	34,131	5,705	16.7
Type II . . . . .	26,509	26,359	150	0.6

<sup>a</sup> Absolute difference is calculated as the estimated average for adjacent blocks minus the average for removed blocks.

<sup>b</sup> Percent difference is calculated as the absolute difference divided by the average for removed blocks.

Source: U. S. Bureau of the Census and SEWRPC.

In general, the findings of this analysis are consistent with the results of the survey of appraisers, assessors, and developers conducted as the first phase of the land value study. Specifically, it was the consensus of the respondents that parkways which significantly preserve and enhance the natural resource base will consistently generate high property values. This opinion is supported by both the relatively high value of properties located in the vicinity of Type I parkways and by the substantial difference between adjacent and removed properties associated with these parkways.

As for the impact of public parks on property values, there was consensus among the appraisers, assessors, and developers that the effects of public parks depend on the characteristics of the parks and, in particular, on the type of facilities provided and the type of use generated. Specifically, it was observed that parks which preserve and enhance the natural resource base generate higher property values than parks which are intensively developed for various recreational pursuits. This hypothesis is supported by the large differences between adjacent and removed properties associated with Types I, II, and III parks—all of which preserve and enhance the natural resource base—compared with the small differences between adjacent and removed properties associated with Type IV parks, which are small parks having relatively little green space.

#### Residential Property Sales

##### Analysis: Land and Improvements

As indicated above, the market value of residential property situated immediately adjacent to certain types of public open space lands is significantly higher than the value of residential property located away from the open space area. The higher market values associated with properties which are adjacent to public open space lands may result from two phenomena. First of all, the higher value may reflect an actual difference in structural characteristics, with housing units situated next to the open space land being somewhat larger or more elaborately designed, or containing more features and amenities than housing located away from the open space land. Secondly, the higher value of adjacent property may reflect the willingness of the public to pay more for housing solely because of its location near public open space land. As part of the land value study, a residential property sales analysis was conducted in order to provide insight into the latter phenomenon—that is, to investigate this locational premium, or the extra amount which the public is willing to pay simply to be able to live near public open space land.

To the extent that public parks and parkways affect the value of adjacent residential property, the magnitude of this effect should be reflected in the sale prices of such property. By comparing the actual sale prices of residential properties which are located adjacent to parks or parkways with the sale prices of similar residential properties which are somewhat removed from the park or parkway, it should be possible to identify the premium which is typically paid to secure housing next to such public open space areas. In particular, if all of the factors

which influence market value are the same for two residential properties except for the fact that one of the parcels is located adjacent to a park or parkway while the other parcel is somewhat removed from the public land, any difference in the sale price of the properties may be attributed to the locational proximity to the park or parkway.

It is important to note again that a residential sales analysis of this type is a complex process because of the many factors which can influence the market value of residential property and the resultant difficulty in finding sets of sales information for residential properties which are comparable in every respect except for proximity to a park or parkway. Characteristics of the house, the lot, the neighborhood, and the municipality act in unison to determine the market value of a residential package. With respect to the housing unit itself, some of the major determinants of value include size, the number of bedrooms and bathrooms, age, the type of exterior veneer, and the provision of such amenities as a fireplace, basement, and garage. Some of the major determinants of the value of a lot are size, soil characteristics, and topographical features such as tree cover and scenic views. Characteristics of the neighborhood and municipality in which a parcel is located also influence the market value of the residential property. Important characteristics of the neighborhood are the neighborhood design and the relation of the neighborhood to other land uses. Important characteristics of the municipality are the level of services provided, including the type of public utilities supplied to the residences, and the property tax structure. Clearly, there are many factors to be “controlled” in a residential sales analysis undertaken to isolate the premium which is typically paid for a location near public open space lands.

The basic information utilized in this residential sales study was extracted from the records of the Multiple Listing Service, Inc. (MLS), a private agency whose purpose is to assist its member real estate brokers in their sales activities by providing an areawide listing of properties which are being placed on the market by member realtors. In addition to reports of new listings provided to member realtors on a daily basis, MLS also prepares a quarterly sales report which includes a photograph, description, and sale price for all properties sold through MLS during the previous three-month period and an annual index of all properties sold through MLS during a given year. Approximately 70 percent of all residential property offered for sale in the Milwaukee metropolitan area is listed through MLS.

This residential sales study included two inventory elements. The first element involved identification of residential properties which were located adjacent to public parks or parkways in Milwaukee County and which were listed with MLS, using MLS annual sales indices for the years 1970 through 1974. The second inventory element entailed identification of residential parcels which were located distances of up to one and one-half miles from the park or parkway and which were basically comparable with the residential properties

adjacent to the park or parkway identified in phase one. The series of quarterly sales reports published by the MLS was the main data resource for this process of identifying comparable residential properties.

The analysis phase of this residential sales study involved a comparison of the sales prices of the residential properties located adjacent to the park or parkway with the sales prices of the comparable residential properties located away from the public land. It should be noted that, for each residential property located adjacent to the park or parkway, more than one comparable residential parcel located some distance from the park or parkway often was identified. In such cases, the average of the sales prices for the parcels located away from the park or parkway was compared with the sales prices of the residential properties located adjacent to the park or parkway.

As previously indicated, the MLS quarterly sales reports, which contain a photograph and description of the house and lot as well as the sale price of the property, were used in identifying comparable residential properties. In some instances it was impossible to identify a residential property located away from the park or parkway that would be directly comparable with the property on the park or parkway. Many times, however, it was possible to identify a residential property located away from the park or parkway that was similar to the residential property located adjacent to the park or parkway except for certain features such as the provision of a fireplace or garage or differences in lot area. In most of these situations it was possible to adjust the sale price of the residential property located away from the park or parkway to eliminate any variation in sale price resulting from these differences in the features of the house or lot.

Since the characteristics of the very neighborhood and municipality in which a property is located influence the market value of the property, it also was necessary to control these factors in an effort to isolate the impact of locational proximity to a park or parkway. In particular, it was necessary that each comparable selected property lie in the same municipality as the property located on the park or parkway, thereby insuring similarity in both the level of local services provided, especially schools, and the property tax structure. Furthermore, efforts were made to identify comparables that were located in neighborhoods which were similar in design to the neighborhood on the park or parkway and which were not significantly affected by other land uses, thereby minimizing variations in sale price due solely to differences in neighborhood characteristics.

The results of this sales analysis for residential properties located adjacent to and removed from public open space lands in Milwaukee County are summarized in Table 88, with the results presented separately for several major types of public open space lands.<sup>4</sup> In this table, the average sale price of residential properties located adjacent to a park or parkway is compared with the average price of comparable residential properties located away from the public land. It should be recognized that the proper-

ties for which sales information was identified represent only a portion of all residential properties which are located adjacent to parks or parkways in Milwaukee County and which were sold between 1970 and 1974. Although the total number of residential sales transactions which occurred in areas adjacent to parks and parkways in Milwaukee County between 1970 and 1974 is unknown, the number of such transactions identified as part of this residential sales analysis is relatively small, a fact which is due both to the general difficulty of finding sales information for residential property located along parks and parkways—even when MLS resources are utilized—and to the difficulty of identifying similar information for comparable residential properties which are located away from the park or parkway. The sample size for certain types of public open space is small, and the sales information on these parks is intended to serve only as an indicator of what the actual impact of parklands may be.

The results of this residential sales analysis, as summarized in Table 88, are generally consistent with the findings of the analysis of census housing value data, thereby lending further support to the observations of the appraisers, assessors, and developers concerning the impact on property values of public open-space lands. The largest difference in value between "adjacent" and "removed" properties once again is associated with Type I parkways, corroborating the opinion of survey respondents that, among the various types of public open-space lands, parkways which preserve high value elements of the natural resource base will consistently have the largest positive impact on residential property values. As for public parks, the results of this analysis support the survey respondents' observation that the locational premium associated with parks varies according to park characteristics, with larger parks which serve to enhance the natural resource base—such as Types I, II, and III parks—generating larger premiums than smaller, intensively developed parks—such as Type IV parks.

While the results of this residential property sales analysis generally are consistent with the findings of the analysis of census housing value data, the implications of the two analyses are somewhat different. While the analysis of census housing value data revealed the existence of higher property values in the immediate vicinity of certain types of public open space lands, the census analysis provided no determination of whether the higher property values reflect a difference in structural characteristics of the properties included in the analysis or whether the higher

---

<sup>4</sup> As was the case for the analysis of the census housing value information, the results for park Types I, II, and III were grouped together because there was insufficient data to allow for a separate analysis of each park type. It should also be noted that sales transactions identified for properties in the Lake Michigan shoreland area were so few in number as to preclude a separate analysis for Lake Michigan parks.



values simply reflect a premium attached to residing near these public open space areas. In contrast, the purpose of this residential sales analysis was to isolate the premium associated with locational proximity to public open space lands by "controlling" the characteristics of the properties included in the analysis. The results of this analysis suggest that, although there may be a tendency to construct larger and more elaborate housing adjacent to public open space areas, there is also a locational premium

which is at least partially responsible for the higher property values which occur in the immediate vicinity of certain types of public open space lands.

The residential sales analysis can be better understood by examining Table 89 which presents the results of a comparison of the sale price of each residential property adjacent to a park or parkway with the sale price of the property comparable to it but located away from

Table 88

**AVERAGE SALE PRICES FOR SELECTED RESIDENTIAL PROPERTIES (HOUSE AND LOT) LOCATED ADJACENT TO AND REMOVED FROM PUBLIC OPEN SPACE LANDS IN MILWAUKEE COUNTY: 1970-1974**

Type of Public Open Space Land	Number of Residential Properties Located Adjacent to Park or Parkway for Which Sales Information Was Identified	Average Sale Price of Residential Property by Proximity to Public Open Space			
		Adjacent to Park or Parkway	Removed from Park or Parkway	Difference Between Sale Price of Adjacent and Removed Parcels	
		Dollars	Dollars	Dollars <sup>a</sup>	Percent <sup>b</sup>
Parks					
Types I, II, and III . . .	39	30,406	28,556	1,850	6.5
Type IV . . . . .	15	23,238	22,629	609	2.7
Parkways					
Type I . . . . .	30	42,475	39,159	3,316	8.5
Type II . . . . .	10	38,622	36,507	2,115	5.8

<sup>a</sup> Absolute difference is calculated as the average for adjacent properties minus the average for removed properties.

<sup>b</sup> Percent difference is calculated as the absolute difference divided by the average for removed properties.

Source: Multiple Listing Service, Inc., and SEWRPC.

Table 89

**DETAILED RESULTS OF THE RESIDENTIAL SALES ANALYSIS CONDUCTED FOR RESIDENTIAL PROPERTIES (HOUSE AND LOT) ADJACENT TO AND REMOVED FROM PUBLIC OPEN SPACE LANDS IN MILWAUKEE COUNTY: 1970-1974**

Type of Open Space	Cases in Which Sale Price of the Property Adjacent to Public Open Space is Lower Than Sale Price of the Property Removed from the Open Space by the Percentage Difference in the Sale Price Between the Adjacent and Removed Properties <sup>a</sup>						Cases in Which Sale Price of the Property Adjacent to Public Open Space is Greater Than Sale Price of the Property Removed from the Open Space by the Percentage Difference in the Sale Price Between the Adjacent and Removed Properties <sup>a</sup>					
	0.1-0.9 Percent	1.0-4.9 Percent	5.0-9.9 Percent	10.0-14.9 Percent	15.0 Percent or More	Total	0.1-0.9 Percent	1.0-4.9 Percent	5.0-9.9 Percent	10.0-14.9 Percent	15.0 Percent or More	Total
Parks												
Types I, II, and III . . .	1	4	1	1	1	8	2	8	7	5	9	31
Type IV . . . . .	0	2	0	1	0	3	2	5	4	1	0	12
Parkways												
Type I . . . . .	1	2	1	0	0	4	1	5	7	8	5	26
Type II . . . . .	0	2	0	0	0	2	0	3	3	1	1	8

<sup>a</sup> This percentage difference is calculated as the absolute difference in the sale price between the adjacent and removed properties divided by the sale price of the removed property.

Source: Multiple Listing Service, Inc., and SEWRPC.

the public land. Significantly, not all of the residential properties located adjacent to park or parkway lands had selling prices higher than those of the associated comparable property located away from the County land. Of the 54 properties located adjacent to public parks and included in this analysis, 43 sold for prices which were higher than the prices of the associated comparable properties located away from the park, while 11 sold for prices lower than those of the comparable. Similarly, of the 40 properties located adjacent to the public parkways and included in this analysis, 34 properties sold for prices which were higher than those of the associated comparable properties located away from the parkway while six sold for prices lower than those of the comparable.

Situations in which the residential property adjacent to the park or parkway sold for a price lower than that of its comparable property may be traced to one of two factors. First, it is possible that the lower sale prices near the park or parkway reflect nuisances associated with a given park or parkway such as rowdiness on the part of park users, excessive traffic and parking problems related to a high volume of use, or quality of park maintenance. The possibility of such negative influences was recognized by many of the appraisers, assessors, and developers interviewed in the first phase of this land value study and such effects could negatively influence a portion or all of the residential property adjacent to a given park, regardless of the park type. Second, it is possible that the selected comparable property located away from the park or parkway is not similar in all respects to the associated residential property located adjacent to the public open space land. While every reasonable effort was made to identify similar parcels, exact comparability may not always have been achieved.

#### Residential Sales Analysis: Lot Prices

As indicated above, the identification of comparable properties is a critical aspect of any residential sales analysis conducted in order to identify the premium which is attached to proximity to public open space lands. The major problem in identifying comparables in the foregoing sales analysis was controlling the characteristics of the residential structure. Because of the great variation in construction materials, age, size, condition, and amenities, it is difficult to achieve comparability between two residential units.

Considerably less variation exists for the characteristics of residential lots—exclusive of improvements—than for the characteristics of the overall housing package. Consequently, the identification of comparable residential lots is more readily accomplished than the identification of comparable residential packages. In order to provide further insight into the premiums associated with a location near public open-space lands, a second residential sales analysis was conducted, focusing on the selling price of residential land.

The inventory phase of this residential land sales study involved identification of residential land subdivisions located adjacent to public open space lands in Milwaukee County and determination of the selling prices for lots

within these subdivisions in order to identify any variation in land value which results from locational proximity to the open-space lands. In some cases, the land sale prices were provided by the developer who had sold the lots, and in other cases the land sale prices were obtained from records at the office of the Milwaukee County Register of Deeds.<sup>5</sup>

The number of residential subdivisions which have been developed adjacent to public open space lands in Milwaukee County is large. When identifying those subdivisions in which land sale prices would be analyzed, however, only those subdivisions which have been platted in the recent past—since 1950—were selected. There were two reasons for restricting the analysis to these subdivisions. First, as indicated by a prior Commission analysis of historic land subdivision practices within the Region, a dramatic change in residential development patterns occurred around 1950.<sup>6</sup> Urban development, which had historically occurred in concentric rings around existing urban concentrations, became characterized by a leapfrog pattern known as “urban sprawl” after 1950. The population density of the developed urban area of the Region decreased sharply, and it is possible that the importance attached to living near “green” spaces changed as residential lot sizes increased. With more open area provided in the privacy of their own property, the public may presently place less value on proximity to a park or parkway than in the more distant past. Since the results of this land value study are intended to assist in the formulation of decisions for public park acquisition and development, it is important that the results of this study reflect relatively current attitudes and preferences on proximity to public open space lands. The second reason for restricting the analysis to subdivisions platted after 1950 is related to the availability of data: it was very difficult to obtain a representative sample of sale prices for lots in a subdivision platted before this time.

While a considerable number of residential subdivisions has been developed adjacent to parkways in Milwaukee County since 1950, very few subdivisions have been developed adjacent to public parks. This situation is reflected in the results of the residential land sales analysis. Thus, a total of 13 subdivisions which are located adjacent to parkway lands in Milwaukee County and which were platted after 1950 was identified for the study. In contrast, only two subdivisions which are

---

<sup>5</sup> While the sale price of real property is not recorded on the deed, a transfer fee imposed by the state and determined as a proportion of the sale price is usually recorded. This transfer fee, currently assessed at one dollar per thousand dollars of the sale price, is considered to be a reasonable indicator of the sale price for a given property.

<sup>6</sup> See SEWRPC Technical Report No. 12, *Residential Land Subdivision in Southeastern Wisconsin*, for a detailed description of residential land development patterns in the Region during the period from 1920 to 1970.

located adjacent to public parks and which were platted since 1950 were identified, thus precluding a reliable determination of the locational premium associated with public parks in this land sales analysis. The balance of this section, then, focuses on the locational premium associated with a residential location near parkway lands.

Within each of the 13 subdivisions which are located adjacent to public parkways and which were identified for use in the land sales analysis, sale prices were obtained for a sample of lots located immediately adjacent to the parkway and a sample of lots somewhat removed from the parkway. The selling prices of the lots then were analyzed to determine any variation in value which might be due to proximity to the parkway. The average number of lots per subdivision, which are located adjacent to the parkway and for which sale prices were obtained, was eight; the average number of lots per subdivision, which are somewhat removed from the parkway and for which sale prices were obtained, was 23. In the selection of specific lots within a subdivision for which sales information was to be obtained, an effort was made to exclude lots which were atypical because of certain unique features such as a stand of fine trees.

In the analysis an effort was made to distinguish between the locational premiums associated with developed and undeveloped parkways. A parkway was considered to be developed if a minimal level of improvements had been made including site grading and planting of grass and, typically, the provision of a walkway or park drive. A parkway was considered to be undeveloped if these minimal improvements were not present and the publicly owned land was in an essentially natural state.<sup>7</sup>

Analysis of the land sales information for the 13 subdivisions indicated that the selling prices for lots immediately adjacent to a parkway were, on the average, higher than the selling prices of other lots in the subdivision. Beyond the first tier of residential lots adjacent to the parkway, however, there appeared to be no variation in sale price due to proximity to the parkway, so that the parkways had no apparent effect on the sale price of residential lots which were not located immediately adjacent to the parkway lands.

A more complete summary of the results of this land sales analysis is presented in Table 90. Within six of the seven subdivisions located adjacent to developed parkways, the average selling price of lots situated next to the parkway was higher than the average selling price of the remaining lots in the subdivision. For these six subdivisions, the average selling price of lots adjacent to the parkway exceeded the average selling price of lots located away from the parkway by amounts ranging from 4 per-

cent to 49 percent, the average variation being 24 percent. Within each of the six subdivisions located adjacent to undeveloped parkways, the average selling price of lots situated next to the parkway was higher than the average selling price of the remaining lots in the subdivisions, with the premiums associated with lots along the parkway ranging from 3 percent to 17 percent, the average variation in this regard being 12 percent.

Flood hazards probably have a significant impact on the sale price of residential lots. Accordingly, as part of this residential land sales analysis, an effort was made to determine the extent to which the subdivisions under consideration are subject to flood hazards. It was found that for four of the subdivisions located adjacent to developed parkways, a portion of the total lot area of each of the "adjacent" lots included in the analysis was located in the floodplain. For each of these lots the portion of the total lot area lying in the floodplain was determined. The average proportion in this regard was calculated for the "adjacent" lots in each subdivision, with the following results: Subdivision No. 2—52 percent; Subdivision No. 4—100 percent; Subdivision No. 5—55 percent; and Subdivision No. 6—43 percent. The existence of flood hazards may have caused the sale price of these lots to be somewhat lower than normal. In particular, the flood hazards associated with lots situated adjacent to the parkway in Subdivision No. 2 may explain why the selling price for "removed" lots was, on the average, slightly higher than the selling price for "adjacent" lots in this particular subdivision. It should be noted that better subdivision design could have overcome some of the negative influence associated with flood hazards within these subdivisions.

The results of this land sales analysis are consistent with the findings of the residential property sales analysis described in the previous section. Although the land sales analysis focused on the selling price of residential lots while the previous analysis focused on the selling price of residential housing packages (house and lot), both analyses did identify a significant premium associated with a location near public parkways, indicating a willingness by the public to pay more for residential property simply because of its location near parkway lands.

The results of this analysis also support certain observations in regard to the impact of parkways on property values offered by the appraisers, assessors, and developers interviewed under the land value study. For example, the land sales analysis indicated that, beyond the first row of residential lots situated immediately adjacent to a parkway, there is no variation in land sale prices due to proximity to the parkway. This finding corroborates the opinion of the survey respondents that any significant impact of public open space lands on property values is confined to residential property immediately adjacent to the open space area.

Furthermore, as indicated in a previous section of this chapter, some of the survey respondents offered an estimate of the premium which is typically paid for residential land located adjacent to a parkway as com-

---

<sup>7</sup>It should be noted that a majority—10 of 13—of the subdivisions included in this analysis were situated adjacent to Type I parkways, thus precluding stratification of the results according to the parkway classification system used for other work elements of the land value study.

Table 90

## SELLING PRICE FOR RESIDENTIAL LOTS IN SELECTED SUBDIVISIONS ADJACENT TO PARKWAYS IN MILWAUKEE COUNTY

## Subdivision Adjacent to Developed Parkway

Subdivision Number	Year Subdivision Was Platted	Average Selling Price of Lots in Subdivision by Proximity to Parkway			
		Adjacent Dollars	Removed Dollars	Difference	
				Dollars <sup>a</sup>	Percent <sup>b</sup>
1	1950	2,600	1,744	856	49.1
2	1953	2,143	2,190	- 47	- 2.1
3	1955	3,864	3,389	475	14.0
4	1968	12,389	8,527	3,862	45.3
5	1972	14,125	13,587	538	4.0
6	1973	19,357	16,457	2,900	17.6
7	1975	26,833	23,600	3,233	13.7

## Subdivision Adjacent to Undeveloped Parkway

Subdivision Number	Year Subdivision Was Platted	Average Selling Price of Lots in Subdivision by Proximity to Parkway			
		Adjacent Dollars	Removed Dollars	Difference	
				Dollars <sup>a</sup>	Percent <sup>b</sup>
8	1960	3,357	3,272	85	2.6
9	1961	8,375	7,667	708	9.2
10	1962	7,343	6,354	989	15.6
11	1968	8,483	7,864	619	7.9
12	1969	9,724	8,306	1,418	17.1
13	1974	13,567	11,613	1,954	16.8

<sup>a</sup> Absolute difference is calculated as the average for adjacent lots minus the average for removed lots.

<sup>b</sup> Percent difference is calculated as the absolute difference divided by the average for removed lots.

Source: Selected Residential Land Developers, the Milwaukee County Register of Deeds, and SEWRPC.

pared with similar property situated away from the parkway, with the average of these estimated premiums being 16 percent. The average premium paid for residential lots situated adjacent to parkway land as determined in this land sales analysis—18 percent<sup>8</sup>—supports the accuracy of the estimate of the survey respondents.

## LOCALLY ASSESSED PROPERTY VALUES

In addition to the analyses undertaken to identify the impact of public open space lands on the market value of residential property described above, the land value study also included an analysis of locally assessed residential property values in the vicinity of public parks and parkways. The primary purpose of this analysis of local assessments was to identify the manner and extent to which locally assessed residential property values vary

with distance from public open space lands. An understanding of the pattern of locally assessed property values around parks and parkways is important within the local planning process because the assessed valuation in conjunction with the local property tax rate determines the amount of property tax revenue which may be collected in a community.

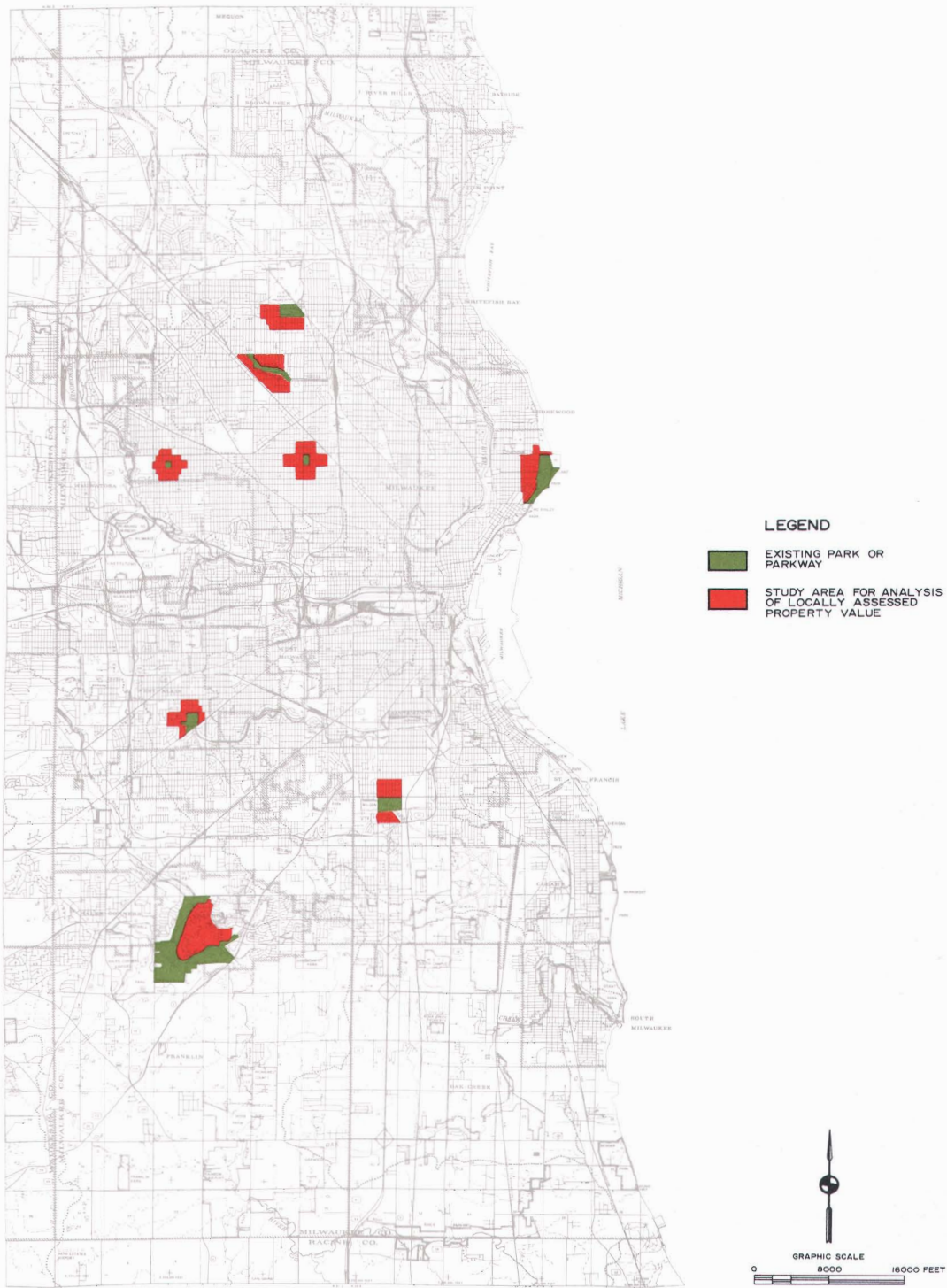
As part of this analysis of locally assessed property values, assessment information was collected and analyzed for residential areas surrounding six parks and portions of two parkways in Milwaukee County (see Map 82). In the selection of these parks and parkways, an attempt was made to obtain a sample of public open space lands which was uniformly distributed throughout Milwaukee County and representative of the major types of parks existing in the County. Another guideline in selecting these parks and parkways was that the surrounding residential area should be relatively isolated from other land uses which might influence property values. The parks selected for this analysis are as follows: Types II and III parks—Wilson Park and McGovern Park in the City of Milwaukee and McCarty Park in the City of West Allis; Type IV parks—Sherman Park and Cooper Park in the City of Milwaukee; and Lake Michigan parks—

<sup>8</sup> This is the average premium associated with "adjacent" lots for all subdivisions included in this analysis with the exception of Subdivision No. 2, for which the sale price of "adjacent" lots was actually slightly lower on the average than the sale price of "removed" lots, presumably due to flood hazards.



# Map 82

## ANALYSIS OF LOCALLY ASSESSED PROPERTY VALUES



The land value study included an analysis of locally assessed residential property values in the vicinity of public parks and parkways to identify the manner and extent to which locally assessed property values vary with distance from public open space lands. Consideration of the variation in locally assessed property values around parks and parkways is important because the assessed valuation in conjunction with the local property tax rate determines the amount of property tax revenue which may be collected in a community. As part of the land value study, assessment information was collected and analyzed for residential areas surrounding six parks and portions of two parkways in Milwaukee County. Among the eight study areas, the greatest variation in the assessed value of the surrounding residential property occurred for Lake Park. The average assessed value of lots situated immediately adjacent to Lake Park exceeded the average assessed value of lots located away from Lake Park by about \$7,000, or 81 percent. For Lake Park, the average assessed value of adjacent structures exceeded the average assessed value for removed structures by more than \$20,000, or 64 percent.

Source: SEWRPC.

Lake Park in the City of Milwaukee.<sup>9</sup> The parkway areas included in this analysis are a portion of the Root River Parkway in the Village of Greendale—a Type I parkway—and a portion of Lincoln Creek Parkway in the City of Milwaukee—a Type III parkway. The parks and parkways selected for this analysis necessarily represent a small portion of all public open space lands in Milwaukee County and, consequently, the variation in residential assessments around the selected parks and parkways is intended to serve only as an indication of the actual situation.

It should be noted that, while the purpose of this analysis was to identify the existing pattern of locally assessed residential property values around public open space lands, the results of this analysis did not indicate whether any identified variation was due to an actual difference in the characteristics of the property or whether the variation primarily reflects a difference in the market value simply because of a location near public open space lands. This determination could not be made because the characteristics of the residential structures were not identified in this analysis.

It should also be observed that, although theoretically real property should be assessed at the full value which could ordinarily be obtained at private sale, in practice real property is typically assessed at fractions of full value—called assessment ratios—which vary among communities. In fact, in two of the three communities in which residential assessments were analyzed, real property was assessed at less than full value. In order to achieve comparability among all communities in this analysis, the property assessments for these two communities were multiplied by constant factors, the inverse of the respective assessment ratios, thereby approximating full market valuations.

Table 91 provides a comparison of the average assessed value of residential lots located immediately adjacent to various types of public open space lands with the average assessed value of residential lots located away from the open-space areas by distances of up to six city blocks.

<sup>9</sup> The proper identification of variation in locally assessed property values around public open space lands requires that public lands which are analyzed be situated within an extensive area of residential development. The only Type I parks in Milwaukee County which are suitable in this regard are those located along the Lake Michigan shoreline: Lake Park and the Grant-Sheridan-Warnimont Park complex. Because the Lake Michigan shoreland is a unique area in which development patterns and property values have been heavily influenced by the Lake itself, these parks are not typical of other Type I parks in Milwaukee County. While this analysis does include an examination of locally assessed property values in the vicinity of Lake Park, the results in this regard are intended to be representative of parks along the Lake Michigan shoreline rather than of Type I parks throughout Milwaukee County.

Among the major types of public open space, the greatest variation in the assessed value of the surrounding residential lots occurred for Lake Park, the only Lake Michigan park included in this analysis. In this regard, the average assessed value of lots situated immediately adjacent to Lake Park exceeded the average assessed value of lots located away from Lake Park by about \$7,000, or 81 percent. Excluding Lake Park, the largest difference between “adjacent” and “removed” properties is associated with the Type I parkway included in the analysis, with the average assessed value of “adjacent” properties exceeding the average assessed value of “removed” properties” by about \$4,900, or 41 percent. At the other extreme, there was virtually no difference between the average assessed values of “adjacent” and “removed” properties associated with the Type IV parks included in this study.

Figure 69 presents a detailed illustration of the variation in the assessed value of residential lots in the vicinity of public open space lands. In general, the greatest variation in land assessments occurs between those lots which are located immediately adjacent to the public land and those lots which are located up to one city block away. An exception to this trend is the pattern of assessments for lots in the vicinity of the Type I parkway. As indicated in Figure 69, the assessments are relatively high for lots located immediately adjacent to this parkway as well as for lots located at distances of up to two blocks away, with assessments decreasing dramatically with distance beyond that point. To a large extent, the high assessments associated with lots located one and two blocks away from the particular parkway studied may be attributed to the topography of the area, with many of these lots being situated on a hill which affords a scenic view toward the parkway land and river below.

Table 91

**ASSESSED VALUE OF RESIDENTIAL LAND  
SURROUNDING SELECTED PUBLIC OPEN SPACE  
LANDS IN MILWAUKEE COUNTY: 1974**

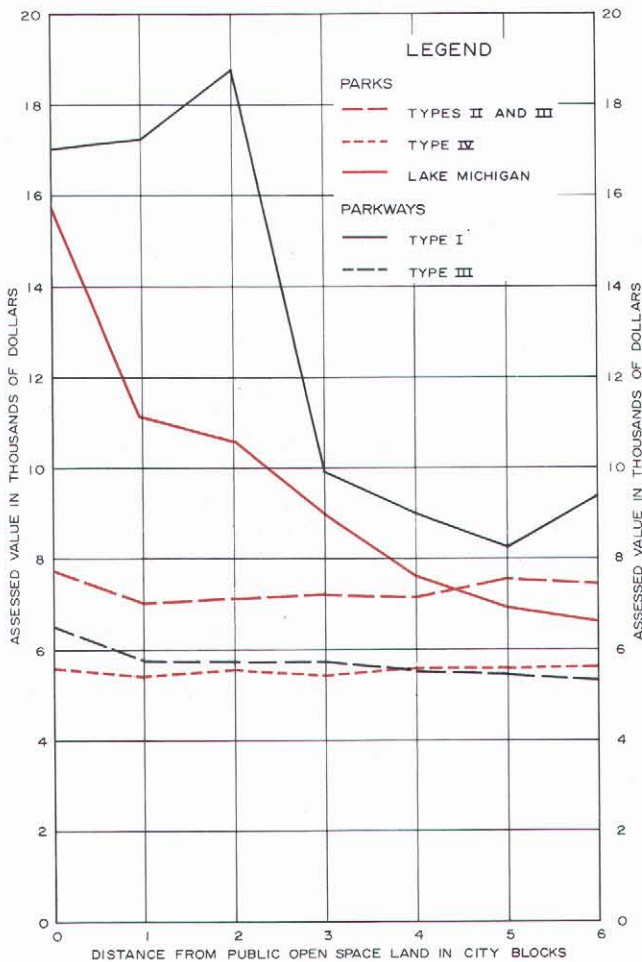
Type of Open Space	Average Assessed Value of Residential Land by Proximity to Open Space Land			
	Adjacent	Removed	Difference	
	Dollars	Dollars	Dollars	Percent
<b>Parks</b>				
Types II and III . . .	7,715	7,254	461	6.4
Type IV . . . . .	5,574	5,505	69	1.3
Lake . . . . .	15,629	8,615	7,014	81.4
<b>Parkways</b>				
Type I . . . . .	16,995	12,087	4,908	40.6
Type III . . . . .	6,538	5,588	950	17.0

Source: Property tax rolls for the Cities of Milwaukee and West Allis and the Village of Greendale, and SEWRPC.



Figure 69

ASSESSED VALUE OF RESIDENTIAL LOTS SURROUNDING  
PUBLIC OPEN SPACE LANDS IN MILWAUKEE COUNTY: 1974



Source: Property tax rolls for the Cities of Milwaukee and West Allis and the Village of Greendale, and SEWRPC.

The results of a similar analysis focusing on the assessed value of residential structures are summarized in Table 92 and Figure 70. Table 92 provides a comparison of the average assessed value of residential structures located adjacent to public open space lands with the average assessed value of residential structures located away from the open space by distance of up to six blocks. With the exception of Type I parkways, the average assessed value of "adjacent" residential structures is higher than the average assessed value of the "removed" structures for each major type of public open space land. The greatest variation in the assessed value of the surrounding residential structures is associated with Lake Park. For this Park, the average assessment for "adjacent" structures exceeded the average assessment for "removed" structures by more than \$20,000, or 64 percent.

Table 92

ASSESSED VALUE OF RESIDENTIAL  
IMPROVEMENTS SURROUNDING SELECTED PUBLIC  
OPEN SPACE LANDS IN MILWAUKEE COUNTY: 1974

Type of Open Space	Average Assessed Value of Residential Improvements by Proximity to Open Space Land			
	Adjacent	Removed	Difference	
	Dollars	Dollars	Dollars	Percent
<b>Parks</b>				
Types II and III . . .	21,109	17,647	3,462	19.6
Type IV . . . . .	19,747	18,724	1,023	5.5
Lake . . . . .	53,125	32,316	20,809	64.4
<b>Parkways</b>				
Type I . . . . .	30,717	31,019	-302	-1.0
Type III . . . . .	19,268	16,284	2,984	18.3

Source: Property tax rolls for the Cities of Milwaukee and West Allis and the Village of Greendale, and SEWRPC.

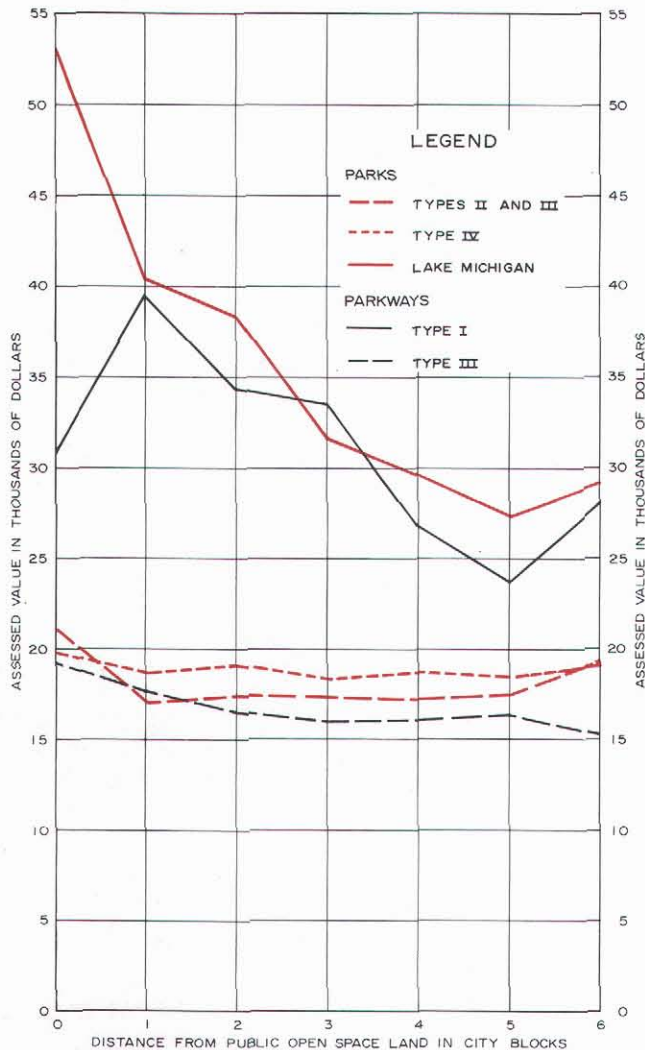
As previously indicated, it is very likely that property values in the vicinity of the Type I parkway which was included in this analysis have been influenced by topographical features and, in particular, by high land which provides a scenic view toward the parkway land from properties situated several blocks away. In this regard, Figure 70 indicates that structures located immediately adjacent to the parkway as well as structures which are situated up to three blocks away from the parkway and which have a view toward the parkway are assessed at a considerably higher value than properties located still farther away from the public open-space area. Specifically, it was found that the average assessed value of all residential structures located up to three blocks away from the parkway exceeds the average assessed value of residential structures located more than three blocks away from the parkway by about \$8,300, or 32 percent.

The results of this analysis of locally assessed property values are generally consistent with the major findings of the analyses of residential property market values described in the previous section of this report as well as with the observations of the appraisers, assessors, and developers interviewed as part of the land value study. For example, the analysis of real property assessments provided still another indication that, among the various types of public open-space lands, with the exception of Lake Michigan parks, Type I parkways—that is, parkways which significantly preserve and enhance high value elements of the natural resource base—have the greatest favorable impact on the value of residential property in the immediate vicinity. The dramatic increase in assessments on residential lots and structures situated adjacent to or with a view toward the Type I parkway included in this analysis supports this conclusion.



Figure 70

ASSESSED VALUE OF RESIDENTIAL  
STRUCTURES SURROUNDING SELECTED PUBLIC  
OPEN SPACE LANDS IN MILWAUKEE COUNTY: 1974



Source: Property tax rolls for the Cities of Milwaukee and West Allis and the Village of Greendale, and SEWRPC.

Furthermore, the results of this analysis of residential property assessments provides additional evidence that the impact of public parks on the value of adjacent residential property depends on the park characteristics and, in particular, on the size and the intensity of development within the park. While none of the Types II, III, and IV parks included in this analysis appears to have a major impact on property values, the results of the analysis do suggest that Types II and III parks—that is, larger parks which protect the natural resource base while providing space and facilities for recreational pursuits—enhance the property tax base to a greater degree than smaller parks, such as Type IV parks, which are typically

developed in an intensive manner for various active recreational pursuits and which provide only limited amounts of green space.

SURVEY OF HOUSEHOLDS IN THE  
VICINITY OF PUBLIC OPEN SPACE LAND

In addition to the various analyses undertaken to identify the impact of public open space lands on the value of nearby residential property, the land value study also included a survey of households residing in the vicinity of public parks and parkways. The survey was undertaken to determine commonly perceived advantages and disadvantages of living near such open space lands. Public attitudes concerning the desirability of a residential location in proximity to public open space lands may influence the value of real property. Accordingly, the results of the household survey may explain some of the variation in property values identified in the previous section of this chapter.

The household survey was conducted within the residential areas surrounding the public open-space lands which were selected for use in the analysis of local property assessments described above. A total of 400 households was interviewed, with this sample equally distributed among the eight parks and parkways, consisting of six parks and two parkways. The sample for each public open space area was randomly selected and was stratified to include households situated various distances from the public land. Thus, for each park or parkway, approximately one-half of the respondents were located immediately adjacent to or with a view toward the open space land, while the other half were located distances of one to three city blocks away from the open area. A survey questionnaire was designed to facilitate the personal interviews and is included as Appendix M.

To determine the general desirability of a residential location near a public open space area, each respondent was asked whether the nearness of the open space land influenced his decision to buy his house. As indicated in Table 93, for each type of open space area, households situated immediately adjacent to, or with a view of, the public land were generally more influenced by the presence of the park or parkway than households located away from the open space land by distances of one to three blocks. The most frequent affirmative response occurred for residents living adjacent to Type I parkways, with 61 percent of these respondents indicating that they were indeed influenced by the proximity of the parkway and 36 percent further indicating that they were very much attracted by the presence of the open space. About 55 percent of the household members situated adjacent to Type IV parks responded that the decision to buy their house was influenced by the presence of the park, while less than half of the households situated adjacent to the other types of public open space lands answered affirmatively to this question.

In an effort to understand the commonly perceived advantages of a location near public open space lands, survey respondents were asked how satisfied they are



living near such open space lands and, additionally, were asked why they feel this way. As indicated in Table 94, among the adjacent households, the households situated next to parkways expressed the highest level of satisfaction with their location near public open space lands. Thus, 92 percent of the households situated adjacent to the Type I parkway and 88 percent of the households situated adjacent to Type III parkways indicated that they were generally satisfied with their location while,

for the parks included in this survey, the corresponding figure ranged from 66 percent for Types II and III parks to 87 percent for the Lake Michigan park.

The specific advantages associated with a residential location near a public open space area as summarized in Table 94 appear to vary according to the characteristics of the open space land. Thus, the most frequently mentioned advantages associated with the parkways and

Table 93

**PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSEHOLDS  
RESIDING IN THE VICINITY OF SELECTED PUBLIC OPEN SPACE LANDS ON WHETHER THE  
PRESENCE OF THE OPEN SPACE AREA INFLUENCED THE DECISION TO BUY THEIR HOMES**

Categories of Response	Public Parks						Parkways			
	Types II and III		Type IV		Lake		Type I		Type III	
	Adjacent	Removed	Adjacent	Removed	Adjacent	Removed	Adjacent	Removed	Adjacent	Removed
Yes . . . . .	36	16	55	19	48	37	61	30	36	4
Very Much Attracted by Open Space Land . .	22	2	23	8	0	11	36	22	4	0
Somewhat Attracted by Open Space Land . .	13	14	32	11	48	26	21	8	32	4
Slightly Attracted by Open Space Land . .	1	0	0	0	0	0	4	0	0	0
No . . . . .	64	84	34	70	52	63	39	70	64	96
No Response . . . . .	0	0	11	11	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100

Source: SEWRPC.

Table 94

**PERCENTAGE DISTRIBUTION OF RESPONSES BY A SAMPLE SURVEY OF HOUSEHOLDS  
RESIDING IN THE VICINITY OF SELECTED OPEN SPACE LANDS ON THEIR GENERAL SATISFACTION  
WITH A RESIDENTIAL LOCATION IN THE VICINITY OF THE PUBLIC OPEN SPACE AREA**

Categories of Response	Public Parks						Parkways			
	Types II and III		Type IV		Lake		Type I		Type III	
	Adjacent	Removed	Adjacent	Removed	Adjacent	Removed	Adjacent	Removed	Adjacent	Removed
Generally Satisfied with Location										
Near Public Open Space Lands . . . . .	66	87	80	98	87	92	92	100	88	96
Convenient Access to Space and Facilities . .	23	30	25	39	4	33	7	9	0	4
Privacy, Quiet, Peaceful . . . . .	13	21	23	21	0	4	36	17	44	48
Natural Beauty, Aesthetically Pleasing . . . .	17	6	14	2	57	33	18	52	24	20
Feeling of Open Space . . . . .	0	0	0	0	0	0	4	22	20	0
Other Positive Comments . . . . .	9	17	7	11	22	7	11	0	0	4
No Specific Advantages Mentioned . . . . .	4	13	11	25	4	15	16	0	0	20
Generally Dissatisfied with Location										
Near Public Open Space Lands . . . . .	34	13	20	2	13	8	8	0	12	4
Level of Use Too High . . . . .	3	1	0	0	0	4	0	0	0	0
Excess Traffic, Parking Problems . . . . .	14	3	2	0	0	4	0	0	0	0
Unsafe: Rowdiness, Vandalism, Crime . . . .	10	7	18	0	4	0	4	0	4	0
Poor Park Maintenance . . . . .	3	1	0	2	9	0	0	0	0	0
Other Negative Comments . . . . .	1	1	0	0	0	0	4	0	8	4
No Specific Disadvantage Mentioned . . . . .	3	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100

Source: SEWRPC.

the Lake Michigan park included in this survey were related to privacy, natural beauty, and the feeling of open space which the public land provides for the adjacent households. While recognizing these benefits, households situated adjacent to Types II, III, and IV parks most frequently cited convenient access to space and facilities as the greatest advantage of their location next to the park.

Among the various public open space lands included in this survey, the highest level of dissatisfaction associated with proximity to public open space areas was expressed by households situated adjacent to Types II, III, and IV parks. In this regard, 34 percent of the survey respondents living adjacent to Types II and III parks expressed general dissatisfaction with their location near a public park, while the corresponding figure for Type IV parks was 20 percent. Among these respondents, the most frequently cited disadvantages were related to excess traffic generated by park users and to an unsafe environment in terms of rowdiness, vandalism, and crime.

The results of the household survey as summarized in Tables 93 and 94 are generally consistent with the analyses of the impact on property values of public open-space lands conducted under the land value study. For example, on the basis of the household survey, the public appears to attach the greatest esteem to a residential location near Type I parkways because of an appreciation for the privacy, quiet, and natural beauty which these parkways provide. The high desirability of a residential location adjacent to Type I parkways serves to explain why the impact of such parkways on adjacent residential property values was generally the highest of the various types of open space lands considered—with the exception of Lake Michigan parks. On the other hand, the dissatisfaction associated with a location near Types II, III, and IV parks, expressed by some of the survey respondents, partially explains the lesser impact of such parks on the value of adjacent property indicated by the various analyses of property values.

In addition to the foregoing questions concerning the general desirability of a residential location in the vicinity of public open space lands, the household survey also included questions designed to provide further insight into the monetary premium associated with a location near such public lands. In this regard, survey respondents were asked whether they think that proximity to a public open space area has any influence on the value of their property and whether any influence so perceived is positive or negative in nature. In addition, respondents were asked to identify the value of their property and to indicate how much of this figure is attributable to the location of the property near the public open space.<sup>10</sup>

It should be recognized that survey respondents typically possessed a superficial knowledge of real estate values and, consequently, their responses concerning the impact of public open space lands on property values only represent opinions intended to supplement the analyses described in the previous section of this chapter. Due to the respondents' self-acknowledged lack of expertise

and their resultant reluctance to specify locational premiums, the actual number of responses in this regard is relatively small.

Table 95 provides a summary of the responses to the question concerning whether public open space lands affect the value of nearby residential property. As indicated in this table, the opinion that public open space lands affect the value of their property is generally more prevalent among households residing adjacent to the open space area than among households located one to three blocks away from the public land. Among the adjacent households, the most frequent affirmative response to this question was observed for households situated adjacent to Lake Park. In this regard, 70 percent of the respondents situated adjacent to Lake Park indicated that the Park has a positive effect on the value of their property. With the exception of Lake Park, the opinion that public open space lands have a positive impact on the value of their property was most prevalent among respondents residing adjacent to the Type I parkway. While many of the respondents living adjacent to Types II, III, and IV parks felt that the open space land has a positive effect on the value of their property, a small portion of the respondents did indicate that, due to nuisances cited in Table 94, these parks have a negative effect on the value of their property.

Some of the survey respondents were willing to estimate the additional amount which they feel their property is worth as a result of its location near a public open space area. The average locational premiums for the various types of public open space lands based upon the estimates of survey respondents residing adjacent to such public lands are presented in Table 96. Survey respondents situated adjacent to the Type I parkway perceived the largest locational premiums, estimating that their properties were worth about \$14,000, or 17 percent more, simply because of their location next to the parkway land. Among the other types of public open space lands, the estimated locational premiums ranged from an average of about \$3,000, or 10 percent, for Types II and III parks to about \$5,400, or 7 percent, for Lake Park. The pattern of responses as summarized in Tables 95 and 96 once again suggests that among the various kinds of public open-space land, with the exception of Lake Michigan parks, Type I parkways—that is, parkways which significantly preserve and enhance high value elements of the natural resource base—have the greatest positive impact on the value of adjacent residential property.

---

<sup>10</sup> It is important to note that these questions are concerned only with the identification of a locational premium associated with proximity to public open space lands—that is, with the additional value attached to property simply because of its location next to a public park or parkway. This survey does not address the other way in which public open-space lands may impact on real property values—namely, by stimulating the construction of larger and more elaborately designed housing along scenic open-space lands.

Table 95

**PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSEHOLDS  
RESIDING IN THE VICINITY OF SELECTED OPEN SPACE LANDS ON THE PERCEIVED  
IMPACT OF THE OPEN SPACE LAND ON THE VALUE OF THEIR PROPERTY**

Categories of Response	Public Parks						Parkways			
	Types II and III		Type IV		Lake		Type I		Type III	
	Adjacent	Removed	Adjacent	Removed	Adjacent	Removed	Adjacent	Removed	Adjacent	Removed
Open Space Affects Value of Property . . .	58	34	48	40	70	33	57	57	52	8
Impact is Positive . . . . .	54	33	46	40	70	33	57	57	52	8
Impact is Negative . . . . .	4	1	2	0	0	0	0	0	0	0
Open Space Has No Impact on Value of Property . . . . .	38	63	48	53	30	59	39	43	40	92
Don't Know . . . . .	4	3	4	7	0	8	4	0	8	0

Source: SEWRPC.

Table 96

**PREMIUM ASSOCIATED WITH A RESIDENTIAL  
LOCATION NEAR PUBLIC PARKS AND PARKWAYS  
AS ESTIMATED BY A SURVEY SAMPLE OF  
HOUSEHOLDS RESIDING IN THE VICINITY OF  
SELECTED PUBLIC OPEN SPACE LANDS**

Type of Open-Space Land	Number of Households Responding	Average Estimated Value of Property in Dollars	Average Estimated Premium Associated with a Location Near Public Open-Space Land	
			Dollars	Percent
<b>Parks</b>				
Types II and III . . .	15	29,667	2,969	10.0
Type IV . . . . .	11	33,636	4,482	13.3
Lake . . . . .	6	79,333	5,375	6.8
<b>Parkways</b>				
Type I . . . . .	10	80,600	13,996	17.4
Type III . . . . .	9	33,222	3,461	10.4

Source: SEWRPC.

**ESTIMATED IMPACT OF PUBLIC OPEN SPACE  
LANDS ON RESIDENTIAL PROPERTY VALUES**

Because there are many factors which interact to determine real property values, the isolation of a single factor such as locational proximity to a public open-space area is a complex task. Accordingly, in order to identify the impact on property values of public open space lands as precisely as possible, a number of different surveys and analyses was undertaken. Previous sections of this chapter presented a detailed description of the methodology and findings of the individual work elements conducted under the land value study. This section discusses the implications of these findings for park and open space planning and development.

The surveys and analyses conducted under the land value study consistently indicated that most public open space lands have a positive impact on the value of residential property situated adjacent to or with a view toward the public area, with the magnitude of this impact being directly related to the characteristics of open space. As indicated throughout this chapter, this positive impact on property values may result from two different phenomena. First, the public open-space land may stimulate the construction of larger and more elaborate housing adjacent to the scenic open space areas. Second, there may be a locational premium associated with residential properties situated adjacent to public open space lands, reflecting a willingness on the part of the public to pay more for a property simply because of its location next to a public open space area. Some of the analysis elements conducted under the land value study were intended to identify the total impact on property values of public open space lands regardless of the cause, while other analyses focused exclusively on the locational premium.

Table 97 presents an estimate of the effect on property values of the major types of public open space land based upon the analyses conducted as part of the land value study. More specifically, for each major type of public open space land, Table 97 presents both an estimate of the total impact on property values and an estimate of the portion of this total impact which is due to the locational premium. The estimate of the total impact on property values for each type of open space land is based upon two analyses conducted under the land value study—namely, the analysis of census housing value data and the analysis of locally assessed property values.<sup>11</sup>

<sup>11</sup> The estimate of the total impact on property values for a given type of open-space land as presented in Table 97 is the average of the percent variation between "adjacent" and "removed" properties identified under the analyses of census housing value data and the percent variation between "adjacent" and "removed" properties identified under the analysis of locally assessed property values.

Table 97

**ESTIMATED IMPACT OF PUBLIC OPEN SPACE LANDS  
ON THE VALUE OF ADJACENT RESIDENTIAL PROPERTY**

Type of Open Space	Percent by Which the Value of Property Which is Situated Adjacent to a Public Open Space Area Exceeds the Value of Property Which is Situated Away from the Public Land	
	Total Impact <sup>a</sup>	Locational Premium <sup>b</sup>
Parks		
Types I, II, and III . .	16	7
Type IV . . . . .	3	2
Lake . . . . .	52	--
Parkways		
Type I . . . . .	30	9

<sup>a</sup> The total impact reflects both the tendency to construct larger and more elaborate housing next to public open space lands and a locational premium, or the additional value which is attached to residential property simply because of its location near a public open space area. The estimate of the total impact for a given type of public open space land presented in this table is the average of the variation between adjacent and removed properties identified under the analysis of census housing value data and the variation between adjacent and removed properties identified under the analysis of locally assessed property values.

<sup>b</sup> The locational premium (defined above) for a given type of public open space land as presented in this section was identified under the residential property sales analysis conducted as part of the land value study.

Source: SEWRPC.

The locational premium for each type of open space land is the premium which was identified under the residential property sales analysis conducted as part of the land value study.

Based upon the findings of the land value study, among the major types of public open space land, the greatest positive impact on property values is associated with the Lake Michigan parks. As indicated in Table 97, on the average the value of residential property situated adjacent to the Lake Michigan parks included in the land value study exceeded the value of property which is somewhat removed from these parks by more than 50 percent. As observed throughout this chapter, the Lake Michigan shoreland is a unique area in which land development patterns and property values have been significantly influenced by the Lake itself. The unusually large impact on property values associated with Lake Michigan parks constitutes an exceptional situation which is not representative of other parks of similar size in Milwaukee County.

Among the major types of public open space land, with the exception of Lake Michigan parks, the greatest impact on property values is associated with Type I parkways, with the value of property adjacent to such parkways, exceeding the value of property located away from the parkway lands by an average of 30 percent. The influence on property values of the parks included in the land value study was considerably less. Thus, the estimated total impact of the Types I, II, and III parks included in the study was 16 percent, while the total impact on property values associated with Type IV parks was only 3 percent.

As further indicated in Table 97, a locational premium accounts for a significant portion of the total positive impact on property values associated with the various types of public open space lands. For example, it is estimated that the public is willing to pay an additional 9 percent for residential property simply because of a location near a Type I parkway. At the other extreme, it is estimated that the public is typically willing to pay only an additional 2 percent for housing because of its location near a Type IV park.

It should be observed that Table 97 does not include an estimate of the impact on property values for Type II parkways—that is, parkways which preserve and enhance medium value elements of the natural resource base—or for Type III parkways—parkways which function primarily as drainageways and which generally do not serve to protect and enhance significant elements of the natural resource base. Based upon the analysis of census housing value data, Type II parkways appear to have little or no impact on the value of adjacent residential property (see Table 85). On the other hand, the residential sales analysis conducted under the land value study indicated that the public is typically willing to pay an additional 6 percent for residential property simply because of its location adjacent to a Type II parkway (see Table 88). The apparent inconsistency between these findings is due primarily to the fact that the analyses on which they are based focused on different segments of Type II parkways in Milwaukee County. It may be concluded from these analyses, however, that the impact on property values of Type II parkways is considerably less than the impact associated with Type I parkways.

The data gathered for Type III parkways was so limited as to make it difficult to determine the impact on property values of this type of public land. The analysis of locally assessed property values did indicate that the value of residential property situated adjacent to one segment of a Type III parkway—Lincoln Creek Parkway—was on the average somewhat higher than the value of property removed from the Parkway (see Table 91). It should be recognized that this particular segment of Lincoln Creek Parkway is generally the widest and most attractive portion of that parkway and that the variation in property values for that segment may not be typical of the pattern of land values along Type III parkways in the balance of the County. Indeed, it is suspected that, due to a general lack of natural resource amenities, Type III parkways typically have very little, if any, positive impact on the value of nearby residential property.



Based upon the results of the land value study, Type I parkways—that is, parkways which significantly preserve and enhance high value elements of the natural resource base—appear to have the greatest overall positive impact on property values of the major types of public open-space land. This finding corroborates the opinion common among the appraisers, assessors, and developers interviewed as part of the land value study that parkways which significantly preserve the natural resource base and enhance natural beauty will consistently generate high property values. The substantial impact on residential property values associated with Type I parkways is a logical consequence of the high esteem which the public attaches to a residential location near such parkways as revealed in the survey of households conducted under the land value study. The survey respondents indicated a high regard for the privacy, quiet, and natural beauty which Type I parkways typically afford, thereby explaining to some extent the substantial positive impact on property values associated with these parkway lands.

The results of the land value study also support the general consensus among the appraisers, assessors, and developers that the impact on property values of public parks varies significantly with the characteristics of the park and, in particular, with the size of the park, the intensity of development within the park, and the level of use generated. Under the individual analysis elements conducted as part of the land value study, Types I, II, and III parks—that is, larger parks which typically preserve and enhance the natural resource base in addition to providing space and facilities for various recreational pursuits—consistently showed a greater impact on property values than Type IV parks—that is, small parks which are typically intensively developed for active recreational pursuits and which provide only limited amounts of “green” space. However, based upon the survey of households conducted as part of the land value study, there may be certain disadvantages associated with a residential location near public parks regardless of park type, with the most commonly cited problems being excessive traffic and parking problems and an unsafe environment in terms of rowdiness, vandalism, and crime. These disadvantages caused some of the survey respondents to express general dissatisfaction with their location near public parks, thereby further explaining the lower impact on property values of parks relative to Type I parkways identified under the land value study.

The impact of public open-space lands on the value of adjacent residential property, expressed in dollars, is significant. For example, based upon the percentage impact shown in Table 97, it is estimated that Type I parkways in Milwaukee County increased the County tax base by about \$9 million in 1970, thereby generating an additional \$360,000 in property taxes. Continued acquisition of parkway lands as planned by the Milwaukee County Park Commission, primarily along the Root River, and, more important, the continued development of adjacent lands for residential purposes would increase the impact of Type I parkways on the property tax base to almost \$15 million, in 1970 dollars.

## MONETARY FLOOD RISKS

As indicated above, parkways which contain significant elements of the natural resource base generally have a positive impact on property values. In addition, parkways which encompass the floodlands of rivers and streams preserve such floodlands in a natural open condition, thereby maintaining the floodwater conveyance and storage capability of such lands and minimizing costly flood problems. In order to provide an indicator of the economic benefits of floodland management efforts, the Commission, under the Menomonee River watershed study, prepared estimates of the annual monetary risk<sup>12</sup> associated with flood hazards for selected stream reaches within the Menomonee River watershed, assuming alternative future planned and uncontrolled development conditions. The findings of the Menomonee River watershed study related to the monetary risks associated with flood hazards occurring as a result of increases in flood discharges and stages due to floodland development are presented here as another indicator of the potential economic benefits of parkway development.<sup>13</sup>

The areas selected for computation of monetary flood risks are those that would experience serious flood problems as a result of a 100-year flood event under year 2000 plan conditions. A two-step procedure was used to select reaches for computation of monetary flood risks under existing and hypothetical future conditions. First, examination of the results of historic flood surveys helped to identify those reaches that have actually experienced serious flood problems. Second, results of hydrologic-hydraulic simulation modeling for existing and year 2000 plan land use conditions identified additional flood-prone areas. This two-step procedure led to the identification of 25 flood-damage-prone reaches as shown on Map 83.

Flood damage risks computations were carried out for five land use-floodland development conditions: existing (1975) conditions (condition 1); year 2000 plan conditions (condition 2); uncontrolled development outside the floodland (condition 3); uncontrolled development within the floodland (condition 4); and uncontrolled development within and outside of the floodlands (con-

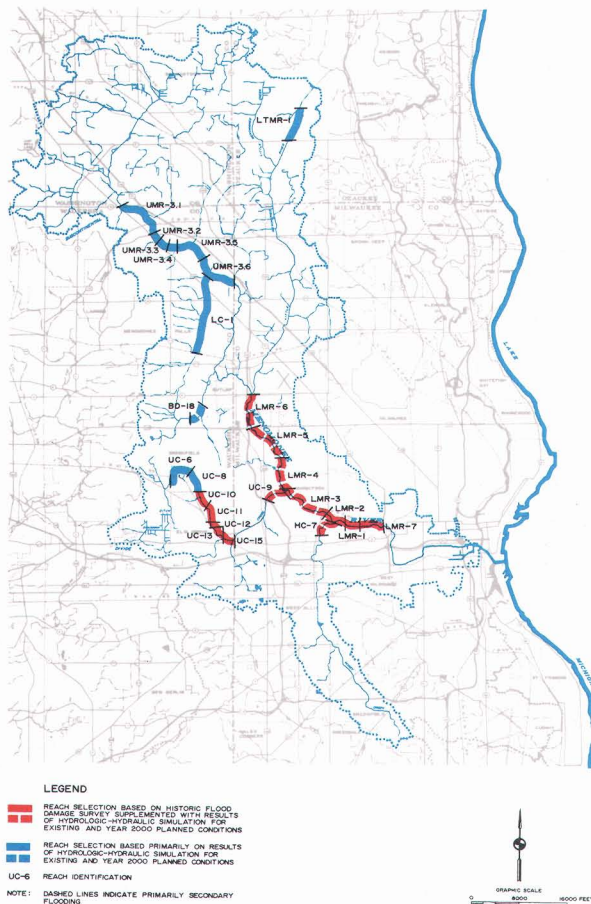
---

<sup>12</sup> The average annual monetary flood damage risk is defined for a stream reach as the sum of the monetary flood loss resulting from floods of all probabilities, each weighed by its probability of occurrence in any year. The average annual flood damage risk expressed in dollars was selected as the uniform, quantitative means of expressing flood damages for the purpose of the Menomonee River watershed study.

<sup>13</sup> A more detailed description of the methodology and findings of this monetary flood risk analysis is set forth in SEWRPC Planning Report No. 26, *A Comprehensive Plan for the Menomonee River Watershed, Volume Two, Alternative Plans and Recommended Plan*.

Map 83

**REACHES SELECTED FOR COMPUTATION  
OF AVERAGE ANNUAL FLOOD DAMAGE RISK  
IN THE MEMOMONEE RIVER WATERSHED**



An analysis of monetary flood damage risks, assuming various future planned and uncontrolled development conditions, was undertaken as part of the Menomonee River watershed study to provide an indicator of the economic benefits of preserving floodlands in a natural open condition through proper floodland management, including parkway development. Under the Menomonee River watershed study, stream reaches for computation of monetary flood risks under existing and hypothetical future conditions were selected through a two-step procedure. First, examination of the results of historic flood surveys helped to identify those reaches that have actually experienced serious flood problems. Second, results of hydrologic-hydraulic simulation modeling for existing and year 2000 plan land use conditions identified additional flood-prone areas. This two-step procedure led to the identification of 25 flood-damage-prone reaches as shown on the map.

Source: SEWRPC.

dition 5). Under year 2000 plan conditions, it should be noted, remaining primary environmental corridors including floodlands in the Menomonee River watershed would be protected through a combination of public ownership—facilitating the development of parkways—and public land use controls.

In all cases, the calculations assume that no additional flood-prone development will be constructed in floodlands; that is, if additional floodland development is constructed, as will be probable under conditions 4 and 5, it is assumed that the structures involved would be floodproofed or otherwise protected against flood damage. Thus, the computed monetary flood risks for any given reach are quite conservative—that is, low relative to the floodland conditions that are likely to prevail inasmuch as the computations assume very strict control over the form, if not the location, of additional urban development in the flood-prone areas.

The results of the monetary flood risk analysis for the 25 selected flood-prone reaches are set forth in Table 98. For each reach and each of the five land use-floodland development conditions, the table presents the average annual flood damage risk as well as the flood damage risks associated with the 10- and 100-year recurrence interval flood stages. The flood damage risks associated with the 10- and 100-year recurrence interval flood events are presented to show the monetary losses that can be expected to accompany a given major flood event along the Menomonee River.

Table 98 indicates that monetary flood damages may be substantially reduced through the development of parkways and the judicious application of land use controls within floodlands. For example, the estimated average annual monetary risk along Underwood Creek in the Village of Elm Grove under year 2000 plan conditions—\$363,000—is considerably less than the estimated average annual monetary flood risk of \$510,000 anticipated under condition 5, which assumes uncontrolled development within and outside of floodlands. In another example, the average annual flood risk along the Menomonee River, Lilly Creek, and Nor-X-Way Channel in the Village of Menomonee Falls under year 2000 plan conditions—\$146,000—is substantially lower than the average annual flood risk of \$408,000 anticipated under condition 5, the “worst possible” situation. In general, the community-by-community analysis of average annual flood damages as a function of alternative land use-floodland development conditions in the Menomonee River watershed clearly indicates that monetary flood risks in a given reach may be expected to be very sensitive to the decisions concerning land use development both in the floodlands and in the watershed as a whole.

## SUMMARY

The land value study, conducted as part of the regional park and open-space planning program at the special request of the Milwaukee County Planning Commission, consisted of various surveys and analyses designed to identify as accurately and precisely as possible the impact

Table 98

## MONETARY FLOOD RISKS FOR SELECTED REACHES IN THE MEMOMONEE RIVER WATERSHED

Reach Description			Monetary Flood Risk in \$1,000 <sup>a</sup>																
			Condition 1: Existing Conditions				Condition 2: 2000 Plan			Condition 3: Uncontrolled Development Outside of Floodlands			Condition 4: Uncontrolled Development Within Floodlands			Condition 5: Uncontrolled Development Within and Outside of Floodlands			
			10 Year Recurrence Interval	100 Year Recurrence Interval	April 21, 1973 <sup>b</sup>	Average Annual	10 Year Recurrence Interval	100 Year Recurrence Interval	Average Annual	10 Year Recurrence Interval	100 Year Recurrence Interval	Average Annual	10 Year Recurrence Interval	100 Year Recurrence Interval	Average Annual	10 Year Recurrence Interval	100 Year Recurrence Interval	Average Annual	
Civil Division	Stream	Identification Number																	
Village of Elm Grove	Underwood Creek	UC-10	30.0	187.3	132.8	21.0	41.3	243.7	32.3	52.2	297.2	42.0	42.3	268.1	35.3	103.7	442.9	58.2	
		UC-11	10.6	69.7	56.9	8.7	13.3	76.2	9.8	25.7	150.7	14.7	13.7	114.7	10.7	36.2	282.2	20.7	
		UC-12	27.5	128.5	122.9	14.4	75.4	136.9	26.3	104.5	158.2	35.4	77.6	155.2	27.3	113.0	216.5	38.4	
		UC-13	327.2	899.0	827.0	168.4	560.2	969.3	269.8	724.3	1,132.1	312.9	608.0	1,083.4	252.7	782.7	1,524.7	342.0	
		UC-15	36.3	78.8	71.6	19.3	39.4	89.5	24.6	84.9	120.9	40.1	44.4	110.3	35.9	119.2	149.4	50.2	
	Subtotal	--	431.6	1,363.3	1,211.2	231.8	729.5	1,505.6	362.8	991.6	1,859.1	445.1	786.0	1,731.7	361.9	1,154.8	2,615.7	509.5	
City of Brookfield	Underwood Creek	UC-6	84.9	270.6	360.2	43.4	108.5	309.1	58.8	112.7	309.6	89.1	98.2	341.2	60.3	118.3	383.3	97.7	
		UC-8	25.1	66.1	78.3	14.0	26.2	78.3	14.7	76.8	104.2	29.5	29.8	105.9	16.6	107.7	116.5	40.4	
		Subtotal	110.0	336.7	438.5	57.4	134.7	387.4	73.5	189.5	413.8	118.6	128.0	447.1	76.9	226.0	499.8	138.1	
	Butler Ditch	BD-18	2.6	5.6	--	1.8	3.2	9.0	2.3	3.6	5.9	2.5	2.8	7.5	1.8	5.0	7.3	3.2	
	Subtotal	--	--	--	438.5	59.2	--	--	75.8	--	--	121.1	--	--	78.7	--	--	141.3	
Village of Menomonee Falls	Lilly Creek	LC-1	67.2	238.2	--	43.0	200.2	333.5	109.4	221.8	393.6	133.5	132.4	348.8	81.9	330.0	621.6	187.1	
	Menomonee River	UMR 3-1	25.2	82.4	36.4	12.8	33.5	109.1	18.3	106.2	300.9	56.7	34.4	212.1	22.1	214.8	693.3	117.7	
		UMR 3-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		UMR 3-3	9.5	34.2	10.0	8.9	10.0	35.8	9.5	34.2	86.6	18.3	10.0	78.9	10.1	75.0	196.0	44.9	
		UMR 3-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	4.8	0.3	0.3	0.4	0.2	0.4	6.6	0.7	
		UMR 3-5	9.7	21.9	10.3	4.6	11.3	36.8	8.5	21.9	69.8	12.8	9.9	40.0	5.6	64.8	122.3	28.8	
		UMR 3-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.3	2.2	5.3	1.3	45.2	2.3	61.6	247.9	28.6	
		Subtotal	44.4	138.5	56.7	26.3	54.8	181.7	36.3	246.0	464.3	93.4	55.9	376.6	40.3	416.6	1,266.1	220.7	
	Subtotal	--	--	--	56.7	69.3	--	--	145.7	--	--	226.9	--	--	122.2	--	--	407.8	
City of Wauwatosa	Menomonee River	LMR-1	75.5	1,394.7	1,085.5	94.5	324.2	1,877.2	190.6	1,100.9	3,438.3	494.5	352.1	2,457.6	236.9	1,729.3	3,166.9	624.4	
		LMR-2	54.4	702.2	828.6	52.5	341.4	933.6	140.3	540.1	1,378.5	226.1	147.0	1,110.7	99.0	683.7	2,092.8	295.2	
			Subtotal	129.9	2,096.9	1,914.1	147.0	665.6	2,810.8	330.9	1,641.0	4,816.8	720.6	499.1	3,568.3	335.9	2,413.0	5,259.7	919.6
	Honey Creek	LMR-3	1.6	67.5	255.0	4.6	4.6	226.3	11.7	10.6	529.3	26.3	4.0	341.3	15.0	41.8	834.6	51.9	
		LMR-4	65.6	149.5	125.5	50.8	87.9	241.8	65.9	108.2	358.5	78.8	104.5	471.5	77.9	202.4	688.8	126.5	
		LMR-5	47.2	131.1	299.6	23.8	83.0	231.7	47.8	94.6	385.3	68.1	91.4	468.2	56.3	376.6	1,126.4	195.4	
		LMR-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.3	13.5	1.2	
			Subtotal	114.4	348.1	680.1	79.2	175.5	699.8	125.4	213.4	1,273.4	173.2	199.9	1,281.4	149.2	621.1	2,663.3	375.0
	Underwood Creek	UC-9	2.1	25.4	9.8	2.6	3.5	64.6	3.9	22.8	175.3	15.9	4.4	113.2	7.9	25.9	314.5	28.7	
	Subtotal	--	--	--	2,607.4	229.3	--	--	460.9	--	--	910.7	--	--	493.6	--	--	1,324.3	
City of Mequon	Little Menomonee River	LTMR-2	9.6	16.4	14.6	2.3	9.6	16.4	2.3	137.7	236.6	29.0	27.3	129.2	9.5	177.9	187.8	34.1	
City of Milwaukee	Menomonee River	LMR-7	10.0	728.2	80.5	38.6	35.0	841.9	48.6	364.0	1,426.0	163.6	66.9	1,201.2	74.7	505.1	1,929.7	224.0	
Total	--	--	--	--	4,408.9	630.5	--	--	1,096.1	--	--	1,896.4	--	--	1,140.6	--	--	2,641.0	

<sup>a</sup> Includes direct damage to structures and contents plus indirect damages associated with that structural damage.<sup>b</sup> Based on historic flood stages available.

Source: SEWRPC.

on residential property values of the major types of public open space lands. The major findings of the individual work elements of the land value study, along with the implications of the land value study with respect to the park and open space planning process, are summarized below. While the study focused primarily on public open space lands in Milwaukee County, the conclusions of the study should be applicable within urban areas throughout the Region.

1. The first work element of the land value study consisted of a survey of appraisers, assessors, and developers conducted in order to obtain their perceptions about any variation in residential property values that might occur as a result of proximity to public parks and parkways. All

respondents indicated that public parks and parkways influence the value of nearby residential property in different ways. With respect to public parks, the respondents generally indicated that the impact on property values depends on the characteristics of the park; larger parks that significantly preserve and enhance the natural resource base typically have a positive impact on the value of adjacent residential property, while smaller parks which are intensively developed for active recreational pursuits and which provide limited amounts of "green" space typically have a smaller positive impact or no impact whatsoever. Certain respondents further indicated that parks which generate nuisances such as excessive traffic and parking problems, undesirable glare from the



nighttime lighting of athletic facilities, or rowdiness may actually have a negative impact on the value of adjacent residential property. Conversely, there was a consensus among the respondents that parkways, especially those which preserve high value elements of the natural resource base and enhance the natural beauty of an area, consistently have a significant positive impact on the value of adjacent residential property. Virtually all of the respondents indicated that any significant impact on property values of public open space lands would be confined to residential properties situated adjacent to or with a view toward the public open space area.

2. Three different analyses were undertaken as part of the land value study to determine the effect of public open space lands on the market value of residential property. The first analysis utilized census housing value data to facilitate a comparison of the value of housing situated immediately adjacent to public open space lands with the value of housing located away from the open space area. This analysis indicated that, among the major types of public open space lands, the highest positive impact on property values is associated with parks situated along the Lake Michigan shoreland. With the exception of the Lake Michigan parks, the highest positive impact was associated with Type I parkways—that is, parkways which significantly preserve and enhance high value elements of the natural resource base. In this regard, the average value of residential property situated immediately adjacent to Type I parkways exceeded the average values of property located away from the parkway by 17 percent. A substantial positive impact—16 percent—also was identified for Types I, II, and III parks—that is, larger parks which preserve and enhance the natural resource base in addition to providing space and facilities for various recreational pursuits. Conversely, a very small positive impact was identified for Type IV parks—that is, small parks which are intensively developed for active recreational pursuits and which provide only limited amounts of green space. It is important to note that while, for each major type of public open space land the average value of residential property situated immediately adjacent to public open land exceeded the average value of residential property located away from the open space, there were a number of individual parks in which the reverse was true: the value of the removed properties was actually higher than the value of the adjacent properties included in the analysis. It should also be noted that this analysis identified the total impact on property values of various types of public open space lands which may reflect both a tendency to construct larger and more elaborate housing along scenic open space lands and a locational premium, or additional value attached to a property simply because of its location near a public open space area.
3. The second analysis concerning the impact of public open space land on the market value of residential property involved a comparison of sale prices for housing situated adjacent to a park or parkway with the sale prices of comparable housing located away from the open space land. By “controlling” the characteristics of the residential properties, this analysis attempted to isolate the locational premium, or the additional amount which the public is willing to pay for residential property simply because of its location near a public open space area. Among the major types of public open space lands, the largest locational premium was identified for Type I parkways. On the average, properties situated adjacent to Type I parkways sold for 9 percent more than comparable properties situated away from such parkway lands. Locational premiums identified in this manner for other types of public open space lands are as follows: Types I, II, and III parks—7 percent; Type IV parks—2 percent; and Type II parkways—6 percent. It should be noted that while, for each type of public open space land, the average value of property situated adjacent to the public land was greater than the average value of comparable properties located away from the open space area, there were cases in which the sale price of an individual adjacent property was actually lower than the sale price of the associated comparable removed property.
4. The third analysis concerning the impact of public open space lands on the market value of residential property involved an examination of lot sales transactions within residential land subdivisions which have been developed next to parkway lands in Milwaukee County since 1950. More specifically, this analysis involved a comparison of the sale prices of lots situated immediately adjacent to the parkway land within a given subdivision with the sale prices of lots situated away from the parkway in the same subdivision as part of another effort to isolate the locational premium associated with these public lands. This analysis revealed a significant difference between the locational premiums associated with developed and undeveloped parkways. Thus, for six subdivisions situated along developed parkways and included in this analysis, the locational premium ranged from 4 to 49 percent, with the average premium being 24 percent. For six subdivisions situated along undeveloped parkways and included in this analysis, the locational premium ranged from 3 to 17 percent, with the average premium being 12 percent.
5. In addition to the foregoing analyses undertaken to identify the impact of public open space lands on the market value of residential property, the land value study also included an analysis of locally assessed property values in order to identify the manner and extent to which property assessments vary with distance from public open space areas. Locally assessed property values



were analyzed within residential areas surrounding eight parks and parkways in Milwaukee County. The largest impact on property values was associated with the single Lake Michigan park included in this analysis. In this regard, the average assessed value of residential lots located adjacent to this park exceeded the average assessed value of lots located away from the park by 81 percent, and the average assessed value of adjacent residential structures exceeded the average assessed value of removed structures by 64 percent. Among the major types of public open-space lands, excluding Lake Michigan parks, the greatest impact on property assessments was associated with Type I parkways. The impact on property values of parks, excluding Lake Michigan parks, was somewhat lower. Furthermore, among these parks, the impact associated with Types II and III parks was somewhat higher than the impact of Type IV parks. It should be noted that, similar to the analysis of census housing data described above, this analysis focused on the total impact on property values of public open space lands, which may reflect both a tendency to construct larger and more elaborate housing adjacent to scenic open space areas and a locational premium, or additional value attached to a property, simply because of its location next to a park or parkway.

6. As part of the land value study, a survey of households residing in the vicinity of parks and parkways was undertaken to determine public attitudes toward a residential location near such open lands. Among the major types of public open space lands, the survey respondents attached the highest esteem to Type I parkways, with such factors as privacy, peacefulness, and natural beauty being cited most frequently as the advantages provided by these parkways. Conversely, the most dissatisfaction was expressed by households situated near to parks. In this regard, 34 percent of the survey respondents residing adjacent to Types II and III parks expressed general dissatisfaction with their location near the park, while the corresponding figure for Type IV parks was 20 percent. Among these respondents, the most frequently cited disadvantages were related to excessive traffic and parking problems generated by park users and to unsafe conditions in terms of rowdiness, vandalism, and crime.
7. In addition to enhancing property values, parkways which encompass the floodlands of rivers and streams provide additional economic benefits by minimizing costly flood problems. Under the Menomonee River watershed study, a computation of average annual monetary flood damage risks assuming various planned and uncontrolled future development conditions for selected stream reaches within a watershed indicated that substantial reductions in monetary flood damages

could be achieved through proper floodland management, including parkway development. Average annual monetary flood damage risks expected under planned conditions for many stream reaches in the watershed were less than half of the amount expected under uncontrolled development conditions.

In summary, the surveys and analyses conducted under the land value study consistently indicated that most public open space lands have a positive impact on the value of adjacent residential property and that this positive impact may be the result of two different factors. First, the public open space land may stimulate the construction of larger and more elaborate housing adjacent to scenic open space areas. Second, there may be a locational premium associated with residential properties situated adjacent to public open space lands reflecting a willingness on the part of the public to pay more for property simply because of its location next to a public open space area.

Considered together, the various elements of the land value study indicate that among the major types of public open space lands, Lake Michigan parks appear to have the greatest positive impact on property values. Because the Lake Michigan shoreland is a unique area in which land development patterns and real estate values have been heavily influenced by the Lake itself, the unusually high impact on property values associated with Lake Michigan parks constitutes an exceptional situation which is not representative of parks of similar size throughout the balance of Milwaukee County. Excluding Lake Michigan parks, the greatest impact on property values is associated with Type I parkways, with the value of property situated adjacent to or with a view toward such parkways, on the average, exceeding the value of property located away from the parkway lands by 30 percent. The impact on property values of the parks included in the land value study—excluding the Lake Michigan parks—was considerably lower. Thus, based upon the difference in value between adjacent and removed properties, the estimated total impact on property values of Types I, II, and III parks is 16 percent, while the estimated impact of Type IV parks is 3 percent.

The results of this land value study indicate that the impact on property values of public open space lands depends, to a great extent, on the character of the open space area. Public open-space lands which significantly preserve and enhance high value elements of the natural resource base, such as parks along the Lake Michigan shoreland and Type I parkways, typically have the greatest impact on the value of adjacent residential property. Large parks which enhance the natural beauty of an area in addition to providing space and facilities for various recreational pursuits generally have a smaller, but still significant, impact on the value of adjacent property. Smaller parks which are intensively developed for active recreational use and which provide only a limited amount of "green" space typically have little, if any, positive impact on the value of adjacent

residential property. In general, the impact on property values of public open space lands is directly related to the size of an area as well as the value of the natural resource amenities which it contains. Conversely, this impact on property values is generally inversely related to the intensity of development within the area as well as the level of use which it generates.

These generalized conclusions along with the detailed results of the land value study as summarized in this chapter are intended to assist in the park and open space planning process by providing a more complete understanding of the total economic impact of the acquisition and development of public open-space lands. The major fiscal considerations in decisions concerning open space acquisition and development typically relate to the basic acquisition and development costs and the potential loss of property tax revenue from the private development which might otherwise occur in the area under consideration. The findings of the land value study are intended to supplement these economic variables which are traditionally considered with respect to open space acquisition and development in the park planning process.

While the findings of this land value study are generally applicable within urban areas throughout the Region, the results have special significance for Milwaukee County. A large portion of the remaining open-space lands proposed for public acquisition in Milwaukee County consists of potential parkways which contain high value elements of the natural resource base. As indicated throughout this chapter, among the major types of public open space lands, this type of parkway typically has the greatest impact on the value of nearby residential property. Proper design of both the parkway area and the surrounding neighborhood, simultaneously providing an attractive

setting for residential development and minimizing flood problems, can generate significantly higher residential property values. This potential positive impact on property values should be considered in evaluating the overall economic impact of additional public open space acquisition and development in Milwaukee County. It should also be recognized that, in addition to enhancing property values, this type of parkway system acts to preserve floodlands in their natural open condition, thereby maintaining the floodwater conveyance and storage capability of such lands and minimizing costly environmental and developmental problems due to flooding.

It is important to recognize the limited scope of this land value study in the sense that this study has focused on one benefit—namely, the impact on property values—of public open space lands. Certainly, the public preservation of open space areas yields many other benefits, the impacts of which are difficult, if not impossible, to specify in economic terms. One obvious benefit of public open space lands relates to the provision of space and facilities through which the recreational needs of a neighborhood, community, or region are satisfied. In addition, to the extent that public open space lands stimulate the construction of larger and more elaborate housing, such open space lands add stability and character to the neighborhood and overall community. Furthermore, the public preservation of open space lands, especially those situated within primary environmental corridors, protects and enhances the natural resource base, thereby maintaining the overall wholesomeness of the regional environment and the unique cultural and natural heritage of the Region. Clearly, these benefits must be considered along with the overall economic impact of public open space lands in any decisions relating to the acquisition and development of open space areas.

(This page intentionally left blank)

## Chapter XI

### REGIONAL PARK AND OPEN SPACE OBJECTIVES, PRINCIPLES, AND STANDARDS

#### INTRODUCTION

As previously noted in Chapter I of this report, planning is a rational process for formulating objectives and, through the preparation and implementation of plans, for meeting objectives. The formulation of objectives, therefore, is an essential task which must be undertaken before plans can be prepared. Within the seven-county Southeastern Wisconsin Planning Region, however, the existence of diverse and often divergent interests makes the formulation of objectives for regional development a difficult task.

Regional development objectives should be established by informed elected or appointed representatives legally assigned this task, assisted by planning technicians. The formulation of park and open space development objectives, particularly, should also involve providers and users of the park and open space facilities. This is particularly important because of the value system implications inherent in any set of development objectives. Active participation by duly elected or appointed public officials and by citizen leaders in the regional planning program is implicit in the composition of the Southeastern Wisconsin Regional Planning Commission. Moreover, the Commission very early recognized that the task of guiding the broad spectrum of related public and private development programs which would influence, and be influenced by, a comprehensive regional planning program would require an even broader opportunity for the active participation of public officials and private interest groups in the regional planning process than the composition of the Commission itself provides. Accordingly the Commission utilizes advisory committees to assist it in this task. This practice has been demonstrated to be a practical and effective procedure for involving officials and citizens in the regional planning process and of openly arriving at decisions concerning regional development objectives and plans to achieve those objectives. Only by utilizing the broad knowledge and experience which the various advisory committee members possess about the Region can sound regional development objectives be formulated. One of the major tasks of these committees, therefore, is to assist the Commission in formulating regional development objectives and supporting principles and standards.

The Commission Technical and Citizen Advisory Committee on Regional Park and Open Space Planning is one of many such advisory committees that have contributed to the formulation of the objectives toward which the regional plan elements have been directed. Other Commission advisory committees have contributed to the formulation of objectives relating to such endeavors as land use development, transportation system develop-

ment, water use and related water quality management, flood control, environmental quality and natural resource conservation, sanitary sewerage system development, airport development, and housing development.

This chapter sets forth those regional development objectives which relate particularly to park and open-space development within southeastern Wisconsin, objectives previously adopted by the Commission under appropriate regional planning programs. In addition, a series of new objectives, principles, and standards directly related to park and open space preservation, acquisition, and development is presented.

#### BASIC CONCEPTS AND DEFINITIONS

The term "objective" is subject to a wide range of interpretation and application and is closely linked to other terms often used in planning work which also are subject to a wide range of interpretation and application. The following definitions which have been consistently used by the Commission will be employed accordingly:

1. Objective: a goal or end toward the attainment of which plans and policies are directed.
2. Principle: a fundamental, primary, or generally accepted tenet used to assert the validity of objectives and to prepare standards and plans.
3. Standard: a criterion used as a basis of comparison to determine the adequacy of alternative and recommended plan proposals to attain objectives.
4. Plan: a design which seeks to achieve the agreed-upon objectives.
5. Policy: a rule or course of action used to ensure plan implementation.
6. Program: a coordinated series of policies and actions to carry out a plan.

Although this chapter discusses only the first three of these terms, an understanding of the interrelationship of the foregoing definitions and the basic concepts which they represent is essential to the following discussion of development objectives, principles, and standards.

#### RELATED REGIONAL DEVELOPMENT OBJECTIVES

In its planning efforts to date, the Commission, after careful review and recommendation by the advisory committees concerned, has adopted 51 specific development objectives, which have been set forth, together with



their supporting principles and standards, in previous Commission planning reports. Certain land use development objectives, water control facility development objectives, and sanitary sewerage system development objectives which are especially relevant to park and open space planning and development are particularly referenced and briefly discussed here for convenience.

#### Specific Land Use Development Objectives

The nine specific land use development objectives adopted by the Commission are largely self-descriptive and are concerned primarily with the allocation and distribution of land uses, land use compatibility, natural resource base protection, and accessibility. Objective No. 3 is particularly relevant to park and open space planning because it requires a spatial distribution of the various land uses that is essential for the protection, wise use, and proper development of the underlying and sustaining natural resource base of the Region (see Appendix N). Standards under this objective relate to adjusting the land use development pattern to the major elements of the natural resource base: the soils, inland lakes and streams, wetlands, woodlands, and wildlife habitat of the Region.

#### Specific Water Control Facility Development Objectives

The specific water control facility development objectives adopted by the Commission under its watershed planning programs are concerned primarily with reducing flood damage, maintaining the quality of the surface water resource, and minimizing the pollution and depletion of the groundwater resource. Certain specific water control facility development objectives have particular significance for park and open space planning to the extent that they require an integrated system of land management and water quality control facilities to ensure a level of stream and lake water quality permitting specified beneficial uses, including certain recreational uses, in designated lakes and stream reaches. Particularly relevant in this regard are Water Control Facility Development Objectives No. 2 and No. 3 for the Fox, Menomonee, and Milwaukee River watersheds, and Objective No. 2 for the Root River watershed (see Appendix N).

#### Specific Sanitary Sewerage System Development Objectives

Sewage treatment plant effluent is a major pollutant of the streams and lakes of the Region. The location, design, construction, operation, and maintenance of sewage treatment plants and the quantity and quality of the effluent of such plants have a major effect on stream and lake water quality and, accordingly, on the ability of that water quality to support the various recommended water uses. Within this context, one of the four sanitary sewerage system development objectives has particular relevance for park and open space planning, namely, Objective No. 2. This objective requires the development of sanitary sewerage systems so as to meet the water use objectives designated for specific lakes and stream reaches within the Region as well as the associated water quality standards (see Appendix N).

## PARK AND OPEN SPACE PRESERVATION, ACQUISITION, AND DEVELOPMENT OBJECTIVES

The regional park and open-space study must address the demands of the existing and anticipated future population of the Region for a wide range of outdoor recreation activities including intensive nonresource-oriented activities such as baseball, tennis, and ice skating; intensive resource-oriented activities such as camping, picnicking, and stream and lake swimming; extensive land based trail-oriented activities such as hiking, biking, cross country skiing, and horseback riding; and extensive water based activities such as fishing, canoeing, and water skiing. Many of these activities, especially the land based resource-oriented activities, are interrelated—for example, bikers often picnic during the course of the day and hikers camp on an overnight outing. It is desirable that the facilities for such interrelated activities be contained within an integrated park and recreation related open space system which accommodates participation in several compatible activities on a single outing. Such an integrated system could, for example, consist of a group of parks which accommodate swimming in streams and lakes, camping, picnicking, or nature study connected by a network of recreation corridors which accommodate hiking, biking, horseback riding, or pleasure driving. The regional park and open space preservation, acquisition, and development objectives, principles, and standards recommended represent, therefore, an attempt to provide both the scope required for proper consideration of an integrated system of parks and recreation areas and the depth required to achieve the quantification of outdoor recreation facilities and related park and recreation area needed to meet the existing and probable future demand for specific outdoor recreational activities.

A comprehensive approach to park and open space planning requires careful consideration of other concerns in addition to outdoor recreation per se, including urban beautification; noise, air, and water pollution abatement; natural resource conservation; and enhancement of the overall quality of the environment. Within this full range of concerns, the importance of the preservation of open space resources becomes evident. Certainly, the provision of parks and other public recreation areas can serve to protect and enhance the natural resource base by preserving open space in critical resource areas, including fragile natural areas, special hazard areas, and renewable resource areas. In fact, the acquisition of parks and other public recreation areas within and near critical resource areas—the most important of which are the primary environmental corridors of the Region—is highly desirable since such acquisition can both satisfy recreation demands in an appropriate setting and protect and preserve valuable natural resource amenities. The overall need for open space preservation can be only partially met by providing park and other public recreation lands. To fully meet such need also

requires the preservation of other types of areas including prime agricultural lands. Therefore, objectives for such preservation also are presented herein.

The following seven regional park and open space preservation, acquisition, and development objectives were formulated under the study and adopted by the Technical and Citizen Advisory Committee on Park and Open Space Planning after careful review, including consideration of nonresident use and the provision of private recreational facilities:

1. The provision of an integrated system of public general use outdoor recreation sites and related open space areas which will allow the resident population of the Region adequate opportunity to participate in a wide range of outdoor recreation activities.
2. The provision of sufficient outdoor recreation facilities to allow the resident population of the Region adequate opportunity to participate in intensive nonresource-oriented outdoor recreation activities.
3. The provision of sufficient outdoor recreation facilities to allow the resident population of the Region adequate opportunity to participate in intensive resource-oriented outdoor recreation activities.
4. The provision of sufficient outdoor recreation facilities to allow the resident population of the Region adequate opportunity to participate in extensive land based outdoor recreation activities.
5. The provision of opportunities for participation by the resident population of the Region in extensive water based outdoor recreational activities on the major inland lakes and rivers and on Lake Michigan consistent with safe and enjoyable lake use and maintenance of good water quality.
6. The preservation of sufficient high quality open space lands for the protection of the underlying and sustaining natural resource base and enhancement of the social and economic well being and environmental quality of the Region.
7. The efficient and economical satisfaction of outdoor recreation and related open space needs meeting all other objectives at the lowest possible cost.

#### PARK AND OPEN SPACE PRINCIPLES AND STANDARDS

Complementing each of the foregoing specific park and open space objectives is a planning principle and set of planning standards. These are set forth in Table 99 and serve to facilitate the quantitative application of the

objectives in plan design, test, and evaluation. These standards should serve not only as aids in the development, test, and evaluation of regional park and public open space plans but also in the development, test, and evaluation of local park plans and in the development of plan implementation policies as well.

The adopted planning standards fall into two groups: comparative and absolute. The comparative standards by their very nature can be applied only through a comparison of alternative plan proposals. Absolute standards can be applied individually to each alternative plan since they are expressed in terms of maximum, minimum, or desirable values. Certain design criteria were also utilized in preparation of the park and open space plans; these are documented herein. While these criteria were utilized in the preparation of park and open space plans, they do not measure the ability of alternative plans to attain the objectives and, therefore, are not true standards.

#### OVERRIDING CONSIDERATIONS

In this application of park and open space objectives, principles, and standards in the preparation, test, and evaluation of the alternative park and open space plans, several overriding considerations must be recognized. First, park and open space standards have been prepared in the past by various national, state, regional, and local park planning agencies, and a review of these standards was conducted in formulating park and open space standards for southeastern Wisconsin. Recreation demands vary, however, by geographic locality and, in the formulation of park and open space standards for a given area, it is desirable to use an approach which recognizes the unique demands and needs of its resident population. The level of use of existing recreational facilities provides a valuable indicator of recreational preferences and demands in an area. Accordingly, the existing level of recreational use, as indicated by surveys of recreation site managers and users conducted under the park and open space planning program, was an important consideration in development of many of the individual facility standards presented here. In a typical situation, the standard for a particular facility, expressed as the number of such facilities required per 1,000 persons, was based upon the number of facilities per 1,000 persons currently provided, adjusted to account for any overutilization or underutilization evident from the survey results (see Appendix O). Participation in the various outdoor recreational activities is, of course, closely related to leisure time, the level of personal income, and mobility, and recent changes in these factors are, in effect, reflected in the standards set forth in this chapter. Additional changes in leisure time, income levels, and mobility could change the pattern of recreational demand and, therefore, affect the validity of these standards for park planning purposes. Second, it must be recognized as unlikely that any one plan proposal will meet all the standards completely; the extent to which each standard is met, exceeded, or violated must serve as a measure of the ability of each alternative plan proposal

Table 99

## OUTDOOR RECREATION AND OPEN SPACE PLANNING OBJECTIVES, PRINCIPLES, AND STANDARDS

### OBJECTIVE NO. 1

The provision of an integrated system of public general use outdoor recreation sites and related open space areas which will allow the resident population of the Region adequate opportunity to participate in a wide range of outdoor recreation activities.

#### PRINCIPLE

Attainment and maintenance of good physical and mental health is an inherent right of all residents of the Region. The provision of public general use outdoor recreation sites and related open space areas contributes to the attainment and maintenance of physical and mental health by providing opportunities to participate in a wide range of both intensive and extensive outdoor recreation activities. Moreover, an integrated park and related open space system properly related to the natural resource base, such as the existing surface water network, can generate the dual benefits of satisfying recreational demands in an appropriate setting while protecting and preserving valuable natural resource amenities. Finally, an integrated system of public general use outdoor recreation sites and related open space areas can contribute to the orderly growth of the Region by lending form and structure to urban development patterns.

#### A. PUBLIC GENERAL USE OUTDOOR RECREATION SITES

#### PRINCIPLE

Public general use outdoor recreation sites promote the maintenance of proper physical and mental health both by providing opportunities to participate in such athletic recreational activities as baseball, swimming, tennis, and ice skating—activities that facilitate the maintenance of proper physical health because of the exercise involved—as well as opportunities to participate in such less athletic activities as pleasure walking, picnicking, or just rest and reflection. These activities tend to reduce everyday tensions and anxieties and thereby help maintain proper physical and mental well being. Well designed and properly located public general use outdoor recreation sites also provide a sense of community, bringing people together for social and cultural as well as recreational activities, and thus contribute to the desirability and stability of residential neighborhoods and therefore the communities in which such facilities are provided.

#### STANDARDS

1. The public sector should provide general use outdoor recreation sites sufficient in size and number to meet the recreation demands of the resident population. Such sites should contain the natural resource or man-made amenities appropriate to the recreational activities to be accommodated therein and be spatially distributed in a manner which provides ready access by the resident population. To achieve this standard, the following public general use outdoor recreation site requirements should be met as indicated below:

Site Type	Size (gross acres)	Publicly Owned General Use Sites							
		Parks				Schools <sup>a</sup>			
		Minimum Per Capita Public Requirements (acres per 1,000 persons) <sup>d</sup>	Typical Facilities	Maximum Service Radius (miles) <sup>b</sup>		Minimum Per Capita Public Requirements (acres per 1,000 persons) <sup>f</sup>	Typical Facilities	Maximum Service Radius (miles) <sup>c</sup>	
				Urban <sup>e</sup>	Rural			Urban <sup>e</sup>	Rural
I <sup>g</sup> Regional	250 or more	5.3	Camp sites, swimming beach, picnic areas, golf course, ski hill, ski touring trail, boat launch, nature study area, playfield, softball diamond, passive activity area <sup>h</sup>	10.0	10.0	--	--	--	--
II <sup>i</sup> Multicomunity	100-249	2.6	Camp sites, swimming pool or beach, picnic areas, golf course, ski hill, ski touring trail, boat launch, nature study area, playfield, softball and/or baseball diamond, passive activity area <sup>h</sup>	4.0 <sup>j</sup>	10.0 <sup>j</sup>	--	--	--	--
III <sup>k</sup> Community	25-99	2.2	Swimming pool or beach, picnic areas, boat launch, nature study area, playfield, softball and/or baseball diamond, tennis court, passive activity area <sup>h</sup>	2.0 <sup>l</sup>	--	0.9	Playfield, baseball diamond, softball diamond, tennis court	0.5-1.0 <sup>m</sup>	--
IV <sup>n</sup> Neighborhood	Less than 25	1.7	Wading pool, picnic areas, playfield, softball and/or baseball diamond, tennis court, playground, basketball goal, ice skating rink, passive activity area <sup>h</sup>	0.5-1.0 <sup>o</sup>	--	1.6	Playfield, playground, baseball diamond, softball diamond, tennis court, basketball goal	0.5-1.0 <sup>m</sup>	--

Table 99 (continued)

2. Public general use outdoor recreation sites should, as much as possible, be located within the designated primary environmental corridors of the Region.

## B. RECREATION RELATED OPEN SPACE

### PRINCIPLE

Effective satisfaction of recreation demands within the Region cannot be accomplished solely by providing public general use outdoor recreation sites. *Certain recreational pursuits such as hiking, biking, pleasure driving, and ski touring are best provided for through a system of recreation corridors located on or adjacent to linear resource-oriented open space lands. A well designed system of recreation corridors offered as an integral part of linear open space lands also can serve to physically connect existing and proposed public parks, thus forming a truly integrated park and recreation related open space system. Such open space lands, in addition, satisfy the human need for natural surroundings, serve to protect the natural resource base, and ensure that many scenic areas and areas of natural, cultural, or historic interest assume their proper place as form determinants for both existing and future land use patterns.*

### STANDARDS

The public sector should provide sufficient open space lands to accommodate a system of resource-oriented recreation corridors to meet the resident demand for extensive trail-oriented recreation activities. To fulfill these requirements the following recreation related open space standards should be met:

1. A minimum of 0.16 linear mile of recreation related open space consisting of linear recreation corridors<sup>D</sup> should be provided for each 1,000 persons in the Region.
2. Recreation corridors should have a minimum length of 15 miles and a minimum width of 200 feet.
3. The maximum travel distance to recreation corridors should be five miles in urban areas and 10 miles in rural areas.
4. Resource-oriented recreation corridors should maximize use of:
  - a. Primary environmental corridor as location for extensive trail-oriented recreation activities.
  - b. Outdoor recreation facilities provided at existing public park sites.
  - c. Existing recreation trail type facilities within the Region.

### OBJECTIVE NO. 2

The provision of sufficient outdoor recreation facilities to allow the resident population of the Region adequate opportunity to participate in intensive nonresource-oriented outdoor recreation activities.

### PRINCIPLE

Participation in intensive nonresource-oriented outdoor recreation activities including baseball, basketball, ice skating, playfield and playground activities, softball, pool swimming, and tennis provides an individual with both the opportunity for physical exercise and an opportunity to test and expand his physical capability. Such activities also provide an outlet for mental tension and anxiety as well as a diversion from other human activities. Competition in the various intensive nonresource related activities also provides an opportunity to share recreational experiences, participate in team play, and gain understanding of other human beings.

### STANDARD

A sufficient number of facilities for participation in intensive nonresource-oriented outdoor recreation activities should be provided throughout the Region. To achieve this standard, the following per capita requirements and design criteria for various facilities should be met as indicated below:



Table 99 (continued)

Minimum Per Capita Facility Requirements <sup>a</sup>				Design Standards					Service Radius of Facility (miles) <sup>f</sup>
Activity	Facility	Owner	Facility Per 1,000 Urban Residents	Typical Location of Facility	Facility Requirements (acres per facility)	Additional Suggested Support Facilities	Support Facility Requirements (acres per facility)	Total Land Requirement (acres per facility)	
Baseball . . .	Diamond	Public Nonpublic Total	0.09 0.01 0.10 <sup>e</sup>	Types II, III, and IV general use site	2.8 acres per diamond	Parking (30 spaces per diamond) Night lighting <sup>g</sup> Concessions and bleachers <sup>h</sup> Buffer and landscape	0.28 acre per diamond -- 0.02 acre minimum 1.40 acres per diamond	4.5	2.0
Basketball . .	Goal	Public Nonpublic Total	0.91 0.22 1.13	Type IV general use site	0.07 acre per goal		--	0.07	0.5
Ice Skating. .	Rink	Public Nonpublic Total	0.15 <sup>u</sup> -- 0.15	Type IV general use site	0.30 acre per rink minimum	Warming house	0.05 acre --	0.35 minimum	0.5
Playfield Activities . .	Playfield	Public Nonpublic Total	0.39 0.11 0.50	Type IV general use site	1.0 acre per playfield minimum	Buffer area	0.65 acre minimum	1.65 minimum	0.5
Playground Activities . .	Playground	Public Nonpublic Total	0.35 0.07 0.42	Type IV general use site	0.25 acre per playground minimum	Buffer and landscape	0.37 acre	0.62 minimum	0.5
Softball. . . .	Diamond	Public Nonpublic Total	0.53 0.07 0.60	Types II, III, and IV general use site	1.70 acre per diamond	Parking (20 spaces per diamond) Night lighting <sup>g</sup> Buffer	0.18 acre per diamond -- 0.80 acre per diamond	2.68	1.0
Swimming . .	Pool	Public Nonpublic Total	0.015 -- 0.015	Types II and III general use site	0.13 acres per pool minimum	Bathhouse and concessions Parking (400 square feet per space) Buffer and landscaping	0.13 acre minimum 0.26 acre minimum 0.70 acre minimum	1.22 minimum	3.0 3.0
Tennis . . . .	Court	Public Nonpublic Total	0.50 0.10 0.60	Types II, III, and IV general use site	0.15 acre per court	Parking (2.0 spaces per court) Night lighting <sup>g</sup> Buffer	0.02 acre per court -- 0.15 acre per court	0.32	1.0

### OBJECTIVE NO. 3

The provision of sufficient outdoor recreation facilities to allow the resident population of the Region adequate opportunity to participate in intensive resource-oriented outdoor recreation activities.

### PRINCIPLE

Participation in intensive resource-oriented outdoor recreation activities including camping, golf, picnicking, downhill skiing, and stream and lake swimming provides an opportunity for individuals to experience the exhilaration of recreational activity in natural surroundings as well as an opportunity for physical exercise. In addition, the family can participate as a unit in certain intensive resource-oriented activities such as camping, picnicking, and beach swimming.

### STANDARD

A sufficient number of facilities for participation in intensive resource-oriented outdoor recreation activities should be provided throughout the Region. To meet this standard, the following per capita requirements and design criteria for various facilities should be met as indicated below:

Table 99 (continued)

Minimum Per Capita Facility Requirement <sup>v</sup>				Design Standards						Service Radius of Facility (miles) <sup>W</sup>
Activity	Facility	Owner	Per Capita Requirements (facility per 1,000 residents)	Typical Location of Facility	Facility Requirements (acres per facility)	Additional Suggested Support Facilities	Support Facility Requirements (acres per facility)	Total Land Requirements (acres per facility)	Resource Requirements	
Camping . .	Camp site	Public Nonpublic Total	0.35 1.47 1.82	Types I and II general use sites	0.33 acre per camp site	Rest rooms-showers Utility hookups Natural area backup lands	-- -- 1.5 acres per camp site	1.83	Ungrazed wooded area Presence of surface water Suitable topography and soils	25.0
Golf. . . .	Regulation 18 hole course	Public Nonpublic Total	0.013 0.027 0.040	Types I and II general use sites	135 acres per course	Clubhouse, parking, maintenance Practice area Woodland-water areas Buffer areas	8.0 acres per course 5.0 acres per course 35.0 acres per course 2.0 acres per course	185.0	Suitable topography and soils Presence of surface water Form-giving vegetation desirable	10.0
Picnicking .	Tables	Public Nonpublic Total	6.35 <sup>x</sup> 2.39 8.74	Types I, II, III, and IV general use sites	0.07 acre per table minimum	Parking  Shelters and grills Buffer and parking overflow	0.02 acre per table (1.5 space per table) -- 0.02 acre per table	0.11	Topography with scenic views Shade trees Presence of surface water desirable Suitable soils	10.0
Skiing. . . .	Developed Slope (acres)	Public Nonpublic Total	0.010 0.090 0.100	Types I, II, and III general use sites	1.0 acre per acre of developed slope	Chalet Parking  Ski tows (and lights) Buffer and maintenance Landscape	0.13 acre minimum 0.25 acre per acre of slope 0.40 tow per acre of slope 0.40 acre per acre of slope 0.35 acre per acre of slope	2.1	Suitable topography and soils  (20 percent slope minimum) North or northeast exposure	25.0
Swimming .	Beach (linear feet)	Public Nonpublic Total	Major Inland Lakes Lake Michigan 6 12 18 16 -- 16	Types I, II, and III general use sites	40 square feet per linear foot (average)	Parking  Bathhouse-concessions Buffer area	0.2 acre per acre of beach 0.10 acre minimum 10 square feet per linear foot	-- <sup>v</sup>	Natural beach Good water quality	10.0

**OBJECTIVE NO. 4**

The provision of sufficient outdoor recreation facilities to allow the resident population of the Region adequate opportunity to participate in extensive land based outdoor recreation activities.

**PRINCIPLE**

Participation in extensive land based outdoor recreation activities including bicycling, hiking, horseback riding, nature study, pleasure driving, ski touring, and snowmobiling provides opportunity for contact with natural, cultural, historic, and scenic features. In addition, such activities can increase an individual's perception and intensify awareness of the surroundings, contribute to a better understanding of the environment, and provide a wider range of vision and comprehension of all forms of life both as this life may have existed in the past and as it exists in the present. Similar to intensive resource-oriented activity, the family as a unit also can participate in extensive land based recreation activities; such participation also serves to strengthen social relationships within the family. For activities like bicycling, hiking, and nature study, participation provides an opportunity to educate younger members of the family in the importance of environmental issues which may become of greater concern as they approach adulthood.

**STANDARD**

A sufficient number of facilities for participation in extensive land based outdoor recreation activities should be provided throughout the Region. Public facilities provided for these activities should be located within the linear resource-oriented recreation corridors identified in Objective 1. To meet this standard, the following per capita requirements and design criteria for various facilities should be met as indicated below:

Table 99 (continued)

Minimum Per Capita Public Facility Requirements <sup>2</sup>			Design Standards				
Activity	Facility	Per Capita Requirements (linear mile per 1,000 residents)	Typical Location of Facility	Minimum Facility Requirements (acres per linear mile)	Suggested Support Facilities and Backup Lands	Minimum Support Facility Requirements (acres per linear mile)	Resource Requirements
Biking	Route	-- <sup>aa</sup>	Scenic roadways	--	Route markers	--	--
	Trail	0.16	Recreation corridor	1.45	Backup lands with resource amenities	24.2	Diversity of scenic, historic, natural, and cultural features Suitable topography (5 percent slope average maximum) and soils
Hiking	Trail	0.16	Recreation corridor	0.73	Backup lands with resource amenities	24.2	Diversity of scenic, historic, natural, and cultural features Suitable topography and soils
Horseback Riding	Trail	0.05	Recreation corridor Type I general use site	1.21	Backup lands with resource amenities	24.2	Diversity of scenic, historic, natural, and cultural features Suitable topography and soils
Nature Study	Center	1 per county	Types III, II, and I general use sites	--	Interpretive center building Parking	--	Diversity of natural features including a variety of plant and animal species Suitable topography and soils
	Trail	0.02	Recreation corridor Types III, II, and I general use sites	0.73	Backup lands with resource amenities	24.2	Diversity of natural features, including a variety of plant and animal species Suitable topography and soils
Pleasure Driving	Route	-- <sup>bb</sup>	Scenic roadways recreation corridor	--	Route markers	--	--
Ski Touring	Trail	0.02	Recreation corridor Types II and I general use sites	0.97	Backup lands with resource amenities	24.2	Suitable natural and open areas Rolling topography
Snowmobiling	Trail	0.11	Private lands (leased for public use)	1.45	Backup lands, including resource amenities and open lands	24.2	Suitable natural and open areas Suitable topography (8 percent slope average maximum) and soils

**OBJECTIVE NO. 5**

The provision of opportunities for participation by the resident population of the Region in extensive water based outdoor recreation activities on the major inland lakes and rivers and on Lake Michigan, consistent with safe and enjoyable lake use and maintenance of good water quality.

**PRINCIPLE**

The major inland lakes and rivers of the Region and Lake Michigan accommodate participation in extensive water based recreation activities, including canoeing, fishing, ice fishing, motor boating, sailing, and water skiing, which may involve unique forms of physical exercise or simply provide opportunities for rest and relaxation within a particularly attractive natural setting. Participation in extensive water based recreation activities requires access to the major inland lakes and rivers and Lake Michigan and such access should be available to the general public.

**STANDARDS**

1. The maximum number of public access points consistent with safe and enjoyable participation in extensive water based recreation activities should be provided on the major inland lakes throughout the Region. To meet this standard the following guidelines for access points available for use by the general public on various sized major inland lakes should be met as indicated below:

Table 99 (continued)

Size of Major Lake (acres)	Minimum Number of Access Points—Public and Private	Optimum Number of Parking Spaces
50-199	1	$\frac{A}{16.6} - \frac{D}{10}^{cc}$ Minimum: <sup>dd</sup> 6
200 or more	Minimum of 1 or 1 per 1,000 acres of usable surface <sup>ee</sup>	$\frac{A}{15.9} - \frac{D}{10}^{ff}$ Minimum: <sup>dd</sup> 12

2. The proper quantity of public access points consistent with safe and enjoyable participation in the various extensive water based recreation activities should be provided on major rivers throughout the Region. To meet this standard the maximum interval between access points on canoeable rivers<sup>gg</sup> should be 10 miles.

3. A sufficient number of boat launch ramps consistent with safe and enjoyable participation in extensive water based outdoor recreation activities should be provided along the Lake Michigan shoreline within harbors of refuge. To meet this standard the following guidelines for the provision of launch ramps should be met:

Minimum Per Capita Facility Requirements (ramps per 1,000 residents)	Design Standards				Maximum Distance Between Harbors of Refuge
	Typical Location of Facility	Facility Area Requirements	Suggested Support Facilities, Services, and Backup Lands	Support Facility Area Requirements	
0.025	Types I, II, and III general use sites	0.015 acre per ramp	Rest rooms Parking (40 car and trailer spaces per ramp)	-- 0.64 acres per ramp minimum	15 miles

4. A sufficient number of boat slips consistent with safe and enjoyable participation in extensive water based outdoor recreation activities should be provided at marinas within harbors of refuge along the Lake Michigan shoreline. To meet this standard the following guidelines for the provision of boat slips should be met:

Minimum Per Capita Facility Requirements (boat slips per 1,000 residents)	Design Standards			Support Facility Area Requirements
	Typical Location of Facility	Facility Area Requirements	Suggested Support Facilities, Services, and Backup Lands	
1.3	Types I, II, and III general use sites	--	Fuel, concessions, rest rooms Parking Storage and maintenance	-- 0.01 acre per boat slip 0.01 acre per boat slip



Table 99 (continued)

**OBJECTIVE NO. 6**

The preservation of sufficient high quality open-space lands for protection of the underlying and sustaining natural resource base and enhancement of the social and economic well being and environmental quality of the Region.

**PRINCIPLE**

Ecological balance and natural beauty within the Region are primary determinants of the ability to provide a pleasant and habitable environment for all forms of life and to maintain the social and economic well being of the Region. Preservation of the most significant aspects of the natural resource base, that is, primary environmental corridors and prime agricultural lands, contributes to the maintenance of ecological balance, natural beauty, and economic well being of the Region.

**A. PRIMARY ENVIRONMENTAL CORRIDORS**

**PRINCIPLE**

The primary environmental corridors are a composite of the best individual elements of the natural resource base including surface water, streams, and rivers and their associated floodlands and shorelands; woodlands, wetlands, and wildlife habitat; areas of groundwater discharge and recharge; organic soils, rugged terrain, and high relief topography; and significant geological formations and physiographic features. By protecting these elements of the natural resource base, flood damage can be reduced, soil erosion abated, water supplies protected, air cleansed, wildlife population enhanced, and continued opportunities provided for scientific, educational, and recreational pursuits.

**STANDARDS**

All remaining nonurban lands within the designated primary environmental corridors in the Region should be preserved in their natural state.

**B. PRIME AGRICULTURAL LANDS**

**PRINCIPLE**

Prime agricultural lands constitute the most productive farm lands in the Region and, in addition to providing food and fibre, contribute significantly to maintaining the ecological balance between plants and animals; provide locations close to urban centers for the production of certain food commodities which may require nearby population concentrations for an efficient production-distribution relationship; provide open spaces which give form and structure to urban development; and serve to maintain the natural beauty and unique cultural heritage of southeastern Wisconsin.

**STANDARDS**

1. All prime agricultural lands should be preserved.
2. All agricultural lands should be preserved that surround adjacent high value scientific, educational, or recreational sites and are covered by soils rated in the regional detailed operational soil survey as having very slight, slight, or moderate limitations for agricultural use.

**OBJECTIVE NO. 7**

The efficient and economical satisfaction of outdoor recreation and related open space needs meeting all other objectives at the lowest possible cost.

**PRINCIPLE**

The total resources of the Region are limited, and any undue investment in park and open space lands must occur at the expense of other public investment.

**STANDARD**

The sum total of all expenditures required to meet park demands and open space needs should be minimized.

Table 99 (continued)

- <sup>a</sup> In urban areas the facilities commonly located in Type III or Type IV school outdoor recreation areas often provide a substitute for facilities usually located in parks by providing opportunities for participation in intensive nonresource-oriented activities.
- <sup>b</sup> The identification of a maximum service radius for each park type is intended to provide another guideline to assist in the determination of park requirements and to assure that each resident of the Region has ready access to the variety of outdoor recreation facilities commonly located in parks.
- <sup>c</sup> The identification of a maximum service radius for each school site is intended to assist in the determination of outdoor recreation facilities requirements and to assure that each urban resident has ready access to the types of facilities commonly located in school recreation areas.
- <sup>d</sup> For Type I and Type II parks, which generally provide facilities for resource-oriented outdoor recreation activities for the total population of the Region, the minimum per capita acreage requirements apply to the total resident population of the Region. For Type III and Type IV sites, which generally provide facilities for intensive nonresource-oriented outdoor recreation activities primarily in urban areas, the minimum per capita acreage requirements apply to the resident population of the Region residing in urban areas.
- <sup>e</sup> Urban areas are defined as areas containing a closely spaced network of minor streets which include concentrations of residential, commercial, industrial, governmental, or institutional land uses having a minimum total area of 160 acres and a minimum population of 500 persons. Such areas usually are incorporated and are served by sanitary sewerage systems. These areas have been further classified into the following densities: low-density urban areas or areas with 0.70 to 2.29 dwelling units per net residential acre, medium-density urban areas or areas with 2.30 to 6.99 dwelling units per net residential acre, and high-density urban areas or areas with 7.00 to 17.99 dwelling units per net residential acre.
- <sup>f</sup> For public school sites, which generally provide facilities for intensive nonresource-oriented outdoor recreation activities, the minimum per capita acreage requirements apply to the resident population of the Region residing in urban areas.
- <sup>g</sup> Type I sites are defined as large outdoor recreation sites having a multicounty service area. Such sites rely heavily for their recreational value and character on natural resource amenities. Type I parks provide opportunities for participation in a wide variety of resource-oriented outdoor recreation pursuits. There were 19 publicly owned nonschool Type I parks acquired and developed for outdoor recreation use in the Region in 1973. Eight additional park sites were partially or totally acquired for outdoor recreation use. The combined acreage contained within these sites was 9,320, or 5.27 acres per thousand residents in the Region. There was also one publicly owned Type I school site with outdoor recreation facilities in the Region in 1973. Appendix P provides an example of a Type I park.
- <sup>h</sup> A passive activity area is defined as an area within an outdoor recreation site which provides an opportunity for such less athletic recreational pursuits as pleasure walking, rest and relaxation, and informal picnicking. Such areas generally are located in all parks or in urban open space sites, and usually consist of a landscaped area with mowed lawn, shade trees, and benches.
- <sup>i</sup> Type II sites are defined as intermediate size sites having a countywide or multicomunity service area. Like Type I sites, such sites rely for their recreational value and character on natural resource amenities. Type II parks, however, usually provide a smaller variety of recreation facilities and have smaller areas devoted to any given activity. In the Region in 1973 there were 15 publicly owned nonschool Type II parks, the combined acreage of which was 2,290, or 1.29 acres per thousand residents in the Region. There were also three publicly owned Type II school sites with outdoor recreation facilities in the Region in 1973. Appendix P provides an example of a Type II park.
- <sup>j</sup> In general, each resident of the Region should reside within 10 miles of a Type I or Type II park. It should be noted, however, that within urban areas having a population of 40,000 or greater, each urban resident should reside within four miles of a Type I or Type II park.
- <sup>k</sup> Type III sites are defined as intermediate size sites having a multineighborhood service area. Such sites rely more on the developmental characteristics of the area to be served than on natural resource amenities for location. In the Region in 1973 there were 73 publicly owned nonschool Type III parks in urban areas, the combined acreage of which was 3,593, or 2.31 acres per thousand urban residents in the Region. In the Region in 1973 there were also 37 publicly owned Type III school sites located in urban areas, the combined total acreage with outdoor facilities of which was 1,502, or 0.96 acre per thousand residents in the Region. Appendix P provides an example of a Type III park.
- <sup>l</sup> In urban areas the need for a Type III site is met by the presence of a Type II or Type I site. Thus, within urban areas having a population of 7,500 or greater, each urban resident should be within two miles of a Type III, II, or I park site.
- <sup>m</sup> The typical service radius of school outdoor recreation facilities is governed by individual facilities within the school site and by population densities in the vicinity of the site. In high-density urban areas each urban resident should reside within 0.5 mile of the facilities commonly located in a Type III or Type IV school outdoor recreation area; in medium-density urban areas each resident should reside within 0.75 mile of facilities commonly located in Type III or Type IV school outdoor recreation areas; and in low-density urban areas each urban resident should reside within one mile of the facilities commonly located in a Type III or Type IV school outdoor recreation area.

Table 99 (continued)

- <sup>n</sup> Type IV sites are defined as small sites which have a neighborhood as the service area. Such sites usually provide facilities for intensive nonresource-oriented outdoor recreation activities and are generally provided in urban areas. In the Region in 1973 there were 397 publicly owned nonschool Type IV parks located in urban areas, the combined acreage of which was 2,600, or 1.67 acres per thousand urban residents in the Region. In the Region in 1973 there were also 429 publicly owned Type IV school sites with outdoor recreation facilities located in urban areas, the combined total acreage of which was 2,398, or 1.54 acres per thousand urban residents in the Region. Recreation lands at the neighborhood level should most desirably be provided through a joint community-school district venture with the facilities and recreational land area required to be provided on one site available to serve the recreation demands of both the school student and resident neighborhood population. Using the Type IV park standard of 1.7 acres per thousand residents and the school standard of 1.6 acres per thousand residents, a total of 3.3 acres per thousand residents or approximately 21 acres of recreation lands in a typical medium-density neighborhood would be provided. These acreage standards relate to lands required to provide for recreation facilities typically located in a neighborhood and are exclusive of the school building site and associated parking area and any additional natural areas which may be incorporated into the design of the park site such as drainageways and associated storm water retention basins, areas of poor soils, and floodland areas. Appendix P provides a design for typical Type IV combined park-school sites.
- <sup>o</sup> The maximum service radius of Type IV parks is governed primarily by the population densities in the vicinity of the park. In high-density urban areas, each urban resident should reside within 0.5 mile of a Type IV park; in medium-density urban areas, each resident should reside within 0.75 mile of a Type IV park; and in low-density urban areas, each urban resident should reside within one mile of a Type IV park. It should be noted that the requirement for a Type IV park also is met by a Type I, II, or III park within 0.5-1.0 mile service radii in high-, medium-, and low-density urban areas, respectively. Further, it should be noted that, in the application of the service radius criterion for Type IV sites, only multiuse parks five acres or greater in area should be considered as satisfying the maximum service radius requirement.
- <sup>p</sup> A recreation corridor is defined as a publicly owned continuous linear expanse of land which is generally located within scenic areas or areas of natural, cultural, or historical interest and which provides opportunities for participation in trail-oriented outdoor recreation activities especially through the provision of trails designated for such activities as biking, hiking, horseback riding, nature study, and ski touring. In the Region in 1973 only Milwaukee County, with an extensive parkway system, and the Wisconsin Department of Natural Resources, with the Kettle Moraine State Forest—Southern Unit, possessed the continuous linear lands required to develop such a recreation corridor.
- <sup>q</sup> Facilities for intensive nonresource-oriented outdoor recreation activities generally serve urban areas. The minimum per capita requirements for facilities for intensive nonresource-oriented outdoor recreation activities, therefore, apply to the total resident population in each urban area of the Region.
- <sup>r</sup> For each facility for intensive nonresource-oriented activity, the service radius indicates the maximum distance a participant should have to travel from his place of residence to participate in the corresponding activity.
- <sup>s</sup> Each urban area having a population of 2,500 or greater should have at least one baseball diamond.
- <sup>t</sup> Support facilities such as night lighting, concessions, and bleachers generally should not be provided in Type IV sites. These sites typically do not contain sufficient acreage to allow adequate buffer between such support facilities and surrounding neighborhood residences.
- <sup>u</sup> Each urban area should have at least one ice skating rink.
- <sup>v</sup> Facilities for intensive resource-oriented activities serve both rural and urban residents of the Region. The minimum per capita requirements for facilities for intensive resource-oriented activities, therefore, apply to the total resident population of the Region.
- <sup>w</sup> Participants in intensive resource-oriented outdoor recreation activity travel relatively long distances from their home. The approximate service radius indicates the normal maximum distance a participant in the respective resource-oriented activity should have to travel from his place of residence to participate in the corresponding activity.
- <sup>x</sup> The allocation of the 6.35 picnic tables per thousand residents to publicly owned general use sites is as follows: 3.80 tables per thousand residents of the Region to be located in Type I and Type II parks to meet the resource-oriented picnicking needs of the Region and 2.55 tables per thousand residents of urban areas in the Region to be located in Type III and Type IV parks to meet local picnicking needs in urban areas of the Region.
- <sup>y</sup> A picnic area is commonly provided adjacent to a swimming beach as a support facility. Thus, the total amount of acreage required for support facilities must be determined on a site by site basis.
- <sup>z</sup> Both urban and rural residents of the Region participate in extensive land based outdoor recreation activities. Thus, minimum per capita requirements for trails for extensive land based activities apply to the total resident population of the Region.

Table 99 (continued)

- aa* Bike routes are located on existing public roadways; therefore, no requirement is provided.
- bb* Pleasure driving routes are located on existing public roadways; therefore, no requirement is provided. However, a recreation corridor may provide a uniquely suitable area for the development of a system of scenic driving routes.
- cc* The survey of boat owners conducted under the regional park study indicated that for lakes of 50-199 acres, the typical mix of fast boating activities is as follows: water skiing—49 percent; motor boating—35 percent; and sailing—16 percent. The minimum area required per boat for safe participation in these activities is as follows: water skiing—20 acres; motor boating—15 acres; and sailing—10 acres. Assuming the current mix of boating activities in conjunction with the foregoing area requirements, it is found that 16.6 acres of "usable" surface water are required per boat on lakes of 50-199 acres. The number of fast boats which can be accommodated on a given lake of this size range is the usable surface area of that lake expressed in acres (A) divided by 16.6. The optimum number of parking spaces for a given lake is the number of fast boats which the lake can accommodate reduced by the number of fast boats in use at any one time by owners of property with lake frontage. The latter figure is estimated as 10 percent of the number of dwelling units (D) on the lake.
- dd* The minimum number of parking spaces relates only to parking to accommodate slow boating activities such as canoeing and fishing and is applicable only in the event that the application of the standard indicated a need for less than six parking spaces for fast boating activities. No launch ramp facilities would be provided for slow boating activities.
- ee* Usable surface water is defined as that area of a lake which can be safely utilized for motor boating, sailing, and water skiing. This area includes all surface water which is a minimum distance of 200 feet from all shorelines and which is free of submerged or surface obstacles and at least five feet in depth.
- ff* The survey of boat owners conducted under the regional park study indicated that, for lakes of 200 acres or more, the typical mix of fast boating activities is as follows: water skiing—43 percent; motor boating—33 percent; and sailing—24 percent. The minimum area required per boat for safe participation in these activities is as follows: water skiing—20 acres; motor boating—15 acres; and sailing—10 acres. Assuming the current mix of boating activities in conjunction with the foregoing area requirements, it is found that 15.9 acres of "usable" surface water are required per boat on lakes of 200 acres or more. The number of fast boats which can be accommodated on a given lake of this size range is the usable surface area of that lake expressed in acres (A) divided by 15.9. The optimum number of parking spaces for a given lake is the number of fast boats which the lake can accommodate reduced by the number of fast boats in use at any one time by owners of property with lake frontage. The latter figure is estimated as 10 percent of the number of dwelling units (D) on the lake.
- gg* Canoeable rivers are defined as those rivers which have a minimum width of 50 feet over a distance of at least 10 miles.

Source: SEWRPC.

to achieve the specific objective which the standards complement. Third, it must be recognized that certain objectives and standards may be inherently conflicting and require resolution through adjustments in plan design, and meaningful plan evaluation may take place only through a comprehensive assessment of each of the alternative plans against all of the objectives and supporting standards. Fourth, the existing level of recreational use, as previously indicated, was an important consideration in the development of many of the individual facility standards presented here. It is important to note that out-of-Region participants were included in determining the intensity of use. As indicated in Chapter VI, out-of-Region residents account for a significant proportion of the use of certain resource-oriented recreational facilities including camp sites, swimming beaches, and golf courses, especially in the southern portion of the Region. In the development of regional park and open space standards, it was assumed that the ratio of in-Region to out-of-Region users would not change significantly through the plan design year. Accordingly, a significant change in the ratio of in-Region to out-of-Region users for a given recreational activity could affect the validity of the standard for the related recreation facilities and areas. It follows that such a change would also significantly affect the validity of the forecasts of recreational facility

and site requirements for southeastern Wisconsin, which will be based upon the application of these standards to the anticipated level of the resident population of the Region.

Finally, the standards must be very judiciously applied to areas which are already partially or fully developed since strict application may require significant renewal activities. For example, application of the regional park and open space standards within an older, intensively developed neighborhood may reveal a pressing need for certain recreational facilities and open space which could be accommodated in a small park. Because of the high density of existing development and the complete lack of open space, the provision of even a five-acre park could necessitate significant demolition activity and the relocation of a number of households. A sound decision on providing the required park in such a case can be made only after considering many factors including basic acquisition, demolition, and redevelopment costs, the cost of required relocation assistance, the quality of existing structures at the park site, the effect on the continued viability of the neighborhood, the effect on the property tax base, and consideration of the benefits which the park would generate.



(This page intentionally left blank)

## OUTDOOR RECREATION SITE AND FACILITY NEEDS

## INTRODUCTION

The primary purpose of the regional park and open space planning program is preparation of a sound and workable plan to guide the staged acquisition and development of lands and facilities needed to satisfy the recreation demands of the regional population. Determination of the quantity and type of outdoor recreation sites and facilities needed to satisfy existing and anticipated future recreation demands clearly is an important step preliminary to the development of such a plan. The methodology and findings of analyses undertaken as part of the regional park and open space planning program to determine existing and anticipated future outdoor recreation site and facility needs in southeastern Wisconsin are described in this chapter.

The need for outdoor recreation sites and facilities is defined for the purposes of this report as the shortfall in number and area of such sites and in number and type of such facilities as determined by comparing the existing supply of such sites and facilities with the existing and anticipated future demand. The existing supply of outdoor recreation sites and facilities has been described in Chapters V and VI of this report. The existing and anticipated future demand for recreation sites and facilities was determined by applying the adopted regional park and open space planning standards, set forth in Chapter XI of this report, to the existing and probable future resident population levels of the Region. It should be noted that, in formulating the regional park and open space standards, every effort possible was made to recognize the unique recreation demands and preferences of the regional population. Consequently, the results of application of these standards to the existing and anticipated future population levels should provide the best approximation possible of the existing and probable future patterns of recreation demand within the Region.

The adopted regional park and open space objectives and related standards specify in detail requirements for the quantity and spatial distribution of both outdoor recreation sites and outdoor recreation facilities. The application of these standards to the existing and anticipated future population levels in the Region helps determine the existing and probable future demand for specific types of outdoor recreation sites and facilities. This demand, when compared to the existing supply of such sites and facilities, yields an estimate of existing and probable future recreation needs. For recreation site requirements, need analyses were conducted for Type I and Type II parks; Type III and Type IV parks and public school-owned general use sites; and public recreation corridors. For recreation facility requirements,

need analyses were conducted for both public and nonpublic facilities for intensive nonresource-oriented outdoor recreation activities such as baseball, basketball, and tennis; public and nonpublic facilities for intensive resource-oriented outdoor recreation activities such as camping, golfing, and picnicking; and public facilities<sup>1</sup> for extensive land based outdoor recreation activities such as hiking, ski touring, and horseback riding. In addition, an analysis of need for public access areas was conducted to facilitate participation in extensive water based recreation activities such as boating and fishing on the major inland lakes of the Region and on Lake Michigan.

Determining existing and probable future outdoor recreation needs is a complex process, requiring the judicious application of adopted regional park and open space planning standards to resident population levels in order to identify outdoor recreation site and facility requirements. The basic concepts underlying the analysis of existing and probable future recreation needs conducted under the park and open space planning program are presented in the first section of this chapter. Then, because information on the existing and future population levels within the Region is a primary input into a determination of outdoor recreation needs, the existing size and distribution of the population of the Region and corresponding forecasts for the year 2000 are described in the second section. The final sections of this chapter describe existing and probable future needs for outdoor recreation sites and outdoor recreation facilities, respectively.

## BASIC CONCEPTS

An understanding of six basic concepts is essential to proper understanding of the methodology and findings of the analyses presented in this chapter. Accordingly, these basic concepts are presented here. First of all, it should be recognized that the application of recreation site standards and of recreation facility standards may result in several different "need situations." An area of analysis—such as the Region or a subarea of the Region—

---

<sup>1</sup>For facilities for extensive land based outdoor recreation activities, it should be recognized that the continuity and accessibility required for an areawide system of trails are not likely to be provided by trail facilities supplied by the private sector. Thus, while trails provided by the private sector allow opportunities for such activities as hiking, ski touring, and horseback riding, only the need for a system of public trails for extensive land based outdoor recreation activities has been set forth in this chapter.

may lack both the facilities and the site area necessary to satisfy the recreation demands of its residents so that both types of needs—site and facility—can be met in the same location. An area, however, may have sufficient recreation sites but lack the required facilities. In this situation, if it is impractical to develop the needed facilities at an existing recreation site, it may be necessary to add recreation site acreage in order to accommodate the needed facilities, thereby exceeding the recreation site requirement. In still other situations, there may be a need for additional recreation lands even though the demand for facilities is met, so that only additional recreation site acreage is required. Clearly, the identified recreation site needs and recreation facility needs must be properly synthesized prior to the development of regional and local park plans.

Second, it should be recognized that the recreation site and facility standards used in analysis of park and recreation facility needs are of two basic types—namely, per capita standards and accessibility standards. The application of per capita standards, expressed as the number of acres of a given site type or the number of facilities of a given type per thousand population, is intended to determine whether the overall number of recreation sites and facilities in a given area is sufficient to satisfy the recreation demands of the resident population. The application of accessibility standards, expressed as maximum service areas around recreation sites and facilities, is intended to determine whether the existing recreation sites and facilities are spatially distributed in a manner convenient to the resident population intended to be served. It should be recognized that, in some situations, per capita standards for recreation sites and facilities may be met, but a need still may exist for additional sites and facilities because of the inaccessibility of the existing recreation areas.

Third, certain facilities, because of their relatively small service areas, clearly can be provided as a practical matter only in urban areas having a significant population concentration while other facilities with larger service areas can be provided in both rural and urban areas. In particular, intensive nonresource-oriented recreation facilities such as basketball courts, playgrounds, and tennis courts generally can be provided only in an urban setting, while intensive resource-oriented facilities such as swimming beaches and camp sites, as well as facilities for trail-oriented activities such as hiking and bicycling, generally must be located in rural areas and, therefore, can serve both urban and rural residents. In addition, the appeal of intensive nonresource related recreation activities generally is greater in urban areas than in rural areas, while the appeal of intensive resource-oriented activities and of trail activities is more universal. For these reasons, in determining existing and probable future recreation needs, standards for intensive nonresource-oriented facilities have been applied only to the urban population of the Region, while standards for intensive resource-oriented recreation facilities and trail facilities have been applied to the total regional population—both rural and urban. Similarly, site standards for those recreation sites which typically provide facilities for intensive

nonresource-oriented recreation activities—namely, Type III and Type IV public general use sites—were also applied only to the urban population, while site standards for those recreation sites which typically provide facilities for intensive resource-oriented activities and trail-oriented activities—namely, Type I and Type II parks and public recreation corridors—were applied to the total regional population, both rural and urban.

Fourth, as indicated in Chapters V and VI of this report, there are many nonpublic recreation sites and facilities in the Region which satisfy a significant portion of the outdoor recreation demand of the resident population. It is important to note, however, that many of these nonpublicly owned sites are not open to the general public, are unavailable to certain segments of the population because of an inability to pay, or are situated in locations not easily accessible to the general public. Inasmuch as adequate opportunities to participate in outdoor recreation activities should be available to all residents of the Region, the analysis of outdoor recreation needs addressed the problem of the limited availability of nonpublicly owned recreation sites and facilities, particularly the extent to which nonpublic facilities actually substitute for public facilities. The approach used in applying nonpublic and public standards to determine outdoor recreation needs necessarily varied by facility type. More detailed explanations of the methodology used to determine existing and probable future outdoor recreation needs are presented in subsequent sections of this chapter.

Fifth, it should be recognized that, while the forecasts of recreation site and facility needs presented in this chapter serve as basic inputs into the design of alternative regional park plans, these forecasts, like all forecasts, involve uncertainty and therefore must be used with caution. Forecasts cannot take into account events which are not predictable but which may have major effects upon future conditions. The validity of the forecasts of future recreation site and facility needs presented here depend on the validity over time of both the population forecasts and the standards on which the determination of future recreation needs was based. Participation in various outdoor recreation activities is closely related to such factors as the amount of leisure time and the level of personal income and mobility. Recent changes in these factors are, in effect, reflected in the site and facility standards adopted as part of the regional park and open space plan program and utilized in the determination of future recreation needs. It should be noted, however, that additional changes in these factors over time could change the pattern of recreation demand and, therefore, affect the validity of the adopted standards for long-range park planning purposes. A change in the validity of the recreation site and facility standards or in the Commission population forecasts themselves would, in turn, affect the validity of the forecasts of future recreation needs.

Sixth, the analysis presented in this chapter is confined to a determination of existing and future recreation needs by applying the recreation site and facility standards associated with adopted regional park and open space

planning Objective Nos. 1 through 5 to the existing and forecast regional population. An additional major consideration in the park and open space planning program, as set forth in Objective No. 6, is the preservation of high quality open space lands to protect the underlying and sustaining natural resource base and to enhance the social and economic well being and environmental quality of the Region. Preservation of the primary environmental corridors of the Region in an essentially natural state and preservation of the prime agricultural lands of the Region in agricultural use would largely achieve this objective. Existing and future open space needs in southeastern Wisconsin then, by definition can be met by public acquisition or appropriate land use control mechanisms of the primary environmental corridors and prime agricultural lands which are not now so protected. The primary environmental corridors and prime agricultural lands of the Region, together with the current extent of the efforts to preserve and protect these areas, have been described in Chapter IV of this report. The regional park and open space plan will provide recommendations concerning the appropriate mechanisms—public acquisition or land use controls—to be used in meeting the remaining open space preservation needs of the Region.

#### EXISTING AND FUTURE POPULATION OF THE REGION

An estimate of the existing resident population level of the Region and a forecast of the probable future resident population level are essential to the development of alternative regional park and open space plans. Such population information provides the basis for application of recreation site and facility standards, thereby facilitating a determination of existing and probable future recreation demands which, in turn, may be scaled against the existing supply of recreation sites and facilities to yield estimates of existing and probable future outdoor recreation needs. In order to identify recreation site and facility needs, then, an accurate estimate of the existing population level and forecasts of the probable future population level in the Region is necessary.

##### Existing Population Estimates

The preparation of population estimates is a difficult task, one which, in the absence of a census, must be based on indicators of population change. The Commission relies primarily on secondary data sources for the preparation of such population estimates. The Wisconsin Department of Administration has the responsibility under state law for preparing annual estimates of the population levels of civil divisions within the State. These estimates are used as the basis for distributing certain state-shared taxes to local units of government. These estimates are revised from time to time for past years by the Department in order to take into account the results of special population censuses, as well as changes in the state population level as estimated by the United States Bureau of the Census.

The population of the Region as of April 1975 was estimated by the Wisconsin Department of Administration at 1,791,900 persons. This estimate is based upon indicators

of population change available on a statewide basis and, in particular, the number of automobiles registered, the number of persons filing income tax returns, and the dollar value of the exemptions for dependents on those income tax returns. For purposes of the park and open space planning program, this population estimate has been modified to exclude that segment of the population which, for reasons of institutionalization, normally has not utilized parks or outdoor recreation facilities.<sup>2</sup> As shown in Table 100, the estimated population of the Region in 1975, excluding the institutionalized population segment, was 1,769,504. Milwaukee County alone accounted for more than half of the noninstitutionalized population—57 percent—of the Region. In contrast, Ozaukee, Walworth, and Washington Counties each accounted for only about 4 percent of such population in 1975.

##### Population Forecasts

Forecasts of probable future levels of population were prepared by the Commission in 1963 as a necessary basis for preparing the regional land use and transportation plan adopted by the Commission in 1966. Following the adoption of these plan elements, the Commission in 1967 mounted a continuing land use-transportation study to monitor development within the Region and to assess the continuing validity of the regional population forecast used in the preparation of these plans. As a result of this monitoring process and in light of the results of the 1970 census of population and the 1970 reinventory of land use which, combined, indicated that population growth within the Region was departing from the trends on which the original population forecasts were based, the Commission in 1972 began a major effort toward reevaluating the adopted regional land use and transportation plans. As a first step in this reevaluation, the Commission prepared revised population forecasts for the year 1990 and extended such forecasts to the year 2000—the design year also selected for the regional park and open space planning program.

A total of 15 different population projections was made with varying assumptions for the rates of birth, mortality, and migration. The most probable range within which the actual population level may be expected to fall was identified. The revised projections indicated that the regional population could be expected to range from a low of 1.97 million persons to a high of 2.43 million persons by the year 2000. A projection of 2.22 million persons finally was selected by the Commission as the best estimate and adopted as the revised population

---

<sup>2</sup>The population excluded from the analysis of outdoor recreation needs consists of persons for whom care or custody is being provided in institutions such as mental hospitals and homes for the aged. The persons in such institutions generally do not have an opportunity to utilize public parks often because of physical disability, institutional restrictions, or transportation problems. In many cases, however, institutions provide their own private recreation and open space facilities.



forecast for regional planning purposes. This projection was based upon an assumed reduction in the age-specific fertility rates to below replacement level by 1980 and then a gradual increase to replacement level from 1985 to the year 2000, and on an assumed halt of regional out-migration by 1985, with no substantial net in- or out-migration occurring thereafter. As indicated in Table 100, the forecast of the resident population of the Region for the year 2000, excluding the institutionalized population segment, is 2.19 million. The population of the Region, excluding the institutionalized segment, may be expected to increase by about 424,000 persons, or 24 percent, between 1975 and 2000. As further indicated in Table 100, among the seven counties the largest absolute increase in population, about 156,000 persons, may be anticipated in Waukesha County and the smallest population increase, about 31,000 persons, may be expected in Walworth County. By the year 2000, Waukesha County's proportion of the regional total may be expected to increase to 19 percent while Milwaukee County's proportion may be expected to decline to 47 percent.

#### Population Distribution

In addition to information on the overall size of the existing and probable future population of the Region, information on population distribution is important to any meaningful determination of existing and probable future outdoor recreation needs. As indicated in the introduction, certain outdoor recreation facilities—namely, intensive nonresource-oriented recreation facilities such as baseball diamonds, basketball courts, and tennis courts—should be provided primarily to serve residents in the urban areas of the Region, while other recreation facilities, such as intensive resource-oriented facilities including camp sites and swimming beaches, should be supplied for both urban and rural residents. Clearly, an estimate of the population residing in urban

areas of the Region in 1975 and a projection of the population expected to reside in urban areas in the year 2000 are necessary inputs into the determination of existing and probable future recreation site and facility needs.

As indicated in Chapter XI of this report, urban areas for park planning purposes were defined as areas marked by a closely spaced network of land access streets and consisting of concentrations of residential, commercial, industrial, governmental, or institutional land uses having a minimum total area of 160 acres and a minimum total resident population of 500 persons. Before applying recreation site and facility standards, it was necessary to delineate all urban areas within the Region, based upon the foregoing definition, and estimate the corresponding existing resident population levels for each such area. It was also necessary to identify all new urban areas likely to exist by the plan design year and estimate the probable geographical extent and population level of each urban area in the plan design year.

The urban areas existing in southeastern Wisconsin in 1975, delineated on the basis of an examination of the Commission's 1975 aerial photographs of the Region, are shown on Map 84. The population estimates for these urban areas were derived from the Wisconsin Department of Administration's 1975 population estimates for civil divisions, allocating the state estimates to smaller areas on the basis of the results of the 1970 census and indicators of growth since 1970, including records of residential land subdivision activity and housing unit counts derived from the Commission aerial photographs. The estimated 1975 population, excluding the population in institutions, is presented for each urban area in Table 101. The estimated total urban population of the Region, excluding persons in institutions, was 1,557,000 in 1975.

Table 100

#### EXISTING AND FORECAST POPULATION OF THE REGION EXCLUDING PERSONS IN INSTITUTIONS: 1975 AND 2000

County	Estimated Population: 1975		Forecast Population: 2000		Forecast Population Increase: 1975-2000	
	Persons <sup>a</sup>	Percent of Region	Persons <sup>a</sup>	Percent of Region	Persons	Percent
Kenosha . . . . .	125,708	7.1	173,373	7.9	47,665	37.9
Milwaukee . . . .	999,917	56.5	1,036,777	47.2	36,860	3.7
Ozaukee . . . . .	64,743	3.7	113,596	5.2	48,853	75.5
Racine. . . . .	176,286	10.0	214,277	9.8	37,991	21.6
Walworth. . . . .	66,397	3.7	97,816	4.5	31,419	47.3
Washington . . .	75,961	4.3	141,591	6.4	65,630	86.4
Waukesha. . . . .	260,492	14.7	416,426	19.0	155,934	59.9
Region	1,769,504	100.0	2,193,856	100.0	424,352	24.0

<sup>a</sup> Institutionalized persons excluded are those for whom care or custody is being provided in institutions such as mental hospitals and homes for the aged.

Source: Wisconsin Department of Administration, U. S. Bureau of the Census, and SEWRPC.

Table 101

**EXISTING AND PLANNED POPULATION EXCLUDING PERSONS IN  
INSTITUTIONS FOR URBAN AREAS IN THE REGION: 1975 AND 2000**

Planning Analysis Area (PAA)	Urban Area	Estimated 1975 Population	Planned 2000 Population <sup>a</sup>
1	Belgium	935	1,482
1	Fredonia	1,457	2,116
2	Port Washington	9,434	12,977
3	Saukville	2,436	6,660
4	Cedarburg-Grafton	19,348 <sup>b</sup>	33,332 <sup>b</sup>
5	Mequon-Thiensville	15,079	38,891
Ozaukee	County Totals	48,689	95,458
6	Kewaskum	2,540	4,878
7	West Bend	20,677	40,613
7	Newburg	642 <sup>c</sup>	2,265 <sup>c</sup>
8	Allenton	831	1,966
9	Jackson	1,977	5,995
10	Hartford	7,512	15,519
10	Slinger	1,346	4,366
11	Germantown	4,466	26,221
Washington	County Totals	39,991	101,823
13	Bayside-Fox Point- River Hills	14,122	14,813
14	Brown Deer-Glendale	24,705	30,751
15	Shorewood-Whitefish Bay	32,093	30,269
16	Milwaukee (part)	42,742	34,191
17	Milwaukee (part)	48,006 <sup>d</sup>	66,200 <sup>d</sup>
18	Milwaukee (part)	119,193	117,814
19	Milwaukee (part)	80,835	74,724
20	Milwaukee (part)	140,065	126,036
21	Milwaukee (part)	66,345	57,830
22	Milwaukee (part)	19,885	19,166
23	Milwaukee (part)	38,979	42,515
24	Milwaukee (part)	59,508	55,639
25	Milwaukee (part)	35,915	37,322
26	Cudahy-St. Francis- South Milwaukee	55,431	58,194
27	Oak Creek	11,721	43,451
28	Franklin	8,895	37,141
29	Greendale-Greenfield- Hales Corners	56,680	62,494
30	West Allis-West Milwaukee	78,260	72,568
31	Wauwatosa	54,879	53,054
Milwaukee	County Totals	988,259	1,034,172
32	Menomonee Falls-Butler	30,057	58,571
32	Lannon	1,141	3,132
33	Brookfield-Elm Grove	43,164	56,944 <sup>e</sup>
34	New Berlin	24,192	51,718
35	Muskego	10,284	18,063
36	DuPlainville	- <sup>f</sup>	3,679
36	Sussex	3,930	9,262
36	Pewaukee	4,530	12,192
37	Merton	703	622
38	Delafield	1,143	6,212
38	Hartland	4,384	6,783
39	Oconomowoc	11,777	19,538
39	Okauchee	2,624	3,370
40	Waukesha	50,135	73,367
41	Dousman	923 <sup>g</sup>	1,875 <sup>g</sup>
41	Eagle	858	1,539
41	North Prairie	774	1,569
41	Wales	1,321	2,437
42	Big Bend	1,741	1,575
42	Mukwonago	3,466	8,609
Waukesha	County Totals	197,147	341,057

Planning Analysis Area (PAA)	Urban Area	Estimated 1975 Population	Planned 2000 Population <sup>a</sup>
43	Racine-North	33,508	34,979
43	Caledonia-East	14,273	15,559
44	Racine-South	57,017	54,352
44	Mt. Pleasant-East	9,168	12,425
45	Caddy Vista	1,007	1,335
45	Caledonia-West	2,168	7,769 <sup>h</sup>
46	Mt. Pleasant-Sturtevant	12,122 <sup>i</sup>	24,618 <sup>i</sup>
47	Union Grove	3,251	6,273
48	Wind Lake	1,251	5,130
48	Waterford-Rochester	3,896	7,346
49	Burlington	10,494	16,380
Racine	County Totals	148,155	186,166
50	Kenosha-North	31,936	33,578
51	Kenosha-South	45,846	44,508
51	South Kenosha	8,774	13,119
52	Somers-East	1,427	18,585
52	Somers-West	683	4,651
53	Pleasant Prairie-West	1,003	2,935
53	Pleasant Prairie-East	- <sup>f</sup>	15,854
53	Pleasant Prairie-Central	- <sup>f</sup>	2,103 <sup>j</sup>
54	Bristol	- <sup>f</sup>	1,487
55	Paddock Lake	2,891	4,758
55	Silver Lake	1,249	2,305
55	Twin Lakes	3,059	4,474
Kenosha	County Totals	96,868	148,357
56	East Troy	2,187	4,985
57	Whitewater	9,069	16,663
58	Elkhorn	4,316	7,798
59	Como Lake	1,468	1,881
59	Genoa City	931	1,537
59	Lake Geneva	5,357	10,185
59	Pell Lake	1,383	1,445
59	Williams Bay-Fontana- Walworth	5,098	10,616
60	Darien	1,004	2,000
60	Delavan	5,739	8,304
60	Sharon	1,365	2,638
Walworth	County Totals	37,917	68,052
Region Totals		1,557,026	1,975,085

<sup>a</sup> Planned urban population according to the revised regional land use plan for the year 2000 adopted by the Commission in 1977.

<sup>b</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>c</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>d</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>e</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>f</sup> Not classified as urban areas in 1975.

<sup>g</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>h</sup> The Caledonia-West urban area includes a small area in planning analysis area 46.

<sup>i</sup> The Mt. Pleasant-Sturtevant urban area includes a small area in planning analysis area 44.

<sup>j</sup> The Pleasant Prairie-Central urban area includes a small area in planning analysis area 51.

Source: Wisconsin Department of Administration, U. S. Bureau of the Census and SEWRPC.

Map 85 shows additional urban areas in the Region which would generally require urban recreation sites and facilities by the year 2000 if the spatial distribution of the urban land proposed under the new regional land use plan being prepared by the Commission is substantially achieved.<sup>3</sup> The corresponding population levels for these urban areas according to the new regional land use plan for the year 2000 are presented in Table 101. It is important to recognize that the geographical extent and population size of the urban areas of the Region for the year 2000 as set forth here are not forecasts per se but rather elements of the new regional land use plan, which attempts to accommodate the urban land requirements of the probable future population of the Region in a manner which is consistent with the adopted regional land use development objectives.

As indicated in Table 101, the total urban population of the Region for the year 2000, excluding persons in institutions, is estimated at 1,975,100, representing an increase of 418,100 persons, or 27 percent, over the 1975 level. Among the seven counties, the largest increase in urban population under the new regional land use plan may be expected to occur in Waukesha County, where the increase is 143,900 persons, or 73 percent. Conversely, the urban population in Milwaukee County may be expected to increase by 45,900 persons between 1975 and 2000, a proportionate increase of only 5 percent. It should be noted, however, that a significant redistribution of population may be expected within the County, with a continued population decline anticipated in portions of the City of Milwaukee and certain first ring suburbs and significant population increases expected in the northernmost and southernmost areas of the County. This anticipated redistribution of the population has important implications for future outdoor recreation demands and needs in Milwaukee County.

## OUTDOOR RECREATION SITE REQUIREMENTS

As indicated in Chapter XI of this report, the first regional park and open space preservation, acquisition, and development objective calls for the provision of an integrated system of public general use sites and related open space areas which will offer the resident population of the Region adequate opportunities to participate in a wide variety of outdoor recreation activities. The system to be provided consists of public general use sites—both parks and public school related general use sites—and public recreation corridors.<sup>4</sup> Standards under Objective No. 1 specify per capita acreage

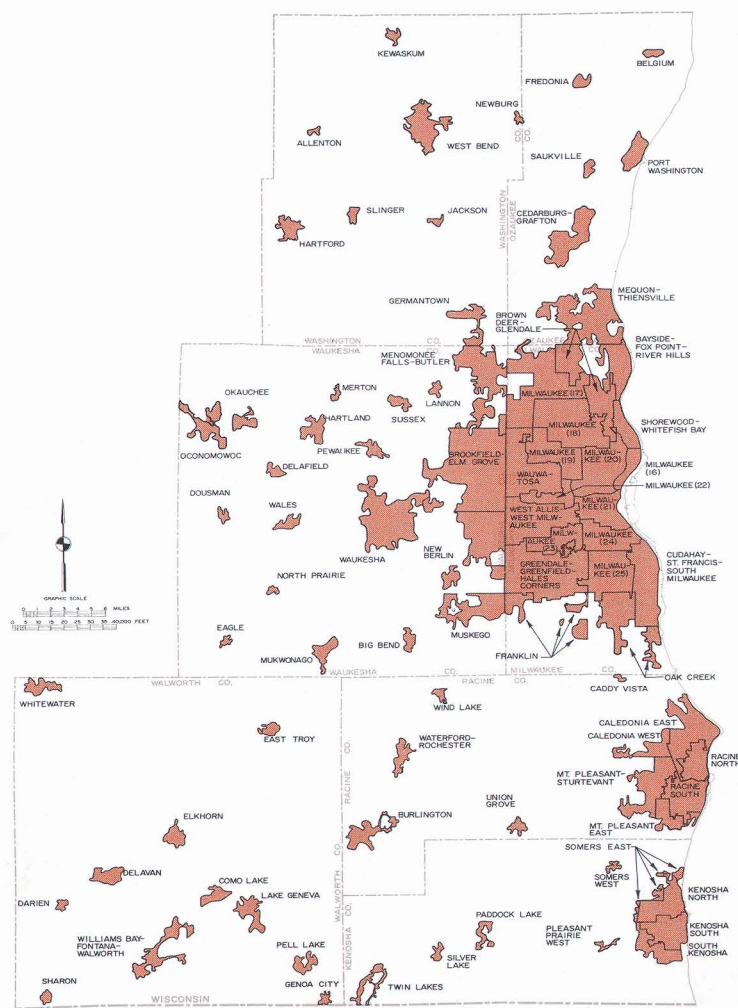
requirements and accessibility requirements for Type I and Type II parks as well as Type III and Type IV parks and public school recreation sites. Additional standards under Objective No. 1 specify per capita linear mileage and accessibility requirements for recreation corridors. The application of these standards to the estimated existing population and the forecast year 2000 population provided estimates of the existing and probable future total outdoor recreation site needs in the Region. These estimates of site needs, when compared to the existing supply of such sites, yield an estimate of existing and probable incremental site needs. The outdoor recreation site needs described in this section represent the major portion of all existing and probable future recreation site needs which should be met in order to satisfy the recreation demands of the regional population. It should be noted that, for the reasons cited in foregoing sections of this chapter, additional recreation site needs, beyond those presented in this section, may become apparent in efforts to meet existing or probable future outdoor recreation facility needs which are described in the next section of this chapter.

Notably, also, the recreation site standards associated with regional park and open space acquisition and development Objective No. 1 relate only to the public sector; similar standards have not been developed for nonpublic recreation sites. Recreation facility standards for the nonpublic sector, however, are specified in Chapter XI, and it is assumed that if the existing and future demand for nonpublic recreation facilities, determined from the application of these standards to the existing and probable future population levels, is met, then there also will be a sufficient quantity of related nonpublic outdoor recreation sites to serve the Region.

<sup>3</sup>The new year 2000 regional land use and transportation plans currently under preparation by the Commission are intended to replace the initial land use and transportation plans for the year 1990 adopted by the Commission in 1966. The findings of the reevaluation of the initial regional land use and transportation plans and a description of the revised land use and transportation plans for the year 2000 are presented in SEWRPC Planning Report No. 25, *A Regional Land Use Plan and A Regional Transportation Plan for Southeastern Wisconsin—2000*.

<sup>4</sup>As indicated in Chapter II of this report, general use sites are defined as public and nonpublic areas of land and water, the primary function of which is to provide space and facilities to be used on an intensive or extensive basis for the pursuit of outdoor recreation activities. Parks comprise an important subgroup of public general use sites, consisting basically of those general use sites which are under the jurisdiction of federal, state, county, or local units of government. Parks usually provide space and facilities for both active and passive recreation uses, with picnicking being the activity most commonly associated with parks. Another subgroup of public general use sites consists of playgrounds and playfields under the jurisdiction of school districts. These school-owned public general use sites, which typically provide areas and facilities for the pursuit of nonresource-oriented recreation activities, differ from parks in that they usually do not contain natural resource amenities or open areas desirable for passive recreation use. Most public school-owned general use sites are small, with virtually all of these sites having been classified as Type III or Type IV sites.

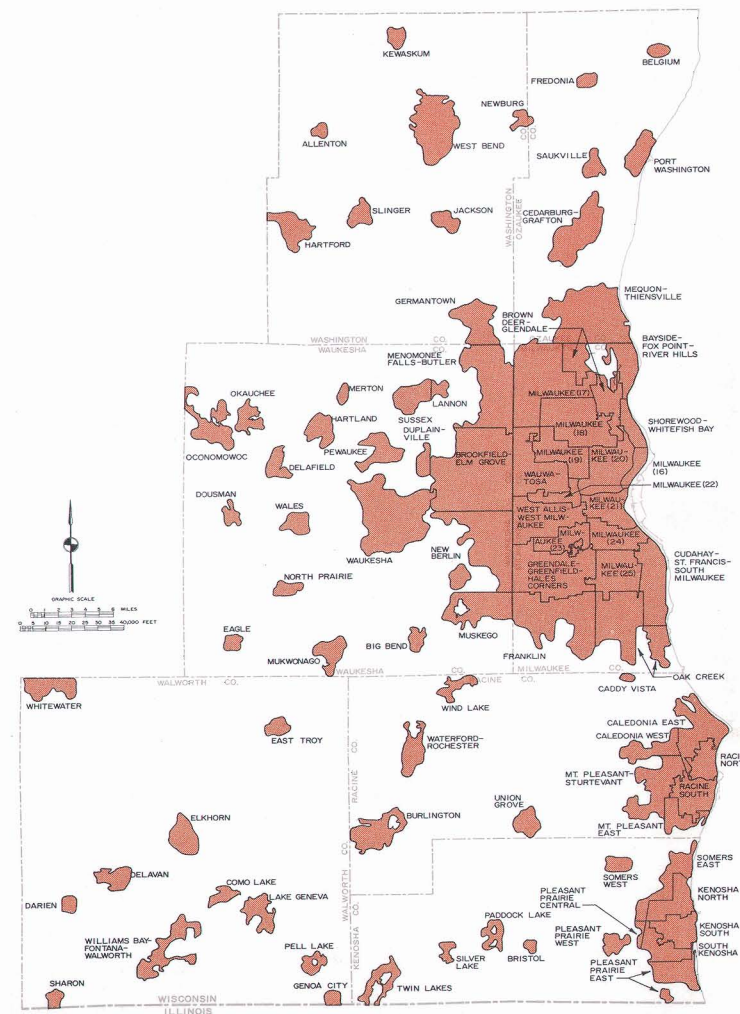
# URBAN AREAS IN THE REGION REQUIRING TYPICAL URBAN OUTDOOR RECREATION SITES AND FACILITIES: 1975



There were 83 urban areas—areas with a closely spaced network of land access streets and relatively dense concentrations of residential, commercial, industrial, governmental, or institutional land uses having a minimum total area of 160 acres and a minimum total resident population of 500 persons—in the Region in 1975. An estimated 1,557,000 persons, or 87 percent of the total population of the Region, lived in these areas. Urban areas require Type III and Type IV urban parks—five to 100 acres in area—and intensive nonresource-oriented facilities such as baseball diamonds, playfields, and tennis courts in order to provide adequate outdoor recreation opportunities for the resident urban population of the Region.

Source: SEWRPC.

# URBAN AREAS IN THE REGION REQUIRING TYPICAL URBAN OUTDOOR RECREATION SITES AND FACILITIES: 2000



By the year 2000 there can be expected to be 87 urban areas in the Region. A total of 1,975,100 persons, or 89 percent of the total regional population, can be expected to reside in those areas. This total represents an increase of about 418,000 persons, or 27 percent, over the 1975 urban population level. The largest increase in urban population—143,900 persons, or 73 percent—may be expected to occur in Waukesha County. The urban population in Milwaukee County may be expected to increase by 45,900 persons, or 5 percent, between 1975 and 2000. A significant redistribution of population may also be expected to occur within Milwaukee County with continued population declines anticipated in portions of the inner city of Milwaukee and certain first ring suburbs and significant population increases expected in the northernmost and southernmost areas of the County.

Source: SEWRPC.



### Type I and Type II Park Needs

Type I and Type II parks are defined as large public, general use, outdoor recreation sites which generally provide opportunities for such activities as camping, golfing, picnicking, and swimming and have a large area containing significant natural resource amenities. Type II parks, by definition, range in area from 100 to 249 acres, while Type I parks are 250 acres or more in size. Type I and Type II parks attract users from relatively long distances and serve persons of all age groups residing in both urban and rural areas. Therefore, the standards for Type I and Type II parks are appropriately applied to the total population—both urban and rural—of the Region.

Type I and Type II parks differ primarily in that Type II parks provide a smaller variety of recreation facilities and have a smaller area devoted to any given activity. Type I and Type II parks are otherwise quite similar in nature, with both relying heavily for recreational value and character on natural resource amenities and providing the same kind of facilities. Although separate acreage standards have been developed for Type I and Type II parks, because of the inherent similarity of these park types, the standards for Type I and Type II parks were applied jointly in the determination of existing and future site needs. In this regard, since the standards under Objective No. 1 specify the provision of 5.3 acres of Type I park and 2.6 acres of Type II parks per thousand persons, an overall standard of 7.9 acres of Type I and Type II parks per thousand persons was utilized in the need analysis.

The manner in which outdoor recreation standards are applied and recreation needs are formulated clearly has a significant impact on the design of alternative plans to meet the identified outdoor recreation needs. In this case in particular, the application of Type I and Type II park standards, combined in the manner described above, is expected to provide desirable flexibility in the design of alternative park plans which must address both recreation site and recreation facility needs. For example, if it were determined that there is a need for an additional golf course in one area of the Region and a swimming beach and a campground in a different area, it may be desirable to locate the golf course in a Type II park in the area where the golf course is needed and the camping area and swimming beach in another Type II site in the area where those facilities are needed. If, however, the acreage standards for Type I and Type II parks were applied separately and there were a need for a Type I park but no need for a Type II park, then the golf course, swimming beach, and campground may all have been located at a single Type I park, thereby meeting the Type I park acreage need but causing either the golf course or the camping and swimming facilities to be inconveniently located with respect to the population to be served. As another example, if it were determined that there is a need for a golf course, swimming beach, and campground in an area and a very desirable potential Type I park site existed in that area, it may be appropriate to locate the needed recreation facilities at that site. If, however, the acreage standard for Type I and Type II park sites

were applied separately and there were a need for Type II acreage but no need for a Type I park, the golf course might be located in one Type II park and the campground and swimming beach in another Type II park, thereby providing the needed Type II park acreage but losing the opportunity for the development of an excellent Type I park.

As indicated in Table 102, the combined per capita acreage standard for Type I and Type II parks is 7.9 acres per thousand population. Application of this standard to the estimated population of the Region in 1975 indicated that a total of approximately 13,980 acres were required to meet the Type I and Type II park demands of the existing population of the Region. Since there was a total of 11,610 acres of Type I and Type II parks in the Region in 1975, an additional 2,370 acres of Type I and Type II parks were needed. Similarly, application of the standard per capita requirement to the planned year 2000 population of the Region indicated that a total of approximately 17,330 acres, or 5,720 acres over the 11,610 acres of existing 1975 Type I and Type II parks, would be required by the year 2000.

In addition to overall acreage requirements, standards under Objective No. 1 also specify service radii, or areas, for each park type which may be utilized in identifying areas of the Region in which residents have limited access to outdoor recreation sites, thereby providing another indicator of recreation site needs. In order to provide a more complete definition of recreation site needs in the Region, then, service areas were delineated around existing acquired Type I and Type II parks on regional base maps; and areas which are not appropriately served, thereby identified. The findings of this accessibility analysis are intended to serve as a guide in the selection of locations for the development of the Type I and Type II parks which are required to meet the foregoing park acreage needs. It should be noted that, although the acreage standards for Type I and Type II parks were combined in the determination of park acreage needs described above, a separate accessibility analysis was undertaken for Type I parks because of the greater number and variety of recreation facilities and larger natural areas for passive recreation activity provided in such parks.

As indicated in Chapter XI of this report, all residents of the Region should reside within a distance of 10 miles from a Type I park. As shown on Map 86, only four areas of the Region are not currently adequately served by Type I sites in accordance with this standard: portions of planning analysis areas 6 through 8 in northwestern Washington County; a small portion of planning analysis area 53 in southeastern Kenosha County; a small portion of planning analysis area 58 in central Walworth County; and portions of planning analysis areas 59 and 60 in southwestern Walworth County.

Chapter XI of this report also specifies a service radius of 10 miles for Type II parks in rural areas of the Region and four miles for Type II parks in urban areas of at least 40,000 population. In both urban and rural areas,

Table 102

## ACREAGE REQUIREMENTS FOR TYPE I AND TYPE II PARKS IN THE REGION: 1975 AND 2000

Existing Parks			1975				2000			
			Estimated Population	Standard Requirement (acres per 1,000 persons)	Acreage Required	Acreage Need	Planned Population	Standard Requirement (acres per 1,000 percent)	Acreage Required	Acreage Need
Type I (acres)	Type II (acres)	Total (acres)								
9,320 <sup>a</sup>	2,290 <sup>b</sup>	11,610	1,769,504 <sup>c</sup>	7.9 <sup>d</sup>	13,980 <sup>e</sup>	2,370 <sup>f</sup>	2,193,856 <sup>c</sup>	7.9 <sup>d</sup>	17,330 <sup>e</sup>	5,720 <sup>f</sup>

<sup>a</sup> The following Type I parks in the Region having a variety of resource-oriented facilities have been included in the existing Type I park acreage total: Brighton Dale and Petrifying Springs Parks in Kenosha County; Brown Deer, Dretzka, Greenfield, Lake Michigan North, Lake Michigan South, Lincoln, Oakwood, and Whitnall Parks in Milwaukee County; Harrington Beach State, Hawthorne Hills, and Mee-Kwon Parks in Ozaukee County; Johnson Park in Racine County; Bigfoot Beach State Park and Whitewater Lake Recreation Area in Walworth County; Pike Lake State Park in Washington County; Menomonee, Minooka, Mukwonago, Nagawaukee Parks and Ottawa Lake Recreation Area in Waukesha County. In addition, the following acquired or partially acquired parks with facilities presently under construction or planned for construction have been included in the existing Type I park acreage total: Silver Lake Park in Kenosha County; Bender Park in Milwaukee County; Cliffside and Ela Parks in Racine County; and Monches Park in Waukesha County. Park acreages were rounded to the nearest 10 acres.

<sup>b</sup> The following Type II parks in the Region having a variety of resource-oriented facilities have been included in the existing Type II park acreage total: Fox River Park in Kenosha County; Currie, Estabrook, Jackson, Kletzsch, and Washington Parks in Milwaukee County; Bushnell and Ives Grove Parks in Racine County; Ridge Run Park in Washington County; and Lapham Peak State Park, Muskego Park, Resinosa State Campground, Wanaki Park, and Wirth Park in Waukesha County. In addition Bristol Woods Park in Kenosha County, an acquired site with facilities planned for construction, has been included in the existing Type II park acreage total. Park acreages were rounded to the nearest 10 acres.

<sup>c</sup> See Table 100 for existing (1975) and planned 2000 population.

<sup>d</sup> Minimum standard per capita acreage requirements for Type I and Type II parks in the Region are as follows: Type I parks—5.3 acres per thousand persons, Type II parks—2.6 acres per thousand persons, and Type I and Type II parks combined—7.9 acres per thousand persons.

<sup>e</sup> Acreage required to provide adequate resource-oriented opportunities was determined by multiplying the standard requirement times the appropriate population.

<sup>f</sup> Acreage need was determined by subtracting the existing park acreage from acreage required.

Source: SEWRPC.

the need for a Type II park is met by the presence of a Type I park. Rural and urban areas not served by either a Type I or a Type II park are shown on Maps 87 and 88, respectively. As shown on Map 87, only three rural areas of the Region—a small portion of planning analysis area 58 in central Walworth County, portions of planning analysis areas 59 and 60 in southwestern Walworth County, and a small portion of planning analysis area 8 in northwestern Washington County—are not adequately served by a Type I or a Type II park.

Map 88 shows existing and anticipated future urban areas in the Region which are not appropriately served by a Type I or a Type II park.<sup>5</sup> Particularly noteworthy on

Map 88 are two large urban areas which are not now adequately served by a Type I or a Type II park: the southern portion of the Kenosha metropolitan area and the south central portion of the Racine metropolitan area. As indicated on Map 88, additional growth anticipated in the southern portion of the Kenosha metropolitan area may be expected to intensify the need for a Type II park site in that area by the year 2000.

#### Type III and Type IV Site Needs

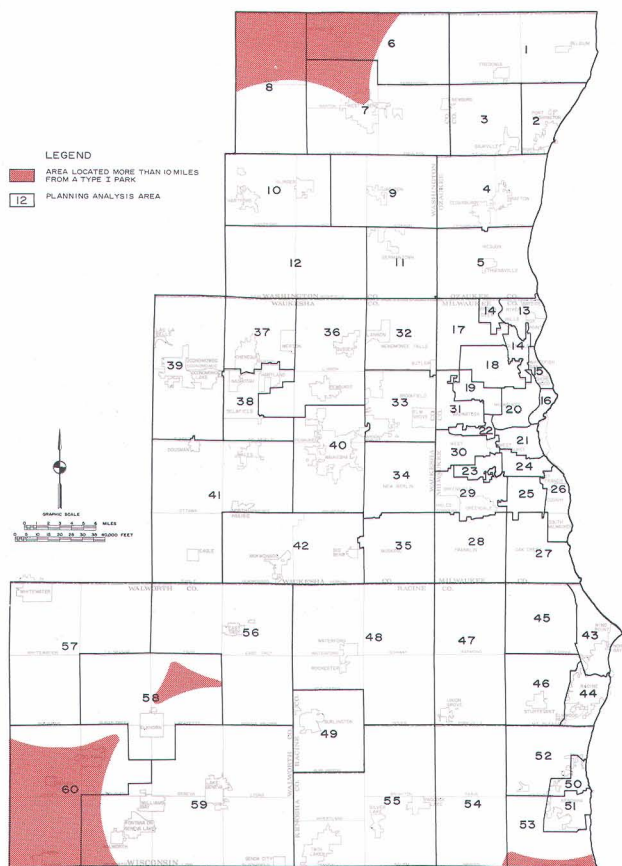
As contrasted to Type I and Type II parks, the location of Type III and Type IV general use outdoor recreation sites depends more upon the developmental characteristics of the area to be served than on the natural resource amenities. Type III general use sites range in size from 25 to 99 acres while Type IV general use sites are under 25 acres in area. Type III and Type IV general use sites, which typically provide opportunities for intensive nonresource-oriented outdoor recreation activities—such

RETURN TO  
SOUTHEASTERN WISCONSIN  
REGIONAL PLANNING COMMISSION  
PLANNING LIBRARY

<sup>5</sup> Consistent with the standards in Chapter XI, this accessibility analysis was conducted only for urban areas with a population of more than 40,000 persons.

Map 86

### AREAS IN THE REGION NOT SERVED BY A TYPE I PARK: 1973



The agreed-upon standards for Type I parks specify a 10-mile service radius in both urban and rural areas. Utilizing this radius, service areas were delineated around existing Type I parks on regional base maps to identify those areas of the Region not adequately served. Only four areas of the Region were found to be inadequately served by Type I parks in accordance with this standard. These areas were portions of northwestern Washington County, a small portion of southeastern Kenosha County, a small portion of central Walworth County, and portions of southwestern Walworth County.

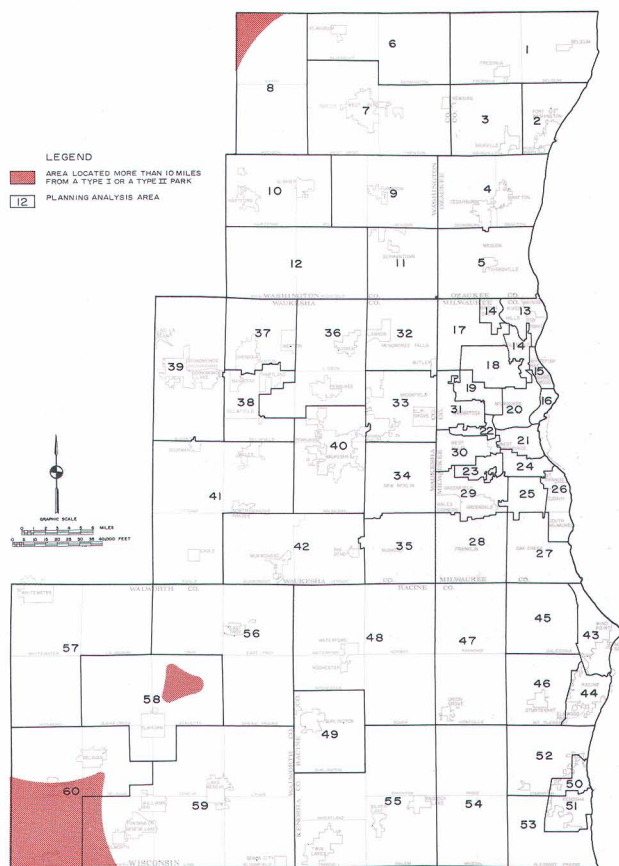
Source: SEWRPC.

as baseball, basketball, ice skating, softball, and tennis—generally attract users from a small service area and are provided primarily to meet the outdoor recreation demand of residents of urban areas. Accordingly, standards for public Type III and Type IV general use sites are appropriately applied only to the population of urban areas of the Region.

Type III and Type IV parks differ in that Type IV general use sites generally provide a smaller number and variety of recreation facilities and have a smaller

Map 87

### AREAS IN THE REGION NOT SERVED BY TYPE I OR TYPE II PARKS: 1973



The agreed-upon standards for Type II parks specify a 10-mile service radius for such parks in rural areas of the Region. For the purposes of service area analysis, both Type I and Type II parks were considered to satisfy the Type II service area requirements. Service areas were, accordingly, delineated around existing Type I and Type II parks on regional base maps to identify those areas of the Region not adequately served. Only three rural areas of the Region—a small portion of central Walworth County, portions of southwestern Walworth County, and a small portion of northwestern Washington County—were found to be inadequately served by a Type I or a Type II park.

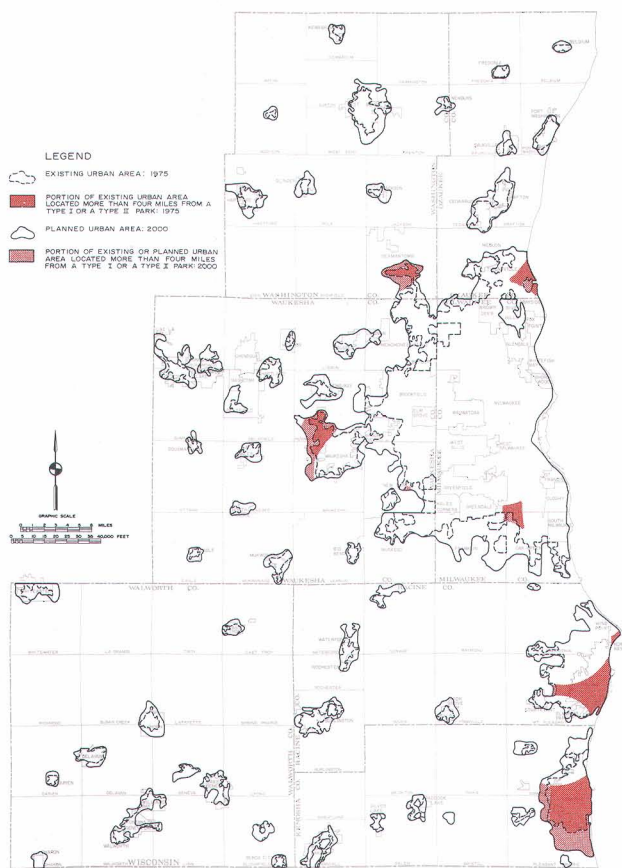
Source: SEWRPC.

natural area available for passive recreation use. Type III and Type IV general use sites otherwise are quite similar, their primary purpose being to provide space and facilities for intensive outdoor recreation activities. Although separate acreage standards have been developed for Type III and Type IV general use sites, because of their basic similarity, the standards for Type III and Type IV public general use sites were applied jointly in the determination of existing and future site needs. Since the standards under Objective No. 1 specify the provision of 3.1 acres of public Type III general use sites per thousand



Map 88

# EXISTING AND PLANNED URBAN AREAS IN THE REGION NOT SERVED BY A TYPE I OR A TYPE II PARK



The agreed-upon standards for Type II parks specify a four-mile service radius for such parks in urban areas of the Region having a population of at least 40,000. For the purpose of service area analysis, both Type I and Type II parks were considered to satisfy the Type II service area requirements. Service areas were delineated around existing Type I and Type II parks on regional base maps to identify those urban areas of the Region not adequately served. Application of the standard indicated that portions of six urban areas were not adequately served by a Type I or Type II park in 1975: portions of both the Kenosha metropolitan area and the south central Racine metropolitan area, a small area in southern Milwaukee County, and portions of the City of Mequon, the Village of Germantown, and the City of Waukesha. In addition, it is expected that the unserved portions of the Kenosha metropolitan area, the Village of Germantown, and the City of Waukesha would be considerably larger by the year 2000 because of anticipated population growth in these areas.

Source: SEWRPC.

population and 3.3 acres of public Type IV general use sites per thousand population, an overall standard of 6.4 acres of Type III and Type IV public general use sites per thousand population was used. This approach is like that used in the combined application of the acreage standards for Type I and Type II parks.

It should be recognized that public Type III and Type IV general use sites are of two basic kinds—namely, parks and public school-owned playgrounds and playfields. Although not generally perceived as parks, school-owned recreation sites do provide areas for the pursuit of intensive nonresource-oriented recreation activities at the neighborhood level; and acreage standards for both park and public school-owned general use sites have been included in Chapter XI of this report. In determining local outdoor recreation site acreage needs, because of the importance attached to natural areas for passive recreation use usually provided in local parks but not usually provided at school recreation sites, it was assumed that the standard for local parks—3.9 acres per thousand persons—must be met within each urban area while the remainder of the overall local outdoor recreation site acreage requirement—2.5 acres per thousand persons—may be met at either parks or public school-owned recreation sites. Within this framework, a given urban area which exceeds the overall standard for Type III and Type IV public general use sites of 6.4 acres per thousand persons may still need additional local outdoor recreation lands if the standard for Type III and Type IV parks, 3.9 acres per thousand persons, is not met in that area.

The need estimates obtained from applying Type III and Type IV site acreage standards to the population residing in each urban area of the Region in 1975 are presented in Table 103. A total of 3,017 additional acres of Type III or Type IV public general use sites is needed to satisfy the recreational demands of the population residing in urban areas of the Region in 1975. As indicated in Table 103, 1,813 acres of the existing need should be met in the form of Type III or Type IV parks while the remainder of the need, 1,204 acres, may be provided in the form of either parks or public school-owned recreation sites. Milwaukee County alone accounts for more than 2,700 acres, or 90 percent, of the total existing Type III and Type IV public general use site acreage need. Among the individual urban areas (see Map 89), the largest site acreage needs are in planning analysis areas 18 through 21 in the central part of the City of Milwaukee and are a direct result of the very high population density and relatively small amount of local recreation site acreage provided in those areas.

Anticipated future Type III and Type IV site acreage needs, based upon application of the appropriate per capita standards to year 2000 population levels in each urban area of the Region, are presented in Table 104. It should be noted that the existing acreage totals may increase between 1975 and 2000 even though no new sites are acquired due to the reclassification of general use sites which, in 1975, were located outside of the identified urban areas and which, by the year 2000, would be located within the anticipated new or expanded urban areas. A total of 3,978 additional acres of Type III and Type IV public general use sites is expected to be needed to satisfy the recreation demands of the population residing in urban areas of the Region in the year 2000 (see Map 90). As further indicated in Table 104, of the total forecast Type III and Type IV site acreage



Table 103

**ACREAGE REQUIREMENTS FOR TYPE III AND TYPE IV GENERAL USE  
OUTDOOR RECREATION SITES IN URBAN AREAS IN THE REGION: 1975**

County	Planning Analysis Area (PAA)	Urban Area	Parks						Schools						Total Need <sup>f</sup> (acres)
			Type III (acres)	Type IV (acres)	Total Park (acres)	Minimum Standard Requirement <sup>a</sup> (acres)	Surplus- Shortage <sup>b</sup> (acres)	Need <sup>c</sup> (acres)	Type III (acres)	Type IV (acres)	Total School (acres)	Minimum Standard <sup>d</sup> Requirement (acres)	Surplus- Shortage <sup>b</sup> (acres)	Need <sup>e</sup> (acres)	
Ozaukee	1	Belgium	0	8	8	3.6	4.4	--	0	9	9	2.3	6.7	--	--
	1	Fredonia	47	7	54	5.7	48.3	--	39	2	41	3.6	37.4	--	--
	2	Port Washington	108	30	138	36.8	101.2	--	0	29	29	23.6	5.4	--	--
	3	Saukville	0	11	11	9.5	1.5	--	0	2	2	6.1	- 4.1	2.6	2.6
	4	Cedarburg-Grafton <sup>g</sup>	25	71	96	75.5	20.5	--	29	65	94	48.4	45.6	--	--
	5	Mequon-Thiensville	58	35	93	58.8	34.2	--	30	59	89	37.7	51.3	--	--
		County Totals	238	162	400	--	--	--	98	166	264	--	--	2.6	2.6
Washington	6	Kewaskum	0	14	14	9.9	4.1	--	0	19	19	6.4	12.6	--	--
	7	West Bend	159	38	197	80.6	116.4	--	34	66	100	51.7	48.3	--	--
	7	Newburg <sup>h</sup>	0	0	0	2.5	2.5	2.5	0	0	0	1.6	- 1.6	1.6	4.1
	8	Allenton	0	5	5	3.2	1.8	--	0	9	9	2.1	6.9	--	--
	9	Jackson	0	22	22	7.7	14.3	--	0	3	3	4.9	- 1.9	--	--
	10	Hartford	27	48	75	29.3	45.7	--	28	15	43	18.8	24.2	--	--
	10	Slinger	0	13	13	5.2	7.8	--	0	24	24	3.4	20.6	--	--
	11	Germantown	29	20	49	17.4	31.6	--	26	7	33	11.2	21.8	--	--
		County Totals	215	160	375	--	--	2.5	88	143	231	--	--	1.6	4.1
Milwaukee	13	Bayside-Fox Point- River Hills	52	40	92	55.1	36.9	--	0	35	35	35.3	- 0.3	--	--
	14	Brown Deer-Glendale	0	38	38	96.3	- 58.3	58.3	101	33	134	61.8	72.2	--	58.3
	15	Shorewood-Whitefish Bay	0	52	52	125.2	- 73.2	73.2	0	57	57	80.2	- 23.2	23.2	96.4
	16	Milwaukee (part)	0	31	31	166.7	- 135.7	135.7	25	14	39	106.9	- 67.9	67.9	203.6
	17	Milwaukee (part) <sup>i</sup>	80	27	107	187.2	- 80.2	80.2	0	70	70	120.0	- 50.0	50.0	130.2
	18	Milwaukee (part)	67	110	177	464.9	- 287.9	287.9	0	114	114	298.0	- 184.0	184.0	471.9
	19	Milwaukee (part)	62	73	135	315.3	- 180.3	180.3	0	59	59	202.1	- 143.1	143.1	323.4
	20	Milwaukee (part)	63	89	152	546.3	- 394.3	394.3	0	83	83	350.2	- 267.2	267.2	661.5
	21	Milwaukee (part)	130	40	170	258.7	- 88.7	88.7	0	20	20	165.9	- 145.9	145.9	234.6
	22	Milwaukee (part)	36	76	112	77.6	34.4	--	0	18	18	49.7	- 31.7	--	--
	23	Milwaukee (part)	26	25	51	152.0	- 101.0	101.0	0	81	81	97.4	- 16.4	16.4	117.4
	24	Milwaukee (part)	207	90	297	232.1	64.9	--	0	56	56	148.8	- 92.8	27.9	27.9
	25	Milwaukee (part)	131	57	188	140.1	47.9	--	0	53	53	89.8	- 36.8	--	--
	26	Cudahy-St. Francis- South Milwaukee	81	93	174	216.2	- 42.2	42.2	0	117	117	138.6	- 21.6	21.6	63.8
	27	Oak Creek	0	12	12	45.7	- 33.7	33.7	64	38	102	29.3	72.7	--	33.7
	28	Franklin	0	6	6	34.7	- 28.7	28.7	63	20	83	22.2	60.8	--	28.7
	29	Greendale-Greenfield- Hales Corners	182	5	187	221.1	- 34.1	34.1	88	110	198	141.7	56.3	--	34.1
	30	West Allis-West Milwaukee	107	84	191	305.2	- 114.2	114.2	40	77	117	195.7	- 78.7	78.7	192.9
	31	Wauwatosa	157	67	224	214.0	10.0	--	0	89	89	137.2	- 48.2	38.2	38.2
		County Totals	1,381	1,015	2,396	--	--	1,652.5	381	1,144	1,525	--	--	1,064.1	2,716.6
Waukesha	32	Menomonee Falls-Butler	204	115	319	117.2	201.8	--	53	48	101	75.1	25.9	--	--
	32	Lannon	0	8	8	4.4	3.6	--	0	4	4	2.9	1.1	--	--
	33	Brookfield-Elm Grove	77	102	179	168.3	10.7	--	102	113	215	107.9	107.1	--	--
	34	New Berlin	41	57	98	94.3	3.7	--	0	75	75	60.5	14.5	--	--
	35	Muskego	0	43	43	40.1	2.9	--	25	30	55	25.7	29.3	--	--
	36	Sussex	70	0	70	15.3	54.7	--	0	18	18	9.8	8.2	--	--
	36	Pewaukee	0	25	25	17.7	7.3	--	71	2	73	11.3	61.7	--	--
	37	Merton	0	10	10	2.7	7.3	--	0	10	10	1.8	8.2	--	--
	38	Delafield	0	21	21	4.5	16.5	--	0	6	6	2.9	3.1	--	--
	38	Hartland	0	24	24	17.1	6.9	--	94	11	105	11.0	94.0	--	--
	39	Oconomowoc	37	29	66	45.9	20.1	--	33	16	49	29.4	19.6	--	--
	39	Okauchee	0	0	0	10.2	- 10.2	10.2	0	7	7	6.6	0.4	--	10.2
	40	Waukesha	152	141	293	195.5	97.5	--	86	67	153	125.3	27.7	--	--
	41	Dousman <sup>j</sup>	0	13	13	3.6	9.4	--	0	20	20	2.3	17.7	--	--
	41	Eagle	30	1	31	3.3	27.7	--	0	1	1	2.1	- 1.1	--	--
	41	North Prairie	0	10	10	3.0	7.0	--	0	0	0	1.9	- 1.9	--	--
	41	Wales	0	5	5	5.2	- 0.2	0.2	50	4	54	3.3	50.7	--	0.2
	42	Big Bend	0	25	25	6.8	18.2	--	0	5	5	4.4	0.6	--	--
	42	Mukwonago	0	19	19	13.5	5.5	--	0	26	26	8.7	17.3	--	--
		County Totals	611	648	1,259	--	--	10.4	514	463	977	--	--	--	10.4
Racine	43	Racine-North	109	16	125	130.7	- 5.7	5.7	0	39	39	83.8	- 44.8	44.8	50.5
	43	Caledonia-East	98	18	116	55.7	60.3	--	30	20	50	35.7	14.3	--	--
	44	Racine-South	219	105	324	222.4	101.6	--	0	46	46	142.5	- 96.5	--	--
	44	Mt. Pleasant-East	165	31	196	35.8	160.2	--	0	34	34	22.9	11.1	--	--
	45	Caddy Vista	0	0	0	3.9	- 3.9	3.9	0	8	8	2.5	5.5	--	3.9
	45	Caledonia-West	34	0	34	8.5	25.5	--	0	16	16	5.4	10.6	--	--
	46	Mt. Pleasant-Sturtevant	0	7	7	47.3	- 40.3	40.3	51	26	77	30.3	46.7	--	40.3
	47	Union Grove	0	19	19	12.7	6.3	--	0	29	29	8.1	20.9	--	--
	48	Wind Lake	0	0	0	4.9	- 4.9	4.9	0	3	3	3.1	- 0.1	0.1	5.0
	48	Waterford-Rochester	0	1	1	15.2	- 14.2	14.2	32	4	36	9.7	26.3	--	14.2
	49	Burlington	68	41	109	40.9	68.1	--	0	27	27	26.2	0.8	--	--
		County Totals	693	238	931	--	--	69.0	113	252	365	--	--	44.9	113.9

Table 103 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Parks						Schools						Total Need <sup>f</sup> (acres)
			Type III (acres)	Type IV (acres)	Total Park (acres)	Minimum Standard Requirement <sup>a</sup> (acres)	Surplus-Shortage <sup>b</sup> (acres)	Need <sup>c</sup> (acres)	Type III (acres)	Type IV (acres)	Total School (acres)	Minimum Standard Requirement <sup>d</sup> (acres)	Surplus-Shortage <sup>b</sup> (acres)	Need <sup>e</sup> (acres)	
Kenosha	50	Kenosha-North	228	76	304	124.6	179.4	--	0	41	41	79.8	- 38.8	--	--
	51	Kenosha-South	44	86	130	178.8	- 48.8	48.8	0	24	24	114.6	- 90.6	90.6	139.4
	51	South Kenosha	96	12	108	34.2	73.8	--	31	33	64	21.9	42.1	--	--
	52	Somers-East	0	0	0	5.6	- 5.6	5.6	0	13	13	3.6	9.4	--	5.6
	52	Somers-West	0	7	7	2.7	4.3	--	0	0	0	1.7	- 1.7	--	--
	53	Pleasant Prairie-West	0	6	6	3.9	2.1	--	0	4	4	2.5	1.5	--	--
	55	Paddock Lake	0	21	21	11.3	9.7	--	0	16	16	7.2	8.8	--	--
	55	Silver Lake	0	7	7	4.9	2.1	--	0	4	4	3.1	0.9	--	--
	55	Twin Lakes	0	17	17	11.9	5.1	--	0	16	16	7.6	8.4	--	--
		County Totals	368	232	600	--	--	54.4	31	151	182	--	--	90.6	145.0
Walworth	56	East Troy	0	0	0	8.5	- 8.5	8.5	83	5	88	5.5	82.5	--	8.5
	57	Whitewater	0	33	33	35.4	- 2.4	2.4	0	29	29	22.7	6.3	--	2.4
	58	Elkhorn	0	23	23	16.8	6.2	--	37	9	46	10.8	35.2	--	--
	59	Como Lake	0	0	0	5.7	- 5.7	5.7	0	4	4	3.7	0.3	--	5.7
	59	Genoa City	0	10	10	3.6	6.4	--	0	1	1	2.3	- 1.3	--	--
	59	Lake Geneva	0	26	26	20.9	5.1	--	40	0	40	13.4	26.6	--	--
	59	Pell Lake	0	2	2	5.4	- 3.4	3.4	0	4	4	3.5	0.5	--	3.4
	59	Williams Bay-Fontana-Walworth	26	31	57	19.9	37.1	--	40	10	50	12.7	37.3	--	--
	60	Darien	0	0	0	3.9	- 3.9	3.9	0	4	4	2.5	1.5	--	3.9
	60	Delavan	61	14	75	22.4	52.6	--	77	10	87	14.3	72.7	--	--
	60	Sharon	0	6	6	5.3	0.7	--	0	3	3	3.4	- 0.4	--	--
		County Totals	87	145	232	--	--	23.9	277	79	356	--	--	--	23.9
Region Totals			3,593	2,600	6,193	--	--	1,812.7	1,502	2,398	3,900	--	--	1,203.8	3,016.5

<sup>a</sup> Minimum standard per capita acreage requirements for Type III and Type IV parks in urban areas in the Region are as follows: Type III parks—2.2 acres per thousand urban residents; Type IV parks—1.7 acres per thousand urban residents; and Type III and Type IV parks combined—3.9 acres per thousand urban residents. The existing (1975) standard acreage requirement for each urban area in the Region was determined by multiplying the minimum standard per capita requirement (3.9 acres per thousand urban residents) times the estimated 1975 population for each urban area in the Region (see Table 101).

<sup>b</sup> When the number of acres of existing (1975) Type III and Type IV parks or schools is greater than the minimum standard acreage requirement, the acreage provided in excess of the standard requirement is indicated by a positive number; when the minimum standard acreage requirement is greater than the number of existing (1975) Type III and Type IV parks or schools, the number of acres less than the minimum standard acreage requirement is indicated by a negative number.

<sup>c</sup> Acreage need for Type III and Type IV parks in urban areas in the Region was determined to be simply the difference between the number of existing acres and the minimum standard acreage requirement. If the number of existing acres was greater than the minimum standard acreage requirement, there was no acreage need.

<sup>d</sup> Minimum standard per capita acreage requirements for Type III and Type IV school outdoor recreation sites in urban areas in the Region are as follows: Type III schools—0.9 acre per thousand urban residents; Type IV schools—1.6 acres per thousand urban residents; and Type III and Type IV schools combined—2.5 acres per thousand residents. The existing (1975) standard acreage requirement for each urban area in the Region was determined by multiplying the minimum standard per capita requirement (2.5 acres per thousand urban residents) times the estimated 1975 population for each urban area in the Region (see Table 101).

<sup>e</sup> If the number of existing acres was greater than the minimum standard year 2000 acreage requirement, there was no acreage need for Type III and Type IV school outdoor recreation sites. If the number of existing acres was less than the minimum standard year 2000 acreage requirement, acreage need for Type III and Type IV school outdoor recreation sites was determined as follows: 1) when a park acreage surplus occurred, the surplus was credited to the school acreage shortage; 2) when a park acreage surplus did not occur, the school acreage shortage was simply the school acreage need.

<sup>f</sup> Total acreage need for Type III and Type IV parks and schools is the sum of Type III and Type IV park acreage need plus Type III and Type IV school acreage need.

<sup>g</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>h</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>i</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>j</sup> The Dousman urban area includes a small area in planning analysis area 39.

Source: SEWRPC.

needs, it is expected that a minimum of 2,694 acres of parks will be required while the remainder of the future acreage needs—1,284 acres—may be supplied either at parks or school sites.

A comparison of the estimated 1975 Type III and Type IV site acreage needs with the corresponding forecast year 2000 needs on a county basis indicates large relative increases in acreage needs within each county of the Region with the exception of Milwaukee County. Within Milwaukee County, substantial additional acreage

needs are anticipated in the northern and southern areas due to the forecast population increases there. In contrast, because of the expected continued decline in population, the year 2000 acreage needs in many parts of the City of Milwaukee as well as in certain first ring suburbs is expected to be somewhat lower than the estimated 1975 site acreage needs. It should be recognized, however, that efforts to meet even the lower year 2000 acreage needs in these areas will be significantly hampered by the dense nature of existing development and related lack of open space.

Table 104

**ACREAGE REQUIREMENTS FOR TYPE III AND TYPE IV GENERAL USE  
OUTDOOR RECREATION SITES IN URBAN AREAS IN THE REGION: 2000**

County	Planning Analysis Area (PAA)	Urban Area	Type III and Type IV Parks (standard: 3.9 acres per 1,000)						Type III and Type IV Schools (standard: 2.5 acres per 1,000)						Total Need <sup>f</sup> (acres)
			Type III (acres)	Type IV (acres)	Total Park (acres)	Minimum Standard Requirement <sup>a</sup> (acres)	Surplus-Shortage <sup>b</sup> (acres)	Need <sup>c</sup> (acres)	Type III (acres)	Type IV (acres)	Total School (acres)	Minimum Standard Requirement <sup>d</sup> (acres)	Surplus-Shortage <sup>b</sup> (acres)	Need <sup>e</sup> (acres)	
Ozaukee	1	Belgium	0	8	8	5.8	2.2	--	0	9	9	3.7	5.3	--	--
	1	Fredonia	47	7	54	8.3	45.7	--	39	2	41	5.3	35.7	--	--
	2	Port Washington	108	30	138	50.6	87.4	--	0	29	29	32.4	- 3.4	--	--
	3	Saukville	0	11	11	26.0	- 15.0	15.0	0	2	2	16.7	- 14.7	14.7	29.7
	4	Cedarburg-Grafton <sup>g</sup>	25	71	96	130.0	- 34.0	34.0	29	65	94	83.3	10.7	--	34.0
	5	Mequon-Thiensville	58	30	88	151.7	- 63.7	63.7	35	59	94	97.2	- 3.2	3.2	66.9
County Totals			238	157	395			112.7	103	166	269			17.9	130.6
Washington	6	Kewaskum	0	14	14	19.0	- 5.0	5.0	0	19	19	12.2	6.8	--	5.0
	7	West Bend	159	38	197	158.4	38.6	--	64	66	130	101.5	28.5	--	--
	7	Newburg <sup>h</sup>	0	0	0	8.8	- 8.8	8.8	0	0	0	5.7	- 5.7	5.7	14.5
	8	Allenton	0	5	5	7.7	- 2.7	2.7	0	9	9	4.9	4.1	--	2.7
	9	Jackson	0	22	22	23.4	- 1.4	1.4	0	3	3	15.0	- 12.0	12.0	13.4
	10	Hartford	27	48	75	60.5	14.5	--	28	15	43	38.8	4.2	--	--
	10	Slinger	0	13	13	17.0	- 4.0	4.0	0	24	24	10.9	13.1	--	4.0
	11	Germantown	29	20	49	102.3	- 53.3	53.3	67	7	74	65.6	8.4	--	53.3
County Totals			215	160	375			75.2	159	143	302			17.7	92.9
Milwaukee	13	Bayside-Fox Point-River Hills	52	40	92	57.8	34.2	--	0	35	35	37.0	- 2.0	--	--
	14	Brown Deer-Glendale	0	38	38	120.0	- 82.0	82.0	101	33	134	76.9	57.1	--	82.0
	15	Shorewood-Whitefish Bay	0	52	52	118.0	- 66.0	66.0	0	57	57	75.7	- 18.7	18.7	84.7
	16	Milwaukee (part)	0	31	31	133.3	- 102.3	102.3	25	14	39	85.5	- 46.5	46.5	148.8
	17	Milwaukee (part) <sup>i</sup>	80	27	107	258.2	- 151.2	151.2	0	70	70	165.5	- 95.5	95.5	246.7
	18	Milwaukee (part)	67	110	177	459.5	- 282.5	282.5	0	114	114	294.5	- 180.5	180.5	463.0
	19	Milwaukee (part)	62	73	135	291.4	- 156.4	156.4	0	59	59	186.8	- 127.8	127.8	284.2
	20	Milwaukee (part)	63	89	152	491.5	- 339.5	339.5	0	83	83	315.1	- 232.1	232.1	571.6
	21	Milwaukee (part)	130	40	170	225.5	- 55.5	55.5	0	20	20	144.6	- 124.6	124.6	180.1
	22	Milwaukee (part)	36	76	112	74.7	37.3	--	0	18	18	47.9	- 29.9	--	--
	23	Milwaukee (part)	26	25	51	165.8	- 114.8	114.8	0	81	81	106.3	- 25.3	25.3	140.1
	24	Milwaukee (part)	207	90	297	217.0	80.0	--	0	56	56	139.1	- 83.1	3.1	3.1
	25	Milwaukee (part)	131	57	188	145.6	42.4	--	0	53	53	93.3	- 40.3	--	--
	26	Cudahy-St. Francis-South Milwaukee	81	93	174	227.0	- 53.0	53.0	0	117	117	145.5	- 28.5	28.5	81.5
	27	Oak Creek	0	12	12	169.5	- 157.5	157.5	64	44	108	108.6	- 0.6	0.6	158.1
	28	Franklin	0	24	24	144.8	- 120.8	120.8	106	29	135	92.9	42.1	--	120.8
	29	Greendale-Greenfield-Hales Corners	182	5	187	243.7	- 56.7	56.7	88	117	205	156.2	48.8	--	56.7
	30	West Allis-West Milwaukee	107	84	191	283.0	- 92.0	92.0	40	77	117	181.4	- 64.4	64.4	156.4
	31	Wauwatosa	157	67	224	206.9	17.1	--	0	89	89	132.6	- 43.6	26.5	26.5
County Totals			1,381	1,033	2,414			1,830.2	424	1,166	1,590			974.1	2,804.3
Waukesha	32	Menomonee Falls-Butler	204	115	319	228.4	90.6	--	53	48	101	146.4	- 45.4	--	--
	32	Lannon	0	8	8	12.2	- 4.2	4.2	0	8	8	7.8	0.2	--	4.2
	33	Brookfield-Elm Grove <sup>j</sup>	77	102	179	222.1	- 43.1	43.1	102	125	227	142.4	84.6	--	43.1
	34	New Berlin	75	57	132	201.7	- 69.1	69.1	28	79	107	129.3	- 22.3	22.3	91.4
	35	Muskego	0	43	43	70.4	- 27.4	27.4	25	30	55	45.2	9.8	--	27.4
	36	Duplainville	0	0	0	14.3	- 14.3	14.3	0	3	3	9.2	- 6.2	6.2	20.5
	36	Sussex	70	0	70	36.1	33.9	--	0	18	18	23.2	- 5.2	--	--
	36	Pewaukee	0	25	25	47.5	- 22.5	22.5	71	2	73	30.5	42.5	--	22.5
	37	Merton	0	10	10	2.4	7.6	--	0	10	10	1.6	8.4	--	--
	38	Delafield	0	21	21	24.2	- 3.2	3.2	0	6	6	15.5	- 9.5	9.5	12.7
	38	Hartland	0	24	24	26.5	- 2.5	2.5	94	11	105	17.0	88.0	--	2.5
	39	Oconomowoc	37	29	66	76.2	- 10.2	10.2	33	16	49	48.8	0.2	--	10.2
	39	Okauchee	0	0	0	13.1	- 13.1	13.1	0	7	7	8.4	- 1.4	1.4	14.5
	40	Waukesha	152	153	305	286.1	18.9	--	86	86	172	183.4	- 11.4	--	--
	41	Dousman <sup>k</sup>	0	13	13	7.3	5.7	--	0	20	20	4.7	15.3	--	--
	41	Eagle	30	1	31	6.0	25.0	--	0	1	1	3.8	- 2.8	--	--
	41	North Prairie	0	10	10	6.1	3.9	--	0	0	0	3.9	- 3.9	--	--
	41	Wales	0	5	5	9.5	- 4.5	4.5	50	4	54	6.1	47.9	--	4.5
	42	Big Bend	0	25	25	6.1	18.9	--	0	5	5	3.9	1.1	--	--
	42	Mukwonago	0	19	19	33.6	- 14.6	14.6	52	26	78	21.5	56.5	--	14.6
County Totals			645	660	1,305			228.7	594	1,099	1,161			39.4	268.1
Racine	43	Racine-North	109	16	125	136.4	- 11.4	11.4	0	39	39	87.4	- 48.4	48.4	59.8
	43	Caledonia-East	98	18	116	60.7	55.3	--	30	20	50	38.9	11.1	--	--
	44	Racine-South	219	105	324	212.0	112.0	--	0	46	46	135.9	- 89.9	--	--
	44	Mt. Pleasant-East	165	31	196	48.5	147.5	--	0	34	34	31.1	2.9	--	--
	45	Caddy Vista	0	0	0	5.2	- 5.2	5.2	0	8	8	3.3	4.7	--	5.2
	45	Caledonia-West <sup>l</sup>	34	0	34	30.3	3.7	--	0	16	16	19.4	- 3.4	--	--
	46	Mt. Pleasant-Sturtevant <sup>m</sup>	0	7	7	96.0	- 89.0	89.0	51	26	77	61.5	15.5	--	89.0
	47	Union Grove	0	19	19	24.5	- 5.5	5.5	0	29	29	15.7	13.3	--	5.5
	48	Wind Lake	0	0	0	20.0	- 20.0	20.0	0	3	3	12.8	- 9.8	9.8	29.8
	48	Waterford-Rochester	0	1	1	28.6	- 27.6	27.6	32	4	36	18.4	17.6	--	27.6
	49	Burlington	68	41	109	63.9	45.1	--	0	27	27	41.0	- 14.0	--	--
County Totals			693	238	931			158.7	113	252	365			58.2	216.9

Table 104 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Type III and Type IV Parks (standard: 3.9 acres per 1,000)						Type III and Type IV Schools (standard: 2.5 acres per 1,000)						Total Need <sup>f</sup> (acres)
			Type III (acres)	Type IV (acres)	Total Park (acres)	Minimum Standard Requirement <sup>a</sup> (acres)	Surplus-Shortage <sup>b</sup> (acres)	Need <sup>c</sup> (acres)	Type III (acres)	Type IV (acres)	Total School (acres)	Minimum Standard Requirement <sup>d</sup> (acres)	Surplus-Shortage <sup>b</sup> (acres)	Need <sup>e</sup> (acres)	
Kenosha	50	Kenosha-North	228	76	304	131.0	173.0	--	0	41	41	83.9	- 42.9	--	--
	51	Kenosha-South	44	86	130	173.6	- 43.6	43.6	0	24	24	111.3	- 87.3	87.3	130.9
	51	South Kenosha	96	12	108	51.2	56.8	--	31	33	64	32.8	31.2	--	--
	52	Somers-East	0	0	0	72.5	- 72.5	72.5	0	13	13	46.5	- 33.5	33.5	106.0
	52	Somers-West	0	7	7	18.1	- 11.1	11.1	0	0	0	11.6	- 11.6	11.6	22.7
	53	Pleasant Prairie-West	0	6	6	11.4	- 5.4	5.4	0	4	4	7.3	- 3.3	3.3	8.7
	53	Pleasant Prairie-East	0	12	12	61.8	- 49.8	49.8	0	23	23	39.6	- 16.6	16.6	66.4
	53	Pleasant Prairie-Central <sup>n</sup>	0	0	0	8.2	- 8.2	8.2	0	1	1	5.3	- 4.3	4.3	12.5
	54	Bristol	0	7	7	5.8	1.2	--	0	10	10	3.7	6.3	--	--
	55	Paddock Lake	0	21	21	18.6	2.4	--	0	16	16	11.9	4.1	--	--
	55	Silver Lake	0	7	7	9.0	- 2.0	2.0	0	4	4	5.8	- 1.8	1.8	3.8
	55	Twin Lakes	0	17	17	17.4	- 0.4	0.4	0	16	16	11.2	4.8	--	0.4
	County Totals		368	251	619	--	--	193.0	31	185	216	--	--	158.4	351.4
Walworth	56	East Troy	0	0	0	19.4	- 19.4	19.4	83	5	88	12.5	75.5	--	19.4
	57	Whitewater	0	33	33	65.0	- 32.0	32.0	0	29	29	41.7	- 12.7	12.7	44.7
	58	Elkhorn	0	23	23	30.4	- 7.4	7.4	37	9	46	19.5	26.5	--	7.4
	59	Como Lake	0	0	0	7.3	- 7.3	7.3	0	4	4	4.7	- 0.7	0.7	8.0
	59	Genoa City	0	10	10	6.0	4.0	--	0	1	1	3.8	- 2.8	--	--
	59	Lake Geneva	0	26	26	39.7	- 13.7	13.7	40	0	40	25.5	14.5	--	13.7
	59	Pell Lake	0	2	2	5.6	- 3.6	3.6	0	4	4	3.6	0.4	--	3.6
	59	Williams Bay-Fontana-Walworth	26	31	57	41.4	15.6	--	40	10	50	26.5	23.5	--	--
	60	Darien	0	0	0	7.8	- 7.8	7.8	0	4	4	5.0	- 1.0	1.0	8.8
	60	Delavan	61	14	75	32.4	42.6	--	77	10	87	20.8	66.2	--	--
	60	Sharon	0	6	6	10.3	- 4.3	4.3	0	3	3	6.6	- 3.6	3.6	7.9
	County Totals		87	145	232	--	--	95.5	277	79	356	--	--	18.0	113.5
	Region Totals			3,627	2,644	6,271	--	--	2,694.0	1,701	2,496	4,197	--	--	1,283.7

<sup>a</sup> Minimum standard per capita acreage requirements for Type III and Type IV parks in urban areas in the Region are as follows: Type III parks—2.2 acres per thousand urban residents; Type IV parks—1.7 acres per thousand urban residents; and Type III and Type IV parks combined—3.9 acres per thousand urban residents. The year 2000 standard acreage requirement for each urban area in the Region was determined by multiplying the minimum standard per capita requirement (3.9 acres per thousand urban residents) times the planned 2000 population for each urban area in the Region (see Table 101).

<sup>b</sup> When the number of acres of existing Type III and Type IV parks or schools within the planned year 2000 urban area boundaries is greater than the minimum standard acreage requirement, the acreage provided in excess of the standard requirement is indicated with a positive number; when the minimum standard acreage requirement is greater than the number of existing Type III and Type IV parks or schools, the number of acres less than the minimum standard acreage requirement is indicated with a negative number.

<sup>c</sup> Acreage need for Type III and Type IV parks in urban areas in the Region was determined to be simply the difference between the number of existing acres and the year 2000 minimum standard acreage requirement. If the number of existing acres was greater than the minimum year 2000 standard acreage requirement, there was no acreage need.

<sup>d</sup> Minimum standard per capita acreage requirements for Type III and Type IV school outdoor recreation sites in urban areas in the Region are as follows: Type III schools—0.9 acre per thousand urban residents; Type IV schools—1.6 acres per thousand urban residents; and Type III and Type IV schools combined—2.5 acres per thousand urban residents. The year 2000 standard acreage requirement for each urban area in the Region was determined by multiplying the minimum standard per capita requirement (2.5 acres per thousand urban residents) times the year 2000 planned population for each urban area in the Region (see Table 101).

<sup>e</sup> If the number of existing acres was greater than the minimum standard year 2000 acreage requirement, there was no acreage need for Type III and Type IV school outdoor recreation sites. If, however, the number of existing acres was less than the year 2000 minimum standard acreage requirement, acreage need for Type III and Type IV school outdoor recreation sites was determined as follows: 1) when a park acreage surplus occurred, the surplus was credited to the school acreage shortage; 2) when a park acreage surplus did not occur, the school acreage shortage was simply the school acreage need.

<sup>f</sup> Total acreage need for Type III and Type IV parks and schools is the sum of the Type III and Type IV park acreage need plus the Type III and Type IV school acreage need.

<sup>g</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>h</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>i</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>j</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>k</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>l</sup> The Caledonia-West area includes a small area in planning analysis area 46.

<sup>m</sup> The Mt. Pleasant-Sturtevant area includes a small area in planning analysis area 44.

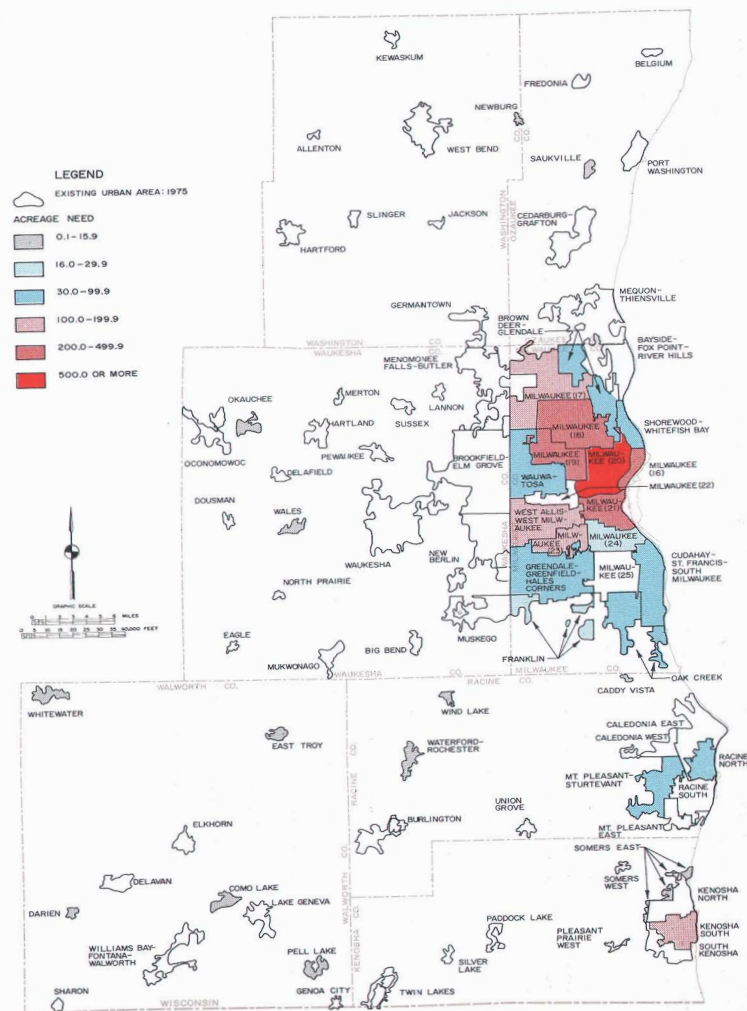
<sup>n</sup> The Pleasant Prairie-Central urban area includes a small area in planning analysis area 51.

Source: SEWRPC.



Map 89

### ACREAGE REQUIREMENTS FOR TYPE III AND TYPE IV GENERAL USE OUTDOOR RECREATION SITES IN URBAN AREAS IN THE REGION: 1975

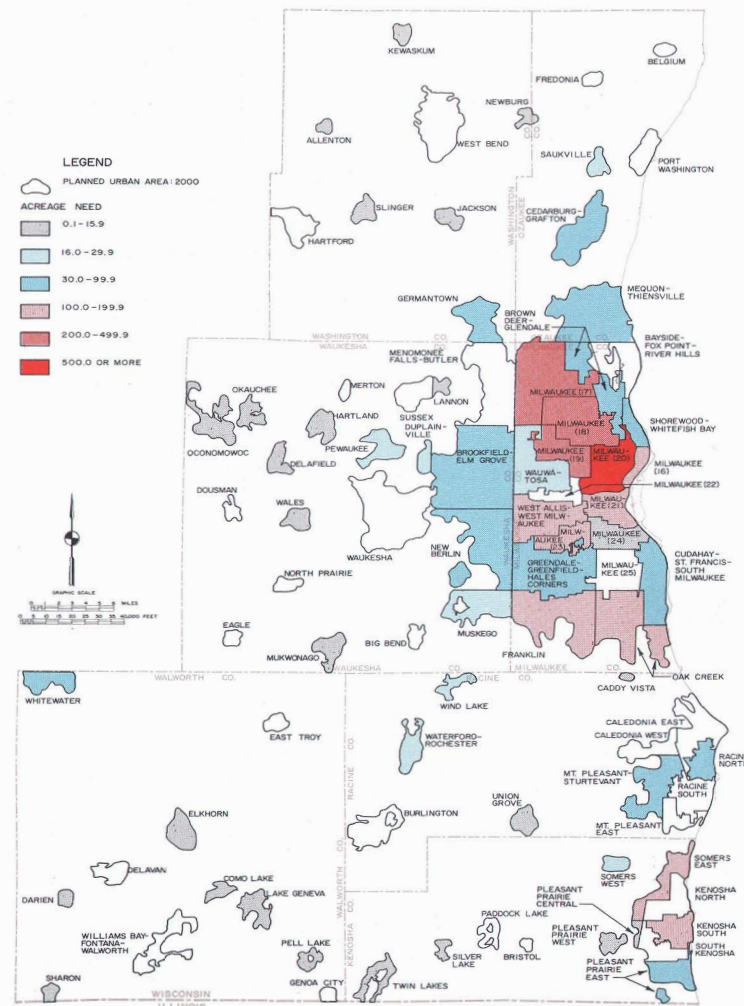


The agreed-upon per capita acreage standard for Type III and Type IV parks and school playgrounds in urban areas of the Region was 6.4 acres per thousand residents. Application of this standard indicated that 32 of the 83 urban areas in the Region in 1975 had a combined total acreage need of 3,017 acres. Urban areas in Milwaukee County alone accounted for more than 2,700 acres, or 90 percent, of this total Type III and Type IV park and school playground site acreage need. Among the individual urban areas, the largest site acreage needs were identified in the central part of the City of Milwaukee and are a direct result of the very high population density and relatively small amount of local recreation site acreage provided in that area.

Source: SEWRPC.

Map 90

### ACREAGE REQUIREMENTS FOR TYPE III AND TYPE IV GENERAL USE OUTDOOR RECREATION SITES IN URBAN AREAS IN THE REGION: 2000



Application of the agreed-upon per capita acreage standard of 6.4 acres per thousand residents for Type III and Type IV parks and school playgrounds in urban areas in the Region indicated that 59 of the 87 urban areas in the Region in the year 2000 may be expected to have a combined total acreage need of 3,978 acres. Urban areas in Milwaukee County may be expected to account for 2,800 acres, or 70 percent of the year 2000 Type III and Type IV park and school playground acreage need, with the largest needs in the Milwaukee inner city area.

Source: SEWRPC.

It is important to recognize that even urban areas which meet the overall Type III and Type IV site acreage requirement, may have a need for additional local parks because the spatial distribution of existing parks does not provide sufficient access for residents of that urban area. Accordingly, in order to determine which urban areas lack adequate access to local parks, appropriate service areas were delineated around existing Type III and Type IV parks on regional base maps and the urban areas not adequately served were so identified. It is important that urban residents have access to natural areas which offer space for passive recreation use. Such areas, though ordinarily provided in parks, are not usually provided in public school-owned general use sites. Therefore, this accessibility analysis was conducted only for parks per se, and public school-owned general use sites were excluded from this analysis.

As indicated in Chapter XI, Type III parks should be provided within two miles of each resident of urban areas having a population greater than 7,500 persons. In urban areas, however, the need for a Type III park may be met by the presence of a Type II or a Type I park. Thus, each resident of an urban area having a population greater than 7,500 should be within two miles of a Type III, Type II, or Type I park. Map 91 shows existing and anticipated future urban areas in the Region which are not appropriately served by a Type I, Type II, or Type III park. The largest of these areas occur in southern Milwaukee County, in northern Milwaukee and southern Ozaukee Counties, and in eastern Waukesha County. It is apparent from Map 91 that certain urban areas in the outlying portions of the Region, such as the Village of Pewaukee and the Williams Bay-Fontana-Walworth urban area, may be expected to need a Type III park by the year 2000 because of anticipated population growth by the plan design year—even though a Type III park is not now needed based upon the 1975 population level.

The accessibility standards for Type IV parks set forth in Chapter XI vary with density. In this regard, the service radius attached to a Type IV park is 0.5 mile in a high-density urban area, 0.75 mile in a medium-density urban area, and 1.0 mile in a low-density urban area. In urban areas, the need for a Type IV park is met by the presence of a Type I, Type II, or Type III park. Accordingly, service areas varying in size according to density were delineated around existing Type I, Type II, Type III, and Type IV parks in the urban areas of the Region on regional base maps in order to identify areas which are not adequately served. It should be noted that, consistent with the accessibility standards presented in Chapter XI, service areas were delineated only around parks of at least six acres in size because recreation sites of less than six acres usually do not provide sufficient green space assumed to be a particularly important element of parks in urban areas.

Existing urban areas, together with proposed urban areas identified in the new regional land use plan which are not appropriately served by a park—Type I, Type II, Type III, or Type IV—are shown on Map 92. As indicated on

Map 92, urban areas not served by these park types are distributed throughout the Region, with the largest of these areas occurring in the central part of the City of Milwaukee. It is evident that efforts to meet the identified park needs may be severely hampered by the dense nature of existing development and the lack of open space in certain urban areas.

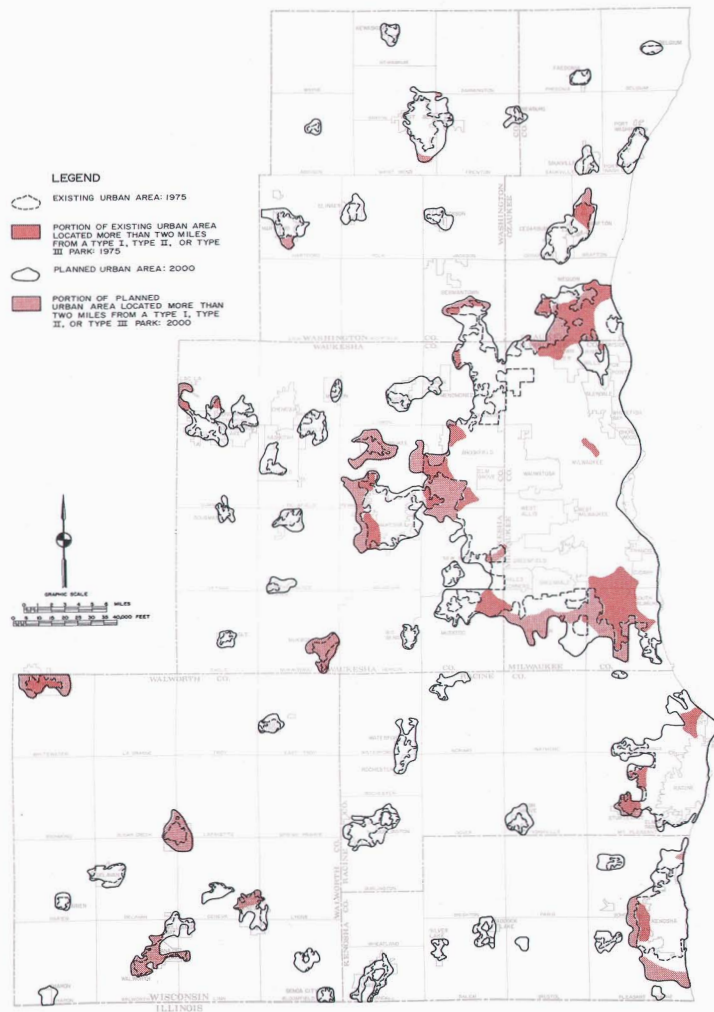
#### Recreation Corridors

The existing and anticipated future park needs described above are clearly important considerations in the design of alternative plans to meet existing and future outdoor recreation needs. It should be recognized, however, that recreation demands within the Region cannot be effectively satisfied solely by providing public general use outdoor recreation sites and that certain recreational pursuits such as hiking, biking, horseback riding, pleasure driving, and ski touring are best provided for through a system of recreation corridors located on or adjacent to linear resource-oriented open space lands. A well designed system of recreation corridors provided as an integral part of linear open space lands can also serve to physically connect existing and proposed public parks, thus forming a truly integrated park and recreation related open space system. Such open space lands, in addition, enhance adjacent residential land values, satisfy the human needs for natural surroundings, serve to protect the natural resource base, and ensure that many scenic areas and areas of natural, cultural, or historic interest assume their proper place as form determinants for existing and future land use patterns.

Recreation corridors are defined for the purposes of this report as publicly owned, continuous, linear expanses of land at least 15 miles in length which are located within scenic areas or areas of natural, cultural, or historic interest, and which provide opportunities to participate in trail-oriented outdoor recreation activities, especially by providing trails marked and maintained for such activities as hiking, biking, horseback riding, pleasure driving, and ski touring. Based upon the aforementioned definition, there were no recreation corridors in the Region in 1973. It should be noted, however, that the Kettle Moraine State Forest and the Milwaukee County parkway system are two publicly owned linear corridor systems within the Region which have the natural resource amenities required for the development of trail facilities and, therefore, are possible segments of a true public recreation corridor system. The Kettle Moraine State Forest—Southern Unit, located in northwestern Walworth and southwestern Waukesha Counties—traverses about 18 linear miles in the Region; and the Milwaukee County parkway system, located throughout Milwaukee County, traverses over 70 linear miles. At the present time, however, neither of these corridor systems provides the continuous designated trail facilities which represent a basic element of the public recreation corridor concept.

Since the primary purpose of recreation corridors is to provide space and facilities for trail-oriented outdoor recreation activities and since facilities for trail-oriented activities generally attract users from relatively long distances and serve persons of all age groups residing in

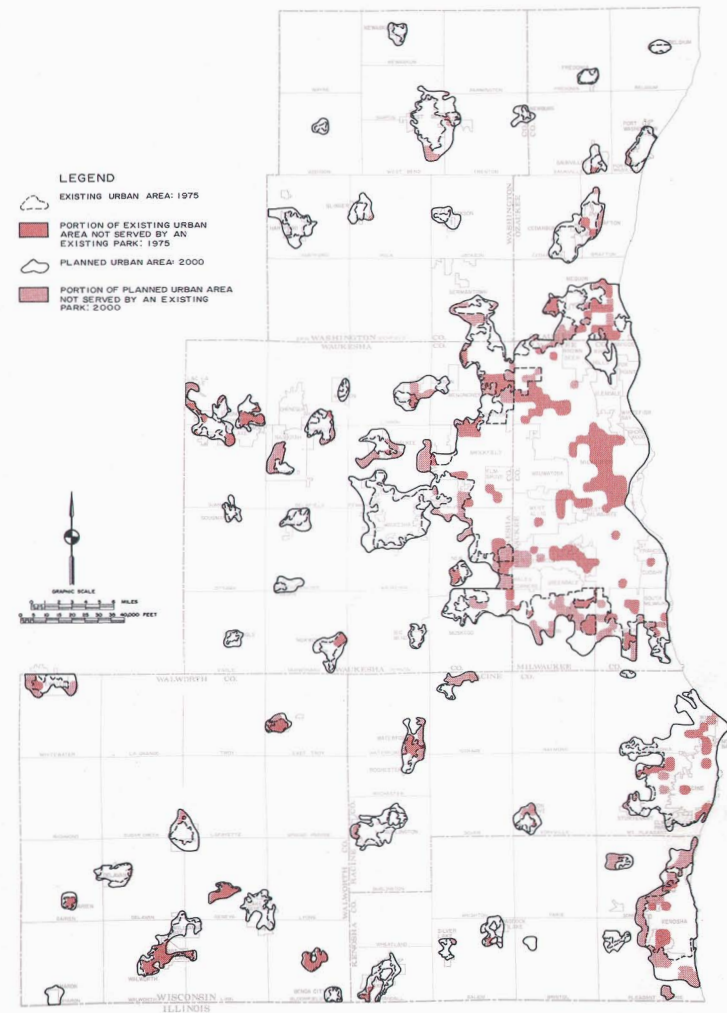
# EXISTING AND PLANNED URBAN AREAS IN THE REGION NOT SERVED BY A TYPE I, TYPE II, OR TYPE III PARK



The agreed-upon standards for Type III parks specify a two-mile service radius for such parks in those urban areas of the Region having a population greater than 7,500. For the purpose of service area analysis, Types I, II, and III parks were considered to satisfy the Type III service area requirement. Service areas were, thus, delineated around existing Types I, II, and III parks on a regional base map to identify those areas of the Region not adequately served. Application of this standard indicated that in 1975 large areas not appropriately served by a Type I, Type II, or Type III park existed in southern and northern Milwaukee County, in eastern Waukesha County, and in southern Ozaukee County. In addition, because of anticipated population growth, certain urban areas in the outlying portions of the Region, such as the Village of Pewaukee and the Williams Bay-Fontana-Walworth urban area, may be expected to need a Type III park by the year 2000.

Source: SEWRPC.

# EXISTING AND PLANNED URBAN AREAS IN THE REGION NOT SERVED BY A TYPE I, TYPE II, TYPE III, OR TYPE IV PARK



The agreed-upon standards for Type IV parks specify a 0.5 mile service radius in a high-density urban area, 0.75 mile in a medium-density urban area, and 1.0 mile in a low-density urban area. For the purposes of service area analysis, the need for a Type IV park was also considered fulfilled by the presence of a Type I, Type II, or Type III park within the appropriate service radius. Accordingly, service areas varying in size according to population density category were delineated around the existing Type I, Type II, Type III, and Type IV parks in the urban areas of the Region in order to identify areas not adequately served. Application of this standard indicated that portions of urban areas not served by these park types were distributed throughout the Region, with the largest number of these areas occurring in the central part of the City of Milwaukee. Portions of a total of 47 of the 83 urban areas in the Region in 1975 were not appropriately served, while portions of 61 of the 87 planned urban areas in the Region in the year 2000 would not be appropriately served by existing parks.

Source: SEWRPC.



both urban and rural areas, the standard for recreation corridors—0.16 linear mile per thousand population—was applied to the total resident population, both urban and rural components, of the Region. In order to meet the minimum standard mileage requirement for recreation corridors in the Region in 1975, approximately 280 linear miles of recreation corridors would be required. In order to meet the minimum standard mileage requirement for the plan design year 2000, approximately 350 linear miles of recreation corridor would be required.

## OUTDOOR RECREATION FACILITY NEEDS

In addition to addressing outdoor recreation site needs, the regional park plan should serve as a guide to the provision of sufficient outdoor recreation facilities, thereby providing the population of the Region adequate opportunity to participate in a wide variety of outdoor recreation activities. Standards under regional park and open space preservation, acquisition, and development Objectives No. 2 through 5 prescribe the quantity and spatial distribution of facilities considered necessary to meet the outdoor recreation demands of the population of the Region. Specifically, in Chapter XI, per capita and accessibility standards are set forth for facilities for selected intensive resource-oriented activities including camping, golfing, picnicking, skiing, and beach swimming; extensive resource-oriented recreation activities including bicycling, hiking, horseback riding, nature study, ski touring, and snowmobiling; and intensive nonresource-oriented recreation activities including baseball, basketball, ice skating, softball, pool swimming, tennis, and playground and playfield activities. In addition, standards are provided for access areas to allow participation in various extensive water based activities on the major inland lakes and rivers in the Region as well as on Lake Michigan. The appropriate per capita and accessibility standards, then, were applied to the existing and probable future population of the Region, providing a measure of the existing and anticipated future demand for specific facilities which, when compared to the existing supply of facilities, yielded estimates of existing and probable future facility needs.

It should be noted that the basic purpose of this report is to provide recommendations to the public sector concerning the provision of needed recreation facilities. Data presented in this chapter as well as in Chapter VI, "Outdoor Recreation Activities, Facilities, and Use," and Chapter XI, "Outdoor Recreation and Open Space Objectives, Principles, and Standards," therefore, deal explicitly with those recreation activities which are both typically provided for in public parks and which require significant expenditures for acquisition of lands and construction of facilities. Special or unique recreation activities like go-carting, hang kite flying and trap shooting, which are not typically provided for in public parks, are considered only implicitly in this report insofar as it is assumed that the majority of facilities for such activities—currently being provided by the private sector—would continue to be provided by the private sector in the future. Also implicitly considered are such activities as jogging, archery, sledding, and horseshoe

pitching. Such activities, while typically provided for in public parks, require minimal expenditure for additional site acreage or facility development. The acreage requirements and costs associated with the provision of facilities for such activities are implicitly included in overall park acreage needs and park acquisition and development costs.

It should also be noted that certain new and emerging outdoor recreation activities like minibike driving could not be explicitly included in this report because of the lack of information on both the site locations of such activities and the characteristics of participants in the activity, thus precluding development of appropriate objectives and standards for such activities. Consideration of new and emerging outdoor recreation activities should be the concern of a continuing regional park and open space planning program which can be responsive to the changing recreational needs and desires of the regional population. A continuing regional park and open space planning program can properly evaluate new recreation activities and over a period of time determine the public sector's role, if any, in the provision of facilities for that recreational activity. If it is determined that a given activity be included in the regional recreation planning program, site and facility standards can be developed, existing and future demands determined, alternative strategies designed to meet such demands, and a final strategy formulated and ultimately incorporated into the adopted regional park and open space plan.

### Intensive Resource-Oriented Outdoor Recreation Facility Needs

Intensive resource-oriented outdoor recreation facilities, including camp sites, golf courses, picnic areas, skiing areas, and swimming beaches, generally attract users from relatively long distances and serve residents of both urban and rural areas; accordingly, the standards for these facilities are appropriately applied to the total population—both urban and rural components—of the Region.<sup>6</sup> In determining the existing and probable future needs for intensive resource-oriented facilities, the overall per capita standard for each type of facility, set forth in Chapter XI, was applied at a regional level. Subsequently, analysis involving the delineation of service areas around existing facilities was undertaken to identify areas of the Region not adequately served by these facilities.

Public and nonpublic facilities for intensive resource-oriented outdoor recreation activities differ in that many nonpublic facilities are not available for use by the general population. Thus, certain nonpublic facilities are not open to the general public, are unavailable to a segment of the population due to economic constraints, or are not easily accessible to the general public. Because of the limited availability of nonpublic facilities, separate need estimates were prepared for public and nonpublic

---

<sup>6</sup>It should be noted that the single exception in this regard is the analysis of local picnicking facility needs, for which the adopted standard is appropriately applied only to the population residing in urban areas of the Region.



facilities. It should be recognized that, even though many nonpublic facilities are not available to the general population, the continued provision of such facilities is important because they do meet a significant portion of the overall demand for intensive resource-oriented recreation facilities which would otherwise have to be met by the public sector.

**Campsites:** As indicated in Table 105, there were 552 campsites located at public general use sites in the Region in 1975, or 0.31 campsite per thousand population. Because the recommended standard is 0.35 public campsite per thousand population, an additional 71 public campsites are needed to meet the demands of existing population of the Region. In addition because of growth in the regional population, this need for public campsites may be expected to increase to 219 by the year 2000.

As further indicated in Table 105, there also were 2,624 campsites located in nonpublic general use outdoor recreation sites, or 1.48 nonpublic campsites per thousand population in the Region in 1975. Since the adopted standard is 1.47 nonpublic campsites per thousand population, there was no need for additional nonpublic campsites in the Region in 1975. By the year 2000, however, it is anticipated that an additional 592 nonpublic campsites will be needed as a result of increased demand generated by growth in the regional population.

In addition to the analysis of overall per capita needs described above, an analysis of the service areas of existing campsites was conducted in order to identify portions of the Region which are not properly served. This service area analysis was conducted only for public camping areas. The extent of the service area of the given campground depends on the number of campsites in the camping area as well as the population density in the surrounding area. The service area of a given campground may be identified by first determining the total popula-

tion which the campground is capable of serving<sup>7</sup> and then delineating on a regional base map a circle around that campground containing an equivalent population. As indicated in Chapter XI, the maximum service radius of any campground is 25 miles.

Map 93 shows the areas in the Region not served by a public campground in the context of both existing 1975 and planned 2000 population distribution. The eastern portions of Kenosha, Milwaukee, and Racine Counties were not served by a public campground in 1975; and, if the spatial distribution of the population proposed under the new regional land use-transportation plan for the year 2000 is substantially achieved, additional areas in southern Ozaukee and northern Washington County would not be served by the existing distribution and quantity of public campgrounds in the year 2000. The findings of this service area analysis are intended to serve as a guide in the selection of locations for additional public campgrounds.

**Golf Courses:** There were 324 regulation golf holes provided at public golf courses in the Region in 1975, equivalent to 18 regulation 18-hole golf courses, or 0.010 public 18-hole golf courses per thousand population (see Table 106). Inasmuch as the adopted standard is 0.013 public regulation 18-hole golf courses per thousand population, there is a need for five additional public 18-hole courses to meet the demands of the existing population of the Region. As further indicated in Table 106, due to anticipated growth in the regional population, the need for additional public golf courses is expected to increase to 11 by the plan design year 2000.

<sup>7</sup>Chapter XI prescribes the provision of 0.35 campsite per thousand population or one campsite for each 2,857 persons. The number of persons which a given campground is capable of serving, therefore, may be approximated by multiplying the number of campsites at the campground by 2,857.

Table 105

FACILITY REQUIREMENTS FOR CAMPSITES IN THE REGION: 1975 AND 2000

Ownership	Existing Quantity	1975 (Estimated Population = 1,769,504)					2000 (Planned Population = 2,193,856)				
		Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need	Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need
Public. . . . .	552	0.31	0.35	- 0.04	- 71	71	0.25	0.35	- 0.10	- 219	219
Nonpublic . .	2,624	1.48	1.47	0.01	17	--	1.20	1.47	- 0.27	- 592	592

<sup>a</sup> Per capita provision is calculated by dividing the existing quantity of facilities by the population in thousands of persons.

<sup>b</sup> Minimum per capita standard requirements for resource-oriented activities are set forth in Chapter XI in the standards under Objective No. 3.

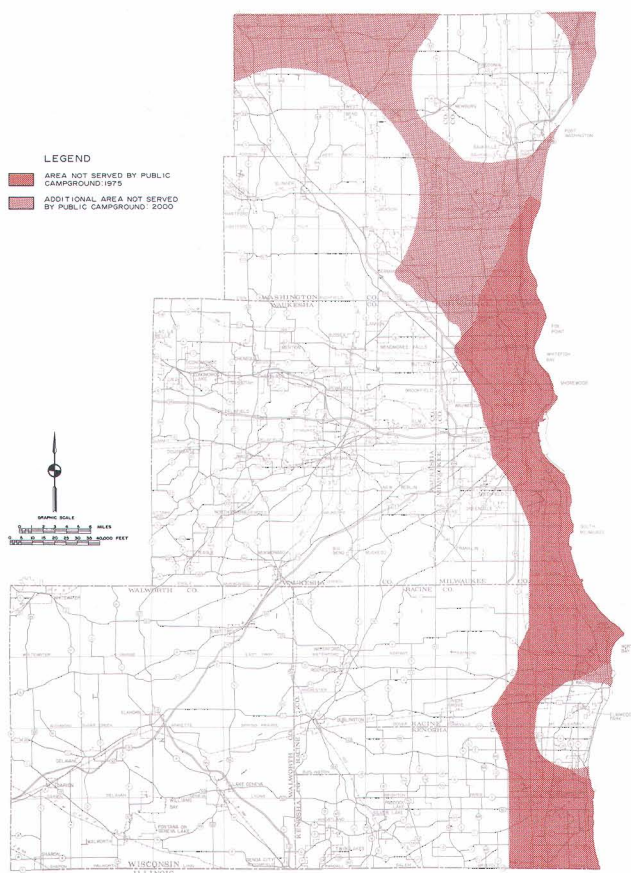
<sup>c</sup> Per capita difference is per capita provision minus the minimum standard per capita requirement.

<sup>d</sup> Shortage-surplus is calculated by multiplying the per capita difference times the population in thousands of persons.

Source: SEWRPC.

Map 93

**AREAS IN THE REGION NOT SERVED  
BY A PUBLIC CAMPGROUND**



The agreed-upon per capita and service area standard for public campsites is 0.35 camp site per thousand residents with a maximum service radius of 25 miles. Service areas, varying in size according to the existing number of campsites and existing and proposed population levels in the surrounding area, were delineated on regional base maps to identify those areas of the Region not adequately served. Application of the standards indicated the eastern portions of Kenosha, Milwaukee, and Racine Counties were not adequately served by public campgrounds in 1975. Those areas contained almost 900,000 persons, or about 50 percent of the resident population of the Region. Based upon the forecast level and spatial distribution of the year 2000 population, additional unserved areas would include southern Ozaukee County and northwestern Washington County.

Source: SEWRPC.

As further indicated in Table 106, the number of regulation golf holes provided at nonpublic golf courses, 1,026, is more than three times the number of public golf holes. There were 57 equivalent nonpublic regulation 18-hole golf courses, or 0.032 nonpublic courses per thousand persons, in the Region in 1975. Because the recommended standard is 0.027 nonpublic golf courses per thousand persons, there was no need for additional

nonpublic golf courses in the Region in 1975. Because of the expanding regional population, however, it is anticipated that two additional nonpublic 18-hole golf courses will be needed by the year 2000.

An analysis of the service areas of existing public golf courses, similar to the analysis undertaken for campgrounds, was conducted in order to identify portions of the Region which are not properly served and to guide the provision of golf courses needed based upon the application of the per capita golf standards. The service areas of public golf courses in the Region were delineated on regional base maps as circular areas around existing courses containing a population equivalent to the population which the golf course is capable of serving.<sup>8</sup> Service areas around public golf courses were delineated in this manner for both the existing 1975 and planned 2000 population distributions. It should be noted that the maximum service radius of any golf course, as set forth in Chapter XI, is 10 miles. It should also be noted that this analysis was confined to public golf courses because some nonpublic courses either are not open to the general public or their use is beyond the economic means of certain segments of the population.

Portions of the Region not served by existing public golf courses are shown on Map 94. Virtually all of Walworth County and the southern portion of Kenosha County, the center city area in Milwaukee County, northwestern Racine County, the western two-thirds of Washington County, and the southern portion of Waukesha County were not served by a public golf course in 1975; and, if the spatial distribution of population proposed under the new regional land use-transportation plan for the year 2000 is substantially achieved, additional areas in each county would not be served by the existing distribution and quantity of public golf courses in the year 2000. The findings of this service area analysis are intended to serve as a guide in the selection of locations for additional public regulation-size golf courses.

**Picnic Tables:** Participation in picnicking ranges from family picnicking in a local park to large group or organizational picnics in large picnic areas provided with grills and picnic shelters. To facilitate a meaningful analysis of the need for picnic facilities, it is useful to distinguish two general kinds of picnicking activity—namely, resource-oriented picnicking and local picnicking—and then determine facility needs for each. Resource-oriented picnicking usually involves an all-day outing at a recreation site possessing scenic areas and natural resource amenities which significantly enhance the quality of the recreational experience. Such picnicking often includes other resource-oriented activities such as boating, swimming, or hiking as well as the picnic activity itself. Areas suitable for resource-oriented picnicking typically

<sup>8</sup> The population which a public golf course is capable of serving varies with the number of golf holes provided as follows: 9-hole courses—38,450 persons; 18-hole courses—76,900 persons; and 27-hole courses—115,350 persons.

Table 106

## FACILITY REQUIREMENTS FOR REGULATION GOLF COURSES IN THE REGION: 1975 AND 2000

Ownership	Existing Quantity		1975 (Estimated Population = 1,769,504)					2000 (Planned Population = 2,193,856)				
	Golf Holes	Equivalent 18-Hole Courses	Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need	Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need
Public. . . . .	324	18	0.010	0.013	- 0.003	- 5	5	0.008	0.013	- 0.005	- 11	11
Nonpublic . . .	1,026	57	0.032	0.027	0.005	9	--	0.026	0.027	- 0.001	- 2	2

<sup>a</sup> Per capita provision is calculated by dividing the existing quantity of facilities by the population in thousands of persons.

<sup>b</sup> Minimum per capita standard requirements for resource-oriented activities are set forth in Chapter XI in the standards under Objective No. 3.

<sup>c</sup> Per capita difference is per capita provision minus the minimum standard per capita requirement.

<sup>d</sup> Shortage-surplus is calculated by multiplying the per capita difference times the population in thousands of persons.

Source: SEWRPC.

Table 107

## FACILITY REQUIREMENTS FOR RESOURCE-ORIENTED PICNICKING IN THE REGION: 1975 AND 2000

Ownership	Existing Quantity	1975 (Estimated Population = 1,769,504)					2000 (Planned Population = 2,193,856)				
		Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need	Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need
Public. . . . .	6,292	3.56	3.80	- 0.24	- 425	425	2.87	3.80	- 0.93	- 2,040	2,040
Nonpublic . . .	4,256	2.41	2.39	0.02	35	--	1.94	2.39	- 0.45	- 987	987

<sup>a</sup> Per capita provision is calculated by dividing the existing quantity of facilities by the population in thousands of persons.

<sup>b</sup> Minimum per capita standard requirements for resource-oriented activities are set forth in Chapter XI in the standards under Objective No. 3.

<sup>c</sup> Per capita difference is per capita provision minus the minimum standard per capita requirement.

<sup>d</sup> Shortage-surplus is calculated by multiplying the per capita difference times the population in thousands of persons.

Source: SEWRPC.

occur in Type I and Type II parks as well as in most nonpublic picnic sites. Participants in resource-oriented picnicking often travel long distances from their homes to such picnic areas.

In comparison to resource-oriented picnicking, local picnicking typically involves a shorter length of stay and relies less on natural resource amenities at the picnic site. Local picnic outings often include participation in nonresource-oriented recreation activities such as softball and various playfield activities. Local picnicking typically occurs in green areas provided at Type III and Type IV parks and participants in local picnicking usually travel relatively short distances from their homes to such sites.

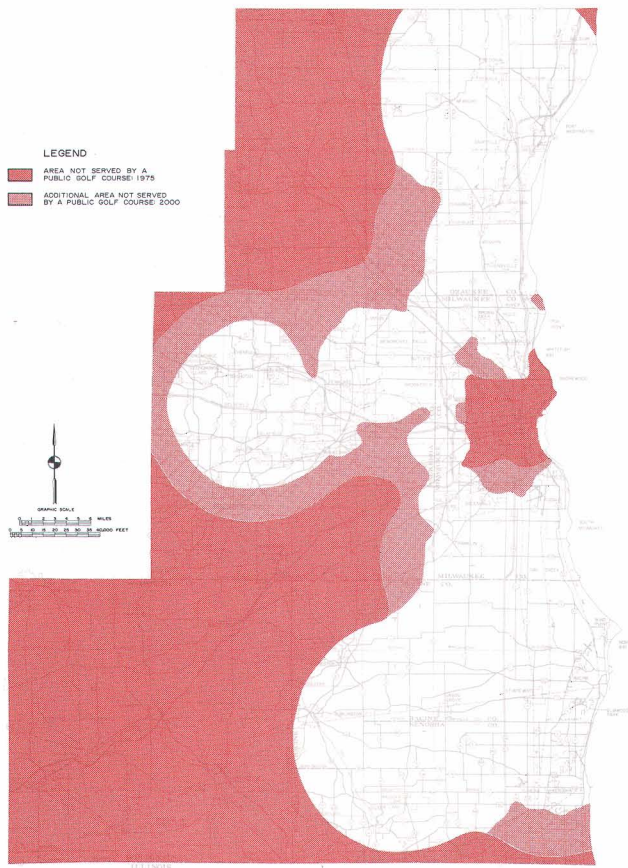
Chapter XI sets forth per capita and accessibility standards for picnic tables required for both resource-oriented and local picnicking. The existing and probable future need for picnic tables based upon application of the standards to the existing and forecast population in the Region are described below.

**Resource-Oriented Picnicking Needs:** The adopted regional park standards prescribe the provision of 3.80 picnic tables per thousand population at Type I and Type II parks, and 2.39 picnic tables per thousand population at nonpublic general use sites in order to meet the demand for resource-oriented picnicking. Because resource-oriented picnic areas draw users from



Map 94

**AREAS IN THE REGION NOT SERVED BY  
A PUBLIC REGULATION GOLF COURSE**



The agreed-upon per capita and service area standard for public golf courses is 0.013 regulation 18-hole golf course per thousand residents with a maximum service radius of 10 miles. Service areas, varying in size according to the existing number of golf holes and existing and proposed population levels in the surrounding area, were delineated on regional base maps to identify those areas of the Region not adequately served. Application of the standards indicated that virtually all of Walworth County, the southern portion of Kenosha County, the center city area in Milwaukee County, the western two-thirds of Washington County, and the southern portions of Waukesha County were not served by public golf courses in 1975. These areas contained approximately 650,000 persons, or about 37 percent of the resident population of the Region.

Source: SEWRPC.

relatively long distances and attract population from all age groups residing in both urban and rural areas, these standards are appropriately applied to the total population—both urban and rural components—of the Region.

As indicated in Table 107, there were 6,292 picnic tables located within Type I and Type II parks, or 3.56 tables per thousand population in the Region in 1975. Since the

adopted standard is 3.80 tables per thousand population, there is a need for 425 additional picnic tables at Type I and Type II parks to meet the demand of the existing population. It is anticipated that the need for additional picnic tables at Type I and Type II parks will increase to 2,040 by the year 2000.

As further indicated in Table 107, there are 4,256 picnic tables located within nonpublic general use outdoor recreation sites in the Region. These tables also meet part of the existing demand for resource-oriented picnicking. Since there was an equivalent of 2.41 nonpublic picnic tables per thousand population in the Region in 1975 and since the recommended standard is 2.39 nonpublic picnic tables per thousand population, there is currently no need for additional nonpublic picnic tables. Because of the increase in demand due to growth in the regional population, however, it is anticipated that 987 additional picnic tables at nonpublic general use sites will be needed by the year 2000.

An analysis of the service areas of picnic sites within Type I and Type II parks, similar to the analysis conducted for the other intensive resource-oriented recreation facilities, was undertaken to identify portions of the Region not properly served and to guide the provision of picnic tables needed based upon the application of per capita standards. Thus, the service areas of existing picnic sites at Type I and Type II parks were delineated on regional base maps as circular areas around the picnic sites containing a population equivalent to the population which the picnic site is capable of serving.<sup>9</sup> Service areas around picnic sites within Type I and Type II parks were determined in this fashion in the context of both the existing 1975 and planned 2000 population distributions. It should be recognized that the maximum service radius of any such picnic area, as indicated in Chapter XI, is 10 miles. It should also be noted that the service area analysis was conducted only for public picnic areas.

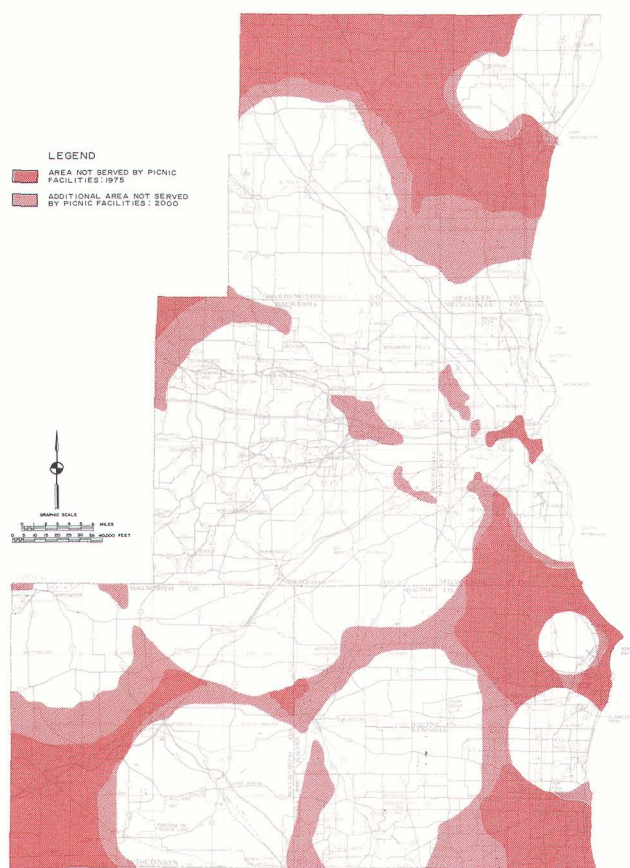
Areas of the Region not served by existing picnic sites within Type I and Type II parks are shown on Map 95. Southeastern Kenosha County, southeastern Milwaukee County, northwestern Ozaukee County, eastern Racine County, southwestern Walworth County and northern Washington County were not served by picnic facilities in Type I and Type II parks in 1975; and, if the spatial distribution of the population proposed under the new regional land use-transportation plan for the year 2000 is substantially achieved, scattered additional areas in each county would not be served by the existing distribution and quantity of picnic facilities in Type I and Type II parks in the year 2000. The findings of this

<sup>9</sup> Chapter XI prescribes the provision of 3.80 picnic tables per thousand population in Type I and Type II parks, or one picnic table for each 263 persons. The number of persons which a given picnic site is capable of serving, therefore, may be approximated by multiplying the number of tables at the site by 263.



Map 95

AREAS IN THE REGION NOT SERVED BY  
PICNIC FACILITIES IN TYPE I AND TYPE II PARKS



The agreed-upon per capita and service area standard for public resource-oriented picnicking is 3.80 picnic tables per thousand residents with a maximum service radius of 10 miles. Service areas, varying in size according to the existing number of picnic tables in Type I and Type II parks and existing and proposed population levels in the surrounding area, were delineated on regional base maps to identify those areas of the Region not adequately served. Application of the standards indicated that southeastern Kenosha County, southeastern Milwaukee County, northern Ozaukee County, eastern Racine County, southwestern Walworth County, and northern Washington County were not served by picnic facilities in Type I and Type II parks in 1975. These areas contained about 200,000 persons, or about 11 percent of the population of the Region. Based upon the forecast level and spatial distribution of the year 2000 population, additional unserved areas would occur throughout the entire Region.

Source: SEWRPC.

service area analysis are intended to serve as a guide in the selection of locations for additional picnic facilities in Type I and Type II parks.

**Local Picnicking Needs:** Local picnic areas attract users from relatively short distances and are intended primarily to serve residents of urban areas and, therefore, the standard for local picnic tables is appropriately applied only to populations within urban areas of the Region. According to Chapter XI, the provision of 2.55 picnic tables per thousand population is required to meet the demand of urban residents for local picnicking. In order to identify the existing and probable future need for local picnic tables, then, the per capita standard for local picnic tables was applied individually to the existing and probable future population levels within each of the urban areas previously identified in Maps 84 and 85. The existing and anticipated future needs for picnic tables within these areas are presented in Table 108.<sup>10</sup>

There were 9,215 picnic tables located in parks in urban areas of the Region in 1975. Since the adopted standard is 2.55 picnic tables per thousand urban residents, a total of 838 picnic tables was needed in 37 urban areas in the Region in 1975. By the year 2000, however, it is anticipated that a total of 1,241 picnic tables will be needed in 46 urban areas. It should be recognized that some urban areas, particularly in Milwaukee County, have a surplus of tables, a surplus extending even into the year 2000. This situation can be attributed to the fact that Type I and Type II parks in Milwaukee County are provided with large quantities of picnic tables and, when the standard for local picnicking is applied to the population of urban areas, a large surplus of tables often results in those urban areas in which Type I or Type II parks are located.

**Ski Hills:** The provision of facilities for downhill skiing is largely the domain of the nonpublic sector with only 24 acres, or 13 percent of the total developed slope acreage in the Region, supplied by the public sector. Public ski areas typically provide a lower quality of recreational experience especially because of their smaller vertical drop and their reliance on rope tows. It is important, nevertheless, that the public sector continue to provide facilities for downhill skiing because public facilities do satisfy the demands of segments of the population who either do not have easy access to non-public ski areas—which are generally located in outlying areas of the Region—or who cannot afford fees charged at commercial ski sites.

As indicated in Table 109, there was an equivalent of 0.014 acre per thousand of developed ski slope at public ski hills in the Region in 1975. Accordingly, on the basis of application of the per capita standards, there is no

<sup>10</sup> It should be noted that, although picnic tables accommodating local picnicking activity usually are located in Type III and Type IV parks, the analysis of local picnicking facility needs took into account the picnic tables located in all parks, including Type I and Type II parks.

Table 108

## FACILITY REQUIREMENTS FOR LOCAL PICNICKING IN URBAN AREAS IN THE REGION: 1975 AND 2000

County	Planning Analysis Area	Picnic Tables at Public Parks								
		Urban Area	1975		2000		1975		2000	
			Quantity <sup>a</sup>	Per Capita Provision <sup>b</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>b</sup>	Shortage-Surplus <sup>d</sup>	Need <sup>e</sup>	Shortage-Surplus <sup>d</sup>	Need <sup>e</sup>
Ozaukee	1	Belgium	0	0.00	0	0.00	- 2.38	2	- 3.78	4
	1	Fredonia	60	41.18	60	28.36	56.28	--	54.61	--
	2	Port Washington	314	33.28	314	24.20	289.91	--	280.95	--
	3	Saukville	18	7.39	18	2.70	11.79	--	1.00	--
	4	Cedarburg-Grafton <sup>f</sup>	60	3.10	60	1.80	10.64	--	- 25.00	25
	5	Mequon-Thiensville	55	3.65	55	1.41	16.59	--	- 44.34	44
		County Totals	507	--	507	--	--	2	--	73
Washington	6	Kewaskum	0	0.00	0	0.00	- 6.48	6	- 12.44	12
	7	West Bend	292	14.12	292	7.19	239.23	--	188.44	--
	7	Newburg <sup>g</sup>	0	0.00	0	0.00	- 1.64	2	- 5.78	6
	8	Allenton	0	0.00	0	0.00	- 2.12	2	- 5.01	5
	9	Jackson	20	10.12	20	3.34	14.97	--	4.74	--
	10	Hartford	170	22.63	170	10.95	56.87	--	130.36	--
	10	Slinger	7	5.20	7	1.60	3.57	--	- 4.15	4
	11	Germantown	30	6.72	30	1.14	18.62	--	- 36.97	37
		County Totals	519	--	519	--	--	10	--	64
Milwaukee	13	Bayside-Fox Point-River Hills	175	12.39	175	11.81	138.96	--	137.17	--
	14	Brown Deer-Glendale	448	18.13	448	14.57	384.90	--	369.63	--
	15	Shorewood-Whitefish Bay	204	6.36	204	6.74	122.27	--	126.83	--
	16	Milwaukee (part)	395	9.24	395	11.55	285.94	--	307.72	--
	17	Milwaukee (part) <sup>h</sup>	575	11.98	575	8.69	452.70	--	406.47	--
	18	Milwaukee (part)	222	1.86	222	1.88	- 82.24	82	- 78.94	79
	19	Milwaukee (part)	580	7.18	580	7.76	374.27	--	389.31	--
	20	Milwaukee (part)	164	1.17	164	1.30	- 193.29	193	- 157.55	158
	21	Milwaukee (part)	235	3.54	235	4.06	65.68	--	87.32	--
	22	Milwaukee (part)	50	2.51	50	2.61	- 0.80	1	1.15	--
	23	Milwaukee (part)	533	13.67	533	12.54	433.45	--	424.72	--
	24	Milwaukee (part)	275	4.62	275	4.94	123.18	--	132.98	--
	25	Milwaukee (part)	308	8.58	308	8.25	216.57	--	269.84	--
	26	Cudahy-St. Francis-South Milwaukee	569	10.27	569	9.78	427.93	--	420.74	--
	27	Oak Creek	28	2.39	28	0.64	- 1.88	2	- 82.99	83
	28	Franklin	0	0.00	173	4.66	- 22.68	23	78.37	--
	29	Greendale-Greenfield-Hales Corners	44	0.78	44	0.70	- 100.32	100	- 115.61	116
30	West Allis-West Milwaukee	667	8.52	667	9.19	467.21	--	481.85	--	
31	Wauwatosa	165	3.01	165	3.11	25.24	--	29.71	--	
	County Totals	5,637	--	5,810	--	--	401	--	436	
Waukesha	32	Menomonee Falls-Butler	49	1.63	49	0.84	- 27.65	28	- 100.16	100
	32	Lannon	442	387.38	442	141.12	439.09	--	434.00	--
	33	Brookfield-Elm Grove <sup>i</sup>	160	3.71	160	2.81	50.07	--	14.81	--
	34	New Berlin	82	3.39	97	1.88	20.32	--	51.05	--
	35	Muskego	255	22.60	255	14.12	206.19	--	208.99	--
	36	Sussex	22	5.60	22	2.38	11.99	--	- 1.57	2
	36	Pewaukee	15	3.31	15	1.23	3.44	--	- 16.09	16
	36	Duplainville <sup>k</sup>	--	--	0	0.00	--	--	- 9.38	9
	37	Merton	8	11.38	8	12.86	6.21	--	6.41	--
	38	Delafield	28	24.50	28	4.51	25.09	--	12.18	--
	38	Hartland	14	3.19	14	2.06	2.81	--	- 3.32	3
	39	Oconomowoc	50	4.25	50	2.56	20.02	--	0.20	--
	39	Okauchee	0	0.00	0	0.00	- 6.69	7	- 8.59	9
	40	Waukesha	327	6.52	331	4.51	199.04	--	143.80	--
	41	Dousman <sup>j</sup>	6	6.51	6	3.20	3.66	--	1.22	--
	41	Eagle	0	0.00	0	0.00	- 2.19	2	- 0.55	1
	41	North Prairie	6	7.75	6	3.82	4.02	--	1.99	--
	41	Wales	5	3.79	5	2.05	1.64	--	- 1.22	1
	42	Big Bend	0	0.00	0	0.00	- 4.44	4	- 4.02	4
	42	Mukwonago	10	2.89	10	1.16	1.18	--	- 11.97	12
	County Totals	1,479	--	1,498	--	--	41	--	157	
Racine	43	Racine-North	24	0.72	24	0.69	- 61.32	61	- 65.06	65
	43	Caledonia-East	25	1.75	25	1.61	- 11.42	11	- 14.63	15
	44	Racine-South	60	1.05	60	1.10	- 85.53	86	- 78.81	79
	44	Mt. Pleasant-East	202	22.03	202	16.26	178.59	--	170.35	--
	45	Caddy Vista	0	0.00	0	0.00	- 2.57	3	- 3.40	3
	45	Caledonia-West <sup>l</sup>	158	72.88	158	20.34	152.48	--	138.21	--
	46	Mt. Pleasant-Sturtevant <sup>m</sup>	0	0.00	0	0.00	- 30.91	31	62.78	--
	47	Union Grove	100	30.76	100	15.94	91.71	--	84.00	--
	48	Wind Lake	0	0.00	0	0.00	- 3.19	3	- 13.08	13
	48	Waterford-Rochester	1	0.26	1	0.14	- 8.92	9	- 17.70	18
	49	Brighton	170	16.20	170	10.38	143.24	--	128.26	--
	County Totals	740	--	740	--	--	204	--	193	

Table 108 (continued)

County	Planning Analysis Area	Picnic Tables at Public Parks								
		Urban Area	1975		2000		1975		2000	
			Quantity <sup>a</sup>	Per Capita Provision <sup>b</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>b</sup>	Shortage-Surplus <sup>d</sup>	Need <sup>e</sup>	Shortage-Surplus <sup>d</sup>	Need <sup>e</sup>
Kenosha	50	Kenosha-North	75	2.35	75	2.23	- 6.39	6	- 10.74	11
	51	Kenosha-South	29	0.63	29	0.65	- 88.02	88	- 84.57	85
	51	South Kenosha	2	0.23	2	0.15	- 20.36	20	- 31.49	31
	52	Somers-East	0	0.00	0	0.00	- 3.64	4	- 47.39	47
	52	Somers-West	0	0.00	0	0.00	- 1.74	2	- 11.86	12
	53	Pleasant Prairie-Central <sup>n</sup>	-- <sup>k</sup>	--	0	0.00	--	--	- 5.36	5
	53	Pleasant Prairie-West	2	1.99	2	0.68	- 0.56	1	5.49	--
	53	Pleasant Prairie-East	-- <sup>k</sup>	--	0	0.00	--	--	40.43	--
	54	Bristol	-- <sup>k</sup>	--	3	2.02	--	--	- 0.79	1
	55	Paddock Lake	74 <sup>g</sup>	27.33	79	16.60	71.64	--	66.85	--
	55	Silver Lake	75	60.05	75	32.54	71.82	--	69.13	--
	55	Twin Lakes	0	0.00	0	0.00	- 7.80	8	- 11.41	11
		County Totals	262	--	265	--	--	129	--	203
Walworth	56	East Troy	0	0.00	0	0.00	- 5.58	6	- 12.71	13
	57	Whitewater	34	3.75	34	2.04	10.88	--	- 8.50	9
	58	Elkhorn	0	0.00	0	0.00	- 11.00	11	- 19.88	20
	59	Como Lake	0	0.00	0	0.00	- 3.74	4	- 4.80	5
	59	Genoa City	15	16.11	15	9.76	12.62	--	11.08	--
	59	Lake Geneva	13	2.43	13	1.28	- 0.64	1	- 12.93	13
	59	Pell Lake	0	0.00	0	0.00	- 3.53	4	- 3.68	4
	59	Williams Bay-Fontana-Walworth	0	0.00	0	0.00	- 13.00	13	- 27.07	27
	60	Darien	0	0.00	0	0.00	- 2.56	3	- 5.10	5
	60	Delavan	9	1.57	9	1.08	- 5.62	6	- 12.21	12
	60	Sharon	0	0.00	0	0.00	- 3.48	3	- 6.73	7
		County Totals	71	--	71	--	--	51	--	115
	Region Totals			9,215	--	9,410	--	--	838	--

<sup>a</sup> Quantity includes the number of picnic tables at Type I, Type II, Type III, and Type IV general use outdoor recreation sites.

<sup>b</sup> Per capita provision is calculated by dividing the quantity of picnic tables provided by the population of the appropriate urban area into thousands of persons (see Table 101).

<sup>c</sup> Quantity of picnic tables may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Shortage-surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (2.55 tables/1,000 urban residents) is determined; 2) the shortage-surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>j</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>k</sup> Not classified as an urban area in 1975.

<sup>l</sup> The Caledonia-West urban area includes a small area in planning analysis area 46.

<sup>m</sup> The Mt. Pleasant-Sturtevant urban area includes a small area in planning analysis area 44.

<sup>n</sup> The Pleasant Prairie-Central urban area includes a small area in planning analysis area 51.

Source: SEWRPC.

Table 109

## FACILITY REQUIREMENTS FOR SKI HILLS IN THE REGION: 1975 AND 2000

Ownership	Existing Quantity	1975 (Estimated Population = 1,769,504)					2000 (Planned Population = 2,193,856)				
		Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need	Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need
Public. . . . .	24	0.014	0.010	0.004	7	--	0.011	0.010	0.001	2	--
Nonpublic . .	158	0.089	0.090	- 0.001	- 2	2	0.072	0.090	- 0.018	- 39	39

<sup>a</sup> Per capita provision is calculated by dividing the existing quantity of facilities by the population in thousands of persons.

<sup>b</sup> Minimum per capita standard requirements for resource-oriented activities are set forth in Chapter XI in the standards under Objective No. 3.

<sup>c</sup> Per capita difference is per capita provision minus the minimum standard per capita requirement.

<sup>d</sup> Shortage-surplus is calculated by multiplying the per capita difference times the population in thousands of persons.

Source: SEWRPC.

need for additional public ski area at the present time. It also is indicated in Table 109 that, on the basis of the per capita standard, the existing slope acreage is sufficient to meet the additional demand for public ski hills expected to be generated by growth in the regional population by the year 2000.

As further indicated in Table 109, there was 0.089 acre per thousand population of developed ski slopes at nonpublic ski areas in the Region in 1975. Since the adopted standard is 0.090 acre per thousand, there is virtually no need for additional nonpublic skiing area at the present time. As a result of growth in the population by the year 2000, however, it is anticipated that an additional 39 acres of developed slope at nonpublic ski hills will be needed to meet the demand for skiing in the plan design year.

Although application of the per capita standard for public ski slope acreage to the existing and probable future population of the Region indicated no need for additional public skiing area by the plan design year, the determination of service areas of existing public ski hills in the Region did identify certain portions of the Region which are not adequately served with public downhill ski facilities. The service areas of public ski hills in the Region were delineated on regional base maps as circular areas around existing ski hills containing a population equivalent to the population which the ski hill is capable of serving.<sup>11</sup> Service areas around public ski hills were delineated in this manner in the context of both the existing 1975 and plan 2000 population

<sup>11</sup> Chapter XI recommends that the public sector provide 0.010 acre of developed slope per thousand population, or one acre for each 100,000 persons in the Region. The number of persons which a given public ski hill is capable of serving, therefore, may be approximated by multiplying the number of acres of developed slope at the site by 100,000.

distributions. The maximum service radius of any ski hill, as indicated in Chapter XI, is 25 miles.

Portions of the Region not served by existing public ski hills are shown on Map 96. Walworth County as well as most of Kenosha County, the western portions of Racine County, and a small area in southwest Waukesha County were not served by a public ski hill in 1975; and, if the spatial distribution of the population proposed under the new regional land use-transportation plan for the year 2000 is substantially achieved, additional small areas in eastern Racine County and southwestern Waukesha County would not be served by the existing distribution and quantity of public ski hills in the year 2000. The findings of this service area analysis are intended to serve as a guide in the selection of locations for additional ski hills at publicly owned sites.

**Swimming Beaches:** In southeastern Wisconsin, beach swimming is pursued along the Lake Michigan shoreline as well as at the inland lakes of the Region. Because of a basic difference in the nature of Lake Michigan beach swimming and swimming at the inland lakes, separate need analyses were undertaken for Lake Michigan and inland lake beaches. In this regard, swimming activity per se in Lake Michigan often is curtailed by cold and rough water and the major attraction for many participants is the opportunity for other active and passive beach related activities in the unique setting which the Lake Michigan shoreline provides. In comparison, swimming activity is much less constrained by water characteristics at the inland lakes of the Region, and swimming per se is a more integral part of beach activities at the inland lakes.

As indicated in Table 110, there were 28,830 linear feet of public beach along the Lake Michigan shoreline, or 16 feet per thousand population in the Region in 1975. Since the standard for public Lake Michigan beaches is 16 feet per thousand population, there was no need



Table 110

## FACILITY REQUIREMENTS FOR SWIMMING BEACHES IN THE REGION: 1975 AND 2000

Type of Beach	Ownership	Existing Quantity	1975 (Estimated Population = 1,769,504)					2000 (Planned Population = 2,193,856)				
			Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need	Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need
Lake Michigan	Public	28,830	16	16	0	0	--	13	16	- 3	- 6,582	6,582
Inland Lake	Public	10,335	6	6	0	0	--	5	6	- 1	- 2,193	2,193
	Nonpublic	21,155	12	12	0	0	--	10	12	- 2	- 4,388	4,388

<sup>a</sup> Per capita provision is calculated by dividing the existing quantity of facilities by the population in thousands of persons.

<sup>b</sup> Minimum per capita standard requirements for resource-oriented activities are set forth in Chapter XI in the standards under Objective No. 3.

<sup>c</sup> Per capita difference is per capita provision minus the minimum standard per capita requirement.

<sup>d</sup> Shortage-surplus is calculated by multiplying the per capita difference times the population in thousands of persons.

Source: SEWRPC.

for additional beach area along Lake Michigan in 1975.<sup>12</sup> Owing to the increase in demand to be generated by growth in the regional population, however, it is anticipated that an additional 6,582 linear feet of public beach along the Lake Michigan shoreline will be needed by the plan design year 2000.

While all existing beaches on Lake Michigan are in public ownership, the public sector provides about one-third—32 percent—of the linear feet of beach at inland lakes in the Region. There were 10,335 linear feet of public beach at inland lakes, or six linear feet of beach per thousand population in the Region in 1975 (see Table 110). Since the standard for public beaches at inland lakes also is six linear feet per thousand population, there was no evident need for additional public beaches at inland lakes in the Region in 1975 on the basis of application of the per capita standard. Due to the increasing size of the regional population, however, it is anticipated that an additional 2,193 linear feet of public beach at inland lakes will be needed to meet the demand for beach swimming by the year 2000.

As further indicated in Table 110, there were 21,155 linear feet of beach on inland lakes at nonpublic general use outdoor recreation sites, or 12 linear feet per thousand population in the Region in 1975. Since the adopted standard for nonpublic inland beaches also is 12 linear feet per thousand population, there was no need for additional inland beaches in the Region in 1975. It is anticipated, however, that an additional 4,388 linear feet of nonpublic beaches at inland lakes will be needed to meet the demand for swimming beaches by the year 2000.

<sup>12</sup> It should be noted that no standard was adopted for the provision of nonpublic swimming beaches on the Lake Michigan shoreline.

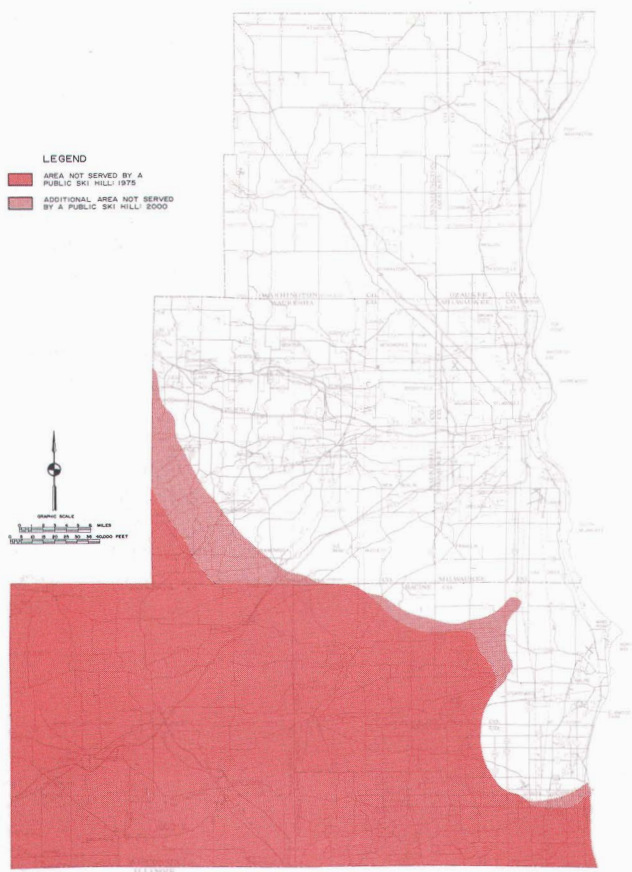
Although application of a per capita standard for public swimming beaches at inland lakes and Lake Michigan to the existing population indicated no need for additional public beaches in the Region in 1975, the identification of service areas of existing public inland beaches indicated that certain portions of the Region were not appropriately served. The service area of a given beach was delineated on regional base maps as a circular area around the beach containing a population equivalent to the population which the given beach is capable of serving.<sup>13</sup> Service areas were delineated in this manner for each public beach within the context of both the existing 1975 and planned year 2000 population distribution. The maximum service radius of any swimming beach is 10 miles. It should be noted that the analysis of service areas of beaches, including beaches at inland lakes and Lake Michigan, was confined to public beaches.

Areas in southeastern Wisconsin not served by existing public beaches are shown on Map 97. A portion of Ozaukee County, western Milwaukee County, northern Racine County, and eastern Washington County were not served by a public beach in 1975; and, if the spatial distribution of the population proposed under the new

<sup>13</sup> Chapter XI prescribes the provision of six linear feet of public beach per thousand population, or one linear foot for each 167 persons, at inland lakes in the Region. The number of persons which a given public inland beach is capable of serving, therefore, may be approximated by multiplying the number of linear feet provided by 167. Further, Chapter XI prescribes the provision of 16 linear feet of public beach per thousand population, or one linear foot for each 63 persons, on Lake Michigan. The number of persons which a given public beach on Lake Michigan is capable of serving, therefore, may be approximated by multiplying the number of linear feet provided by 63.

Map 96

### AREAS IN THE REGION NOT SERVED BY A PUBLICLY OWNED SKI HILL

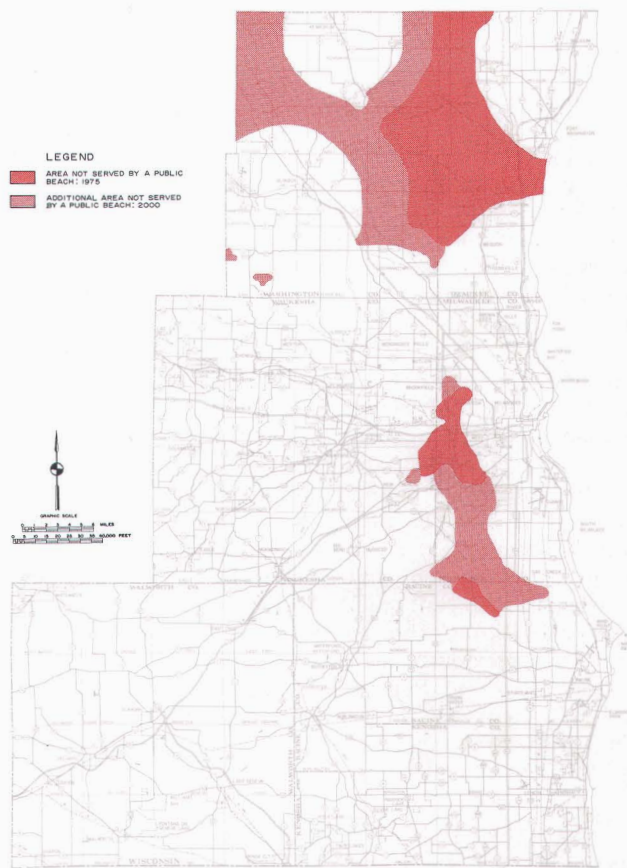


The agreed-upon per capita and service area standard for public ski hills is 0.010 acre of developed ski slopes per thousand residents with a maximum service radius of 25 miles. Service areas varying in size according to the existing acres of developed ski slopes and existing and proposed population levels in the surrounding area were delineated on regional base maps to identify those areas of the Region not adequately served. Application of the standards indicated that Walworth County, most of Kenosha County, western Racine County, and a small portion in southwestern Waukesha County were not served by a public ski hill in 1975. These areas contained approximately 200,000 persons, or about 11 percent of the population of the Region. Based upon the forecast level and spatial distribution of the year 2000 population, additional small unserved areas would occur in eastern Racine County and southwestern Waukesha County.

Source: SEWRPC.

Map 97

### AREAS IN THE REGION NOT SERVED BY A PUBLIC SWIMMING BEACH



The agreed-upon per capita and service area standard for public swimming beaches on major inland lakes, and Lake Michigan is 22 linear feet per thousand residents with a maximum service radius of 10 miles. Service areas, varying in size according to the existing linear feet of beach and existing and proposed population levels in the surrounding area, were delineated on regional base maps to identify those areas of the Region not adequately served. Application of the standards indicated that a small portion of western Milwaukee County, a portion of Ozaukee County, a small portion of northern Racine County, and a small portion of eastern Washington County were not served by public beaches in 1975. These areas contained about 100,000 persons, or about 6 percent of the population of the Region. Based upon the forecast level and spatial distribution of the year 2000 population, additional unserved areas would occur in western Milwaukee County, northern Racine County, and Washington County.

Source: SEWRPC.

regional land use-transportation plan for the year 2000 is substantially achieved, additional areas in western Milwaukee County, northern Racine County, and Washington County would not be served by the existing distribution and quantity of public beaches in the year 2000. The findings of this service area analysis are intended to serve as a guide in the selection of locations for additional public beaches.

#### Extensive Land Based Outdoor Recreation Facility Needs

Owing to the recent increase in participation in extensive land based outdoor recreation activity, including biking, hiking, horseback riding, nature study, and ski touring, there is presently a substantial need for related trail facilities. The existing and anticipated future needs for public recreation trail facilities based upon application of the standards presented in Chapter XI to the existing and forecast population levels of the Region are presented in this section. It is important to recognize that the standards set forth under Objective No. 4 relate only to recreation trails recommended to be provided within public recreation corridors. As already noted, public recreation corridors have been defined for the purposes of this report as publicly owned continuous expanses of land at least 15 miles in length which are located within scenic areas or areas of natural, cultural, or historic interest, and which provide opportunities for participation in trail oriented outdoor recreation activities especially through the provision of appropriate designated trails. As previously indicated, there were no recreation corridors in the Region in 1975 as defined above. It follows, then, that the per capita linear mileage standards for various trail facilities set forth under Objective No. 4 are entirely unmet.

It is important to note that there are currently a number of public and nonpublic trail facilities in the Region which are not located within a public recreation corridor as defined above but which do indeed satisfy a portion of the existing demand for trail facilities for biking, hiking, horseback riding, and ski touring. Examples of these include the Ice Age Trail which provides opportunities for backpack hiking through public and nonpublic lands in the western portion of the Region and a 27-mile trail located primarily on nonpublic lands circling Lake Geneva in Walworth County. It is anticipated that these and perhaps similar additional facilities not located in the public recreation corridor will continue to accommodate trail-oriented activities in the Region. It also is anticipated that some of these existing trail facilities may eventually be connected to similar trails located within the public recreation corridor network which is ultimately recommended as part of the park and open space plan, thereby providing an even more extensive system of recreation trails.

Since facilities for hiking, biking, horseback riding, and other extensive land based recreation activities attract users from relatively long distances and serve residents of both urban and rural areas, the per capita linear mileage standards for the various trail facilities are appropriately applied to the total population—both urban and rural components—of the Region. As indicated

in Table 111, in order to meet the minimum standard mileage requirements for trails within recreation corridors in the Region in 1975, the following trail facilities should be provided: 280 miles of designated biking and hiking trails; 35 miles of designated nature study and ski touring trails; 88 miles of designated horseback riding trails; and 195 miles of designated snowmobiling trails. As further indicated in Table 111, in order to meet the minimum standard mileage requirements for trails within recreation corridors in the Region by the plan design year 2000, the following trail facilities should be provided: 350 miles of designated biking and hiking trails; 44 miles of designated nature study and ski touring trails; 110 miles of designated horseback riding trails; and 241 miles of designated snowmobiling trails. It is important to recognize that certain segments of the public recreation corridor network are expected to accommodate trails for several activities and that all of the trail requirements presented in Table 111 could be accommodated within the recreation corridor system, the linear mileage requirements for which have been previously set forth in this chapter.

In addition to the minimum standard mileage requirements set forth for the various trail-oriented outdoor recreation activities, Objective No. 4 also recommends the provision of one public nature study center within each of the seven counties. Designated public nature study centers already exist in the Region in Milwaukee and Waukesha Counties. Accordingly, public nature study centers are currently needed in Kenosha, Ozaukee, Racine, Walworth, and Washington Counties.

#### Intensive Nonresource-Oriented Outdoor Recreation Facility Needs

Intensive nonresource-oriented outdoor recreation facilities—including baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, softball diamonds, swimming pools, and tennis courts—attract users from relatively short distances and, being located primarily in Type III and Type IV general use sites in urban areas, serve residents of those urban areas. Accordingly, the standards for such facilities are appropriately applied to the urban population of the Region. The size and distribution of this population have been described previously in this chapter. In determining the existing and probable

Table 111

#### **FACILITY REQUIREMENTS FOR PUBLIC TRAILS IN RECREATION CORRIDORS IN THE REGION: 1975 AND 2000**

Type of Trail	Need: 1975 (linear miles)	Need: 2000 (linear miles)
Biking . . . . .	280	350
Hiking . . . . .	280	350
Horseback Riding . .	88	110
Nature Study . . . .	35	44
Ski Touring . . . . .	35	44
Snowmobiling . . . .	195	241

Source: SEWRPC.

future needs for intensive nonresource-oriented outdoor recreation facilities, the per capita standard for each type of facility, as set forth in Chapter XI, was applied to each urban area in the Region, and the need for each type of facility in each urban area was thus determined. Because urban areas are relatively small and facilities for intensive nonresource-oriented outdoor recreation activities are generally distributed throughout urban areas, the application of facility standards alone provided an adequate analysis of need for intensive nonresource-oriented outdoor recreation facilities.<sup>14</sup>

Both public facilities for intensive nonresource-oriented outdoor recreation activities—which are generally located in Type III and Type IV park and school grounds—and nonpublic facilities—which are generally located in Type IV parochial school grounds and Type IV private organizational parks—are usually available for use by the general public. Thus, both types of facilities contribute to offset the need for intensive nonresource-oriented recreation facilities. In addition to a determination of combined public and nonpublic facility needs, however, both public and nonpublic facility needs were determined separately in order to suggest the degree to which each sector—public and nonpublic—has contributed to meet the facility need under consideration. It should be noted that, in the following description of need for facilities for intensive nonresource-oriented activities, the standards for each facility have been applied to the appropriate population, and the quantity of facilities needed has been rounded to the nearest whole facility. It should also be noted that the “existing” quantity of facilities may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites which in 1975 were located outside of the identified urban areas and which, by the year 2000, would be located within the anticipated new or expanded urban areas.

**Baseball Diamonds:** As indicated in Table 112, there were 195 baseball diamonds located in general use sites in the urban areas in the Region in 1975. Since the adopted standard is 0.10 baseball diamond per thousand urban residents, a total of 43 additional baseball dia-

monds was needed in 17 urban areas in the Region in 1975 (see Map 98). The majority of these facilities was required in high-density urban areas in Milwaukee, Racine, and Kenosha Counties. By the year 2000, however, as indicated in Table 113, it is anticipated that a total of 58 baseball diamonds will be needed in 27 urban areas, with the diamonds needed in 2000 and those required in 1975 both being located primarily in those urban areas expected to have relatively large population increases between 1975 and 2000 (see Map 99). Interestingly, while the total number of diamonds needed in urban areas in Milwaukee County remained the same in both 1975 and 2000, the required distribution changed, reflecting the anticipated decrease in population in the older central portion of the County, and an anticipated increase in population in the newer urban areas in the northwest and southern portions of the County.

**Basketball Goals:** As indicated in Table 114, there were 2,016 basketball goals in general use sites in the urban areas in the Region in 1975. Since the adopted standard is 1.13 basketball goals per thousand urban residents, a total of 179 additional basketball goals was needed in 19 urban areas in the Region in 1975, the majority of these being required in urban areas in Milwaukee County (see Map 100). By the year 2000, however, as indicated in Table 115, it is anticipated that a total of 398 basketball goals will be needed in 43 urban areas, with the goals needed in 2000 and those required in 1975 both being located primarily in those urban areas expected to have relatively large population increases between 1975 and 2000 (see Map 101).

**Ice Skating Rinks:** As indicated in Table 116, there were 252 ice skating rinks located in general use sites in the urban areas in the Region in 1975. Since the adopted standard is 0.15 ice skating rink per thousand urban residents, a total of 64 additional ice skating rinks was needed in 39 urban areas in the Region in 1975 (see Map 102). It is important to note that, for 21 of the 39 urban areas requiring ice skating rinks, the minimum requirement that one ice skating rink should be provided in each urban area as specified in Chapter XI, has been applied. By the year 2000, however, as indicated in Table 117 it is anticipated that a total of 96 ice skating rinks will be needed in 48 urban areas, with the ice skating rinks needed in 2000 and those required in 1975 both being located in urban areas distributed throughout the Region (see Map 103).

**Playfields:** As indicated in Table 118, there were 931 playfields located in general use sites in urban areas in the Region in 1975. Since the adopted standard is 0.50 playfield per thousand urban residents, a total of 78 additional playfields was needed in 11 urban areas in the Region in 1975, the majority of these being required in the high-density urban areas in Milwaukee and Racine Counties (see Map 104). By the year 2000, however, as indicated in Table 119, it is anticipated that a total of 131 playfields will be needed in 26 urban areas, with the playfields needed in 2000 and those required in 1975 both being located primarily in those urban areas expected to have relatively large population increases between 1975 and 2000 (see Map 105).

<sup>14</sup> It should be noted that the accessibility analysis conducted for Type III and Type IV parks, as described previously in this chapter, provides an indication of portions of urban areas not adequately served by intensive nonresource-oriented outdoor recreation facilities and, together with the facility needs analyses, provides a comprehensive analysis of need for outdoor recreation sites and facilities in each of the urban areas in the Region. Yet it is also important to recognize that even urban areas which meet the overall Type III and Type IV site and facility type needs may have a need for additional facilities because the spatial distribution of existing facilities does not provide sufficient access for residents of that urban area. Such additional facility needs can be determined only through a detailed analysis of the needs of neighborhoods and subneighborhoods within each urban area and, as previously noted in Chapter II of this report, such an analysis is beyond the scope of this report.



Table 112

## FACILITY REQUIREMENTS FOR BASEBALL DIAMONDS IN URBAN AREAS IN THE REGION: 1975

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (diamonds) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	1	1.07	0	0.00	1	1.07	0.92	- 0.01	0.91	--
	1	Fredonia	1	0.69	0	0.00	1	0.69	0.87	- 0.02	0.85	--
	2	Port Washington	1	0.11	0	0.00	1	0.11	0.15	- 0.09	0.06	--
	3	Saukville	1	0.41	0	0.00	1	0.41	0.78	- 0.02	0.76	--
	4	Cedarburg-Grafton <sup>f</sup>	5	0.26	1	0.05	6	0.31	3.29	- 0.77	4.06	--
	5	Mequon-Thiensville	3	0.20	0	0.00	3	0.20	1.66	- 0.15	1.51	--
		County Totals	12	--	1	--	13	--	--	--	--	--
Washington	6	Kewaskum	1	0.39	0	0.00	1	0.39	0.77	- 0.02	0.75	--
	7	West Bend	2	0.10	0	0.00	2	0.10	0.14	- 0.21	- 0.07	--
	7	Newburg <sup>g</sup>	0	0.00	0	0.00	0	0.00	- 0.05	- 0.01	- 0.06	--
	8	Allenton	0	0.00	0	0.00	0	0.00	- 0.08	- 0.01	- 0.09	--
	9	Jackson	0	0.00	0	0.00	0	0.00	- 0.18	- 0.02	- 0.20	--
	10	Hartford	2	0.27	0	0.00	2	0.27	1.32	- 0.07	1.25	--
	10	Slinger	2	1.49	0	0.00	2	1.49	1.88	- 0.01	1.87	--
	11	Germantown	1	0.22	0	0.00	1	0.22	0.60	- 0.05	0.55	--
	County Totals	8	--	0	--	8	--	--	--	--	--	
Milwaukee	13	Bayside-Fox Point-River Hills	1	0.07	0	0.00	1	0.07	- 0.27	- 0.14	- 0.41	--
	14	Brown Deer-Glendale	3	0.12	0	0.00	3	0.12	0.77	- 0.25	0.52	--
	15	Shorewood-Whitefish Bay	2	0.06	1	0.03	3	0.09	- 0.89	0.68	- 0.21	--
	16	Milwaukee (part)	1	0.02	0	0.00	1	0.02	- 2.84	- 0.43	- 3.27	3
	17	Milwaukee (part) <sup>h</sup>	7	0.15	2	0.04	9	0.19	2.88	1.44	4.32	--
	18	Milwaukee (part)	6	0.05	0	0.00	6	0.05	- 4.76	- 1.19	- 5.95	6
	19	Milwaukee (part)	5	0.06	0	0.00	5	0.06	- 2.27	- 0.81	- 3.08	3
	20	Milwaukee (part)	4	0.03	1	0.01	5	0.04	- 8.40	- 0.00	- 8.40	8
	21	Milwaukee (part)	4	0.06	0	0.00	4	0.06	- 1.97	- 0.66	- 2.63	3
	22	Milwaukee (part)	3	0.15	0	0.00	3	0.15	1.21	- 0.20	1.01	--
	23	Milwaukee (part)	4	0.10	0	0.00	4	0.10	0.49	- 0.39	0.10	--
	24	Milwaukee (part)	4	0.07	0	0.00	4	0.07	- 1.36	- 0.59	- 1.95	2
	25	Milwaukee (part)	2	0.06	0	0.00	2	0.06	- 1.23	- 0.36	- 1.59	2
	26	Cudahy-St. Francis-South Milwaukee	6	0.11	3	0.05	9	0.16	1.01	2.45	3.46	--
	27	Oak Creek	0	0.00	0	0.00	0	0.00	- 1.05	- 0.12	- 1.17	1
	28	Franklin	0	0.00	0	0.00	0	0.00	- 0.80	- 0.09	- 0.89	1
	29	Greendale-Greenfield-Hales Corners	6	0.11	2	0.03	8	0.14	0.90	1.43	2.33	--
	30	West Allis-West Milwaukee	10	0.13	0	0.00	10	0.13	2.96	- 0.78	2.18	--
	31	Wauwatosa	11	0.20	1	0.02	12	0.22	6.06	0.45	6.51	--
		County Totals	79	--	10	--	89	--	--	--	--	29
Waukesha	32	Menomonee Falls-Butler	5	0.17	0	0.00	5	0.17	2.40	- 0.30	2.10	--
	32	Lannon	1	0.88	0	0.00	1	0.88	0.90	- 0.01	0.89	--
	33	Brookfield-Elm Grove	9	0.21	0	0.00	9	0.21	5.11	- 0.43	4.68	--
	34	New Berlin	5	0.21	1	0.04	6	0.25	2.82	0.76	3.58	--
	35	Muskego	2	0.19	0	0.00	2	0.19	1.07	- 0.10	0.97	--
	36	DuPlainville	--	--	--	--	--	--	--	--	--	--
	36	Sussex	3	0.76	0	0.00	3	0.76	2.65	- 0.04	2.61	--
	36	Pewaukee	2	0.44	0	0.00	2	0.44	1.59	- 0.04	1.55	--
	37	Merton	1	1.42	0	0.00	1	1.42	0.94	- 0.01	0.93	--
	38	Delafield	1	0.87	0	0.00	1	0.87	0.90	- 0.01	0.89	--
	38	Hartland	3	0.68	0	0.00	3	0.68	2.60	- 0.04	2.56	--
	39	Oconomowoc	1	0.08	0	0.00	1	0.08	- 0.06	- 0.12	- 0.18	--
	39	Okauchee	0	0.00	0	0.00	0	0.00	- 0.24	- 0.02	- 0.26	1 <sup>i</sup>
	40	Waukesha	4	0.08	0	0.00	4	0.08	- 0.51	- 0.50	- 1.01	1
	41	Dousman <sup>j</sup>	1	1.08	0	0.00	1	1.08	0.91	- 0.01	0.90	--
	41	Eagle	0	0.00	0	0.00	0	0.00	- 0.08	- 0.01	- 0.09	--
	41	North Prairie	0	0.00	0	0.00	0	0.00	- 0.07	- 0.01	- 0.08	--
	41	Wales	2	1.51	0	0.00	2	1.51	1.88	- 0.01	1.87	--
	42	Big Bend	0	0.00	0	0.00	0	0.00	- 0.16	- 0.02	- 0.18	--
	42	Mukwonago	1	0.29	0	0.00	1	0.29	0.69	- 0.04	0.65	--
		County Totals	41	--	1	--	42	--	--	--	--	2
	Racine	43	Racine-North	0	0.00	0	0.00	0	0.00	- 3.02	- 0.33	- 3.35
43		Caledonia-East	0	0.00	0	0.00	0	0.00	- 1.29	- 0.14	- 1.43	1
44		Racine-South	1	0.02	0	0.00	1	0.02	- 4.13	- 0.57	- 4.70	5
44		Mt. Pleasant-East	0	0.00	0	0.00	0	0.00	- 0.83	- 0.09	- 0.92	1
45		Caddy Vista	0	0.00	0	0.00	0	0.00	- 0.09	- 0.01	- 0.10	--
45		Caledonia-West	1	0.46	0	0.00	1	0.46	0.81	- 0.02	0.79	--
46		Mt. Pleasant-Sturtevant	6	0.49	0	0.00	6	0.49	4.85	- 0.12	4.73	--
47		Union Grove	1	0.31	0	0.00	1	0.31	0.71	- 0.03	0.68	--
48		Wind Lake	1	0.80	0	0.00	1	0.80	0.88	- 0.01	0.87	--
48		Waterford-Rochester	1	0.26	0	0.00	1	0.26	0.66	- 0.04	0.62	--
49		Burlington	4	0.38	2	0.19	6	0.57	3.06	1.89	4.95	--
		County Totals	15	--	2	--	17	--	--	--	--	10

Table 112 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (diamonds) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>c</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	4	0.13	1	0.03	5	0.16	1.13	0.68	1.81	--
	51	Kenosha-South	4	0.09	0	0.00	4	0.09	-0.13	-0.46	-0.59	1
	51	South Kenosha	0	0.00	0	0.00	0	0.00	-0.79	-0.09	-0.88	1
	52	Somers-East	0	0.00	1	0.70	1	0.70	-0.12	0.98	0.86	--
	52	Somers-West	0	0.00	0	0.00	0	0.00	-0.06	-0.01	-0.07	--
	53	Pleasant Prairie-West	0	0.00	0	0.00	0	0.00	-0.09	-0.01	-0.10	--
	55	Paddock Lake	1	0.35	0	0.00	1	0.35	0.74	-0.03	0.71	--
	55	Silver Lake	1	0.80	0	0.00	1	0.80	0.89	-0.01	0.88	--
	55	Twin Lakes	1	0.33	0	0.00	1	0.33	0.72	-0.03	0.69	--
		County Totals	11	--	2	--	13	--	--	--	--	2
Walworth	56	East Troy	0	0.00	0	0.00	0	0.00	-0.20	-0.02	-0.22	--
	57	Whitewater	3	0.33	0	0.00	3	0.33	2.18	-0.09	2.09	--
	58	Elkhorn	1	0.23	0	0.00	1	0.23	0.61	-0.04	0.57	--
	59	Como Lake	0	0.00	0	0.00	0	0.00	-0.13	-0.02	-0.15	--
	59	Genoa City	1	1.07	0	0.00	1	1.07	0.92	-0.01	0.91	--
	59	Lake Geneva	2	0.37	0	0.00	2	0.37	1.51	-0.05	1.46	--
	59	Pell Lake	0	0.00	0	0.00	0	0.00	-0.13	-0.01	-0.14	--
	59	Williams Bay-Fontana										
		Walworth	0	0.00	4	0.78	4	0.78	-0.46	3.93	3.47	--
	60	Darien	0	0.00	0	0.00	0	0.00	-0.09	-0.01	-0.10	--
	60	Delavan	2	0.35	0	0.00	2	0.35	1.48	-0.05	1.43	--
	60	Sharon	0	0.00	0	0.00	0	0.00	-0.12	-0.02	-0.14	--
		County Totals	9	--	4	--	13	--	--	--	--	--
Region Totals			175	--	20	--	195	--	--	--	43	

<sup>a</sup> Minimum standard per capita requirements for baseball diamonds are as follows: public—0.09/1,000 urban residents; nonpublic—0.01/1,000 urban residents; and public and nonpublic combined—0.10/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of baseball diamonds may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of baseball diamonds provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> As specified in Chapter XI, at least one baseball diamond should be provided in each urban area having a population of 2,500 or more.

<sup>j</sup> The Dousman urban area includes a small area in planning analysis area 39.

Source: SEWRPC.

Table 113

## FACILITY REQUIREMENTS FOR BASEBALL DIAMONDS IN URBAN AREAS IN THE REGION: 2000

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (diamonds)						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	1	0.67	0	0.00	1	0.67	0.87	- 0.02	0.85	--
	1	Fredonia	1	0.47	0	0.00	1	0.47	0.81	- 0.02	0.79	--
	2	Port Washington	1	0.08	0	0.00	1	0.08	- 0.17	- 0.13	- 0.30	--
	3	Saukville	1	0.15	0	0.00	1	0.15	0.40	- 0.07	0.33	--
	4	Cedarburg-Grafton <sup>f</sup>	5	0.15	1	0.03	6	0.18	2.00	0.67	2.67	--
	5	Mequon-Thiensville	3	0.08	0	0.00	3	0.08	- 0.39	- 0.39	- 0.78	1
	County Totals		12	--	1	--	13	--	--	--	--	1
Washington	6	Kewaskum	1	0.21	0	0.00	1	0.21	0.56	- 0.05	0.51	--
	7	West Bend	2	0.05	0	0.00	2	0.05	- 1.66	- 0.40	- 2.06	2
	7	Newburg <sup>g</sup>	0	0.00	0	0.00	0	0.00	- 0.21	- 0.02	- 0.23	--
	8	Allenton	0	0.00	0	0.00	0	0.00	- 0.18	- 0.02	- 0.20	--
	9	Jackson	0	0.00	0	0.00	0	0.00	- 0.54	- 0.06	- 0.60	1
	10	Hartford	2	0.13	0	0.00	2	0.13	0.61	- 0.16	0.45	--
	10	Slinger	2	0.46	0	0.00	2	0.46	1.61	- 0.05	1.56	--
	11	Germantown	1	0.04	0	0.00	1	0.04	- 1.36	- 0.26	- 1.62	2
County Totals		8	--	0	--	8	--	--	--	--	5	
Milwaukee	13	Bayside-Fox Point-River Hills	1	0.27	0	0.00	1	0.27	- 0.33	- 0.15	- 0.48	--
	14	Brown Deer-Glendale	3	0.10	0	0.00	3	0.10	0.24	- 0.31	- 0.07	--
	15	Shorewood-Whitefish Bay	2	0.07	1	0.03	3	0.10	- 0.73	0.70	- 0.03	--
	16	Milwaukee (part)	1	0.03	0	0.00	1	0.03	- 2.08	- 0.34	- 2.42	2
	17	Milwaukee (part) <sup>h</sup>	7	0.11	2	0.03	9	0.14	1.32	1.32	2.64	--
	18	Milwaukee (part)	7	0.06	0	0.00	7	0.06	- 3.53	- 1.18	- 4.71	5
	19	Milwaukee (part)	5	0.07	0	0.00	5	0.07	- 1.72	- 0.75	- 2.47	2
	20	Milwaukee (part)	4	0.03	1	0.01	5	0.04	- 7.56	- 0.00	- 7.56	8
	21	Milwaukee (part)	4	0.07	0	0.00	4	0.07	- 1.20	- 0.58	- 1.78	2
	22	Milwaukee (part)	3	0.16	0	0.00	3	0.16	1.27	- 0.19	1.08	--
	23	Milwaukee (part)	4	0.09	0	0.00	4	0.09	0.17	- 0.42	- 0.25	--
	24	Milwaukee (part)	4	0.07	0	0.00	4	0.07	- 1.01	- 0.55	- 1.56	2
	25	Milwaukee (part)	3	0.08	0	0.00	3	0.08	- 0.36	- 0.37	- 0.73	1
	26	Cudahy-St. Francis-South Milwaukee	6	0.10	3	0.05	9	0.15	0.76	2.42	3.18	--
	27	Oak Creek	0	0.00	0	0.00	0	0.00	- 3.91	- 0.44	- 4.35	4
	28	Franklin	0	0.00	1	0.03	1	0.03	- 3.34	0.63	- 2.71	3
	29	Greendale-Greenfield-Hales Corners	6	0.10	2	0.03	8	0.13	0.38	1.37	1.75	--
30	West Allis-West Milwaukee	10	0.14	0	0.00	10	0.14	3.47	- 0.73	2.74	--	
31	Wauwatosa	11	0.21	1	0.02	12	0.23	6.23	0.47	6.70	--	
County Totals		81	--	11	--	92	--	--	--	--	29	
Waukesha	32	Menomonee Falls-Butler	9	0.15	0	0.00	9	0.15	3.51	- 0.59	2.92	--
	32	Lannon	1	0.32	0	0.00	1	0.32	0.72	- 0.03	0.69	--
	33	Brookfield-Elm Grove <sup>i</sup>	5	0.09	0	0.00	5	0.09	0.00	- 0.57	- 0.57	1
	34	New Berlin	5	0.10	1	0.02	6	0.12	0.35	0.48	0.83	--
	35	Muskego	2	0.11	0	0.00	2	0.11	0.37	- 0.18	0.19	--
	36	Duplainville	0	0.00	0	0.00	0	0.00	- 0.33	- 0.04	- 0.37	1 <sup>j</sup>
	36	Sussex	3	0.32	0	0.00	3	0.32	2.16	- 0.09	2.07	--
	36	Pewaukee	2	0.16	0	0.00	2	0.16	0.90	- 0.12	0.78	--
	37	Merton	1	1.61	0	0.00	1	1.61	0.95	- 0.01	0.94	--
	38	Delafield	1	0.16	0	0.00	1	0.16	0.44	- 0.06	0.38	--
	38	Hartland	3	0.44	0	0.00	3	0.44	2.39	- 0.07	2.32	--
	39	Oconomowoc	1	0.05	0	0.00	1	0.05	- 0.76	- 0.19	- 0.95	1
	39	Okauchee	0	0.00	0	0.00	0	0.00	- 0.30	- 0.04	- 0.34	1 <sup>j</sup>
	40	Waukesha	4	0.05	0	0.00	4	0.05	- 2.61	- 0.73	- 3.34	3
	41	Dousman <sup>k</sup>	1	0.53	0	0.00	1	0.53	0.83	- 0.02	0.81	--
	41	Eagle	0	0.00	0	0.00	0	0.00	- 0.14	- 0.01	- 0.15	--
	41	North Prairie	0	0.00	0	0.00	0	0.00	- 0.14	- 0.02	- 0.16	--
	41	Wales	2	0.82	0	0.00	2	0.82	1.78	- 0.02	1.76	--
	42	Big Bend	0	0.00	0	0.00	0	0.00	- 0.14	- 0.02	- 0.16	--
42	Mukwonago	1	0.12	0	0.00	1	0.12	0.23	- 0.09	0.14	--	
County Totals		41	--	1	--	42	--	--	--	--	7	
Racine	43	Racine-North	1	0.03	0	0.00	1	0.03	- 2.15	- 0.35	- 2.50	3
	43	Caledonia-East	0	0.00	0	0.00	0	0.00	- 1.40	- 0.16	- 1.56	2
	44	Racine-South	1	0.02	0	0.00	1	0.02	- 3.89	- 0.54	- 4.43	4
	44	Mt. Pleasant-East	0	0.00	0	0.00	0	0.00	- 1.12	- 0.12	- 1.24	1
	45	Caddy Vista	0	0.00	0	0.00	0	0.00	- 0.12	- 0.01	- 0.13	--
	45	Caledonia-West <sup>l</sup>	1	0.13	0	0.00	1	0.13	0.31	- 0.08	0.23	--
	46	Mt. Pleasant-Sturtevant <sup>m</sup>	6	0.24	0	0.00	6	0.24	3.69	- 0.24	3.45	--
	47	Union Grove	1	0.16	0	0.00	1	0.16	0.43	- 0.06	0.37	--
	48	Wind Lake	1	0.20	0	0.00	1	0.20	0.54	- 0.05	0.49	--
	48	Waterford-Rochester	1	0.14	0	0.00	1	0.14	0.36	- 0.07	0.29	--
	49	Burlington	4	0.24	2	0.12	6	0.36	2.53	1.83	4.36	--
	County Totals		16	--	2	--	18	--	--	--	--	10

Table 113 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (diamonds)						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	4	0.12	1	0.03	5	0.15	0.98	0.66	1.64	--
	51	Kenosha-South	5	0.11	0	0.00	5	0.11	0.99	-0.44	0.55	--
	51	South Kenosha	0	0.00	0	0.00	0	0.00	-1.18	-0.13	-1.31	1
	52	Somers-East	1	0.05	1	0.05	2	0.10	-0.74	0.74	0.00	--
	52	Somers-West	0	0.00	0	0.00	0	0.00	-0.42	-0.05	-0.47	1 <sup>j</sup>
	53	Pleasant Prairie-West	0	0.00	0	0.00	0	0.00	-0.26	-0.03	-0.29	1 <sup>j</sup>
	53	Pleasant Prairie-East	0	0.00	0	0.00	0	0.00	-1.43	-0.16	-1.59	2
	53	Pleasant Prairie-Central <sup>n</sup>	0	0.00	0	0.00	0	0.00	-0.19	-0.02	-0.21	--
	54	Bristol	0	0.00	0	0.00	0	0.00	-0.13	-0.02	-0.15	--
	55	Paddock Lake	1	0.21	0	0.00	1	0.21	0.57	-0.05	0.52	--
	55	Silver Lake	1	0.43	0	0.00	1	0.43	0.79	-0.02	0.77	--
	55	Twin Lakes	1	0.22	0	0.00	1	0.22	0.60	-0.05	0.55	--
	County Totals		13	--	2	--	15	--	--	--	--	5
Walworth	56	East Troy	1	0.20	0	0.00	1	0.20	0.55	-0.05	0.50	--
	57	Whitewater	3	0.18	0	0.00	3	0.18	1.50	-0.17	1.33	--
	58	Elkhorn	1	0.13	0	0.00	1	0.13	0.30	-0.08	0.22	--
	59	Corn Lake	0	0.00	0	0.00	0	0.00	-0.17	-0.02	-0.19	--
	59	Genoa City	1	0.65	0	0.00	1	0.65	0.86	-0.01	0.85	--
	59	Lake Geneva	2	0.20	0	0.00	2	0.20	1.08	-0.10	0.98	--
	59	Pell Lake	0	0.00	0	0.00	0	0.00	-0.13	-0.01	-0.14	--
	59	Williams Bay-Fontana-Walworth	1	0.09	4	0.38	5	0.47	0.00	3.93	3.93	--
	60	Darien	0	0.00	0	0.00	0	0.00	-0.18	-0.02	-0.20	--
	60	Delavan	2	0.24	0	0.00	2	0.24	1.25	-0.08	1.17	--
	60	Sharon	0	0.00	0	0.00	0	0.00	-0.24	-0.02	-0.26	1 <sup>j</sup>
	County Totals		11	--	4	--	15	--	--	--	--	1
Region Totals		182	--	21	--	203	--	--	--	--	58	

<sup>a</sup> Minimum standard per capita requirements for baseball diamonds are as follows: public—0.09/1,000 urban residents; nonpublic—0.01/1,000 urban residents; and public and nonpublic combined—0.10/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of baseball diamonds may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of baseball diamonds provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>j</sup> As specified in Chapter XI, at least one baseball diamond should be provided in each urban area having a population of 2,500 or more.

<sup>k</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>l</sup> The Caledonia-West area includes a small area in planning analysis area 46.

<sup>m</sup> The Mt. Pleasant-Sturtevant area includes a small area in planning analysis area 44.

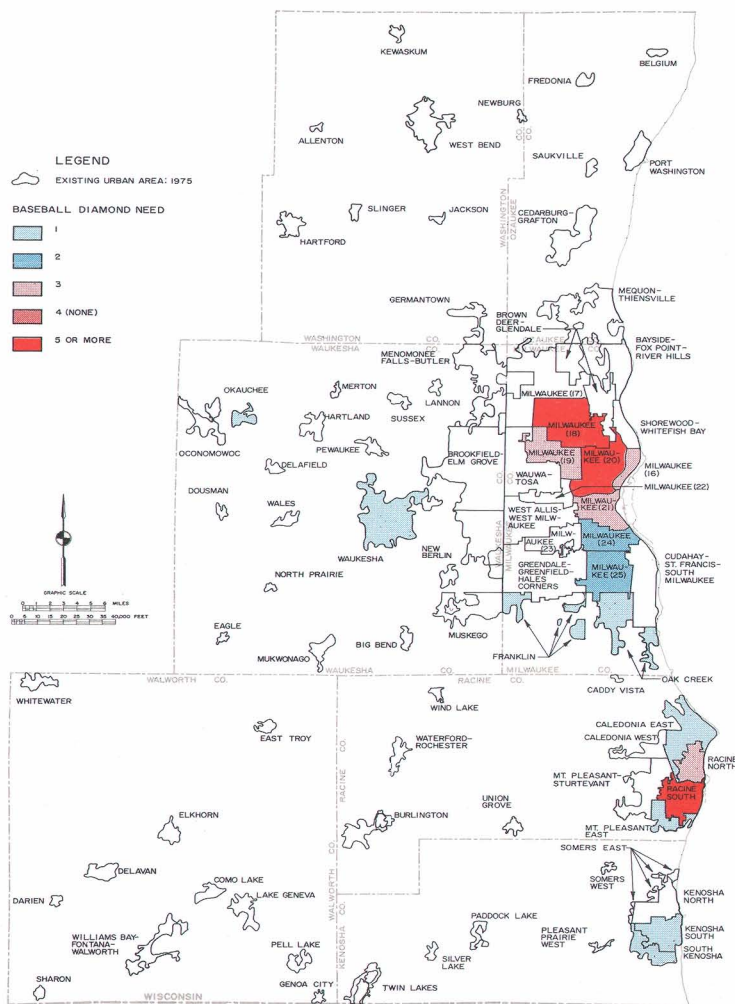
<sup>n</sup> The Pleasant Prairie-Central urban area includes a small area in planning analysis area 51.

Source: SEWRPC.



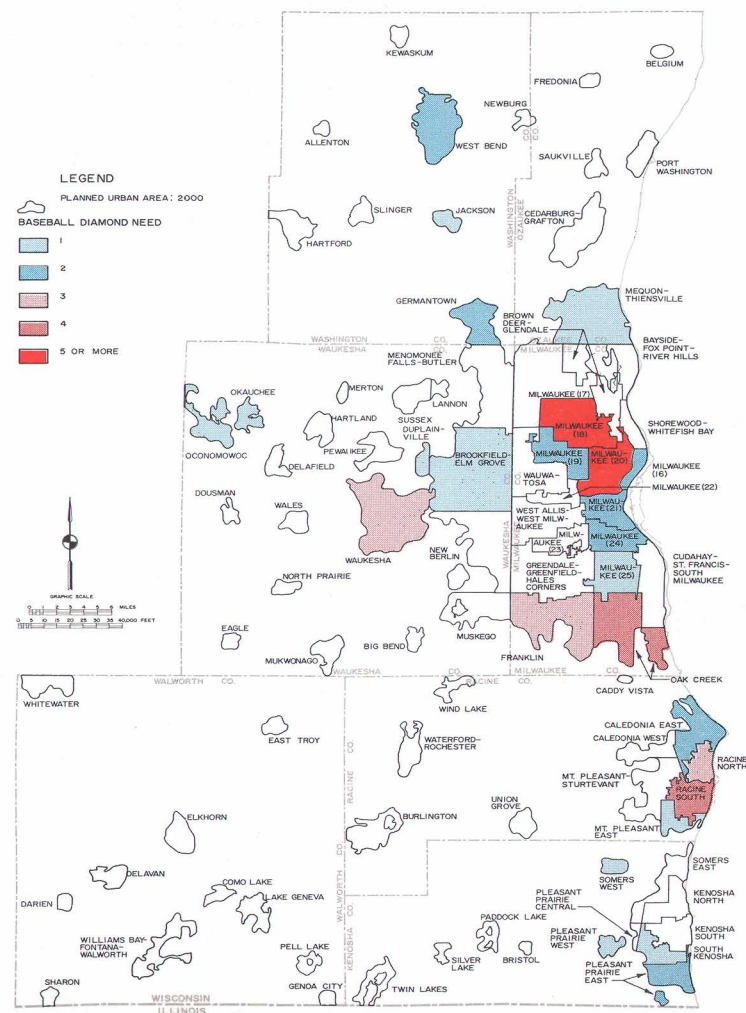
Map 98

### FACILITY REQUIREMENTS FOR BASEBALL DIAMONDS IN URBAN AREAS IN THE REGION: 1975



Map 99

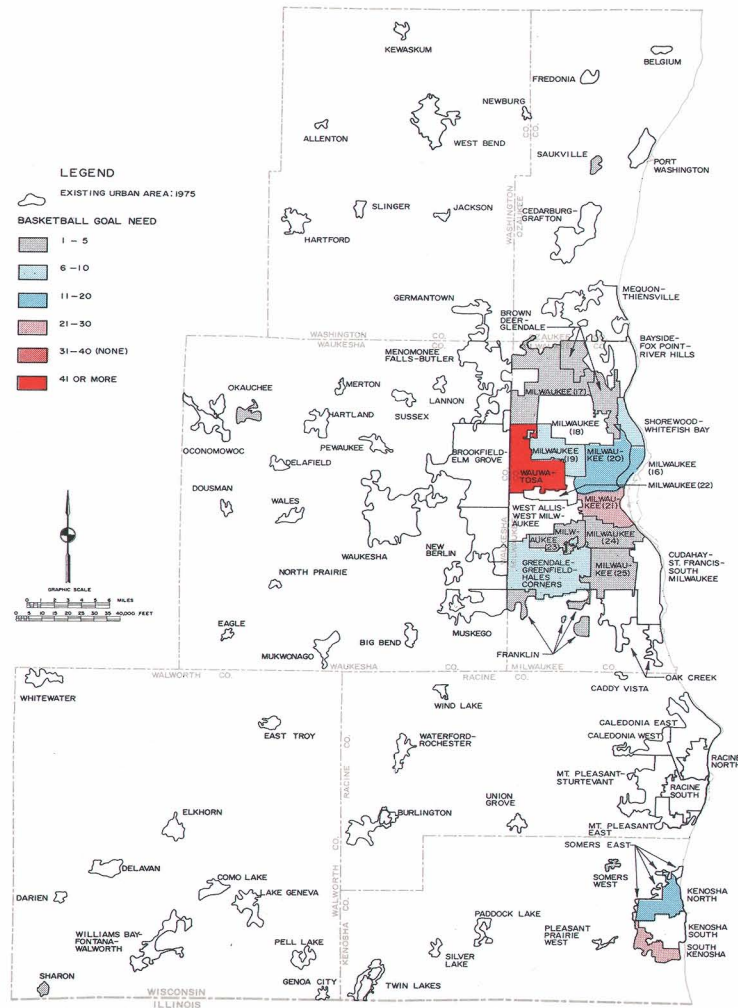
### FACILITY REQUIREMENTS FOR BASEBALL DIAMONDS IN URBAN AREAS IN THE REGION: 2000



The agreed-upon per capita standard for baseball diamonds is 0.10 baseball diamond per thousand urban residents. Application of this standard indicated that a total of 43 additional baseball diamonds was needed in 17 urban areas in the Region in 1975 with the majority of these facilities required in high-density urban areas in Milwaukee, Racine, and Kenosha Counties. By the year 2000 it is anticipated that a total of 58 baseball diamonds would be needed in 27 urban areas, with the additional 15 diamonds above those required in 1975 being in urban areas that are expected to have relatively large population increases between 1975 and 2000. The total number of diamonds needed in urban areas within Milwaukee County remained the same in both 1975 and 2000. The only significant change was an adjustment in spatial distribution to reflect the anticipated decrease in population in the older central city portion of the City of Milwaukee and an anticipated increase in population in the newer urban areas in the northwest and southern portions of

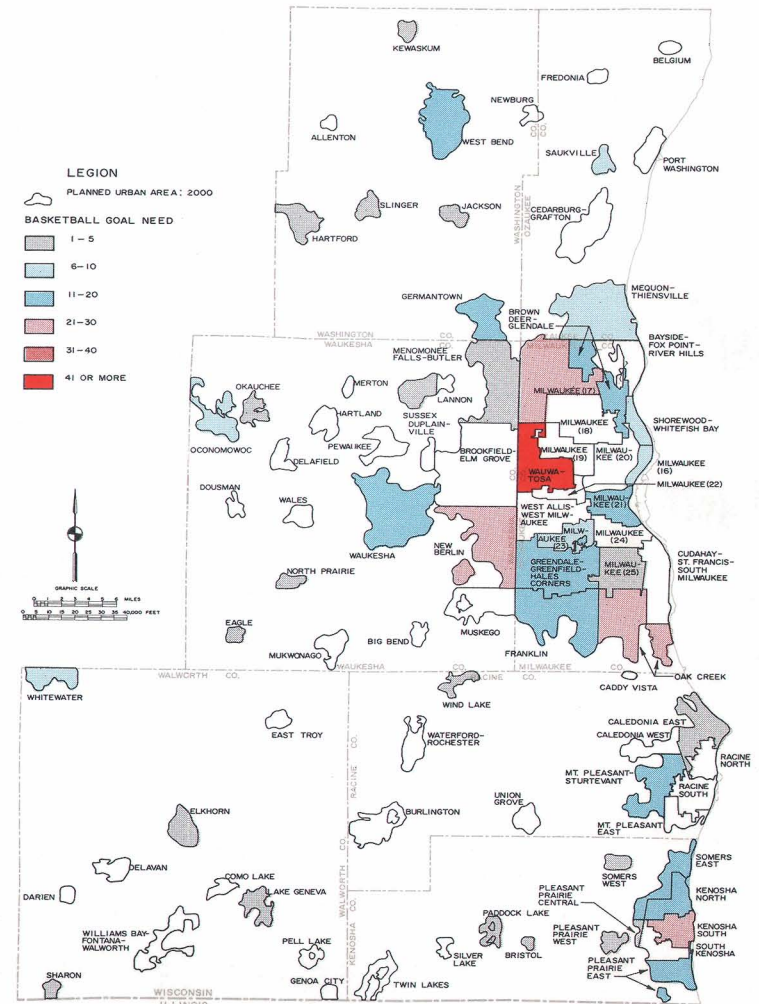
Map 100

### FACILITY REQUIREMENTS FOR BASKETBALL GOALS IN URBAN AREAS IN THE REGION: 1975



Map 101

### FACILITY REQUIREMENTS FOR BASKETBALL GOALS IN URBAN AREAS IN THE REGION: 2000



The agreed-upon per capita standard for basketball goals is 1.13 basketball goals per thousand urban residents. Application of this standard indicates that a total of 179 additional basketball goals was needed in 19 urban areas in the Region in 1975. The majority of these goals were required in the most intensely

Table 114

## FACILITY REQUIREMENTS FOR BASKETBALL GOALS IN URBAN AREAS IN THE REGION: 1975

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (goals) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	2	2.14	0	0.00	2	2.14	1.15	- 0.21	0.94	--
	1	Fredonia	7	4.80	1	0.69	8	5.49	5.67	0.68	6.35	--
	2	Port Washington	12	1.27	3	0.32	15	1.59	3.42	0.92	4.34	--
	3	Saukville	2	0.82	0	0.00	2	0.82	- 0.22	- 0.53	- 0.75	1
	4	Cedarburg-Grafton <sup>f</sup>	38	1.96	7	0.36	45	2.32	20.32	2.71	23.03	--
	5	Mequon-Thiensville	25	1.66	10	0.66	35	2.32	11.31	6.63	17.94	--
	County Totals		86	--	21	--	107	--	--	--	--	1
Washington	6	Kewaskum	3	1.18	2	0.77	5	1.95	0.69	1.44	2.13	--
	7	West Bend	13	0.63	16	0.77	29	1.40	- 5.82	11.45	5.63	--
	7	Newburg <sup>g</sup>	0	0.00	5	7.79	5	7.79	- 0.58	4.86	4.28	--
	8	Allenton	2	2.41	1	1.20	3	3.61	1.24	0.82	2.06	--
	9	Jackson	2	1.01	0	0.00	2	1.01	0.20	- 0.43	- 0.23	--
	10	Hartford	13	1.73	2	0.27	15	2.00	6.16	0.35	6.51	--
	10	Slinger	2	1.49	0	0.00	2	1.49	0.78	- 0.30	0.48	--
	11	Germantown	8	1.79	2	0.45	10	2.24	3.93	1.02	4.95	--
County Totals		43	--	28	--	71	--	--	--	--	--	
Milwaukee	13	Bayside-Fox Point-River Hills	39	2.76	7	0.50	46	3.26	26.15	3.89	30.04	--
	14	Brown Deer-Glendale	20	0.81	3	0.12	23	0.93	- 2.48	- 2.44	- 4.92	5
	15	Shorewood-Whitefish Bay	22	0.69	4	0.12	26	0.81	- 7.20	- 3.06	- 10.27	10
	16	Milwaukee (part)	30	0.70	2	0.05	32	0.75	- 8.89	- 7.40	- 16.29	16
	17	Milwaukee (part) <sup>h</sup>	38	0.78	13	0.27	51	1.05	- 6.24	2.40	- 3.84	4
	18	Milwaukee (part)	115	0.96	34	0.29	149	1.25	5.96	8.34	14.30	--
	19	Milwaukee (part)	63	0.78	22	0.27	85	1.05	- 10.56	4.22	- 6.34	6
	20	Milwaukee (part)	136	0.97	7	0.05	143	1.02	8.40	- 23.81	- 15.41	15
	21	Milwaukee (part)	45	0.68	9	0.13	54	0.81	- 15.37	- 5.59	- 20.96	21
	22	Milwaukee (part)	25	1.26	8	0.40	33	1.66	6.90	3.63	10.53	--
	23	Milwaukee (part)	39	1.00	2	0.05	41	1.05	3.53	- 6.58	- 3.05	3
	24	Milwaukee (part)	58	0.97	8	0.13	66	1.10	3.85	- 5.09	- 1.24	1
	25	Milwaukee (part)	36	1.00	4	0.11	40	1.11	3.32	- 3.90	- 0.58	1
	26	Cudahy-St. Francis-South Milwaukee	39	0.70	32	0.58	71	1.28	- 11.44	19.81	8.37	--
	27	Oak Creek	24	2.05	2	0.17	26	2.22	13.36	- 0.59	12.77	--
	28	Franklin	9	1.01	0	0.00	9	1.01	0.91	- 1.96	- 1.05	1
	29	Greendale-Greenfield-Hales Corners	39	0.69	16	0.28	55	0.97	- 12.58	3.53	- 9.05	9
	30	West Allis-West Milwaukee	78	1.00	26	0.33	104	1.33	6.79	8.78	15.57	--
	31	Wauwatosa	18	0.33	0	0.00	18	0.33	- 31.94	- 12.07	- 44.01	44
	County Totals		873	--	199	--	1,072	--	--	--	--	136
Waukesha	32	Menomonee Falls-Butler	45	1.50	17	0.56	62	2.06	17.73	10.22	27.95	--
	32	Lannon	8	7.01	1	0.88	9	7.89	6.96	0.75	7.71	--
	33	Brookfield-Elm Grove	56	1.30	25	0.58	81	1.88	16.72	15.50	32.22	--
	34	New Berlin	33	1.36	0	0.00	33	1.36	10.99	- 5.32	5.67	--
	35	Muskego	22	2.14	0	0.00	22	2.14	12.64	- 2.26	10.38	--
	36	Sussex	9	2.29	0	0.00	9	2.29	5.42	- 0.86	4.56	--
	36	Pewaukee	13	2.87	4	0.88	17	3.75	8.88	3.00	11.88	--
	37	Merton	4	5.69	0	0.00	4	5.69	3.36	- 0.15	3.21	--
	38	Delafield	4	3.50	0	0.00	4	3.50	2.96	- 0.25	2.71	--
	38	Hartland	8	1.82	2	0.46	10	2.28	4.01	1.04	5.05	--
	39	Oconomowoc	8	0.68	8	0.68	16	1.36	- 2.72	5.41	2.69	--
	39	Okauchee	2	0.76	0	0.00	2	0.76	- 0.39	- 0.58	- 0.97	1
	40	Waukesha	53	1.06	6	0.12	59	1.18	7.37	- 5.03	2.34	--
	41	Dousman <sup>i</sup>	4	4.33	1	1.08	5	5.41	3.17	0.79	3.96	--
	41	Eagle	1	1.17	0	0.00	1	1.17	0.22	- 0.19	0.03	--
	41	North Prairie	1	1.29	0	0.00	1	1.29	0.30	- 0.17	0.13	--
	41	Wales	5	3.79	0	0.00	5	3.79	3.80	- 0.29	3.51	--
	42	Big Bend	4	2.30	3	1.72	7	4.02	2.42	2.62	5.04	--
	42	Mukwonago	10	2.88	2	0.58	12	3.46	6.85	1.24	8.09	--
	County Totals		290	--	69	--	359	--	--	--	--	1
Racine	43	Racine-North	39	1.16	12	0.36	51	1.52	8.51	4.63	13.14	--
	43	Caledonia-East	15	1.05	2	0.14	17	1.19	2.00	- 1.14	0.86	--
	44	Racine-South	62	1.09	15	0.26	77	1.35	10.11	2.46	12.57	--
	44	Mt. Pleasant-East	13	1.42	4	0.43	17	1.85	4.68	1.92	6.60	--
	45	Caddy Vista	4	3.97	0	0.00	4	3.97	3.08	- 0.22	2.86	--
	45	Caledonia-West	15	6.92	0	0.00	15	6.92	13.03	- 0.48	12.55	--
	46	Mt. Pleasant-Sturtevant	9	0.74	8	0.66	17	1.40	- 2.06	5.33	3.27	--
	47	Union Grove	8	2.46	0	0.00	8	2.46	5.04	- 0.72	4.33	--
	48	Wind Lake	2	1.60	0	0.00	2	1.60	0.86	- 0.28	0.58	--
	48	Waterford-Rochester	9	2.31	4	1.03	13	3.34	5.45	3.16	8.61	--
	49	Burlington	7	0.67	14	1.33	21	2.00	- 2.55	11.69	9.14	--
	County Totals		183	--	59	--	242	--	--	--	--	--

Table 114 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (goals) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	15	0.47	7	0.22	22	0.69	- 14.06	- 0.03	- 14.09	14
	51	Kenosha-South	17	0.37	10	0.22	27	0.59	- 24.72	- 0.09	- 24.81	25
	51	South Kenosha	18	2.05	2	0.23	20	2.28	10.02	0.07	10.09	--
	52	Somers-East	6	4.21	2	1.40	8	5.61	4.70	1.69	6.39	--
	52	Somers-West	0	0.00	0	0.00	0	0.00	- 0.62	- 0.15	- 0.77	1
	53	Pleasant Prairie-West	2	1.99	0	0.00	2	1.99	1.09	- 0.22	0.87	--
	55	Paddock Lake	2	0.69	2	0.69	4	1.38	- 0.63	1.36	0.73	--
	55	Silver Lake	2	1.60	1	0.80	3	2.40	0.86	0.73	1.59	--
	55	Twin Lakes	4	1.31	3	0.98	7	2.29	1.22	2.33	3.55	--
		County Totals	66	--	27	--	93	--	--	--	--	40
Walworth	56	East Troy	5	2.29	2	0.91	7	3.20	3.01	1.52	4.53	--
	57	Whitewater	12	1.32	0	0.00	12	1.32	3.75	- 2.00	1.75	--
	58	Elkhorn	6	1.39	0	0.00	6	1.39	2.07	- 0.95	1.12	--
	59	Como Lake	2	1.36	0	0.00	2	1.36	0.66	- 0.32	0.34	--
	59	Genoa City	4	4.30	0	0.00	4	4.30	3.15	- 0.20	2.95	--
	59	Lake Geneva	6	1.12	2	0.37	8	1.49	1.13	0.82	1.95	--
	59	Pell Lake	2	1.45	0	0.00	2	1.45	0.74	- 0.30	0.44	--
	59	Williams Bay-Fontana-Walworth	9	1.76	8	1.57	17	3.33	4.36	6.86	11.22	--
	60	Darien	2	1.99	0	0.00	2	1.99	1.09	- 0.22	0.87	--
	60	Delavan	6	1.05	5	0.87	11	1.92	0.80	3.73	4.53	--
	60	Sharon	1	0.73	0	0.00	1	0.73	- 0.24	- 0.30	- 0.54	1
		County Totals	55	--	17	--	72	--	--	--	--	1
Region Totals			1,596	--	420	--	2,016	--	--	--	179	

<sup>a</sup> Minimum standard per capita requirements for basketball goals are as follows: public—0.91/1,000 urban residents; nonpublic—0.22/1,000 urban residents; and public and nonpublic combined—1.13/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of basketball goals may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of basketball goals provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Dousman urban area includes a small area in planning analysis area 39.

Source: SEWRPC.



Table 115

## FACILITY REQUIREMENTS FOR BASKETBALL GOALS IN URBAN AREAS IN THE REGION: 2000

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (Goals) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	2	1.35	0	0.00	2	1.35	0.65	- 0.32	0.33	--
	1	Fredonia	7	3.31	1	0.47	8	3.78	5.07	0.54	5.61	--
	2	Port Washington	12	0.92	3	0.24	15	1.16	0.19	0.15	0.34	--
	3	Saukville	2	0.30	0	0.00	2	0.30	- 4.06	- 1.47	- 5.53	6
	4	Cedarburg-Grafton <sup>f</sup>	38	1.14	7	0.21	45	1.35	7.66	- 0.33	7.33	--
	5	Mequon-Thiensville	25	0.64	10	0.26	35	0.90	- 10.50	1.56	- 8.94	9
		County Totals	86	--	21	--	107	--	--	--	--	15
Washington	6	Kewaskum	3	0.62	2	0.41	5	1.03	- 1.44	0.93	- 0.51	1
	7	West Bend	15	0.37	16	0.39	31	0.76	- 21.96	7.07	- 14.89	15
	7	Newburg <sup>g</sup>	0	0.00	5	2.21	5	2.21	- 2.06	4.51	2.45	--
	8	Allenton	2	1.02	1	0.51	3	1.53	0.21	0.57	0.78	--
	9	Jackson	2	0.33	0	0.00	2	0.33	- 3.45	- 1.32	- 4.77	5
	10	Hartford	13	0.84	2	0.13	15	0.97	- 1.12	- 1.42	- 2.54	3
	10	Slinger	2	0.46	0	0.00	2	0.46	- 1.97	- 0.96	- 2.93	3
	11	Germantown	8	0.30	2	0.08	10	0.38	- 15.86	- 3.77	- 19.63	20
		County Totals	45	--	28	--	73	--	--	--	--	47
Milwaukee	13	Bayside-Fox Point-River Hills	39	2.64	7	0.47	46	3.11	25.63	3.70	29.33	--
	14	Brown Deer-Glendale	20	0.65	3	0.10	23	0.75	- 7.98	- 3.77	- 11.75	12
	15	Shorewood-Whitefish Bay	22	0.73	4	0.13	26	0.86	- 5.54	- 2.66	- 8.20	8
	16	Milwaukee (part)	30	0.88	2	0.06	32	0.94	- 1.12	- 5.52	- 6.64	7
	17	Milwaukee (part) <sup>h</sup>	38	0.57	13	0.20	51	0.77	- 22.50	- 1.33	- 23.83	24
	18	Milwaukee (part)	119	1.01	34	0.29	153	1.30	11.78	8.25	20.03	--
	19	Milwaukee (part)	63	0.84	22	0.30	85	1.14	- 5.00	5.56	0.56	--
	20	Milwaukee (part)	136	1.08	7	0.05	143	1.13	21.43	- 21.43	0.00	--
	21	Milwaukee (part)	45	0.78	9	0.15	54	0.93	- 7.63	- 3.72	- 11.35	11
	22	Milwaukee (part)	25	1.30	8	0.42	33	1.72	7.56	3.78	11.34	--
	23	Milwaukee (part)	39	0.91	2	0.05	41	0.96	0.31	- 7.35	- 7.04	7
	24	Milwaukee (part)	58	1.04	8	0.15	66	1.19	7.37	- 4.24	3.13	--
	25	Milwaukee (part)	36	0.96	4	0.11	40	1.07	2.04	- 4.21	- 2.17	2
	26	Cudahy-St. Francis-South Milwaukee	39	0.67	32	0.55	71	1.22	- 13.95	19.19	5.24	--
	27	Oak Creek	26	0.60	2	0.04	28	0.64	- 13.54	- 7.56	- 21.10	21
	28	Franklin	16	0.43	6	0.16	22	0.59	- 17.80	- 2.17	- 19.97	20
	29	Greendale-Greenfield-Hales Corners	41	0.65	16	0.26	57	0.91	- 15.87	2.25	- 13.62	14
	30	West Allis-West Milwaukee	78	1.07	26	0.36	104	1.43	11.97	10.03	22.00	--
31	Wauwatosa	18	0.34	0	0.00	18	0.34	- 30.28	- 11.67	- 41.95	42	
	County Totals	888	--	205	--	1,093	--	--	--	--	168	
Waukesha	32	Menomonee Falls-Butler	45	0.77	18	0.31	63	1.08	- 8.20	5.27	- 2.93	3
	32	Lannon	11	3.51	3	0.96	14	4.47	8.15	2.31	10.46	--
	33	Brookfield-Elm Grove <sup>i</sup>	56	0.98	25	0.44	81	1.42	3.99	12.53	16.52	--
	34	New Berlin	35	0.68	0	0.00	35	0.68	- 12.06	- 11.38	- 23.44	23
	35	Muskego	22	1.22	0	0.00	22	1.22	5.56	- 3.97	1.59	--
	36	Duplainville	0	0.00	0	0.00	0	0.00	- 3.35	- 0.81	- 4.16	--
	36	Sussex	9	0.97	0	0.00	9	0.97	0.57	- 2.04	- 1.47	1
	36	Pewaukee	13	1.06	4	0.33	17	1.39	1.90	1.32	3.22	--
	37	Merton	4	6.43	0	0.00	4	6.43	3.43	- 0.13	3.30	--
	38	Delafield	4	0.64	6	0.97	10	1.61	- 1.65	4.63	2.98	--
	38	Hartland	8	1.18	2	0.29	10	1.47	1.83	0.51	2.34	--
	39	Oconomowoc	8	0.41	8	0.41	16	0.82	- 9.78	3.70	- 6.08	6
	39	Okauchee	2	0.59	0	0.00	2	0.59	- 1.07	- 0.74	- 1.81	2
	40	Waukesha	57	0.78	6	0.08	63	0.86	- 9.76	- 10.14	- 19.90	20
	41	Dousman <sup>j</sup>	4	2.13	1	0.53	5	2.66	2.29	0.58	2.87	--
	41	Eagle	1	0.65	0	0.00	1	0.65	- 0.40	- 0.34	- 0.74	1
	41	North Prairie	1	0.64	0	0.00	1	0.64	- 0.43	- 0.34	- 0.77	1
	41	Wales	5	2.05	0	0.00	5	2.05	2.78	- 0.53	2.25	--
	42	Big Bend	4	2.54	3	1.90	7	4.44	2.57	2.65	5.22	--
	42	Mukwonago	10	1.16	2	0.23	12	1.39	2.17	0.10	2.27	--
		County Totals	299	--	78	--	377	--	--	--	--	57
Racine	43	Racine-North	39	1.12	12	0.34	51	1.46	7.17	4.30	11.47	--
	43	Caledonia-East	15	0.96	2	0.13	17	1.09	0.78	- 1.40	- 0.62	1
	44	Racine-South	62	1.14	15	0.28	77	1.42	12.54	3.04	15.58	--
	44	Mt. Pleasant-East	13	1.05	4	0.32	17	1.37	1.74	1.24	2.98	--
	45	Caddy Vista	4	3.00	0	0.00	4	3.00	2.78	- 0.29	2.49	--
	45	Caledonia-West <sup>k</sup>	15	1.93	0	0.00	15	1.93	7.92	- 1.71	6.21	--
	46	Mt. Pleasant-Sturtevant <sup>l</sup>	9	0.37	8	0.32	17	0.69	- 13.29	2.46	- 10.83	11
	47	Union Grove	8	1.28	0	0.00	8	1.28	2.29	- 1.38	0.91	--
	48	Wind Lake	2	0.39	0	0.00	2	0.39	- 2.67	- 1.13	- 3.80	4
	48	Waterford-Rochester	9	1.23	4	0.54	13	1.77	2.35	2.35	4.70	--
	49	Burlington	7	0.43	14	0.85	21	1.28	- 7.91	10.40	2.49	--
		County Totals	183	--	59	--	242	--	--	--	--	16

Table 115 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (Goals) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	15	0.45	7	0.21	22	0.66	- 15.55	- 0.39	- 15.94	16
	51	Kenosha-South	17	0.38	10	0.23	27	0.61	- 23.51	0.21	- 23.30	23
	51	South Kenosha	18	1.37	2	0.15	20	1.52	6.06	- 0.89	5.17	--
	52	Somers-East	6	0.32	2	0.11	8	0.43	- 10.96	- 2.04	- 13.00	13
	52	Somers-West	0	0.00	0	0.00	0	0.00	- 4.23	- 1.03	- 5.26	5
	53	Pleasant Prairie-West	2	0.68	0	0.00	2	0.68	- 0.67	- 0.65	- 1.32	1
	53	Pleasant Prairie-East	1	0.06	0	0.00	1	0.06	- 13.47	- 3.49	- 16.96	17
	53	Pleasant Prairie-Central <sup>m</sup>	1	0.47	0	0.00	1	0.47	- 0.92	- 0.46	- 1.38	1
	54	Bristol	0	0.00	0	0.00	0	0.00	- 1.35	- 0.33	- 1.68	2
	55	Paddock Lake	2	0.42	2	0.42	4	0.84	- 2.33	0.95	- 1.38	1
	55	Silver Lake	2	0.87	1	0.43	3	1.30	- 0.10	0.50	0.40	--
	55	Twin Lakes	4	0.89	3	0.67	7	1.56	- 0.07	2.01	1.94	--
County Totals			68	--	27	--	95	--	--	--	79	
Walworth	56	East Troy	5	1.00	2	0.40	7	1.40	0.46	0.91	1.37	--
	57	Whitewater	12	0.72	0	0.00	12	0.72	- 3.16	- 3.67	- 6.83	7
	58	Elkhorn	6	0.77	0	0.00	6	0.77	- 1.10	- 1.71	- 2.81	3
	59	Como Lake	2	1.06	0	0.00	2	1.06	0.28	- 0.41	- 0.13	--
	59	Genoa City	4	2.60	0	0.00	4	2.60	2.60	- 0.34	2.26	--
	59	Lake Geneva	6	0.59	2	0.20	8	0.79	- 3.27	- 0.24	- 3.51	4
	59	Pell Lake	2	1.38	0	0.00	2	1.38	0.69	- 0.32	0.37	--
	59	Williams Bay-Fontana-Walworth	9	0.85	8	0.75	17	1.60	- 0.64	5.63	4.99	--
	60	Darien	2	1.00	0	0.00	2	1.00	0.18	- 0.44	- 0.26	--
	60	Delavan	6	0.72	5	0.60	11	1.32	- 1.55	3.17	1.62	--
	60	Sharon	1	0.38	0	0.00	1	0.38	- 1.40	- 0.58	- 1.98	2
	County Totals			55	--	17	--	72	--	--	--	16
Region Totals			1,624	--	435	--	2,059	--	--	--	398	

<sup>a</sup> Minimum standard per capita requirements for basketball goals are as follows: public--0.91/1,000 urban residents; nonpublic--0.22/1,000 urban residents; and public and nonpublic combined--1.13/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 110).

<sup>c</sup> Quantity of basketball goals may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of basketball goals provided by the population of the appropriate urban area in thousands of persons (see Table 110).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>j</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>k</sup> The Caledonia-West area includes a small area in planning analysis area 46.

<sup>l</sup> The Mt. Pleasant-Sturtevant area includes a small area in planning analysis area 44.

<sup>m</sup> The Pleasant Prairie-Central urban area includes a small area in planning analysis area 51.

Source: SEWRPC.

Table 116

## FACILITY REQUIREMENTS FOR ICE SKATING RINKS IN URBAN AREAS IN THE REGION: 1975

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (rinks) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	0	0.00	0	0.00	0	0.00	-0.14	0.00	-0.14	1 <sup>f</sup>
	1	Fredonia	0	0.00	0	0.00	0	0.00	-0.22	0.00	-0.22	1 <sup>f</sup>
	2	Port Washington	3	0.32	0	0.00	3	0.32	1.58	0.00	1.58	—
	3	Saukville	0	0.00	0	0.00	0	0.00	-0.37	0.00	-0.37	1 <sup>f</sup>
	4	Cedarburg-Grafton <sup>g</sup>	6	0.31	0	0.00	6	0.31	3.10	0.00	3.10	--
	5	Mequon-Thiensville	2	0.13	0	0.00	2	0.13	-0.30	0.00	-0.30	--
	County Totals		11	--	0	--	11	--	--	--	--	3
Washington	6	Kewaskum	1	0.39	0	0.00	1	0.39	0.62	0.00	0.62	--
	7	West Bend	4	0.19	0	0.00	4	0.19	0.90	0.00	0.90	--
	7	Newburg <sup>h</sup>	0	0.00	0	0.00	0	0.00	-0.10	0.00	-0.10	1 <sup>f</sup>
	8	Allenton	0	0.00	0	0.00	0	0.00	-0.12	0.00	-0.12	1 <sup>f</sup>
	9	Jackson	1	0.51	0	0.00	1	0.51	0.70	0.00	0.70	--
	10	Hartford	2	0.27	0	0.00	2	0.27	0.87	0.00	0.87	--
	10	Slinger	0	0.00	0	0.00	0	0.00	-0.20	0.00	-0.20	1 <sup>f</sup>
	11	Germantown	0	0.00	1	0.22	1	0.22	-0.67	1.00	0.33	--
County Totals		8	--	1	--	9	--	--	--	--	3	
Milwaukee	13	Bayside-Fox Point-River Hills	3	0.21	0	0.00	3	0.21	0.88	0.00	0.88	--
	14	Brown Deer-Glendale	6	0.24	0	0.00	6	0.24	2.30	0.00	2.30	--
	15	Shorewood-Whitefish Bay	3	0.09	1	0.03	4	0.12	-1.81	1.01	-0.80	1
	16	Milwaukee (part)	5	0.12	0	0.00	5	0.12	-1.41	0.00	-1.41	1
	17	Milwaukee (part) <sup>i</sup>	5	0.10	1	0.02	6	0.12	-2.40	0.96	-1.44	1
	18	Milwaukee (part)	18	0.15	0	0.00	18	0.15	0.00	0.00	0.00	--
	19	Milwaukee (part)	10	0.12	0	0.00	10	0.12	-2.13	0.00	-2.13	2
	20	Milwaukee (part)	12	0.09	0	0.00	12	0.09	-8.40	0.00	-8.40	8
	21	Milwaukee (part)	7	0.11	0	0.00	7	0.11	-2.95	0.00	-2.95	3
	22	Milwaukee (part)	7	0.35	0	0.00	7	0.35	4.02	0.00	4.02	--
	23	Milwaukee (part)	9	0.23	0	0.00	9	0.23	3.15	0.00	3.15	--
	24	Milwaukee (part)	12	0.20	0	0.00	12	0.20	3.08	0.00	3.08	--
	25	Milwaukee (part)	9	0.25	0	0.00	9	0.25	3.61	0.00	3.61	--
	26	Cudahy-St. Francis-South Milwaukee	4	0.07	0	0.00	4	0.07	-4.31	0.00	-4.31	4
	27	Oak Creek	4	0.34	0	0.00	4	0.34	2.24	0.00	2.24	--
	28	Franklin	2	0.22	0	0.00	2	0.22	0.67	0.00	0.67	--
	28	Greendale-Greenfield-Hales Corners	3	0.05	0	0.00	3	0.05	-5.50	0.00	-5.50	6
	30	West Allis-West Milwaukee	13	0.17	0	0.00	13	0.17	1.26	0.00	1.26	--
	31	Wauwatosa	5	0.09	0	0.00	5	0.09	-3.23	0.00	-3.23	3
	County Totals		137	--	2	--	139	--	--	--	--	29
Waukesha	32	Menomonee Falls-Butler	3	0.10	0	0.00	3	0.10	-1.50	0.00	-1.50	2 <sup>f</sup>
	32	Lannon	0	0.00	0	0.00	0	0.00	-0.17	0.00	-0.17	1 <sup>f</sup>
	33	Brookfield-Elm Grove	8	0.19	1	0.02	9	0.21	1.52	1.01	2.53	--
	34	New Berlin	3	0.12	0	0.00	3	0.12	-0.63	0.00	-0.63	1
	35	Muskego	1	0.10	0	0.00	1	0.10	-0.54	0.00	-0.54	1
	36	Sussex	1	0.25	0	0.00	1	0.25	0.41	0.00	0.41	--
	36	Pewaukee	0	0.00	0	0.00	0	0.00	-0.68	0.00	-0.68	1
	37	Merton	2	2.85	0	0.00	2	2.85	1.89	0.00	1.89	--
	38	Delafield	0	0.00	0	0.00	0	0.00	-0.17	0.00	-0.17	1
	38	Hartland	1	0.23	0	0.00	1	0.23	0.34	0.00	0.34	--
	39	Oconomowoc	6	0.51	0	0.00	6	0.51	4.23	0.00	4.23	--
	39	Okauchee	0	0.00	0	0.00	0	0.00	-0.39	0.00	-0.39	1 <sup>f</sup>
	40	Waukesha	4	0.08	0	0.00	4	0.08	-3.52	0.00	-3.52	4
	41	Dousman <sup>j</sup>	0	0.00	0	0.00	0	0.00	-0.14	0.00	-0.14	1 <sup>f</sup>
	41	Eagle	1	1.17	0	0.00	1	1.17	0.87	0.00	0.87	--
	41	North Prairie	0	0.00	0	0.00	0	0.00	-0.12	0.00	-0.12	--
	41	Wales	0	0.00	0	0.00	0	0.00	-0.20	0.00	-0.20	1 <sup>f</sup>
	42	Big Bend	0	0.00	1	0.57	1	0.57	-0.26	1.00	0.74	--
	42	Mukwonago	1	0.29	0	0.00	1	0.29	0.48	0.00	0.48	--
	County Totals		31	--	2	--	33	--	--	--	--	14
Racine	43	Racine-North	3	0.09	0	0.00	3	0.09	-2.03	0.00	-2.03	2
	43	Caledonia-East	3	0.21	1	0.07	4	0.28	0.86	1.00	1.86	--
	44	Racine-South	8	0.14	0	0.00	8	0.14	-0.55	0.00	-0.55	1
	44	Mt. Pleasant-East	4	0.44	0	0.00	4	0.44	2.66	0.00	2.66	--
	45	Caddy Vista	0	0.00	0	0.00	0	0.00	-0.15	0.00	-0.15	1 <sup>f</sup>
	45	Caledonia	1	0.46	0	0.00	1	0.46	0.67	0.00	0.67	--
	46	Mt. Pleasant-Sturtevant	2	0.16	0	0.00	2	0.16	0.12	0.00	0.12	--
	47	Union Grove	2	0.62	0	0.00	2	0.62	1.51	0.00	1.51	--
	48	Wind Lake	0	0.00	0	0.00	0	0.00	-0.19	0.00	-0.19	1 <sup>f</sup>
	48	Waterford-Rochester	0	0.00	1	0.26	1	0.26	-0.58	1.01	0.43	--
	49	Burlington	4	0.38	4	0.38	8	0.76	2.43	4.00	6.43	--
	County Totals		27	--	6	--	33	--	--	--	--	5

Table 116 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (rinks) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	4	0.13	0	0.00	4	0.13	- 0.79	0.00	- 0.79	1
	51	Kenosha-South	8	0.17	0	0.00	8	0.17	1.12	0.00	1.12	--
	51	South Kenosha	0	0.00	1	0.11	1	0.11	- 1.32	1.00	- 0.32	--
	52	Somers-East	0	0.00	0	0.00	0	0.00	- 0.21	0.00	- 0.21	1 <sup>f</sup>
	52	Somers-West	0	0.00	0	0.00	0	0.00	- 0.10	0.00	- 0.10	1 <sup>f</sup>
	53	Pleasant Prairie-West	1	1.00	0	0.00	1	1.00	0.85	0.00	0.85	--
	55	Paddock Lake	0	0.00	1	0.35	1	0.35	- 0.43	1.00	0.57	--
	55	Silver Lake	0	0.00	0	0.00	0	0.00	- 0.19	0.00	- 0.19	1 <sup>f</sup>
	55	Twin Lakes	1	0.33	2	0.65	3	0.98	0.54	2.00	2.54	--
		County Totals	14	--	4	--	18	--	--	--	--	4
Walworth	56	East Troy	0	0.00	0	0.00	0	0.00	- 0.33	0.00	- 0.33	1 <sup>f</sup>
	57	Whitewater	3	0.33	0	0.00	3	0.33	1.64	0.00	1.64	--
	58	Elkhorn	1	0.23	0	0.00	1	0.23	0.35	0.00	0.35	--
	59	Como Lake	0	0.00	0	0.00	0	0.00	- 0.22	0.00	- 0.22	1 <sup>f</sup>
	59	Genoa City	0	0.00	0	0.00	0	0.00	- 0.14	0.00	- 0.14	1 <sup>f</sup>
	59	Lake Geneva	0	0.00	1	0.19	1	0.19	- 0.80	1.00	0.20	--
	59	Pell Lake	0	0.00	0	0.00	0	0.00	- 0.21	0.00	- 0.21	1 <sup>f</sup>
	59	Williams Bay-Fontana-Walworth	0	0.00	2	0.39	2	0.39	- 0.77	1.99	1.22	--
	60	Darien	0	0.00	0	0.00	0	0.00	- 0.15	0.00	- 0.15	1 <sup>f</sup>
	60	Delavan	2	0.35	0	0.00	2	0.35	1.14	0.00	1.14	--
	60	Sharon	0	0.00	0	0.00	0	0.00	- 0.20	0.00	- 0.20	1 <sup>f</sup>
	County Totals	6	--	3	--	9	--	--	--	--	6	
Region Totals			234	--	18	--	252	--	--	--	64	

<sup>a</sup> Minimum standard per capita requirements for ice skating rinks are as follows: public--0.15/1,000 urban residents and public and nonpublic combined--0.15/1,000 urban residents. The nonpublic sector was omitted because it is not anticipated that this sector will provide ice skating rinks.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of ice skating rinks may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of ice skating rinks provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> As specified in Chapter XI, at least one ice skating rink should be provided in each urban area.

<sup>g</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>h</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>i</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>j</sup> The Dousman urban area includes a small area in planning analysis area 39.

Source: SEWRPC.



Table 117

## FACILITY REQUIREMENTS FOR ICE SKATING RINKS IN URBAN AREAS IN THE REGION: 2000

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (rinks) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	0	0.00	0	0.00	0	0.00	-0.22	0.00	-0.22	1 <sup>f</sup>
	1	Fredonia	0	0.00	0	0.00	0	0.00	-0.32	0.00	-0.32	1 <sup>f</sup>
	2	Port Washington	3	0.23	0	0.00	3	0.23	1.05	0.00	1.05	--
	3	Saukville	0	0.00	0	0.00	0	0.00	-1.00	0.00	-1.00	1 <sup>f</sup>
	4	Cedarburg-Grafton <sup>g</sup>	6	0.18	0	0.00	6	0.18	1.00	0.00	1.00	--
	5	Mequon-Thiensville	2	0.05	0	0.00	2	0.05	-3.89	0.00	-3.89	4
		County Totals	11	--	0	--	11	--	--	--	--	7
Washington	6	Kewaskum	1	0.21	0	0.00	1	0.21	0.27	0.00	0.27	--
	7	West Bend	5	0.12	1	0.03	6	0.15	-1.09	1.00	-0.09	--
	7	Newburg <sup>h</sup>	0	0.00	0	0.00	0	0.00	-0.34	0.00	-0.34	1 <sup>f</sup>
	8	Allenton	0	0.00	0	0.00	0	0.00	-0.29	0.00	-0.29	1 <sup>f</sup>
	9	Jackson	1	0.17	0	0.00	1	0.17	0.10	0.00	0.10	--
	10	Hartford	2	0.13	0	0.00	2	0.13	-0.33	0.00	-0.33	--
	10	Slinger	0	0.00	0	0.00	0	0.00	-0.65	0.00	-0.65	1
	11	Germantown	0	0.00	1	0.04	1	0.04	-3.93	1.05	-2.88	3
	County Totals	9	--	2	--	11	--	--	--	--	6	
Milwaukee	13	Bayside-Fox Point-River Hills	3	0.45	0	0.00	3	0.45	0.78	0.00	0.78	--
	14	Brown Deer-Glendale	6	0.20	0	0.00	6	0.20	1.39	0.00	1.39	--
	15	Shorewood-Whitefish Bay	3	0.10	1	0.03	4	0.13	-1.54	1.00	-0.54	1
	16	Milwaukee (part)	5	0.15	0	0.00	5	0.15	-0.13	0.00	-0.13	--
	17	Milwaukee (part) <sup>i</sup>	6	0.09	1	0.02	7	0.11	-3.97	1.32	-2.65	3
	18	Milwaukee (part)	18	0.15	0	0.00	18	0.15	0.00	0.00	0.00	--
	19	Milwaukee (part)	10	0.13	0	0.00	10	0.13	-1.21	0.00	-1.21	1
	20	Milwaukee (part)	12	0.10	0	0.00	12	0.10	-6.30	0.00	-6.30	6
	21	Milwaukee (part)	7	0.12	0	0.00	7	0.12	-1.68	0.00	-1.68	2
	22	Milwaukee (part)	7	0.37	0	0.00	7	0.37	4.12	0.00	4.12	--
	23	Milwaukee (part)	9	0.21	0	0.00	9	0.21	2.62	0.00	2.62	--
	24	Milwaukee (part)	12	0.22	0	0.00	12	0.22	3.66	0.00	3.66	--
	25	Milwaukee (part)	10	0.27	0	0.00	10	0.27	4.40	0.00	4.40	--
	26	Cudahy-St. Francis-South Milwaukee	4	0.07	0	0.00	4	0.07	-4.73	0.00	-4.73	5
	27	Oak Creek	4	0.09	0	0.00	4	0.09	-2.51	0.00	-2.51	3
	28	Franklin	2	0.05	0	0.00	2	0.05	-3.57	0.00	-3.57	4
	29	Greendale-Greenfield-Hales Corners	3	0.05	0	0.00	3	0.05	-6.37	0.00	-6.37	6
30	West Allis-West Milwaukee	14	0.19	0	0.00	14	0.19	3.11	0.00	3.11	--	
31	Wauwatosa	5	0.09	0	0.00	5	0.09	-2.96	0.00	-2.96	3	
	County Totals	140	--	2	--	142	--	--	--	--	34	
Waukesha	32	Menomonee Falls-Butler	4	0.07	0	0.00	4	0.07	-4.69	0.00	-4.69	5 <sup>f</sup>
	32	Lannon	0	0.00	0	0.00	0	0.00	-0.47	0.00	-0.47	1 <sup>f</sup>
	33	Brookfield-Elm Grove <sup>j</sup>	9	0.16	1	0.02	10	0.18	0.57	1.14	1.71	--
	34	New Berlin	4	0.08	0	0.00	4	0.08	-3.76	0.00	-3.76	4
	35	Muskego	1	0.06	0	0.00	1	0.06	-1.71	0.00	-1.71	2
	36	Duplainville	0	0.00	0	0.00	0	0.00	-0.55	0.00	-0.55	1
	36	Sussex	1	0.11	0	0.00	1	0.11	-0.39	0.00	-0.39	--
	36	Pewaukee	0	0.00	0	0.00	0	0.00	-1.83	0.00	-1.83	2
	37	Merton	2	3.22	0	0.00	2	3.22	1.91	0.00	1.91	--
	38	Delafield	0	0.00	0	0.00	0	0.00	-0.93	0.00	-0.93	1
	38	Hartland	1	0.15	0	0.00	1	0.15	-0.02	0.00	-0.02	--
	39	Oconomowoc	10	0.51	0	0.00	10	0.51	7.07	0.00	7.07	--
	39	Okauchee	0	0.00	0	0.00	0	0.00	-0.51	0.00	-0.51	1
	40	Waukesha	4	0.05	0	0.00	4	0.05	-7.01	0.00	-7.01	7
	41	Dousman <sup>k</sup>	0	0.00	0	0.00	0	0.00	-0.28	0.00	-0.28	1 <sup>f</sup>
	41	Eagle	1	0.65	0	0.00	1	0.65	0.77	0.00	0.77	--
	41	North Prairie	0	0.00	0	0.00	0	0.00	-0.24	0.00	-0.24	1 <sup>f</sup>
	41	Wales	0	0.00	0	0.00	0	0.00	-0.37	0.00	-0.37	1 <sup>f</sup>
	42	Big Bend	0	0.00	1	0.63	1	0.63	-0.24	1.00	0.76	--
	42	Mukwonago	1	0.12	0	0.00	1	0.12	-0.29	0.00	-0.29	--
	County Totals	38	--	2	--	40	--	--	--	--	27	
Racine	43	Racine-North	4	0.11	0	0.00	4	0.11	-1.25	0.00	-1.25	1
	43	Caledonia-East	3	0.19	1	0.07	4	0.26	0.62	1.09	1.71	--
	44	Racine-South	8	0.15	0	0.00	8	0.15	-0.15	0.00	-0.15	--
	44	Mt. Pleasant-East	4	0.32	0	0.00	4	0.32	2.11	0.00	2.11	--
	45	Caddy Vista	0	0.00	0	0.00	0	0.00	-0.20	0.00	-0.20	1 <sup>f</sup>
	45	Caledonia-West <sup>l</sup>	1	0.13	0	0.00	1	0.13	-0.16	0.00	-0.16	--
	46	Mt. Pleasant-Sturtevant <sup>m</sup>	2	0.08	0	0.00	2	0.08	-1.72	0.00	-1.72	2
	47	Union Grove	2	0.32	0	0.00	2	0.32	1.06	0.00	1.06	--
	48	Wind Lake	0	0.00	0	0.00	0	0.00	-0.77	0.00	-0.77	1
	48	Waterford-Rochester	0	0.00	1	0.14	1	0.14	-1.10	1.03	-0.07	--
	49	Burlington	4	0.24	4	0.24	8	0.48	1.47	3.93	5.40	--
		County Totals	28	--	6	--	34	--	--	--	--	5

Table 117 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (rinks) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	4	0.12	0	0.00	4	0.12	-1.04	0.00	-1.04	1
	51	Kenosha-South	8	0.18	0	0.00	8	0.18	1.32	0.00	1.32	--
	51	South Kenosha	0	0.00	1	0.08	1	0.08	-1.97	1.00	-0.97	1
	52	Somers-East	0	0.00	0	0.00	0	0.00	-2.79	0.00	-2.79	3
	52	Somers-West	1	0.22	0	0.00	1	0.22	0.30	0.00	0.30	--
	53	Pleasant Prairie-West	1	0.34	0	0.00	1	0.34	0.56	0.00	0.56	--
	53	Pleasant Prairie-East	0	0.00	0	0.00	0	0.00	-2.38	0.00	-2.38	2
	53	Pleasant Prairie-Central <sup>n</sup>	0	0.00	0	0.00	0	0.00	-0.32	0.00	-0.32	1 <sup>f</sup>
	54	Bristol	0	0.00	0	0.00	0	0.00	-0.22	0.00	-0.22	1 <sup>f</sup>
	55	Paddock Lake	0	0.00	1	0.21	1	0.21	-0.71	1.00	0.29	--
	55	Silver Lake	0	0.00	0	0.00	0	0.00	-0.35	0.00	-0.35	1 <sup>f</sup>
	55	Twin Lakes	1	0.22	2	0.45	3	0.67	0.33	2.00	2.33	--
		County Totals	15	--	4	--	19	--	--	--	--	10
Walworth	56	East Troy	0	0.00	0	0.00	0	0.00	-0.75	0.00	-0.75	1
	57	Whitewater	3	0.18	0	0.00	3	0.18	0.50	0.00	0.50	--
	58	Elkhorn	1	0.13	0	0.00	1	0.13	-0.16	0.00	-0.16	--
	59	Como Lake	0	0.00	0	0.00	0	0.00	-0.28	0.00	-0.28	1 <sup>f</sup>
	59	Genoa City	0	0.00	0	0.00	0	0.00	-0.23	0.00	-0.23	1 <sup>f</sup>
	59	Lake Geneva	0	0.00	1	0.10	1	0.10	-1.53	1.00	-0.53	1 <sup>f</sup>
	59	Pell Lake	0	0.00	0	0.00	0	0.00	-0.22	0.00	-0.22	1 <sup>f</sup>
	59	Williams Bay-Fontana-Walworth	0	0.00	2	0.19	2	0.19	-1.59	2.01	0.42	--
	60	Darien	0	0.00	0	0.00	0	0.00	-0.30	0.00	-0.30	1 <sup>f</sup>
	60	Delavan	2	0.24	0	0.00	2	0.24	0.75	0.00	0.75	--
	60	Sharon	0	0.00	0	0.00	0	0.00	-0.40	0.00	-0.40	1 <sup>f</sup>
		County Totals	6	--	3	--	9	--	--	--	--	7
Region Totals			247	--	19	--	266	--	--	--	96	

<sup>a</sup> Minimum standard per capita requirements for ice skating rinks are as follows: public—0.15/1,000 urban residents and public and nonpublic combined—0.15/1,000 urban residents. The nonpublic sector was omitted because it is not anticipated that this sector will provide ice skating rinks.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of ice skating rinks may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of ice skating rinks provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> As specified in Chapter XI, at least one ice skating rink should be provided in each urban area having a population of 2,500 or more.

<sup>g</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>h</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>i</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>j</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>k</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>l</sup> The Caledonia-West area includes a small area in planning analysis area 46.

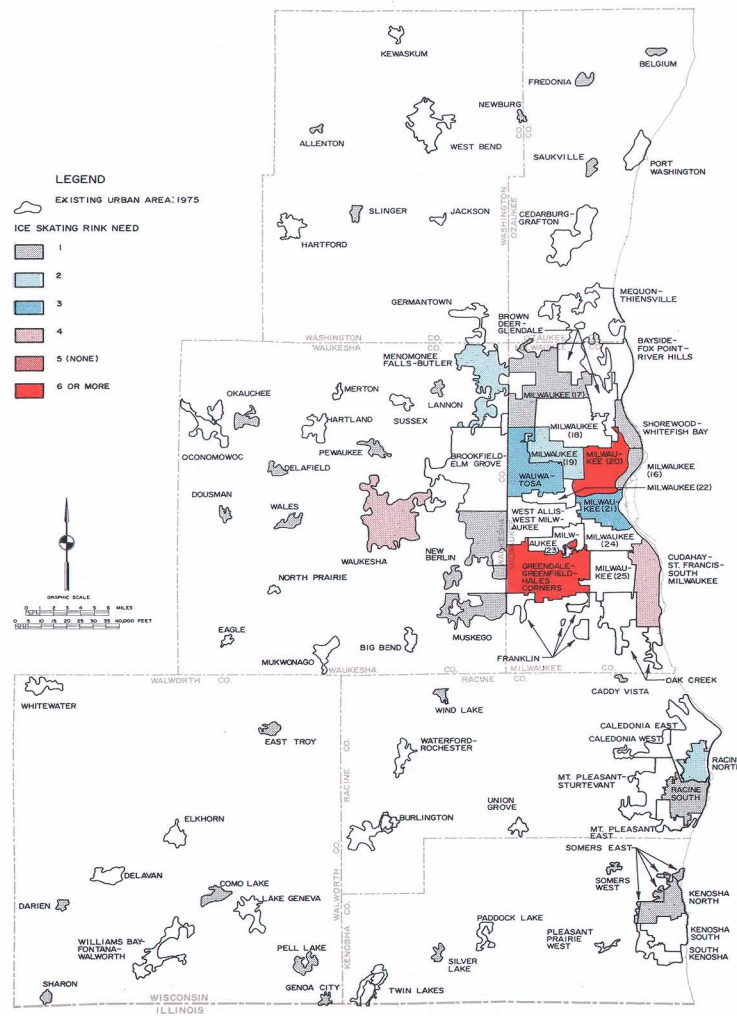
<sup>m</sup> The Mt. Pleasant-Sturtevant area includes a small area in planning analysis area 44.

<sup>n</sup> The Pleasant Prairie-Central urban area includes a small area in planning analysis area 51.

Source: SEWRPC.

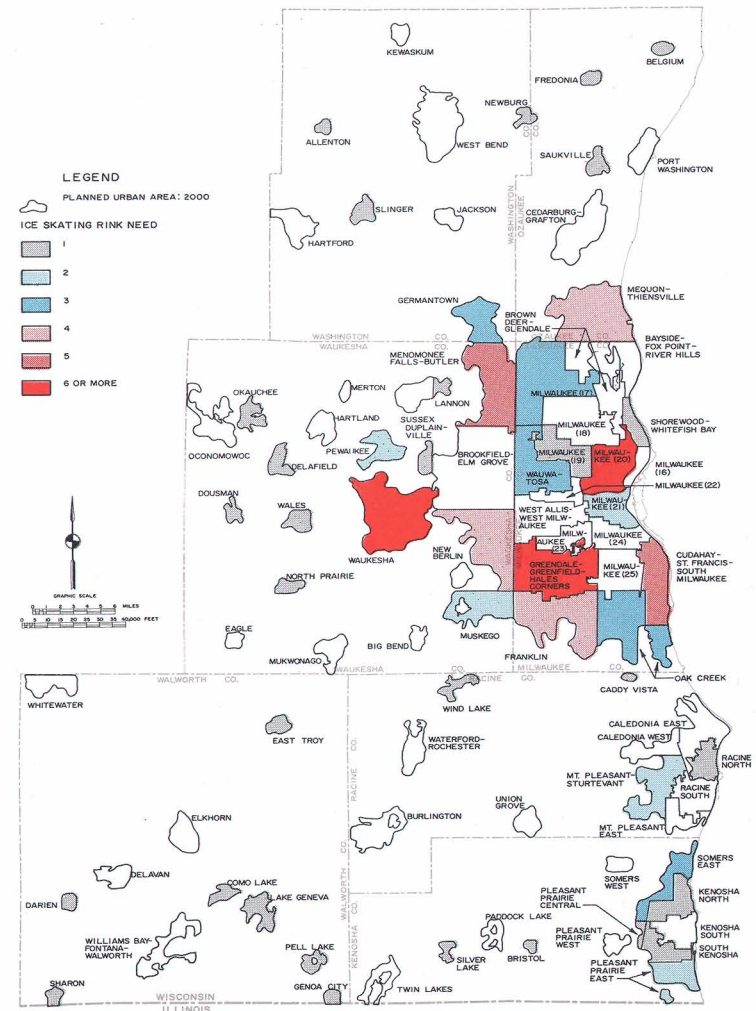
Map 102

### FACILITY REQUIREMENTS FOR ICE SKATING RINKS IN URBAN AREAS IN THE REGION: 1975



Map 103

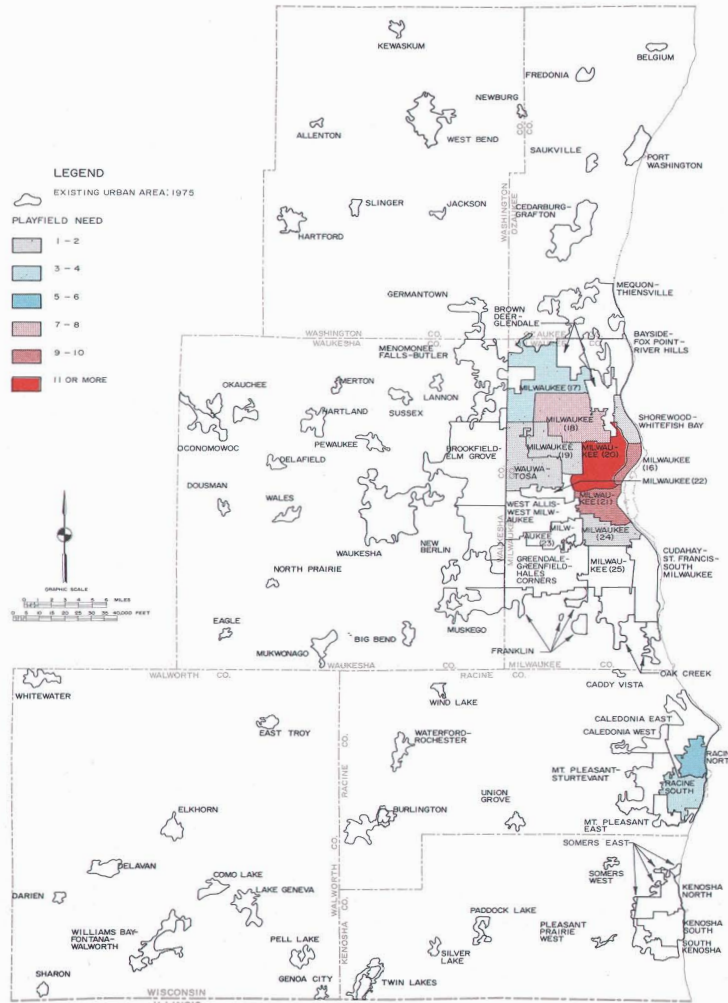
### FACILITY REQUIREMENTS FOR ICE SKATING RINKS IN URBAN AREAS IN THE REGION: 2000



The agreed-upon per capita standard for ice skating rinks is 0.15 ice skating rink per thousand urban residents. Application of this standard indicated that a total of 64 additional ice skating rinks was needed in 39 urban areas in

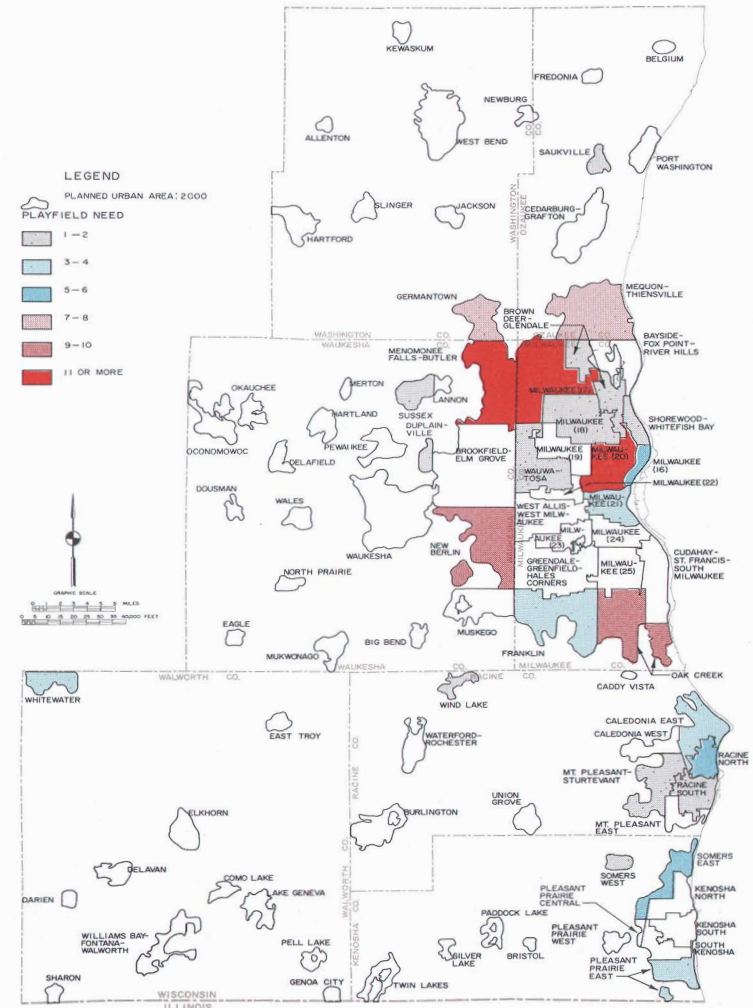
Map 104

### FACILITY REQUIREMENTS FOR PLAYFIELDS IN URBAN AREAS IN THE REGION: 1975



Map 105

### FACILITY REQUIREMENTS FOR PLAYFIELDS IN URBAN AREAS IN THE REGION: 2000



The agreed-upon per capita standard for playfields is 0.50 playfield per thousand urban residents. Application of this standard indicated that a total of 78 additional playfields was needed in 11 urban areas in the Region in 1975, the majority of these being required in the most intensely developed urban areas of Milwaukee and Racine Counties. By the year 2000, it is anticipated that a total of 131 playfields will be needed in 26 urban areas, with the additional 53 playfields above those required in 1975 being located in those urban areas expected to have large population increases between 1975 and 2000.

Source: SEWRPC.



Table 118

## FACILITY REQUIREMENTS FOR PLAYFIELDS IN URBAN AREAS IN THE REGION: 1975

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (playfields) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	1	1.07	0	0.00	1	1.07	0.63	- 0.10	0.53	--
	1	Fredonia	3	2.06	1	0.69	4	2.75	2.43	0.84	3.27	--
	2	Port Washington	9	0.95	1	0.11	10	1.06	5.32	- 0.04	5.28	--
	3	Saukville	2	0.82	0	0.00	2	0.82	1.05	- 0.27	0.78	--
	4	Cedarburg-Grafton <sup>f</sup>	12	0.62	4	0.21	16	0.83	4.45	1.93	6.38	--
	5	Mequon-Thiensville	9	0.60	4	0.26	13	0.86	3.17	2.26	5.43	--
		County Totals	36	--	10	--	46	--	--	--	--	--
Washington	6	Kewaskum	2	0.79	1	0.39	3	1.18	1.01	0.72	1.73	--
	7	West Bend	14	0.68	5	0.24	19	0.92	5.93	2.73	8.66	--
	7	Newburg <sup>g</sup>	0	0.00	2	3.12	2	3.12	- 0.25	1.93	1.68	--
	8	Allenton	2	2.41	1	1.20	3	3.61	1.68	0.91	2.59	--
	9	Jackson	2	1.01	0	0.00	2	1.01	1.23	- 0.22	1.01	--
	10	Hartford	9	1.20	2	0.26	11	1.46	6.07	1.17	7.24	--
	10	Slinger	3	2.23	0	0.00	3	2.23	2.48	- 0.15	2.33	--
	11	Germantown	4	0.90	1	0.22	5	1.12	2.26	0.51	2.77	--
	County Totals	36	--	12	--	48	--	--	--	--	--	
Milwaukee	13	Bayside-Fox Point-River Hills	8	0.57	3	0.21	11	0.78	2.49	1.45	3.94	--
	14	Brown Deer-Glendale	12	0.49	2	0.08	14	0.57	2.36	- 0.71	1.65	--
	15	Shorewood-Whitefish Bay	11	0.34	3	0.09	14	0.43	- 1.52	- 0.53	- 2.05	2
	16	Milwaukee (part)	9	0.21	2	0.05	11	0.26	- 7.67	- 2.70	- 10.37	10
	17	Milwaukee (part) <sup>h</sup>	15	0.31	6	0.13	21	0.44	- 3.84	0.96	- 2.88	3
	18	Milwaukee (part)	38	0.32	15	0.12	53	0.44	- 8.34	1.19	- 7.15	7
	19	Milwaukee (part)	27	0.33	12	0.15	39	0.48	- 4.52	3.11	- 1.41	1
	20	Milwaukee (part)	31	0.22	5	0.04	36	0.26	- 23.81	- 9.80	- 33.61	34
	21	Milwaukee (part)	19	0.29	5	0.07	24	0.36	- 6.88	- 2.30	- 9.18	9
	22	Milwaukee (part)	12	0.60	4	0.20	16	0.80	4.25	1.81	6.06	--
	23	Milwaukee (part)	17	0.44	4	0.10	21	0.54	1.80	- 0.29	1.51	--
	24	Milwaukee (part)	23	0.39	5	0.08	28	0.47	- 0.21	- 1.55	- 1.76	2
	25	Milwaukee (part)	20	0.56	2	0.05	22	0.61	5.99	- 1.95	4.04	--
	26	Cudahy-St. Francis-South Milwaukee	23	0.41	11	0.20	34	0.61	1.39	4.90	6.29	--
	27	Oak Creek	8	0.68	3	0.26	11	0.94	3.43	1.71	5.14	--
	28	Franklin	7	0.79	0	0.00	7	0.79	3.53	- 0.98	2.55	--
	29	Greendale-Greenfield-Hales Corners	21	0.37	9	0.16	30	0.53	- 1.11	2.77	1.66	--
30	West Allis-West Milwaukee	31	0.40	11	0.14	42	0.54	0.48	2.39	2.87	--	
31	Wauwatosa	20	0.36	5	0.09	25	0.45	- 1.40	- 1.04	- 2.44	2	
	County Totals	352	--	107	--	459	--	--	--	--	70	
Waukesha	32	Menomonee Falls-Butler	14	0.47	4	0.13	18	0.60	2.41	0.60	3.01	--
	32	Lannon	3	2.63	0	0.00	3	2.63	2.56	- 0.13	2.43	--
	33	Brookfield-Elm Grove	19	0.44	9	0.21	28	0.65	2.17	4.25	6.42	--
	34	New Berlin	14	0.58	0	0.00	14	0.58	4.57	- 2.66	1.91	--
	35	Muskego	9	0.87	1	0.10	10	0.97	4.99	- 0.13	4.86	--
	36	Sussex	3	0.76	0	0.00	3	0.76	1.47	- 0.43	1.04	--
	36	Pewaukee	5	1.10	1	0.22	6	1.32	3.23	0.51	3.74	--
	37	Merton	2	2.85	0	0.00	2	2.85	1.73	- 0.08	1.65	--
	38	Delafield	2	1.75	0	0.00	2	1.75	1.55	- 0.12	1.43	--
	38	Hartland	4	0.91	2	0.46	6	1.37	2.29	1.52	3.81	--
	39	Oconomowoc	10	0.85	0	0.00	10	0.85	5.41	- 1.30	4.11	--
	39	Okauchee	1	0.38	0	0.00	1	0.38	- 0.02	- 0.29	- 0.31	--
	40	Waukesha	34	0.68	4	0.08	38	0.76	14.44	- 1.51	12.93	--
	41	Dousman <sup>i</sup>	3	3.25	1	1.08	4	4.33	2.64	0.90	3.54	--
	41	Eagle	2	2.33	0	0.00	2	2.33	1.66	- 0.09	1.57	--
	41	North Prairie	1	1.29	0	0.00	1	1.29	0.70	- 0.09	0.61	--
	41	Wales	3	2.27	0	0.00	3	2.27	2.48	- 0.14	2.34	--
	42	Big Bend	3	1.72	2	1.15	5	2.87	2.32	1.81	4.13	--
	42	Mukwonago	4	1.15	1	0.29	5	1.44	2.65	0.62	3.27	--
	County Totals	136	--	25	--	161	--	--	--	--	--	
Racine	43	Racine-North	9	0.27	3	0.09	12	0.36	- 4.07	- 0.68	- 4.75	5
	43	Caledonia-East	9	0.63	3	0.21	12	0.84	3.42	1.43	4.85	--
	44	Racine-South	24	0.42	2	0.04	26	0.46	1.76	- 4.27	- 2.51	3
	44	Mt. Pleasant-West	7	0.76	2	0.22	9	0.98	3.39	1.01	4.40	--
	45	Caddy Vista	1	0.99	1	0.99	2	1.98	0.61	0.89	1.50	--
	45	Caledonia	4	1.85	0	0.00	4	1.85	3.17	- 0.24	2.93	--
	46	Mt. Pleasant-Sturtevant	8	0.66	2	0.16	10	0.82	3.27	- 0.61	3.88	--
	47	Union Grove	6	1.85	0	0.00	6	1.85	4.73	- 0.36	4.37	--
	48	Wind Lake	1	0.80	0	0.00	1	0.80	0.51	- 0.14	0.37	--
	48	Waterford-Rochester	3	0.77	3	0.77	6	1.54	1.48	2.57	4.05	--
	49	Burlington	9	0.86	5	0.47	14	1.33	4.90	3.85	8.75	--
		County Totals	81	--	21	--	102	--	--	--	--	8

Table 118 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (playfields) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>c</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	13	0.41	4	0.12	17	0.53	0.54	0.49	1.03	--
	51	Kenosha-South	16	0.35	7	0.15	23	0.50	1.88	1.96	0.08	--
	51	South Kenosha	9	1.03	1	0.11	10	1.14	5.57	0.04	5.61	--
	52	Somers-East	1	0.70	1	0.70	2	1.40	0.44	0.84	1.28	--
	52	Somers-West	1	1.46	0	0.00	1	1.46	0.73	-0.07	0.66	--
	53	Pleasant Prairie-West	2	1.99	0	0.00	2	1.99	1.61	-0.11	1.50	--
	55	Paddock Lake	3	1.04	2	0.69	5	1.73	1.87	1.68	3.55	--
	55	Silver Lake	3	2.40	2	1.60	5	4.00	2.51	1.86	4.37	--
	55	Twin Lakes	2	0.65	5	1.64	7	2.29	0.81	4.66	5.47	--
		County Totals	50	--	22	--	72	--	--	--	--	--
Walworth	56	East Troy	2	0.91	1	0.46	3	1.37	1.15	0.76	1.91	--
	57	Whitewater	3	0.33	2	0.22	5	0.55	0.53	1.00	0.47	--
	58	Elkhorn	5	1.16	1	0.23	6	1.39	3.31	0.53	3.84	--
	59	Como Lake	1	0.68	0	0.00	1	0.68	0.43	-0.16	0.27	--
	59	Genoa City	2	2.15	0	0.00	2	2.15	1.63	-0.10	1.53	--
	59	Lake Geneva	6	1.12	2	0.37	8	1.49	3.91	1.41	5.32	--
	59	Pell Lake	1	0.72	0	0.00	1	0.72	0.46	-0.15	0.31	--
	59	Williams Bay-Fontana-Walworth	7	1.37	3	0.59	10	1.96	5.00	2.44	7.44	--
	60	Darien	1	1.00	0	0.00	1	1.00	0.61	-0.11	0.50	--
	60	Delavan	4	0.70	1	0.17	5	0.87	1.76	0.37	2.13	--
	60	Sharon	1	0.73	0	0.00	1	0.73	0.47	-0.15	0.32	--
		County Totals	33	--	10	--	43	--	--	--	--	--
Region Totals			724	--	207	--	931	--	--	--	78	

<sup>a</sup> Minimum standard per capita requirements for playfields are as follows: public—0.39/1,000 urban residents; nonpublic—0.11/1,000 urban residents; and public and nonpublic combined—0.50/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of playfields may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of playfields provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Dousman urban area includes a small area in planning analysis area 39.

Source: SEWRPC.

Table 119

## FACILITY REQUIREMENTS FOR PLAYFIELDS IN URBAN AREAS IN THE REGION: 2000

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (playfields) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>a</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	1	0.67	0	0.00	1	0.67	0.42	-0.16	0.26	--
	1	Fredonia	3	1.42	1	0.47	4	1.89	2.17	0.77	2.94	--
	2	Port Washington	9	0.69	1	0.08	10	0.77	3.94	-0.43	3.51	--
	3	Saukville	2	0.30	0	0.00	2	0.30	-0.60	-0.73	-1.33	1
	4	Cedarburg-Grafton <sup>f</sup>	12	0.36	5	0.15	17	0.51	-1.00	1.33	0.33	--
	5	Mequon-Thiensville	9	0.23	4	0.10	13	0.33	-6.22	-0.39	-6.61	7
	County Totals		36	--	11	--	47	--	--	--	--	8
Washington	6	Kewaskum	2	0.41	1	0.21	3	0.62	0.10	0.46	0.56	--
	7	West Bend	15	0.37	6	0.15	21	0.52	-0.84	1.53	0.69	--
	7	Newburg <sup>g</sup>	0	0.00	2	0.88	2	0.88	-0.88	1.74	0.86	--
	8	Allenton	2	1.02	1	0.51	3	1.53	1.24	0.78	2.02	--
	9	Jackson	2	0.33	0	0.00	2	0.33	-0.34	-0.66	-1.00	--
	10	Hartford	9	0.58	2	0.13	11	0.71	2.95	0.29	3.24	--
	10	Slinger	3	0.69	0	0.00	3	0.69	1.30	-0.48	0.82	--
	11	Germantown	5	0.19	1	0.04	6	0.23	-5.23	-1.88	-7.11	7
County Totals		38	--	13	--	51	--	--	--	--	7	
Milwaukee	13	Bayside-Fox Point-River Hills	8	1.26	3	0.27	11	1.53	2.23	1.36	3.59	--
	14	Brown Deer-Glendale	12	0.39	2	0.06	14	0.45	0.01	-1.38	-1.37	1
	15	Shorewood-Whitefish Bay	11	0.36	3	0.10	14	0.46	-0.81	-0.33	-1.14	1
	16	Milwaukee (part)	9	0.26	2	0.06	11	0.32	-4.34	-1.76	-6.10	6
	17	Milwaukee (part) <sup>h</sup>	15	0.23	6	0.09	21	0.32	-10.59	-1.32	-11.91	12
	18	Milwaukee (part)	41	0.35	15	0.13	56	0.48	-4.71	2.36	-2.35	2
	19	Milwaukee (part)	27	0.36	12	0.16	39	0.52	-2.14	3.78	1.64	--
	20	Milwaukee (part)	31	0.25	5	0.04	36	0.29	-17.65	-8.82	-26.47	26
	21	Milwaukee (part)	20	0.34	5	0.09	25	0.43	-2.66	-1.36	-3.92	4
	22	Milwaukee (part)	12	0.62	4	0.21	16	0.83	4.53	1.89	6.42	--
	23	Milwaukee (part)	18	0.42	4	0.10	22	0.52	1.42	-0.68	0.74	--
	24	Milwaukee (part)	23	0.41	5	0.09	28	0.50	1.30	-1.12	0.18	--
	25	Milwaukee (part)	21	0.56	2	0.06	23	0.62	6.45	-2.11	4.34	--
	26	Cudahy-St. Francis-South Milwaukee	23	0.40	11	0.18	34	0.58	0.31	4.60	4.91	--
	27	Oak Creek	9	0.21	4	0.09	13	0.30	-7.95	-0.78	-8.73	9
	28	Franklin	11	0.30	4	0.10	15	0.40	-3.48	-0.09	-3.57	4
	29	Greendale-Greenfield-Hales Corners	22	0.35	9	0.15	31	0.50	-2.37	2.12	-0.25	--
	30	West Allis-West Milwaukee	31	0.43	11	0.15	42	0.58	2.70	3.02	5.72	--
31	Wauwatosa	21	0.40	5	0.09	26	0.49	0.31	-0.84	-0.53	1	
County Totals		365	--	112	--	477	--	--	--	--	66	
Waukesha	32	Menomonee Falls-Butler	14	0.24	5	0.08	19	0.32	-8.78	-1.76	-10.54	11
	32	Lannon	4	1.28	1	0.32	5	1.60	2.78	0.65	3.43	--
	33	Brookfield-Elm Grove <sup>i</sup>	20	0.35	9	0.16	29	0.51	-2.28	2.85	0.57	--
	34	New Berlin	17	0.33	0	0.00	17	0.33	-3.17	-5.69	-8.86	9
	35	Muskego	9	0.50	1	0.05	10	0.55	1.96	-0.99	0.97	--
	36	Duplainville	1	0.27	0	0.00	1	0.27	-0.43	-0.41	-0.84	1
	36	Sussex	3	0.32	0	0.00	3	0.32	-0.61	-1.02	-1.63	2
	36	Pewaukee	5	0.41	1	0.08	6	0.49	0.25	-0.35	-0.10	--
	37	Merton	2	3.22	0	0.00	2	3.22	1.76	-0.07	1.69	--
	38	Delafield	3	0.48	1	0.16	4	0.64	0.58	0.31	0.89	--
	38	Hartland	4	0.69	2	0.29	6	0.88	1.35	1.26	2.61	--
	39	Oconomowoc	10	0.51	0	0.00	10	0.51	2.38	-2.15	0.23	--
	39	Okauchee	1	0.30	1	0.29	2	0.59	-0.31	0.63	0.32	--
	40	Waukesha	37	0.50	4	0.06	41	0.56	8.38	-4.07	4.31	--
	41	Dousman	3	1.60	1	0.53	4	2.13	2.27	0.79	3.06	--
	41	Eagle	2	1.30	0	0.00	2	1.30	1.40	-0.17	1.23	--
	41	North Prairie	1	0.64	0	0.00	1	0.64	0.39	-0.17	0.22	--
	41	Wales	3	1.23	0	0.00	3	1.23	2.05	-0.27	1.78	--
	42	Big Bend	3	1.90	2	1.27	5	3.17	2.38	1.83	4.21	--
42	Mukwonago	5	0.58	1	0.12	6	0.70	1.65	0.05	1.70	--	
County Totals		147	--	29	--	176	--	--	--	--	23	
Racine	43	Racine-North	9	0.26	3	0.08	12	0.34	-4.64	-0.85	-5.49	5
	43	Caledonia-East	9	0.58	3	0.19	12	0.77	2.96	1.24	4.20	4
	44	Racine-South	24	0.44	2	0.04	26	0.48	2.81	-3.98	-1.17	1
	44	Mt. Pleasant-East	7	0.56	2	0.16	9	0.72	2.11	0.62	2.73	--
	45	Caddy Vista	1	0.75	1	0.75	2	1.50	0.48	0.85	1.33	--
	45	Caledonia-West <sup>k</sup>	4	0.51	0	0.00	4	0.51	0.93	-0.85	0.08	--
	46	Mt. Pleasant-Sturtevant <sup>j</sup>	8	0.33	2	0.08	10	0.41	-1.48	-0.74	-2.22	2
	47	Union Grove	6	0.96	0	0.00	6	0.96	3.55	-0.69	2.86	--
	48	Wind Lake	1	0.19	0	0.00	1	0.19	-1.00	-0.57	-1.57	2
	48	Waterford-Rochester	3	0.41	3	0.41	6	0.82	0.15	2.20	2.35	--
	49	Burlington	9	0.55	5	0.30	14	0.85	2.61	3.20	5.81	--
	County Totals		81	--	21	--	102	--	--	--	--	14

Table 119 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (playfields) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	13	0.39	4	0.12	17	0.51	- 0.09	0.30	0.21	--
	51	Kenosha-South	16	0.36	7	0.16	23	0.52	- 1.36	2.11	0.75	--
	51	South Kenosha	9	0.69	1	0.07	10	0.76	3.88	- 0.44	3.44	--
	52	Somers-East	2	0.11	1	0.05	3	0.16	- 5.20	- 1.12	- 6.32	6
	52	Somers-West	1	0.22	0	0.00	1	0.22	- 0.82	- 0.51	- 1.33	1
	53	Pleasant Prairie-West	2	0.68	0	0.00	2	0.68	0.85	- 0.32	0.53	--
	53	Pleasant Prairie-East	4	0.25	1	0.06	5	0.31	- 2.22	- 0.79	- 3.01	3
	53	Pleasant Prairie-Central <sup>m</sup>	1	0.48	0	0.00	1	0.48	0.19	- 0.23	- 0.04	--
	54	Bristol	2	1.35	0	0.00	2	1.35	1.42	- 0.16	1.26	--
	55	Paddock Lake	3	0.63	2	0.42	5	1.05	1.14	1.48	2.62	--
	55	Silver Lake	3	1.30	2	0.87	5	2.17	2.10	1.75	3.85	--
	55	Twin Lakes	2	0.45	5	1.12	7	1.57	0.25	4.51	4.76	--
		County Totals		58	--	23	--	81	--	--	--	10
Walworth	56	East Troy	3	0.60	1	0.20	4	0.80	1.06	0.45	1.51	--
	57	Whitewater	3	0.18	2	0.12	5	0.30	- 3.49	0.16	- 3.33	3
	58	Elkhorn	5	0.64	1	0.13	6	0.77	1.96	0.14	2.10	--
	59	Como Lake	1	0.53	0	0.00	1	0.53	0.27	- 0.21	0.06	--
	59	Genoa City	2	1.30	0	0.00	2	1.30	1.40	- 0.17	1.23	--
	59	Lake Geneva	6	0.59	2	0.20	8	0.79	2.03	0.88	2.91	--
	59	Pell Lake	1	0.69	0	0.00	1	0.69	0.44	- 0.16	0.28	--
	59	Williams Bay-Fontana-Walworth	7	0.66	3	0.28	10	0.94	2.87	1.80	4.67	--
	60	Darien	1	0.50	0	0.00	1	0.50	0.22	- 0.22	0.00	--
	60	Delavan	4	0.48	1	0.12	5	0.60	0.76	0.09	0.85	--
	60	Sharon	1	0.38	0	0.00	1	0.38	- 0.03	- 0.29	- 0.32	--
		County Totals		34	--	10	--	44	--	--	--	3
Region Totals			759	--	219	--	978	--	--	--	131	

<sup>a</sup> Minimum standard per capita requirements for playfields are as follows: public—0.39/1,000 urban residents; nonpublic—0.11/1,000 urban residents; and public and nonpublic combined—0.50/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of playfields may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of playfields provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>j</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>k</sup> The Caledonia-West area includes a small area in planning analysis area 46.

<sup>l</sup> The Mt. Pleasant-Sturtevant area includes a small area in planning analysis area 44.

<sup>m</sup> The Pleasant Prairie-Central urban area includes a small area in planning analysis area 51.

Source: SEWRPC.



Playgrounds: As indicated in Table 120, there were 757 playgrounds located in general use sites in the urban areas in the Region in 1975. Since the adopted standard is 0.42 playground per thousand urban residents, a total of 120 additional playgrounds was needed in 16 urban areas in the Region in 1975, the majority of these being required in the high-density urban areas in Milwaukee and Kenosha Counties (see Map 106). By the year 2000, however, as indicated in Table 121, it is anticipated that a total of 174 playgrounds will be needed in 32 urban areas. Similar to the anticipated future needs for basketball goals and playfields, the playgrounds needed in 2000 and those required in 1975 both will be required primarily in those urban areas expected to have relatively large population increases between 1975 and 2000 (see Map 107). Again, it is important to note that while the total number of playgrounds needed in urban areas in Milwaukee County remains the same in both 1975 and 2000, the required distribution reflects an anticipated decrease in population in the older central portion of the County and an anticipated increase in the population in the newer urban areas in the northwestern and southern portions of the County.

Softball Diamonds: As indicated in Table 122, there were 1,070 softball diamonds located in general use sites in urban areas in the Region in 1975. Since the adopted standard is 0.60 softball diamond per thousand urban residents, a total of 194 additional softball diamonds was needed in 14 urban areas in the Region in 1975, with almost all being required in high-density urban areas in Milwaukee County (see Map 108). By the year 2000, however, as indicated in Table 123, it is anticipated that a total of 253 softball diamonds will be needed in 30 urban areas (see Map 109). Again, it is important to note that, while the total number of diamonds needed in Milwaukee County remains approximately the same in both 1975 and 2000, the required distribution is changed to reflect an anticipated decrease in population in the older central portion of the County and an anticipated increase in the population in the newer urban areas in the northwestern and southern portions of the County.

Tennis Courts: As indicated in Table 124, there were 912 tennis courts located in general use sites in urban areas in the Region in 1975. Since the adopted standard is 0.60 tennis court per thousand urban residents, a total of 313 additional courts was needed in 34 urban areas in the Region in 1975, with most of these courts being required in the high-density urban areas in Milwaukee, Racine, and Kenosha Counties (see Map 110). By the year 2000, however, as indicated in Table 125 it is anticipated that a total of 412 courts will be needed in 57 urban areas (see Map 111).

Swimming Pools: Due to the relatively large service radius of swimming pools in comparison with other intensive nonresource-oriented facilities and due further to the offsetting effect that swimming beaches in urban areas—such as Quarry Lake in the Racine urban area—have on the need for swimming pools in urban areas, a somewhat

different methodology for the determination of need for swimming pools was utilized. In order to account for the relatively large service radius of pools, the population and facilities of urban areas immediately adjacent to one another were combined to form a larger urban area, as shown in Map 112, and the application of the standard for pools was applied in the usual fashion as reported in Table 126 and Table 127. In order to account for the fact that a swimming beach may offset the need for a swimming pool and, in fact, is generally a more desirable facility for swimming, swimming beaches located within urban areas were considered a suitable substitute for swimming pools and were included in the total quantity of pools as footnoted in Tables 126 and 127. It should be noted that only urban areas having more than 7,500 residents were included in this analysis, in accordance with the guidelines for pools specified in Chapter XI of this report. Finally, it should be noted that because nonpublic pools are usually not open to the general public, only public pools and public beaches within urban areas have been considered in the analysis of need.

As indicated in Table 126, only one additional pool in the combined urban analysis area of Racine was needed on a per capita basis in 1975; and, as indicated in Table 127, it is anticipated that only one pool in Racine will be needed on a per capita basis in the year 2000. To determine the adequacy of the distribution of swimming pools and beaches in urban areas, an analysis of the service areas of existing facilities also was conducted. Chapter XI specifies a service radius of three miles for swimming pools; and, for purposes of this analysis, the same service radius has been applied to swimming beaches within urban areas under consideration. Map 112 shows the existing and anticipated future urban areas in the Region which are not adequately served by a swimming pool or beach. Particularly noteworthy are three large areas which are not currently served: the northwest and southern areas in the combined Milwaukee urban area and the southern portion of the combined Racine urban area. As indicated on Map 112, additional growth in these areas may be expected to increase the need for pools in these areas.

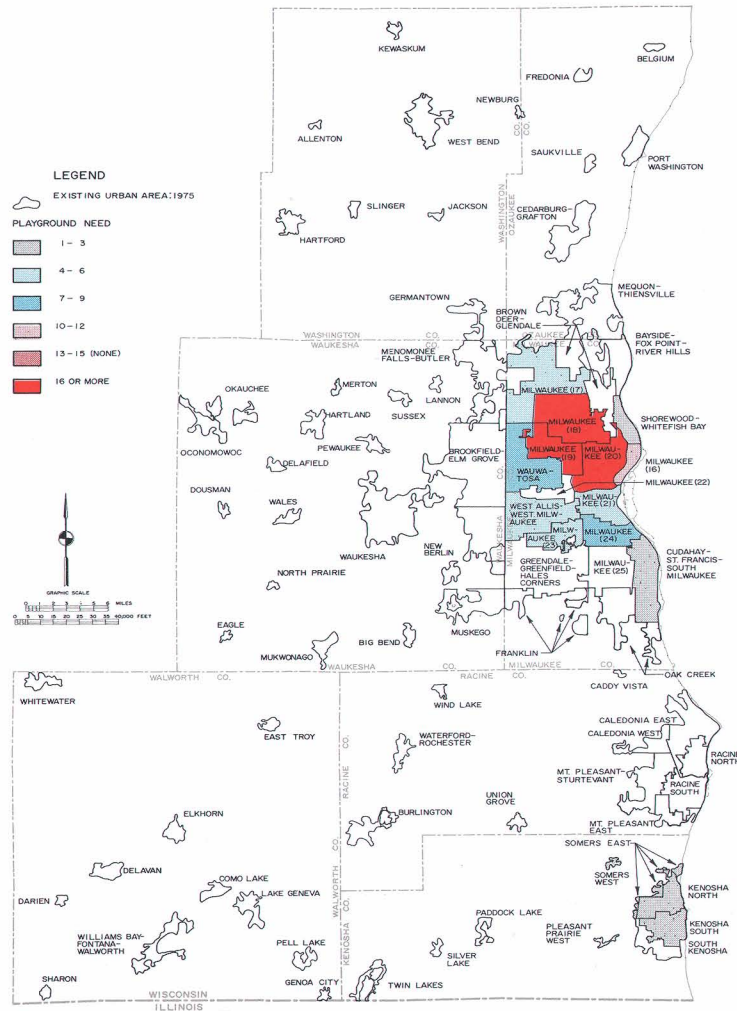
#### Boat Access Needs

Boat access points provide an opportunity to participate in extensive water based recreational activities such as fishing, motor boating, sailing, canoeing, and water skiing for those individuals who do not own land contiguous to a body of water. Standards under Objective No. 5 in Chapter XI establish the number of boat access facilities which should be provided on both the major inland lakes and rivers of the Region and along the Lake Michigan shoreline in the Region. The need for boat access facilities on the major inland lakes and rivers as well as on Lake Michigan, based upon the application of these standards, is described in this section.

Inland Lakes: The number of access points as well as the amount of related parking which should be provided on the inland lakes of the Region depends, in part, upon the

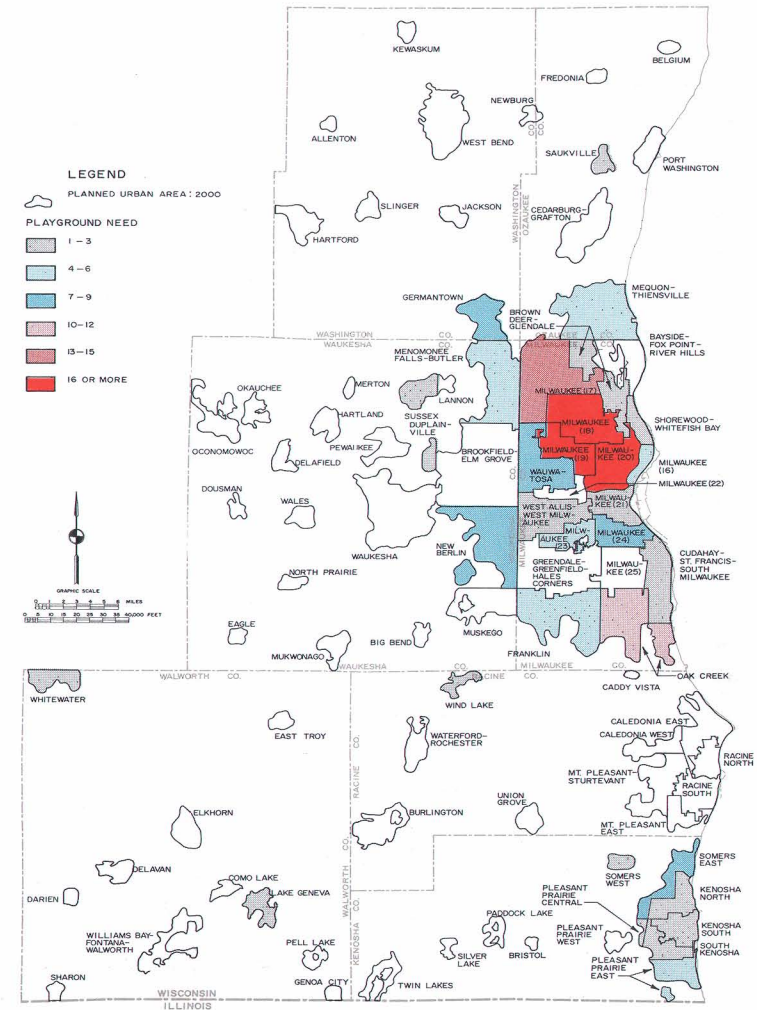
Map 106

### FACILITY REQUIREMENTS FOR PLAYGROUNDS IN URBAN AREAS IN THE REGION: 1975



Map 107

### FACILITY REQUIREMENTS FOR PLAYGROUNDS IN URBAN AREAS IN THE REGION: 2000



The agreed-upon per capita standard for playgrounds is 0.42 playground per thousand urban residents. Application of this standard indicated that a total of 120 additional playgrounds

Table 120

## FACILITY REQUIREMENTS FOR PLAYGROUNDS IN URBAN AREAS IN THE REGION: 1975

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (playgrounds) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	2	2.14	0	0.00	2	2.14	1.67	-0.06	1.61	--
	1	Fredonia	4	2.74	1	0.69	5	3.43	3.49	0.90	4.39	--
	2	Port Washington	12	1.27	1	0.11	13	1.38	8.70	0.34	9.04	--
	3	Saukville	1	0.41	0	0.00	1	0.41	0.15	-0.17	-0.02	--
	4	Cedarburg-Grafton <sup>f</sup>	18	0.93	2	0.10	20	1.03	11.22	0.58	11.80	--
	5	Mequon-Thiensville	8	0.53	3	0.20	11	0.73	2.71	1.96	4.67	--
		County Totals	45	--	7	--	52	--	--	--	--	--
Washington	6	Kewaskum	2	0.79	1	0.39	3	1.18	1.11	0.82	1.93	--
	7	West Bend	13	0.63	5	0.24	18	0.87	5.76	3.56	9.32	--
	7	Newburg <sup>g</sup>	0	0.00	3	4.67	3	4.67	0.22	2.95	2.73	--
	8	Allenton	2	2.41	1	1.20	3	3.61	1.71	0.94	2.65	--
	9	Jackson	3	1.52	0	0.00	3	1.52	2.31	-0.14	2.17	--
	10	Hartford	9	1.20	1	0.13	10	1.33	6.37	0.47	6.84	--
	10	Slinger	2	1.49	1	0.74	3	2.23	1.53	0.90	2.43	--
	11	Germantown	2	0.45	1	0.22	3	0.67	0.44	0.68	1.12	--
	County Totals	33	--	13	--	46	--	--	--	--	--	
Milwaukee	13	Bayside-Fox Point-River Hills	6	0.43	4	0.28	10	0.71	1.06	3.01	4.07	--
	14	Brown Deer-Glendale	9	0.36	2	0.08	11	0.44	0.35	0.28	0.63	--
	15	Shorewood-Whitefish Bay	10	0.31	1	0.03	11	0.34	-1.23	-1.25	-2.48	2
	16	Milwaukee (part)	7	0.16	1	0.02	8	0.18	-7.96	-1.99	-9.95	10
	17	Milwaukee (part) <sup>h</sup>	10	0.21	5	0.10	15	0.31	-6.72	1.44	-5.28	5
	18	Milwaukee (part)	24	0.20	6	0.05	30	0.25	-17.88	-2.38	-20.26	20
	19	Milwaukee (part)	12	0.15	3	0.04	15	0.19	-16.29	-2.66	-18.95	19
	20	Milwaukee (part)	32	0.23	2	0.01	34	0.24	-16.81	-8.40	-25.21	25
	21	Milwaukee (part)	20	0.30	2	0.03	22	0.33	-3.21	-2.65	-5.86	6
	22	Milwaukee (part)	10	0.50	1	0.05	11	0.55	3.04	-0.39	2.65	--
	23	Milwaukee (part)	12	0.31	0	0.00	12	0.31	-1.64	-2.73	-4.37	4
	24	Milwaukee (part)	15	0.25	1	0.02	16	0.27	-5.82	-3.17	-8.99	9
	25	Milwaukee (part)	15	0.42	1	0.03	16	0.45	2.43	-1.51	0.92	--
	26	Cudahy-St. Francis-South Milwaukee	19	0.34	3	0.05	22	0.39	-0.40	-0.88	-1.28	1
	27	Oak Creek	6	0.51	1	0.09	7	0.60	1.90	0.18	2.08	--
	28	Franklin	6	0.67	0	0.00	6	0.67	2.88	-0.62	2.26	--
	29	Greendale-Greenfield-Hales Corners	18	0.32	6	0.10	24	0.42	-1.84	2.03	0.19	--
30	West Allis-West Milwaukee	24	0.31	4	0.05	28	0.36	-3.39	-1.48	-4.87	5	
31	Wauwatosa	14	0.26	0	0.00	14	0.26	-5.21	-3.84	-9.05	9	
	County Totals	269	--	43	--	312	--	--	--	--	115	
Waukesha	32	Menomonee Falls-Butler	14	0.47	6	0.20	20	0.67	3.61	3.90	7.51	--
	32	Lannon	3	2.63	1	0.88	4	3.51	2.60	0.92	3.52	--
	33	Brookfield-Elm Grove	20	0.46	10	0.23	30	0.69	4.89	6.98	11.87	--
	34	New Berlin	11	0.45	0	0.00	11	0.45	2.53	-1.69	0.84	--
	35	Muskego	8	0.78	1	0.10	9	0.88	4.40	0.28	4.68	--
	36	Sussex	3	0.76	0	0.00	3	0.76	1.62	-0.27	1.35	--
	36	Pewaukee	4	0.88	1	0.22	5	1.10	2.41	0.69	3.10	--
	37	Merton	2	2.85	0	0.00	2	2.85	1.75	-0.05	1.70	--
	38	Delafield	3	2.62	0	0.00	3	2.62	2.60	-0.08	2.52	--
	38	Hartland	4	0.91	2	0.46	6	1.37	2.47	1.69	4.16	--
	39	Oconomowoc	10	0.85	3	0.25	13	1.10	5.87	2.18	8.05	--
	39	Okauchee	1	0.38	0	0.00	1	0.38	0.08	-0.18	0.10	--
	40	Waukesha	30	0.60	3	0.06	33	0.66	12.45	-0.51	11.94	--
	41	Dousman <sup>i</sup>	2	2.17	1	1.08	3	3.25	1.68	0.93	2.61	--
	41	Eagle	1	1.17	0	0.00	1	1.17	0.70	-0.06	0.64	--
	41	North Prairie	1	1.29	0	0.00	1	1.29	0.72	-0.05	0.67	--
	41	Wales	2	1.51	0	0.00	2	1.51	1.54	-0.09	1.45	--
	42	Big Bend	2	1.15	3	1.72	5	2.87	1.39	2.88	4.27	--
	42	Mukwonago	4	1.15	1	0.29	5	1.44	2.78	0.76	3.54	--
	County Totals	125	--	32	--	157	--	--	--	--	--	
Racine	43	Racine-North	13	0.39	5	0.15	18	0.54	1.28	2.65	3.93	--
	43	Caledonia-East	5	0.35	2	0.14	7	0.49	0.00	1.00	1.00	--
	44	Racine-South	29	0.51	7	0.12	36	0.63	9.04	3.01	12.05	--
	44	Mt. Pleasant-East	5	0.54	2	0.22	7	0.76	1.74	1.38	3.12	--
	45	Caddy Vista	1	0.99	1	0.99	2	1.98	0.65	0.93	1.58	--
	45	Caledonia	3	1.38	0	0.00	3	1.38	2.24	-0.15	2.09	--
	46	Mt. Pleasant-Sturtevant	8	0.66	2	0.16	10	0.82	3.76	1.09	4.85	--
	47	Union Grove	8	2.46	0	0.00	8	2.46	6.86	-0.23	6.63	--
	48	Wind Lake	1	0.80	0	0.00	1	0.80	0.56	-0.09	0.47	--
	48	Waterford-Rochester	3	0.77	2	0.51	5	1.28	1.64	1.71	3.35	--
	49	Burlington	8	0.76	8	0.76	16	1.52	4.33	7.26	11.59	--
		County Totals	84	--	29	--	113	--	--	--	--	--

Table 120 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (playgrounds) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	11	0.34	1	0.03	12	0.37	- 0.18	- 1.23	- 1.41	1
	51	Kenosha-South	15	0.33	2	0.04	17	0.37	- 1.05	- 1.21	- 2.26	2
	51	South Kenosha	4	0.46	1	0.11	5	0.57	0.93	0.39	1.32	--
	52	Somers-East	0	0.00	0	0.00	0	0.00	- 0.50	- 0.10	- 0.60	1
	52	Somers-West	0	0.00	0	0.00	0	0.00	- 0.24	- 0.05	- 0.29	1
	53	Pleasant Prairie-West	1	1.00	0	0.00	1	1.00	0.65	- 0.07	0.58	--
	55	Paddock Lake	2	0.69	3	1.04	5	1.73	0.99	2.80	3.79	--
	55	Silver Lake	2	1.60	0	0.00	2	1.60	1.56	- 0.08	1.48	--
	55	Twin Lakes	2	0.65	1	0.33	3	0.98	0.93	0.79	1.72	--
	County Totals	37	--	8	--	45	--	--	--	--	5	
Walworth	56	East Troy	1	0.46	1	0.46	2	0.92	0.23	0.85	1.08	--
	57	Whitewater	5	0.55	0	0.00	5	0.55	1.83	- 0.64	1.19	--
	58	Elkhorn	4	0.93	1	0.23	5	1.16	2.49	0.70	3.19	--
	59	Como Lake	1	0.68	0	0.00	1	0.68	0.48	- 0.10	0.38	--
	59	Genoa City	2	2.15	0	0.00	2	2.15	1.68	- 0.07	1.61	--
	59	Lake Geneva	2	0.37	1	0.19	3	0.56	0.12	0.63	0.75	--
	59	Pell Lake	1	0.72	0	0.00	1	0.72	0.52	- 0.10	0.42	--
	59	Williams Bay-Fontana-Walworth	5	0.98	2	0.39	7	1.37	3.21	1.63	4.84	--
	60	Darien	1	1.00	0	0.00	1	1.00	0.65	- 0.07	0.58	--
	60	Delavan	3	0.52	0	0.00	3	0.52	0.99	- 0.40	0.59	--
	60	Sharon	2	1.47	0	0.00	2	1.47	1.52	- 0.09	1.43	--
	County Totals	27	--	5	--	32	--	--	--	--	--	
Region Totals			620	--	137	--	757	--	--	--	--	120

<sup>a</sup> Minimum standard per capita requirements for playgrounds are as follows: public—0.35/1,000 urban residents; nonpublic—0.07/1,000 urban residents; and public and nonpublic combined—0.42/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of playgrounds may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of playgrounds provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>j</sup> As specified in Chapter XI, at least one playground should be provided in each urban area.

Source: SEWRPC.



Table 121

## FACILITY REQUIREMENTS FOR PLAYGROUNDS IN URBAN AREAS IN THE REGION: 2000

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (playgrounds) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	2	1.35	0	0.00	2	1.35	1.48	-0.10	1.38	--
	1	Fredonia	4	1.89	1	0.47	5	2.36	3.26	0.85	4.11	--
	2	Port Washington	12	0.92	1	0.08	13	1.00	7.46	0.09	7.55	--
	3	Saukville	1	0.15	0	0.00	1	0.15	-1.33	-0.47	-1.80	2
	4	Cedarburg-Grafton <sup>f</sup>	18	0.54	2	0.06	20	0.60	6.33	-0.33	6.00	--
	5	Mequon-Thiensville	8	0.20	3	0.08	11	0.28	-5.83	0.39	-5.44	5
		County Totals	45	--	7	--	52	--	--	--	--	7
Washington	6	Kewaskum	2	0.41	1	0.21	3	0.62	0.29	0.66	0.95	--
	7	West Bend	14	0.34	6	0.15	20	0.49	-0.22	3.16	2.94	--
	7	Newburg <sup>g</sup>	0	0.00	3	1.32	3	1.32	-0.79	2.83	2.04	--
	8	Allenton	2	1.02	1	0.51	3	1.53	1.31	0.86	2.17	--
	9	Jackson	3	0.50	0	0.00	3	0.50	0.90	-0.42	0.48	--
	10	Hartford	9	0.58	1	0.06	10	0.64	3.57	-0.09	3.48	--
	10	Slinger	2	0.46	1	0.23	3	0.69	0.47	0.70	1.17	--
	11	Germantown	2	0.08	1	0.03	3	0.11	-7.18	-0.83	-8.01	8
	County Totals	34	--	14	--	48	--	--	--	--	8	
Milwaukee	13	Bayside-Fox Point-River Hills	6	0.90	4	0.54	10	1.44	0.82	2.96	3.78	--
	14	Brown Deer-Glendale	9	0.29	2	0.07	11	0.36	-1.76	-0.16	-1.92	2
	15	Shorewood-Whitefish Bay	10	0.33	1	0.03	11	0.36	-0.59	-1.12	-1.71	2
	16	Milwaukee (part)	7	0.20	1	0.03	8	0.23	-4.97	-1.39	-6.36	6
	17	Milwaukee (part) <sup>h</sup>	10	0.15	5	0.08	15	0.23	-13.24	0.66	-12.58	13
	18	Milwaukee (part)	24	0.20	6	0.05	30	0.25	-17.67	-2.36	-20.03	20
	19	Milwaukee (part)	12	0.16	3	0.04	15	0.20	-14.15	-2.24	-16.39	16
	20	Milwaukee (part)	32	0.25	2	0.02	34	0.27	-12.60	-6.30	-18.90	19
	21	Milwaukee (part)	20	0.35	2	0.03	22	0.38	-0.24	-2.05	-2.29	2
	22	Milwaukee (part)	10	0.52	1	0.05	11	0.57	3.29	-0.34	2.95	--
	23	Milwaukee (part)	12	0.28	0	0.00	12	0.28	-2.88	-2.97	-5.85	6
	24	Milwaukee (part)	15	0.27	1	0.02	16	0.29	-4.47	-2.90	-7.37	7
	25	Milwaukee (part)	15	0.40	1	0.03	16	0.43	1.94	-1.62	0.32	--
	26	Cudahy-St. Francis-South Milwaukee	19	0.33	3	0.05	22	0.38	-1.37	-1.07	-2.44	2
	27	Oak Creek	7	0.16	1	0.02	8	0.18	-8.21	-2.04	-10.25	10
	28	Franklin	9	0.24	2	0.06	11	0.30	-4.00	-0.60	-4.60	5
	29	Greendale-Greenfield-Hales Corners	19	0.30	7	0.12	26	0.42	-2.87	2.62	-0.25	--
	30	West Allis-West Milwaukee	24	0.33	4	0.06	28	0.39	-1.40	-1.08	-2.48	2
	31	Wauwatosa	15	0.28	0	0.00	15	0.28	-3.57	-3.71	-7.28	7
	County Totals	275	--	46	--	321	--	--	--	--	119	
Waukesha	32	Menomonee Falls-Butler	14	0.24	7	0.12	21	0.36	-6.44	2.93	-3.51	4
	32	Lannon	4	1.28	2	0.64	6	1.92	2.90	1.78	4.68	--
	33	Brookfield-Elm Grove <sup>i</sup>	20	0.35	10	0.18	30	0.53	0.00	6.26	6.26	--
	34	New Berlin	13	0.25	0	0.00	13	0.25	-5.10	-3.62	-8.72	9
	35	Muskego	8	0.44	1	0.06	9	0.50	1.68	-0.27	1.41	--
	36	Duplainville	1	0.27	0	0.00	1	0.27	-0.29	-0.26	-0.55	1
	36	Sussex	3	0.32	0	0.00	3	0.32	-0.24	-0.65	-0.89	1
	36	Pewaukee	4	0.33	1	0.08	5	0.41	-0.27	0.15	-0.12	--
	37	Merton	2	3.22	0	0.00	2	3.22	1.78	-0.04	1.74	--
	38	Delafield	4	0.64	0	0.00	4	0.64	1.83	-0.44	1.39	--
	38	Hartland	4	0.59	2	0.29	6	0.88	1.63	1.52	3.15	--
	39	Oconomowoc	10	0.51	3	0.16	13	0.67	3.16	1.63	4.79	--
	39	Okauchee	1	0.30	1	0.29	2	0.59	-0.18	0.76	0.58	--
	40	Waukesha	33	0.45	4	0.05	37	0.50	7.32	-1.14	6.18	--
	41	Dousman <sup>j</sup>	2	1.07	1	0.53	3	1.60	1.35	0.86	2.21	--
	41	Eagle	1	0.65	0	0.00	1	0.65	0.46	-0.11	0.35	--
	41	North Prairie	1	0.64	0	0.00	1	0.64	0.45	-0.11	0.34	--
	41	Wales	2	0.82	0	0.00	2	0.82	1.15	-0.17	0.98	--
	42	Big Bend	2	1.27	3	1.90	5	3.17	1.45	2.89	4.34	--
	42	Mukwonago	4	0.46	1	0.12	5	0.58	0.99	0.39	1.38	--
		County Totals	133	--	36	--	169	--	--	--	--	15
Racine	43	Racine-North	14	0.40	5	0.14	19	0.54	1.76	2.55	4.31	--
	43	Caledonia-East	5	0.32	2	0.13	7	0.45	-0.46	0.93	0.47	--
	44	Racine-South	29	0.53	7	0.13	36	0.66	9.98	3.19	13.17	--
	44	Mt. Pleasant-East	5	0.40	2	0.16	7	0.56	0.62	1.12	1.74	--
	45	Caddy Vista	1	0.75	1	0.75	2	1.50	0.53	0.91	1.44	--
	45	Caledonia-West <sup>k</sup>	3	0.39	0	0.00	3	0.39	0.31	-0.54	-0.23	--
	46	Mt. Pleasant-Sturtevant <sup>l</sup>	8	0.33	2	0.08	10	0.41	-0.49	0.24	-0.25	--
	47	Union Grove	8	1.28	0	0.00	8	1.28	5.80	-0.43	5.37	--
	48	Wind Lake	1	0.19	0	0.00	1	0.19	-0.79	-0.36	-1.15	1
	48	Waterford-Rochester	3	0.41	2	0.27	5	0.68	0.44	1.47	1.91	--
	49	Burlington	8	0.49	8	0.49	16	0.98	2.27	6.85	9.12	--
		County Totals	85	--	29	--	114	--	--	--	--	1

Table 121 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (playgrounds) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	11	0.33	1	0.03	12	0.36	- 0.75	- 1.35	- 2.10	2
	51	Kenosha-South	15	0.34	2	0.04	17	0.38	- 0.58	- 1.11	- 1.69	2
	51	South Kenosha	4	0.30	1	0.08	5	0.38	- 0.59	0.08	- 0.51	1
	52	Somers-East	0	0.00	0	0.00	0	0.00	- 6.50	- 1.31	- 7.81	8
	52	Somers-West	0	0.00	0	0.00	0	0.00	- 1.63	- 0.32	- 1.95	2
	53	Pleasant Prairie-West	1	0.34	0	0.00	1	0.34	- 0.03	- 0.20	- 0.23	--
	53	Pleasant Prairie-East	1	0.06	1	0.06	2	0.12	- 4.60	- 0.16	- 4.76	5
	53	Pleasant Prairie-Central <sup>m</sup>	0	0.00	0	0.00	0	0.00	- 0.73	- 0.15	- 0.88	1
	54	Bristol	2	1.35	0	0.00	2	1.35	1.48	- 0.10	1.38	--
	55	Paddock Lake	2	0.42	3	0.63	5	1.05	0.33	2.67	3.00	--
	55	Silver Lake	2	0.87	0	0.00	2	0.87	1.19	- 0.16	1.03	--
	55	Twin Lakes	2	0.45	1	0.22	3	0.67	0.43	0.69	1.12	--
		County Totals	40	--	9	--	49	--	--	--	--	21
Walworth	56	East Troy	2	0.40	1	0.20	3	0.60	0.26	0.65	0.91	--
	57	Whitewater	5	0.30	0	0.00	5	0.30	- 0.83	- 1.17	- 2.00	2
	58	Elkhorn	4	0.51	1	0.13	5	0.64	1.27	0.45	1.72	--
	59	Como Lake	1	0.53	0	0.00	1	0.53	0.34	- 0.13	0.21	--
	59	Genoa City	2	1.30	0	0.00	2	1.30	1.46	- 0.11	1.35	--
	59	Lake Geneva	2	0.20	1	0.09	3	0.29	- 1.56	0.28	- 1.28	1
	59	Pell Lake	1	0.69	0	0.00	1	0.69	0.49	- 0.10	0.39	--
	59	Williams Bay-Fontana-Walworth	5	0.47	2	0.19	7	0.66	1.27	1.27	2.54	--
	60	Darien	1	0.50	0	0.00	1	0.50	0.30	- 0.14	0.16	--
	60	Delavan	3	0.36	0	0.00	3	0.36	0.09	- 0.58	- 0.49	--
	60	Sharon	2	0.76	0	0.00	2	0.76	1.08	- 0.19	0.89	--
		County Totals	28	--	5	--	33	--	--	--	--	3
Region Totals			640	--	146	--	786	--	--	--	--	174

<sup>a</sup> Minimum standard per capita requirements for playgrounds are as follows: public—0.35/1,000 urban residents; nonpublic—0.07/1,000 urban residents; and public and nonpublic combined—0.42/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of playgrounds may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of playgrounds provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>j</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>k</sup> The Caledonia-West area includes a small area in planning analysis area 46.

<sup>l</sup> The Mt. Pleasant-Sturtevant area includes a small area in planning analysis area 44.

<sup>m</sup> The Pleasant Prairie-Central urban area includes a small area in planning analysis area 51.

Source: SEWRPC.

Table 122

## FACILITY REQUIREMENTS FOR SOFTBALL DIAMONDS IN URBAN AREAS IN THE REGION: 1975

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (diamonds) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	0	0.00	0	0.00	0	0.00	- 0.49	- 0.07	- 0.56	1
	1	Fredonia	5	3.43	0	0.00	5	3.43	4.23	- 0.10	4.13	--
	2	Port Washington	13	1.38	1	0.11	14	1.48	8.00	0.34	8.34	--
	3	Saukville	2	0.82	0	0.00	2	0.82	0.71	- 0.17	0.54	--
	4	Cedarburg-Grafton <sup>f</sup>	13	0.67	3	0.16	16	0.83	2.71	1.74	4.45	--
	5	Mequon-Thiensville	12	0.80	4	0.26	16	1.06	4.07	2.87	6.94	--
	County Totals		45	--	8	--	53	--	--	--	--	1
Washington	6	Kewaskum	1	0.39	3	1.18	4	1.57	- 0.34	2.82	2.48	--
	7	West Bend	12	0.58	7	0.34	19	0.92	1.04	5.55	6.59	--
	7	Newburg <sup>g</sup>	0	0.00	3	4.67	3	4.67	- 0.34	2.95	2.61	--
	8	Allenton	2	2.41	2	2.41	4	4.82	1.56	1.94	3.50	--
	9	Jackson	2	1.01	0	0.00	2	1.01	0.95	- 0.14	0.81	--
	10	Hartford	17	2.26	1	0.13	18	2.39	13.02	0.47	13.49	--
	10	Slinger	4	2.97	0	0.00	4	2.97	3.28	- 0.09	3.19	--
	11	Germantown	4	0.90	1	0.22	5	1.12	1.63	0.69	2.32	--
County Totals		42	--	17	--	59	--	--	--	--	--	
Milwaukee	13	Bayside-Fox Point-River Hills	12	0.85	2	0.14	14	0.99	4.52	0.99	5.51	--
	14	Brown Deer-Glendale	34	1.38	0	0.00	34	1.38	20.91	- 1.73	19.18	--
	15	Shorewood-Whitefish Bay	14	0.44	2	0.06	16	0.50	- 3.00	- 0.25	- 3.25	3
	16	Milwaukee (part)	8	0.19	0	0.00	8	0.19	- 14.65	- 2.99	- 17.64	18
	17	Milwaukee (part) <sup>h</sup>	14	0.29	8	0.17	22	0.46	- 11.52	4.80	- 6.72	7
	18	Milwaukee (part)	41	0.35	4	0.03	45	0.38	- 21.45	- 4.77	- 26.22	26
	19	Milwaukee (part)	27	0.33	7	0.09	34	0.42	- 15.84	1.34	- 14.50	15
	20	Milwaukee (part)	14	0.10	0	0.00	14	0.10	- 60.23	- 9.80	- 70.03	70
	21	Milwaukee (part)	9	0.13	1	0.02	10	0.15	- 26.54	- 3.32	- 29.86	30
	22	Milwaukee (part)	14	0.70	0	0.00	14	0.70	3.46	- 1.39	2.07	--
	23	Milwaukee (part)	23	0.59	2	0.05	25	0.64	2.34	- 0.73	1.61	--
	24	Milwaukee (part)	22	0.37	2	0.03	24	0.40	- 9.54	- 2.17	- 11.71	12
	25	Milwaukee (part)	17	0.47	1	0.03	18	0.50	- 2.03	- 1.52	- 3.55	4
	26	Cudahy-St. Francis-South Milwaukee	39	0.70	14	0.25	53	0.95	9.42	9.98	19.40	--
	27	Oak Creek	15	1.28	3	0.26	18	1.54	8.79	2.18	10.97	--
	28	Franklin	5	0.56	0	0.00	5	0.56	0.28	- 0.62	- 0.34	--
	29	Greendale-Greenfield-Hales Corners	32	0.56	4	0.07	36	0.63	1.70	0.00	1.70	--
	30	West Allis-West Milwaukee	49	0.63	2	0.03	51	0.66	7.83	- 3.13	4.70	--
	31	Wauwatosa	30	0.55	1	0.02	31	0.57	1.10	- 2.74	- 1.64	2
County Totals		419	--	53	--	472	--	--	--	--	187	
Waukesha	32	Menomonee Falls-Butler	21	0.70	6	0.20	27	0.90	5.11	3.91	9.02	--
	32	Lannon	4	3.51	1	0.88	5	4.39	3.40	0.92	4.32	--
	33	Brookfield-Elm Grove <sup>i</sup>	31	0.72	8	0.18	39	0.90	8.12	4.98	13.10	--
	34	New Berlin	24	0.99	1	0.04	25	1.03	11.17	- 0.69	10.48	--
	35	Muskego	15	1.46	1	0.10	16	1.56	9.55	0.28	9.83	--
	36	Duplainville	--	--	--	--	--	--	--	--	--	--
	36	Sussex	5	1.27	0	0.00	5	1.27	2.92	- 0.28	2.64	--
	36	Pewaukee	6	1.33	2	0.44	8	1.77	3.60	1.68	5.28	--
	37	Merton	2	2.85	0	0.00	2	2.85	1.63	- 0.05	1.58	--
	38	Delafield	1	0.87	0	0.00	1	0.87	0.39	- 0.08	0.31	--
	38	Hartland	7	1.60	2	0.45	9	2.05	4.68	1.69	6.37	--
	39	Oconomowoc	10	0.85	2	0.17	12	1.02	3.75	1.18	4.93	--
	39	Okauchee	1	0.38	0	0.00	1	0.38	- 0.39	- 0.18	- 0.57	1
	40	Waukesha	37	0.74	4	0.08	41	0.82	10.43	0.49	10.92	--
	41	Dousman <sup>j</sup>	8	8.67	0	0.00	8	8.67	7.51	- 0.06	7.45	--
	41	Eagle	4	4.66	0	0.00	4	4.66	3.55	- 0.06	3.49	--
	41	North Prairie	1	1.29	0	0.00	1	1.29	0.59	- 0.05	0.54	--
	41	Wales	1	0.76	0	0.00	1	0.76	0.30	- 0.09	0.21	--
	42	Big Bend	2	1.15	2	1.15	4	2.30	1.08	1.88	2.96	--
	42	Mukwonago	8	2.31	0	0.00	8	2.31	6.16	- 0.24	5.92	--
	County Totals		188	--	29	--	217	--	--	--	--	1
Racine	43	Racine-North	16	0.48	0	0.00	16	0.48	- 1.76	- 2.34	- 4.10	4
	43	Caledonia-East	7	0.49	5	0.35	12	0.84	- 0.57	4.00	3.43	--
	44	Racine-South	38	0.67	3	0.05	41	0.72	7.78	- 0.99	6.79	--
	44	Mt. Pleasant-East	5	0.54	3	0.33	8	0.87	0.09	2.39	2.48	--
	45	Caddy Vista	2	1.99	1	0.99	3	2.98	1.47	0.93	2.40	--
	45	Caledonia	5	2.31	0	0.00	5	2.31	3.85	- 0.15	3.70	--
	46	Mt. Pleasant-Sturtevant	7	0.58	2	0.16	9	0.74	0.61	1.09	1.70	--
	47	Union Grove	6	1.85	0	0.00	6	1.85	4.28	- 0.23	4.05	--
	48	Wind Lake	1	0.80	1	0.80	2	1.60	0.34	0.91	1.25	--
	48	Waterford-Rochester	6	1.54	0	0.00	6	1.54	3.93	- 0.27	3.66	--
	49	Burlington	11	1.05	5	0.48	16	1.53	5.43	4.27	9.70	--
	County Totals		104	--	20	--	124	--	--	--	--	4

Table 122 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (diamonds) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	20	0.63	3	0.09	23	0.72	3.08	0.76	3.84	--
	51	Kenosha-South	24	0.52	3	0.07	27	0.59	- 0.30	- 0.21	- 0.51	1
	51	South Kenosha	17	1.94	0	0.00	17	1.94	12.35	- 0.61	11.74	--
	52	Somers-East	1	0.70	0	0.00	1	0.70	0.24	- 0.10	0.14	--
	52	Somers-West	2	2.93	0	0.00	2	2.93	1.64	- 0.05	1.59	--
	53	Pleasant Prairie-West	4	3.99	0	0.00	4	3.99	3.47	- 0.07	3.40	--
	55	Paddock Lake	1	0.35	1	0.34	2	0.69	- 0.53	0.80	0.27	--
	55	Silver Lake	4	3.20	0	0.00	4	3.20	3.34	- 0.09	3.25	--
	55	Twin Lakes	4	1.31	0	0.00	4	1.31	2.37	- 0.21	2.16	--
	County Totals	77	--	7	--	84	--	--	--	--	1	
Walworth	56	East Troy	4	1.83	1	0.46	5	2.29	2.84	0.85	3.69	--
	57	Whitewater	8	0.88	0	0.00	8	0.88	3.19	- 0.63	2.56	--
	58	Elkhorn	5	1.16	1	0.23	6	1.39	2.71	0.70	3.41	--
	59	Como Lake	2	1.36	0	0.00	2	1.36	1.22	- 0.10	1.12	--
	59	Genoa City	2	2.15	0	0.00	2	2.15	1.51	- 0.07	1.44	--
	59	Lake Geneva	3	0.56	4	0.75	7	1.31	0.16	3.63	3.79	--
	59	Pell Lake	1	0.72	0	0.00	1	0.72	0.27	- 0.10	0.17	--
	59	Williams Bay-Fontana-Walworth	8	1.57	6	1.18	14	2.75	5.30	5.66	10.96	--
	60	Darien	1	1.00	0	0.00	1	1.00	0.47	- 0.07	0.40	--
	60	Delavan	12	2.09	1	0.17	13	1.66	8.95	0.57	9.52	--
60	Sharon	2	1.47	0	0.00	2	1.47	1.28	- 0.10	1.18	--	
	County Totals	48	--	13	--	61	--	--	--	--	--	
Region Totals			923	--	147	--	1,070	--	--	--	--	194

<sup>a</sup> Minimum standard per capita requirements for softball diamonds are as follows: public—0.53/1,000 urban residents; nonpublic—0.07/1,000 urban residents; and public and nonpublic combined—0.60/1,000 urban residents.

<sup>c</sup> Quantity of softball diamonds may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of softball diamonds provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>j</sup> The Dousman urban area includes a small area in planning analysis area 39.

Source: SEWRPC.



Table 123

## FACILITY REQUIREMENTS FOR SOFTBALL DIAMONDS IN URBAN AREAS IN THE REGION: 2000

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (diamonds) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	0	0.00	0	0.00	0	0.00	- 0.79	- 0.10	- 0.89	1
	1	Fredonia	5	2.36	0	0.00	5	2.36	3.88	- 0.15	3.73	--
	2	Port Washington	13	1.00	1	0.08	14	1.08	6.12	0.09	6.21	--
	3	Saukville	2	0.30	0	0.00	2	0.30	- 1.53	- 0.47	- 2.00	2
	4	Cedarburg-Grafton <sup>f</sup>	13	0.39	3	0.09	16	0.48	- 4.67	0.67	- 4.00	4
	5	Mequon-Thiensville	12	0.31	4	0.10	16	0.41	- 8.56	1.17	- 7.39	7
	County Totals		45	--	8	--	53	--	--	--	--	14
Washington	6	Kewaskum	1	0.20	3	0.62	4	0.82	- 1.59	2.66	1.07	--
	7	West Bend	12	0.30	7	0.17	19	0.47	- 9.53	4.16	- 5.37	5
	7	Newburg <sup>g</sup>	0	0.00	3	1.32	3	1.32	- 1.20	2.83	1.63	--
	8	Allenton	2	1.01	2	1.02	4	2.03	0.96	1.86	2.82	--
	9	Jackson	2	0.33	0	0.00	2	0.33	- 1.18	- 0.42	- 1.60	2
	10	Hartford	17	1.10	1	0.06	18	1.16	8.78	- 0.09	8.69	--
	10	Slinger	4	0.92	0	0.00	4	0.92	1.69	- 0.31	1.38	--
	11	Germantown	7	0.27	1	0.04	8	0.31	- 6.89	- 0.84	- 7.73	8
County Totals		45	--	17	--	62	--	--	--	--	15	
Milwaukee	13	Bayside-Fox Point-River Hills	12	1.44	2	0.18	14	1.62	4.15	0.96	5.11	--
	14	Brown Deer-Glendale	34	1.11	0	0.00	34	1.11	17.70	- 2.15	15.55	--
	15	Shorewood-Whitefish Bay	14	0.46	2	0.07	16	0.53	- 2.04	- 0.12	- 2.16	2
	16	Milwaukee (part)	8	0.23	0	0.00	8	0.23	- 10.12	- 2.39	- 12.51	13
	17	Milwaukee (part) <sup>h</sup>	14	0.21	8	0.12	22	0.33	- 21.18	3.31	- 17.87	18
	18	Milwaukee (part)	44	0.37	4	0.04	48	0.41	- 18.85	- 3.53	- 22.38	22
	19	Milwaukee (part)	27	0.36	7	0.09	34	0.45	- 12.70	1.49	- 11.21	11
	20	Milwaukee (part)	14	0.11	0	0.00	14	0.11	- 52.94	- 8.82	- 61.76	62
	21	Milwaukee (part)	10	0.17	1	0.02	11	0.19	- 20.65	- 3.05	- 23.70	24
	22	Milwaukee (part)	14	0.73	0	0.00	14	0.73	3.84	- 1.34	2.50	--
	23	Milwaukee (part)	23	0.54	2	0.05	25	0.59	0.47	- 0.98	- 0.51	1
	24	Milwaukee (part)	22	0.39	2	0.04	24	0.43	- 7.48	- 1.90	- 9.38	9
	25	Milwaukee (part)	17	0.45	1	0.03	18	0.48	- 2.78	- 1.61	- 4.39	4
	26	Cudahy-St. Francis-South Milwaukee	39	0.67	14	0.24	53	0.91	8.15	9.93	18.08	--
	27	Oak Creek	16	0.37	3	0.07	19	0.44	- 7.03	- 0.04	- 7.07	7
	28	Franklin	9	0.25	2	0.05	11	0.30	- 10.68	- 0.60	- 11.28	11
	29	Greendale-Greenfield-Hales Corners	34	0.55	4	0.06	38	0.61	0.89	- 0.38	0.51	--
	30	West Allis-West Milwaukee	49	0.67	2	0.03	51	0.70	10.54	- 3.08	7.46	--
	31	Wauwatosa	33	0.62	1	0.02	34	0.64	4.88	- 2.71	2.17	--
County Totals		433	--	55	--	488	--	--	--	--	184	
Waukesha	32	Menomonee Falls-Butler	21	0.36	6	0.10	27	0.46	- 9.96	1.76	- 8.20	8
	32	Lannon	5	1.60	2	0.64	7	2.24	3.34	1.78	5.12	--
	33	Brookfield-Elm Grove <sup>i</sup>	32	0.56	8	0.14	40	0.70	1.71	3.99	5.70	--
	34	New Berlin	31	0.60	1	0.02	32	0.62	3.59	- 2.62	0.97	--
	35	Muskego	15	0.83	1	0.06	16	0.89	5.42	- 0.26	5.16	--
	36	Duplainville	0	0.00	0	0.00	0	0.00	- 1.95	- 0.26	- 2.21	2
	36	Sussex	5	0.54	0	0.00	5	0.54	0.09	- 0.65	- 0.56	1
	36	Pewaukee	6	0.50	2	0.16	8	0.66	- 0.46	1.15	0.69	--
	37	Merton	2	3.22	0	0.00	2	3.22	1.67	- 0.04	1.63	--
	38	Delafield	3	0.48	1	0.16	4	0.64	- 0.29	0.56	0.27	--
	38	Hartland	7	1.04	2	0.29	9	1.33	3.40	1.53	4.93	--
	39	Oconomowoc	10	0.51	2	0.10	12	0.61	- 0.35	0.63	0.28	--
	39	Okauchee	1	0.30	0	0.00	1	0.30	- 0.78	- 0.24	- 1.02	1
	40	Waukesha	43	0.59	4	0.05	47	0.64	4.12	- 1.14	2.98	--
	41	Dousman <sup>j</sup>	8	4.27	0	0.00	8	4.27	7.01	- 0.13	6.88	--
	41	Eagle	4	2.60	0	0.00	4	2.60	3.19	- 0.11	3.08	--
	41	North Prairie	1	0.64	0	0.00	1	0.64	0.17	- 0.11	0.06	--
	41	Wales	1	0.41	0	0.00	1	0.41	- 0.29	- 0.17	- 0.46	--
	42	Big Bend	2	1.27	2	1.27	4	2.54	1.17	1.89	3.06	--
	42	Mukwonago	8	0.93	0	0.00	8	0.93	3.43	- 0.60	2.83	--
County Totals		205	--	31	--	236	--	--	--	--	12	
Racine	43	Racine-North	16	0.46	0	0.00	16	0.46	- 2.54	- 2.45	- 4.99	5
	43	Caledonia-East	7	0.45	5	0.32	12	0.77	- 1.24	3.89	2.65	--
	44	Racine-South	38	0.70	3	0.05	41	0.75	9.19	- 0.80	8.39	--
	44	Mt. Pleasant-East	5	0.40	3	0.24	8	0.64	- 1.61	2.11	0.50	--
	45	Caddy Vista	2	1.50	1	0.75	3	2.25	1.29	0.91	2.20	--
	45	Caledonia-West <sup>k</sup>	5	0.64	0	0.00	5	0.64	0.85	- 0.54	0.31	--
	46	Mt. Pleasant-Sturtevant <sup>l</sup>	7	0.28	2	0.08	9	0.36	- 6.15	0.25	- 5.90	6
	47	Union Grove	6	0.96	0	0.00	6	0.96	2.68	- 0.44	2.24	--
	48	Wind Lake	1	0.19	2	0.39	3	0.58	- 1.72	1.64	- 0.08	--
	48	Waterford-Rochester	6	0.82	0	0.00	6	0.82	2.13	- 0.51	1.62	--
	49	Burlington	11	0.67	5	0.31	16	0.98	2.32	3.85	6.17	--
	County Totals		104	--	21	--	125	--	--	--	--	11

Table 123 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (diamonds) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	20	0.60	3	0.09	23	0.69	2.20	0.65	2.85	--
	51	Kenosha-South	24	0.54	3	0.07	27	0.61	0.41	- 0.12	0.29	--
	51	South Kenosha	17	1.30	0	0.00	17	1.30	10.05	- 0.92	9.13	--
	52	Somers-East	2	0.11	0	0.00	2	0.11	- 7.81	- 1.30	- 9.11	9
	52	Somers-West	2	0.43	0	0.00	2	0.43	- 0.46	- 0.33	- 0.79	1
	53	Pleasant Prairie-West	4	1.36	0	0.00	4	1.36	2.45	- 0.21	2.24	--
	53	Pleasant Prairie-East	5	0.32	0	0.00	5	0.32	- 3.33	- 1.11	- 4.44	4
	53	Pleasant Prairie-Central <sup>m</sup>	1	0.48	0	0.00	1	0.48	- 0.10	- 0.15	- 0.25	--
	54	Bristol	2	1.35	0	0.00	2	1.35	1.21	- 0.10	1.11	--
	55	Paddock Lake	1	0.21	1	0.21	2	0.42	- 1.52	0.66	- 0.86	1
	55	Silver Lake	4	1.74	0	0.00	4	1.74	2.78	- 0.16	2.62	--
	55	Twin Lakes	4	0.89	0	0.00	4	0.89	1.63	- 0.31	1.32	--
		County Totals	86	--	7	--	93	--	--	--	--	15
Walworth	56	East Troy	5	1.00	1	0.20	6	1.20	2.36	0.65	3.01	--
	57	Whitewater	8	0.48	0	0.00	8	0.48	- 0.83	- 1.17	- 2.00	2
	58	Elkhorn	5	0.64	1	0.13	6	0.77	0.87	0.45	1.32	--
	59	Como Lake	2	1.06	0	0.00	2	1.06	1.00	- 0.13	0.87	--
	59	Genoa City	2	1.30	0	0.00	2	1.30	1.19	- 0.11	1.08	--
	59	Lake Geneva	3	0.30	4	0.39	7	0.69	- 2.40	3.29	0.89	--
	59	Pell Lake	1	0.69	0	0.00	1	0.69	0.23	- 0.10	0.13	--
	59	Williams Bay-Fontana-Walworth	8	0.75	6	0.57	14	1.32	2.33	5.31	7.64	--
	60	Darien	1	0.50	0	0.00	1	0.50	- 0.06	- 0.14	- 0.20	--
	60	Delavan	12	1.45	1	0.12	13	1.57	7.60	0.42	8.02	--
	60	Sharon	2	0.76	0	0.00	2	0.76	0.60	- 0.18	0.42	--
		County Totals	49	--	13	--	62	--	--	--	--	2
Region Totals			967	--	152	--	1,119	--	--	--	253	

<sup>a</sup> Minimum standard per capita requirements for softball diamonds are as follows: public—0.53/1,000 urban residents; nonpublic—0.07/1,000 urban residents; and public and nonpublic combined—0.60/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of softball diamonds may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of softball diamonds provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>j</sup> The Dousman urban area includes a small area in planning analysis area 39.

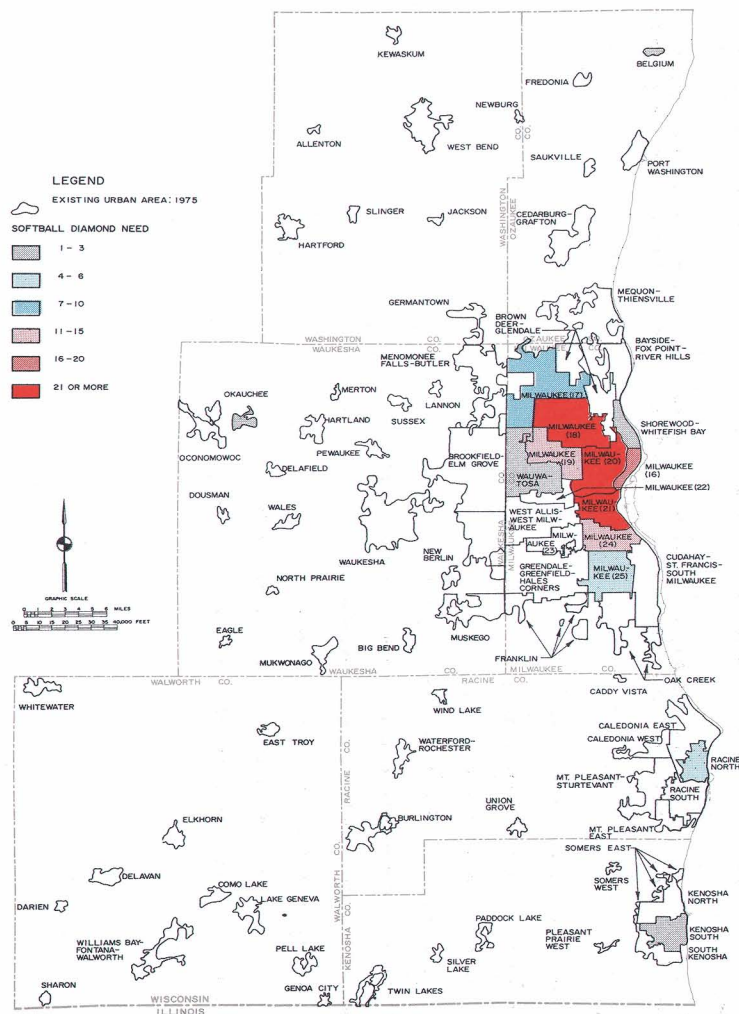
<sup>k</sup> The Caledonia-West area includes a small area in planning analysis area 46.

<sup>l</sup> The Mt. Pleasant-Sturtevant area includes a small area in planning analysis area 44.

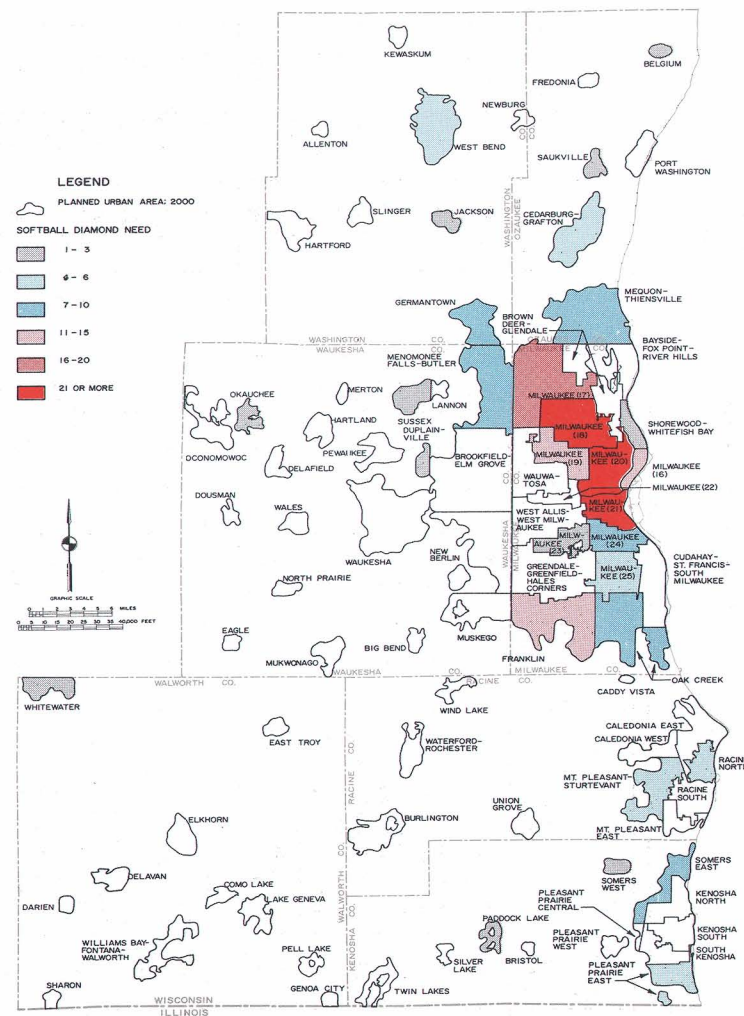
<sup>m</sup> The Pleasant Prairie-Central urban area includes a small area in planning analysis area 51.

Source: SEWRPC.

### FACILITY REQUIREMENTS FOR SOFTBALL DIAMONDS IN URBAN AREAS IN THE REGION: 1975



### FACILITY REQUIREMENTS FOR SOFTBALL DIAMONDS IN URBAN AREAS IN THE REGION: 2000

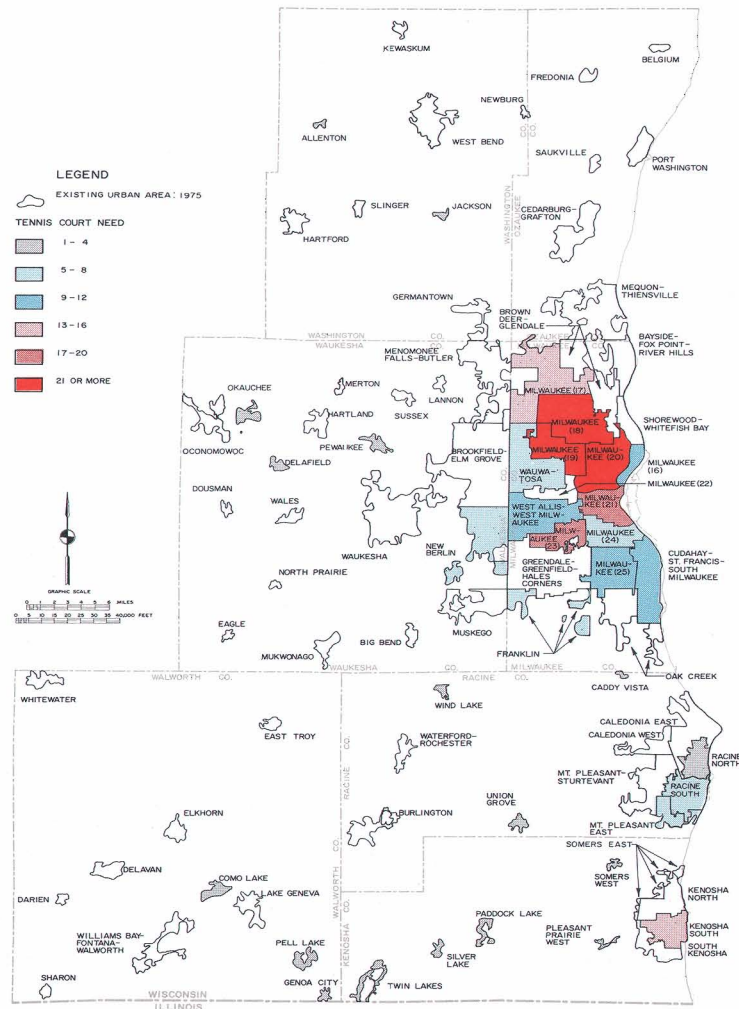


The agreed-upon per capita standard for softball diamonds is 0.60 softball diamond per thousand urban residents. Application of the standard for softball diamonds indicated that a total of 194 additional softball diamonds was needed in 14 urban areas in the Region in 1975, with almost all being required in high-density urban areas in Milwaukee County. By the year 2000, it is anticipated that a total of 253 softball diamonds will be needed in 30 urban areas. While the total number of softball diamonds needed in Milwaukee County remains approximately the same in both 1975 and 2000, the spatial distribution changes to reflect the anticipated decrease in the population in the older central portion of the City of Milwaukee and an anticipated increase in the population of the newer urban areas in the northwestern and southern portions of the County.

Source: SEWRPC.

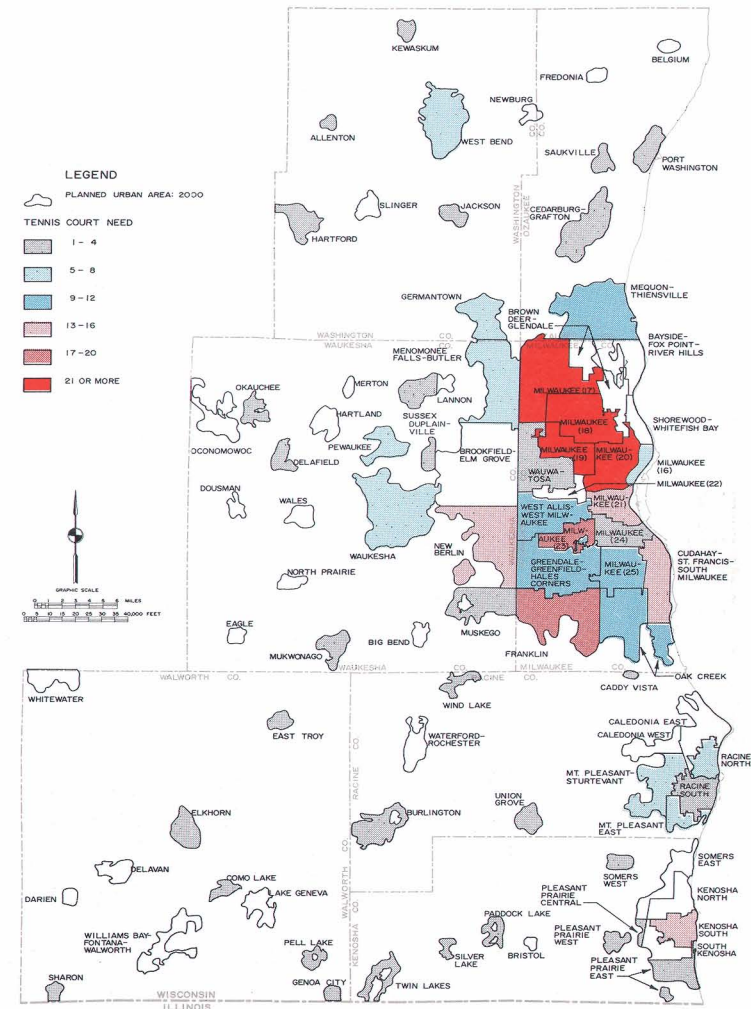
Map 110

### FACILITY REQUIREMENTS FOR TENNIS COURTS IN URBAN AREAS IN THE REGION: 1975



Map 111

### FACILITY REQUIREMENTS FOR TENNIS COURTS IN URBAN AREAS IN THE REGION: 2000



The agreed-upon per capita standard for tennis courts is 0.60 tennis court per thousand and urban residents. Application of this standard indicated that a total of 313 additional tennis courts was needed in 34 urban areas in the Region in 1975, with most of these courts being required in the high density urban areas in Milwaukee, Racine, and Kenosha Counties. By the year 2000, it is anticipated that a total of 412 courts will be needed in 57 urban areas, with the additional 99 tennis courts needed above those required in 1975 being located in urban areas throughout the Region.

Source: SEWRPC.



Table 124

## FACILITY REQUIREMENTS FOR TENNIS COURTS IN URBAN AREAS IN THE REGION: 1975

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (courts) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	2	2.14	0	0.00	2	2.14	1.53	- 0.09	1.44	--
	1	Fredonia	2	1.37	0	0.00	2	1.37	1.27	- 0.14	1.13	--
	2	Port Washington	7	0.74	0	0.00	7	0.74	2.28	- 0.94	1.34	--
	3	Saukville	2	0.82	0	0.00	2	0.82	0.78	- 0.24	0.54	--
	4	Cedarburg-Grafton <sup>f</sup>	17	0.88	0	0.00	17	0.88	7.35	- 1.93	5.42	--
	5	Mequon-Thiensville	10	0.66	4	0.27	14	0.93	2.41	2.56	4.97	--
		County Totals	40	--	4	--	44	--	--	--	--	--
Washington	6	Kewaskum	2	0.79	0	0.00	2	0.79	0.73	- 0.25	0.48	--
	7	West Bend	19	0.92	0	0.00	19	0.92	8.66	- 2.07	6.59	--
	7	Newburg <sup>g</sup>	0	0.00	1	1.56	1	1.56	- 0.32	0.94	0.62	--
	8	Allenton	0	0.00	0	0.00	0	0.00	- 0.42	- 0.08	- 0.50	1
	9	Jackson	0	0.00	0	0.00	0	0.00	- 0.99	- 0.20	- 1.19	1
	10	Hartford	5	0.67	0	0.00	5	0.67	1.24	- 0.75	0.49	--
	10	Slinger	4	2.97	0	0.00	4	2.97	3.32	- 0.13	3.19	--
	11	Germantown	6	1.34	3	0.68	9	2.02	3.77	2.55	6.32	--
	County Totals	36	--	4	--	40	--	--	--	--	2	
Milwaukee	13	Bayside-Fox Point-River Hills	14	0.99	34	2.41	48	3.40	6.94	32.59	39.53	--
	14	Brown Deer-Glendale	23	0.93	15	0.61	38	1.54	10.65	12.53	23.18	--
	15	Shorewood-Whitefish Bay	34	1.06	7	0.22	41	1.28	17.95	3.79	21.74	--
	16	Milwaukee (part)	15	0.35	0	0.00	15	0.35	- 6.37	- 4.28	- 10.65	11
	17	Milwaukee (part) <sup>h</sup>	8	0.17	6	0.12	14	0.29	- 15.84	0.96	- 14.88	15
	18	Milwaukee (part)	23	0.20	0	0.00	23	0.19	- 35.76	- 11.92	- 47.68	48
	19	Milwaukee (part)	14	0.17	5	0.06	19	0.23	- 26.42	- 3.08	- 29.50	30
	20	Milwaukee (part)	15	0.11	3	0.02	18	0.13	- 54.63	- 11.21	- 65.84	66
	21	Milwaukee (part)	20	0.30	0	0.00	20	0.30	- 13.17	- 6.63	- 19.80	20
	22	Milwaukee (part)	31	1.56	1	0.05	32	1.61	21.06	- 0.99	20.07	--
	23	Milwaukee (part)	6	0.15	0	0.00	6	0.15	- 13.49	- 3.90	- 17.39	17
	24	Milwaukee (part)	30	0.50	0	0.00	30	0.50	0.24	- 5.95	- 5.71	6
	25	Milwaukee (part)	13	0.36	0	0.00	13	0.36	- 4.96	- 3.59	- 8.55	9
	26	Cudahy-St. Francis-South Milwaukee	16	0.29	5	0.09	21	0.38	- 11.72	- 0.54	- 12.26	12
	27	Oak Creek	14	1.19	0	0.00	14	1.19	8.14	- 1.17	6.97	--
	28	Franklin	0	0.00	0	0.00	0	0.00	- 4.45	- 0.89	- 5.34	5
29	Greendale-Greenfield-Hales Corners	17	0.30	12	0.21	29	0.51	- 11.34	6.33	- 5.01	--	
30	West Allis-West Milwaukee	35	0.45	0	0.00	35	0.45	- 4.13	- 7.83	- 11.96	12	
31	Wauwatosa	28	0.51	0	0.00	28	0.51	0.56	- 5.49	- 4.93	5	
	County Totals	356	--	88	--	444	--	--	--	--	256	
Waukesha	32	Menomonee Falls-Butler	28	0.93	0	0.00	28	0.93	12.92	- 3.00	9.92	--
	32	Lannon	3	2.63	0	0.00	3	2.63	2.43	- 0.11	2.32	--
	33	Brookfield-Elm Grove	46	1.07	10	0.23	56	1.30	24.42	5.68	30.10	--
	34	New Berlin	9	0.37	0	0.00	9	0.37	- 3.10	- 2.42	- 5.52	6
	35	Muskego	9	0.88	0	0.00	9	0.88	3.86	- 1.03	2.83	--
	36	DuPlainville	--	--	--	--	--	--	--	--	--	--
	36	Sussex	2	0.51	0	0.00	2	0.51	0.04	- 0.39	- 0.35	--
	36	Pewaukee	2	0.44	0	0.00	2	0.44	- 0.27	- 0.45	- 0.72	1
	37	Merton	2	2.85	0	0.00	2	2.85	1.65	- 0.07	1.58	--
	38	Delafield	0	0.00	0	0.00	0	0.00	- 0.57	- 0.12	- 0.69	1
	38	Hartland	6	1.37	0	0.00	6	1.37	3.81	- 0.44	3.37	--
	39	Oconomowoc	12	1.02	3	0.25	15	1.27	6.11	1.82	7.93	--
	39	Okauchee	1	0.38	0	0.00	1	0.38	- 0.31	- 0.26	- 0.57	1
	40	Waukesha	31	0.62	7	0.14	38	0.76	5.93	1.99	7.92	--
	41	Dousman <sup>i</sup>	2	2.17	0	0.00	2	2.17	1.54	- 0.09	1.45	--
	41	Eagle	2	2.33	0	0.00	2	2.33	1.58	- 0.09	1.49	--
	41	North Prairie	1	1.29	0	0.00	1	1.29	0.61	- 0.07	0.54	--
	41	Wales	7	5.30	0	0.00	7	5.30	6.34	- 0.13	6.21	--
	42	Big Bend	2	1.15	0	0.00	2	1.15	1.13	- 0.17	0.96	--
	42	Mukwonago	3	0.87	0	0.00	3	0.87	1.27	- 0.35	0.92	--
	County Totals	168	--	20	--	188	--	--	--	--	9	
Racine	43	Racine-North	16	0.48	0	0.00	16	0.48	- 0.75	- 3.35	- 4.10	4
	43	Caledonia-East	8	0.56	2	0.14	10	0.70	0.86	0.57	1.43	--
	44	Racine-South	26	0.46	0	0.00	26	0.46	- 2.51	- 5.70	- 8.21	8
	44	Mt. Pleasant-East	0	0.00	0	0.00	0	0.00	- 4.58	- 0.92	- 5.50	6
	45	Caddy Vista	0	0.00	0	0.00	0	0.00	- 0.50	- 0.10	- 0.60	1
	45	Caledonia-West	6	2.77	0	0.00	6	2.77	4.92	- 0.22	4.70	--
	46	Mt. Pleasant-Sturtevant	9	0.74	0	0.00	9	0.74	2.91	- 1.21	1.70	--
	47	Union Grove	0	0.00	0	0.00	0	0.00	- 1.63	- 0.32	- 1.95	2
	48	Wind Lake	0	0.00	0	0.00	0	0.00	- 0.63	- 0.12	- 0.75	1
	48	Waterford-Rochester	6	1.54	0	0.00	6	1.54	4.05	- 0.39	3.66	--
	49	Burlington	5	0.48	3	0.28	8	0.76	- 0.25	1.95	1.70	--
		County Totals	76	--	5	--	81	--	--	--	--	22

Table 124 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (courts) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	10	0.31	12	0.38	22	0.69	- 5.97	8.81	2.84	--
	51	Kenosha-South	6	0.13	8	0.17	14	0.30	- 16.92	3.41	- 13.51	14
	51	South Kenosha	10	1.14	0	0.00	10	1.14	5.61	- 0.87	4.74	--
	52	Somers-East	4	2.80	2	1.40	6	4.20	3.28	1.86	5.14	--
	52	Somers-West	0	0.00	0	0.00	0	0.00	- 0.34	- 0.07	- 0.41	1 <sup>j</sup>
	53	Pleasant Prairie-West	0	0.00	0	0.00	0	0.00	- 0.50	- 0.10	- 0.60	1
	55	Paddock Lake	0	0.00	0	0.00	0	0.00	- 1.45	- 0.28	- 1.73	2
	55	Silver Lake	0	0.00	0	0.00	0	0.00	- 0.63	- 0.12	- 0.75	1
	55	Twin Lakes	0	0.00	0	0.00	0	0.00	- 1.53	- 0.31	- 1.84	2
County Totals		30	--	22	--	52	--	--	--	--	21	
Walworth	56	East Troy	2	0.91	0	0.00	2	0.91	0.91	- 0.22	0.69	--
	57	Whitewater	1	0.11	15	1.65	16	1.76	- 3.53	14.09	10.56	--
	58	Elkhorn	4	0.93	0	0.00	4	0.93	1.84	- 0.43	1.41	--
	59	Como Lake	0	0.00	0	0.00	0	0.00	- 0.73	- 0.15	- 0.88	1
	59	Genoa City	0	0.00	0	0.00	0	0.00	- 0.47	- 0.09	- 0.56	1
	59	Lake Geneva	8	1.49	5	0.93	13	2.42	5.32	4.47	9.79	--
	59	Pell Lake	0	0.00	0	0.00	0	0.00	- 0.69	- 0.14	- 0.83	1
	59	Williams Bay-Fontana-										
		Walworth	4	0.78	14	2.75	18	3.53	1.43	13.51	14.94	--
	60	Darien	2	1.99	0	0.00	2	1.99	1.50	- 0.10	1.40	--
	60	Delavan	7	1.22	0	0.00	7	1.22	4.13	- 0.57	3.56	--
	60	Sharon	1	0.73	0	0.00	1	0.73	0.32	- 0.14	0.18	--
County Totals		29	--	34	--	63	--	--	--	--	3	
Region Totals			735	--	177	--	912	--	--	--	--	313

<sup>a</sup> Minimum standard per capita requirements for tennis courts are as follows: public—0.50/1,000 urban residents; nonpublic—0.10/1,000 urban residents; and public and nonpublic combined—0.60/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of tennis courts may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of tennis courts provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>j</sup> As specified in Chapter XI, at least one tennis court should be provided in each urban area.

Source: SEWRPC.

Table 125

## FACILITY REQUIREMENTS FOR TENNIS COURTS IN URBAN AREAS IN THE REGION: 2000

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (courts) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Ozaukee	1	Belgium	2	1.35	0	0.00	2	1.35	1.26	- 0.15	1.11	--
	1	Fredonia	2	0.95	0	0.00	2	0.95	0.94	- 0.21	0.73	--
	2	Port Washington	7	0.54	0	0.00	7	0.54	0.51	- 1.30	- 0.79	1
	3	Saukville	2	0.30	0	0.00	2	0.30	- 1.33	- 0.67	- 2.00	2
	4	Cedarburg-Grafton <sup>f</sup>	17	0.51	0	0.00	17	0.51	0.33	- 3.33	- 3.00	3
	5	Mequon-Thiensville	10	0.26	4	0.10	14	0.36	- 9.33	0.00	- 9.33	9
		County Totals	40	--	4	--	44	--	--	--	--	15
Washington	6	Kewaskum	2	0.41	0	0.00	2	0.41	- 0.44	- 0.49	- 0.93	1
	7	West Bend	19	0.47	0	0.00	19	0.47	- 1.31	- 4.06	- 5.37	5
	7	Newburg <sup>g</sup>	0	0.00	1	0.44	1	0.44	- 1.13	0.77	- 0.36	--
	8	Allenton	0	0.00	0	0.00	0	0.00	- 0.98	- 0.20	- 1.18	1
	9	Jackson	0	0.00	0	0.00	0	0.00	- 3.00	- 0.60	- 3.60	4
	10	Hartford	5	0.32	0	0.00	5	0.32	- 2.76	- 1.55	- 4.31	4
	10	Slinger	4	0.92	0	0.00	4	0.92	1.82	- 0.44	1.38	--
	11	Germantown	8	0.31	3	0.11	11	0.42	- 5.11	0.38	- 4.73	5
	County Totals	38	--	4	--	42	--	--	--	--	20	
Milwaukee	13	Bayside-Fox Point-River Hills	14	2.34	34	5.23	48	7.57	6.59	32.52	39.11	--
	14	Brown Deer-Glendale	23	0.75	15	0.49	38	1.24	7.62	11.93	19.55	--
	15	Shorewood-Whitefish Bay	34	1.12	7	0.23	41	1.35	18.87	3.97	22.84	--
	16	Milwaukee (part)	15	0.44	0	0.00	15	0.44	- 2.10	- 3.42	- 5.52	5
	17	Milwaukee (part) <sup>h</sup>	8	0.12	6	0.09	14	0.21	- 25.16	- 0.66	- 25.82	26
	18	Milwaukee (part)	35	0.30	0	0.00	35	0.30	- 23.56	- 11.78	- 35.34	35
	19	Milwaukee (part)	14	0.19	5	0.06	19	0.25	- 23.36	- 2.47	- 25.83	26
	20	Milwaukee (part)	15	0.12	3	0.02	18	0.14	- 47.89	- 10.08	- 57.97	58
	21	Milwaukee (part)	20	0.35	0	0.00	20	0.35	- 8.92	- 5.78	- 14.70	15
	22	Milwaukee (part)	31	1.62	1	0.05	32	1.67	21.42	- 0.92	20.50	--
	23	Milwaukee (part)	6	0.14	0	0.00	6	0.14	- 15.26	- 4.25	- 19.51	20
	24	Milwaukee (part)	30	0.54	0	0.00	30	0.54	2.18	- 5.56	- 3.38	3
	25	Milwaukee (part)	13	0.35	0	0.00	13	0.35	- 5.66	- 3.73	- 9.39	9
	26	Cudahy-St. Francis-South Milwaukee	16	0.27	5	0.09	21	0.36	- 13.09	- 0.82	- 13.91	14
	27	Oak Creek	14	0.32	0	0.00	14	0.32	- 7.73	- 4.34	- 12.07	12
	28	Franklin	0	0.00	4	0.11	4	0.11	- 18.57	0.29	- 18.28	18
	29	Greendale-Greenfield-Hales Corners	17	0.27	12	0.19	29	0.46	- 14.25	5.75	- 8.50	9
	30	West Allis-West Milwaukee	35	0.48	0	0.00	35	0.48	- 1.28	- 7.26	- 8.54	9
	31	Wauwatosa	28	0.53	0	0.00	28	0.53	1.47	- 5.30	- 3.83	4
	County Totals	368	--	92	--	460	--	--	--	--	263	
Waukesha	32	Menomonee Falls-Butler	28	0.48	0	0.00	28	0.48	- 1.17	- 5.86	- 7.03	7
	32	Lannon	3	0.96	0	0.00	3	0.96	1.43	- 0.31	1.12	--
	33	Brookfield-Elm Grove <sup>i</sup>	52	0.91	10	0.18	62	1.09	23.35	4.56	27.91	--
	34	New Berlin	15	0.29	0	0.00	15	0.29	- 10.86	- 5.17	- 16.03	16
	35	Muskego	9	0.50	0	0.00	9	0.50	- 0.03	- 1.81	- 1.84	2
	36	DuPlainville	0	0.00	0	0.00	0	0.00	- 1.84	- 0.37	- 2.21	2
	36	Sussex	2	0.22	0	0.00	2	0.22	- 2.63	- 0.93	- 3.56	4
	36	Pewaukee	2	0.16	0	0.00	2	0.16	- 4.10	- 1.22	- 5.32	5
	37	Merton	2	3.22	0	0.00	2	3.22	1.69	- 0.06	1.63	--
	38	Delafield	0	0.00	0	0.00	0	0.00	- 3.11	- 0.62	- 3.73	4
	38	Hartland	6	0.88	0	0.00	6	0.88	2.61	- 0.68	1.93	--
	39	Oconomowoc	12	0.61	3	0.16	15	0.77	2.23	1.05	3.28	--
	39	Okauchee	1	0.30	0	0.00	1	0.30	- 0.68	- 0.34	- 1.02	1
	40	Waukesha	31	0.42	7	0.10	38	0.52	- 5.69	- 0.33	- 6.02	6
	41	Dousman <sup>j</sup>	2	1.07	0	0.00	2	1.07	1.07	- 0.19	0.88	--
	41	Eagle	2	1.30	0	0.00	2	1.30	1.23	- 0.15	1.08	--
	41	North Prairie	1	0.64	0	0.00	1	0.64	0.22	- 0.16	0.06	--
	41	Wales	7	2.87	0	0.00	7	2.87	5.78	- 0.24	5.54	--
	42	Big Bend	2	1.27	0	0.00	2	1.27	1.21	- 0.16	1.05	--
	42	Mukwonago	3	0.35	0	0.00	3	0.35	- 1.31	- 0.86	- 2.17	2
		County Totals	180	--	20	--	200	--	--	--	--	49
Racine	43	Racine-North	16	0.46	0	0.00	16	0.46	- 1.49	- 3.50	- 4.99	5
	43	Caledonia-East	8	0.51	2	0.13	10	0.64	0.16	0.47	0.63	--
	44	Racine-South	31	0.57	0	0.00	31	0.57	3.83	- 5.44	- 1.61	2
	44	Mt. Pleasant-East	0	0.00	0	0.00	0	0.00	- 6.21	- 1.24	- 7.45	7
	45	Caddy Vista	0	0.00	0	0.00	0	0.00	- 0.67	- 0.13	- 0.80	1
	45	Caledonia-West <sup>k</sup>	6	0.77	0	0.00	6	0.77	2.10	- 0.78	1.32	--
	46	Mt. Pleasant-Sturtevant <sup>l</sup>	9	0.37	0	0.00	9	0.37	- 3.20	- 2.46	- 5.66	6
	47	Union Grove	0	0.00	0	0.00	0	0.00	- 3.14	- 0.62	- 3.76	4
	48	Wind Lake	0	0.00	0	0.00	0	0.00	- 2.57	- 0.51	- 3.08	3
	48	Waterford-Rochester	6	0.82	0	0.00	6	0.82	2.35	- 0.73	1.62	--
	49	Burlington	5	0.31	3	0.18	8	0.49	- 3.19	1.36	- 1.83	2
		County Totals	81	--	5	--	86	--	--	--	--	30

Table 125 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Number of Facilities (courts) <sup>a</sup>						Shortage/Surplus <sup>b</sup> of Facilities			Need <sup>e</sup>
			Public		Nonpublic		Total		Public	Nonpublic	Total	
			Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>	Quantity <sup>c</sup>	Per Capita Provision <sup>d</sup>				
Kenosha	50	Kenosha-North	10	0.30	12	0.36	22	0.66	- 6.79	8.64	1.85	--
	51	Kenosha-South	6	0.13	8	0.18	14	0.31	- 16.25	3.55	- 12.70	13
	51	South Kenosha	10	0.76	0	0.00	10	0.76	3.44	- 1.31	2.13	--
	52	Somers-East	10	0.54	6	0.32	16	0.86	0.74	4.09	4.83	--
	52	Somers-West	0	0.00	0	0.00	0	0.00	- 2.33	- 0.46	- 2.79	3
	53	Pleasant Prairie-West	0	0.00	0	0.00	0	0.00	- 1.47	- 0.29	- 1.76	2
	53	Pleasant Prairie-East	0	0.00	6	0.38	6	0.38	- 7.93	4.44	- 3.49	3
	53	Pleasant Prairie-Central <sup>m</sup>	0	0.00	0	0.00	0	0.00	- 1.05	- 0.21	- 1.26	1
	54	Bristol	1	0.67	0	0.00	1	0.67	0.26	- 0.15	0.11	--
	55	Paddock Lake	0	0.00	0	0.00	0	0.00	- 2.38	- 0.47	- 2.85	3
	55	Silver Lake	0	0.00	0	0.00	0	0.00	- 1.15	- 0.23	- 1.38	1
	55	Twin Lakes	0	0.00	0	0.00	0	0.00	- 2.24	- 0.44	- 2.68	3
	County Totals	37	--	32	--	69	--	--	--	--	29	
Walworth	56	East Troy	2	0.40	0	0.00	2	0.40	- 0.49	- 0.50	- 0.99	1
	57	Whitewater	1	0.06	15	0.90	16	0.96	- 7.33	13.33	6.00	--
	58	Elkhorn	4	0.51	0	0.00	4	0.51	0.10	- 0.78	- 0.68	1
	59	Como Lake	0	0.00	0	0.00	0	0.00	- 0.94	- 0.19	- 1.13	1
	59	Genoa City	0	0.00	0	0.00	0	0.00	- 0.77	- 0.15	- 0.92	1
	59	Lake Geneva	8	0.79	5	0.49	13	1.28	2.91	3.98	6.89	--
	59	Pell Lake	0	0.00	0	0.00	0	0.00	- 0.72	- 0.15	- 0.87	1
	59	Williams Bay-Fontana-Walworth	4	0.38	14	1.32	18	1.70	- 1.27	12.95	11.68	--
	60	Darien	2	1.00	0	0.00	2	1.00	1.00	- 0.20	0.80	--
	60	Delavan	7	0.84	0	0.00	7	0.84	2.85	- 0.83	2.02	--
	60	Sharon	1	0.38	0	0.00	1	0.38	- 0.32	- 0.26	- 0.58	1
		County Totals	29	--	34	--	63	--	--	--	--	6
Region Totals			773	--	191	--	964	--	--	--	412	

<sup>a</sup> Minimum standard per capita requirements for tennis courts are as follows: public—0.50/1,000 urban residents; nonpublic—0.10/1,000 urban residents; and public and nonpublic combined—0.60/1,000 urban residents.

<sup>b</sup> Shortage/surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (as listed in footnote a) is determined; 2) the shortage/surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Quantity of tennis courts may increase between 1975 and 2000 even though no new facilities are constructed due to the reclassification of general use sites, which in 1975 were located outside of identified urban areas, and which by the year 2000 would be located within the anticipated new or expanded urban areas.

<sup>d</sup> Per capita provision is calculated by dividing the quantity of tennis courts provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>e</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>f</sup> The Cedarburg-Grafton urban area includes a small area in planning analysis area 5.

<sup>g</sup> The Newburg urban area includes a small area in planning analysis area 3.

<sup>h</sup> The Milwaukee (planning analysis area 17) urban area includes a small area in planning analysis area 5.

<sup>i</sup> The Brookfield-Elm Grove urban area includes a small area in planning analysis area 40.

<sup>j</sup> The Dousman urban area includes a small area in planning analysis area 39.

<sup>k</sup> The Caledonia-West area includes a small area in planning analysis area 46.

<sup>l</sup> The Mt. Pleasant-Sturtevant area includes a small area in planning analysis area 44.

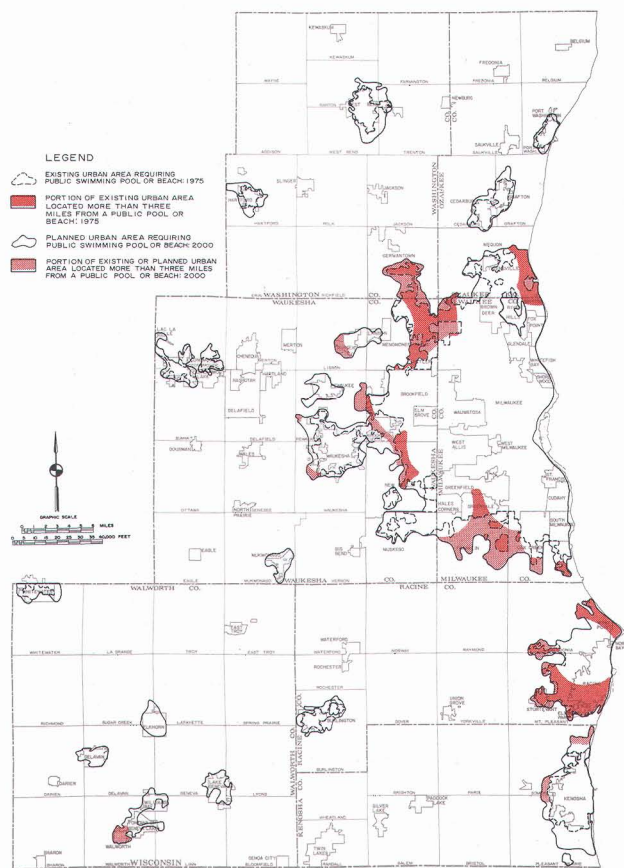
<sup>m</sup> The Pleasant Prairie-Central urban area includes a small area in planning analysis area 51.

Source: SEWRPC.



Map 112

# FACILITY REQUIREMENTS FOR PUBLIC SWIMMING POOLS IN URBAN AREAS IN THE REGION: 1975 AND 2000



The agreed-upon per capita and service area standard for swimming pools is 0.015 swimming pool per thousand urban residents with a maximum service radius of three miles in urban areas having an existing or planned population of 7,500 persons or greater. Swimming beaches located within urban areas were considered a suitable substitute and, thus, offset the need for swimming pools in those areas. Service areas were delineated on regional base maps to identify those urban areas of the Region not adequately served. Application of the standards indicated that the northwest and southern areas in the Milwaukee urban area and the southern portion of the Racine urban area were inadequately served by public swimming facilities in 1975. Based upon the forecast level and spatial distribution of the year 2000 population, additional inadequately served areas may be expected to occur in the northern portion of the Kenosha urban area, the southwest portion of the Williams Bay-Fontana-Walworth urban area, and the extreme southern portion of the West Bend urban area, as well as in scattered portions in the Milwaukee urban area.

Source: SEWRPC.

Table 126

# FACILITY REQUIREMENTS FOR SWIMMING POOLS IN URBAN AREAS IN THE REGION: 1975

Urban Area	Existing Facilities (public pools) 1975		Shortage-Surplus of Facilities (public pools) 1975	
	Quantity	Per Capita Provision <sup>a</sup>	Shortage Surplus <sup>b</sup>	Need <sup>c</sup>
Burlington . . . . .	2 <sup>d</sup>	0.191	1.85	--
Cedarburg-Grafton. . .	2	0.103	1.70	--
Hartford . . . . .	2 <sup>d</sup>	0.266	1.89	--
Kenosha <sup>e</sup> . . . . .	2	0.023	0.70	--
Milwaukee <sup>f</sup> . . . . .	23 <sup>g</sup>	0.021	6.69	--
Oconomowoc . . . . .	2 <sup>h</sup>	0.170	1.83	--
Port Washington . . . .	1	0.106	0.86	--
Racine <sup>i</sup> . . . . .	1 <sup>d</sup>	0.008	-0.90	1
Waukesha . . . . .	3 <sup>d</sup>	0.060	2.26	--
West Bend . . . . .	1 <sup>d</sup>	0.048	0.68	--
Whitewater . . . . .	1 <sup>d</sup>	0.110	0.86	--
Totals	40 <sup>a</sup>	--	--	1

<sup>a</sup> Per capita provision is calculated by dividing the quantity of existing swimming pools provided by the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>b</sup> Shortage-surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (0.015 pool per thousand urban residents) is determined; 2) the shortage-surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>c</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus, this analysis indicates no need for additional facilities.

<sup>d</sup> Includes one beach.

<sup>e</sup> Kenosha includes the following urban areas: Kenosha-North, Kenosha-South, South Kenosha, and Somers-East.

<sup>f</sup> Milwaukee includes the following urban areas: all urban areas in Milwaukee County, Mequon-Thiensville, Germantown, Menomonee Falls-Butler, Brookfield-Elm Grove, New Berlin, and Muskego.

<sup>g</sup> Includes three beaches.

<sup>h</sup> Includes two beaches.

<sup>i</sup> Racine includes the following urban areas: Racine-North, Racine-South, Caledonia-East, Caledonia-West, Mt. Pleasant-East, and Mt. Pleasant-Sturtevant.

Source: SEWRPC.

Table 127

**FACILITY REQUIREMENTS FOR SWIMMING POOLS  
IN URBAN AREAS IN THE REGION: 2000**

Urban Area	Existing Facilities (public pools) 2000		Shortage-Surplus of Facilities (public pools) 2000	
	Quantity <sup>a</sup>	Per Capita Provision <sup>b</sup>	Shortage/ Surplus <sup>c</sup>	Need <sup>d</sup>
Burlington . . . . .	2 <sup>e</sup>	0.122	1.75	--
Cedarburg-Grafton. . .	2	0.060	1.50	--
Delavan . . . . .	1 <sup>e</sup>	0.241	1.88	--
Elkhorn . . . . .	1	0.128	0.88	--
Hartford . . . . .	2	0.129	1.77	--
Kenosha <sup>f</sup> . . . . .	2	0.016	0.13	--
Lake Geneva. . . . .	1 <sup>e</sup>	0.098	0.85	--
Milwaukee <sup>h</sup> . . . . .	23 <sup>g</sup>	0.018	3.86	--
Mukwonago . . . . .	2 <sup>g</sup>	0.232	1.87	--
Oconomowoc . . . . .	2 <sup>g</sup>	0.102	1.70	--
Pewaukee. . . . .	1 <sup>e</sup>	0.082	0.82	--
Port Washington . . . .	1	0.077	0.80	--
Racine <sup>i</sup> . . . . .	1 <sup>e</sup>	0.007	-1.20	1
Sussex-Lannon . . . . .	1 <sup>e</sup>	0.081	0.82	--
Waukesha. . . . .	3 <sup>e</sup>	0.041	1.91	--
West Bend . . . . .	1 <sup>e</sup>	0.025	0.41	--
Whitewater. . . . .	1 <sup>e</sup>	0.060	0.75	--
Williams Bay- Fontana-Walworth . .	2 <sup>g</sup>	0.188	1.84	--
Totals	49			1

<sup>a</sup> Quantity of swimming pools increased between 1975 and 2000 even though no new facilities were constructed due to the addition of swimming pools or beaches which in 1975 were located in urban areas with a population less than 7,500 persons, and which by the year 2000 would be located within the anticipated additional new or expanded urban areas with a planned population greater than 7,500 persons.

<sup>b</sup> Per capita provision is calculated by dividing the quantity of existing swimming pools provided by the population of the appropriate area in thousands of persons (see Table 101).

<sup>c</sup> Shortage-surplus is determined as follows: 1) the difference between the per capita provision minus the minimum per capita standard (0.015 pool per thousand urban residents) is determined; 2) the shortage-surplus is then calculated by multiplying this difference (from step 1) times the population of the appropriate urban area in thousands of persons (see Table 101).

<sup>d</sup> Need is simply the shortage rounded to the nearest integer. If there is a surplus this analysis indicates no need for additional facilities.

<sup>e</sup> Includes one beach.

Table 127 (continued)

<sup>f</sup> Kenosha includes the following urban areas: Kenosha-North, Kenosha-South, South Kenosha, Somers-East, Pleasant Prairie-East, and Pleasant Prairie-Central..

<sup>g</sup> Includes two beaches.

<sup>h</sup> Milwaukee includes the following urban areas: all urban areas in Milwaukee County, Mequon-Thiensville, Germantown, Menomonee Falls-Butler, Brookfield-Elm Grove, Duplainville, New Berlin, and Muskego.

<sup>i</sup> Racine includes the following urban areas: Racine-North, Racine-South, Caledonia-East, Caledonia-West, Mt. Pleasant-East, and Mt. Pleasant-East.

Source: SEWRPC.

capacity of the inland lakes to accommodate safe and enjoyable participation in the various extensive water based activities. The capacity of an individual lake, in turn, may be determined on a basis of the number of surface acres on the lake which are usable for fast boating activities, including motor boating, water skiing, and sailing.<sup>15</sup> Standards under Objective No. 5 in Chapter XI recommend a minimum of one access point for each 1,000 acres of usable surface and, in addition, suggest formulas for the determination of the optimum number of parking spaces, specifying in general that the number of parking spaces on a given lake should vary directly with the number of usable acres but inversely with the amount of residential development on the lake.<sup>16</sup> In the analysis of boat access needs, then, the usable surface acreage was calculated for each of the 100 major inland lakes—that is, lakes having an overall area of 50 acres or more—in the Region, and the standards were applied for each major inland lake in the Region. Generally there was a substantial amount of residential development surrounding the major lakes in the Region, and virtually all of the major inland lakes in the Region were heavily utilized for fast boating activities. In this regard, the number of access facilities for fast boating activities

<sup>15</sup> Sailing has been included as a "fast boating" activity because—as in the case of motor boating and water skiing—a relatively large amount and continuous expanse of surface water are required for participation in the activity.

<sup>16</sup> It should be noted that even if no parking spaces whatsoever are required on the basis of the amount of surface area suitable for fast boating activities, a minimum of six parking spaces should be provided at access points on each major inland lake of the Region to accommodate slow boating activities such as canoeing and fishing.

consistent with safe and enjoyable lake use was generally exceeded. These access facilities included access points and car and trailer parking open to the general public and individual lake home access. Additional access facilities to provide fast boating opportunities can be accommodated, in fact, at only two of the 100 major inland lakes—Lake Geneva in Walworth County and Pine Lake in Waukesha County. In addition, standards under Objective No. 5 in Chapter XI require that at least one access point open to the general public be located on each major inland lake in the Region to accommodate slow boating activities, such as fishing and canoeing. Application of this standard indicated a need for one access point on 40 of the 100 major inland lakes in the Region (see Map 113). No additional access points for slow boating were required in Milwaukee County where there are no major lakes nor in Ozaukee County whose single major inland lake—Spring Lake—was provided with adequate access facilities. Among the remaining five counties, Waukesha—with access point needs on 12 major inland lakes—had the largest number of lakes requiring additional slow boating access facilities.

Rivers and Streams: There are no large rivers in the Region, according to the Wisconsin Department of Natural Resources classification system.<sup>17</sup> Nevertheless, certain rivers in the Region are utilized for extensive water based activities like fishing and canoeing. As indicated in Chapter VI, the main stem of the Milwaukee River downstream from the City of West Bend and the main stem of the Fox River downstream from the City of Waukesha have been termed “canoeable rivers”<sup>18</sup> by the Commission. A standard under Objective No. 5 in Chapter XI prescribes a maximum distance of 10 miles between access points along “canoeable rivers.” Application of this standard indicated a minimum requirement of 11 access points—six along the main stem of the Milwaukee River and five along the main stem of the Fox River.

Lake Michigan: In contrast to the inland lakes situation in the Region, where the number of access facilities is necessarily related to the capacity of each lake to accommodate water based recreation activity, access facilities on Lake Michigan can be provided in quantities sufficient to fully meet existing and probable future demand. Standards under Objective No. 5 specify per capita requirements for both the number of boat launch ramps and the number of boat slips. Because these facilities attract users

from relatively long distances and serve residents of both urban and rural areas of the Region, these per capita standards were applied to the total population—both urban and rural components—of the Region to determine existing and probable future Lake Michigan access needs.

As indicated in Table 128, there were 35 public and non-public boat launch ramps along the Lake Michigan shoreline in southeastern Wisconsin, or 0.020 launch ramp per thousand population in the Region in 1975. Because the adopted standard is 0.025 launch ramp per thousand population, an additional nine launch ramps are currently needed. Because of the expected increase in demand due to population growth in the Region, it is anticipated that this total need will reach 19 launch ramps by the year 2000.

As further indicated in Table 128, there were 1,620 public and nonpublic boat slips along the Lake Michigan shoreline in southeastern Wisconsin, or 0.6 boat slip per thousand population in the Region in 1975. Since the adopted standard specifies the provision of 1.3 boat slips per thousand population, an additional 708 boat slips are needed to meet the existing demand. In addition, owing to the increase demand expected to be generated by population growth in the Region, it is anticipated that the need for boat slips along the Lake Michigan shoreline will increase to 1,316 by the plan design year.

As indicated in Chapter XI, the maximum distance between Lake Michigan boat access points within harbors of refuge should be 15 miles. Analysis of the existing distribution of access points along the Lake Michigan shoreline in southeastern Wisconsin revealed two “voids” in this regard: the reach of shoreline between the harbor of the City of Racine and the boat launch site at the mouth of Oak Creek in the City of South Milwaukee and between the harbors of the Cities of Milwaukee and Port Washington (see Map 114). These voids are likely locations for the Lake Michigan access facilities required on the basis of the application of the per capita standards.

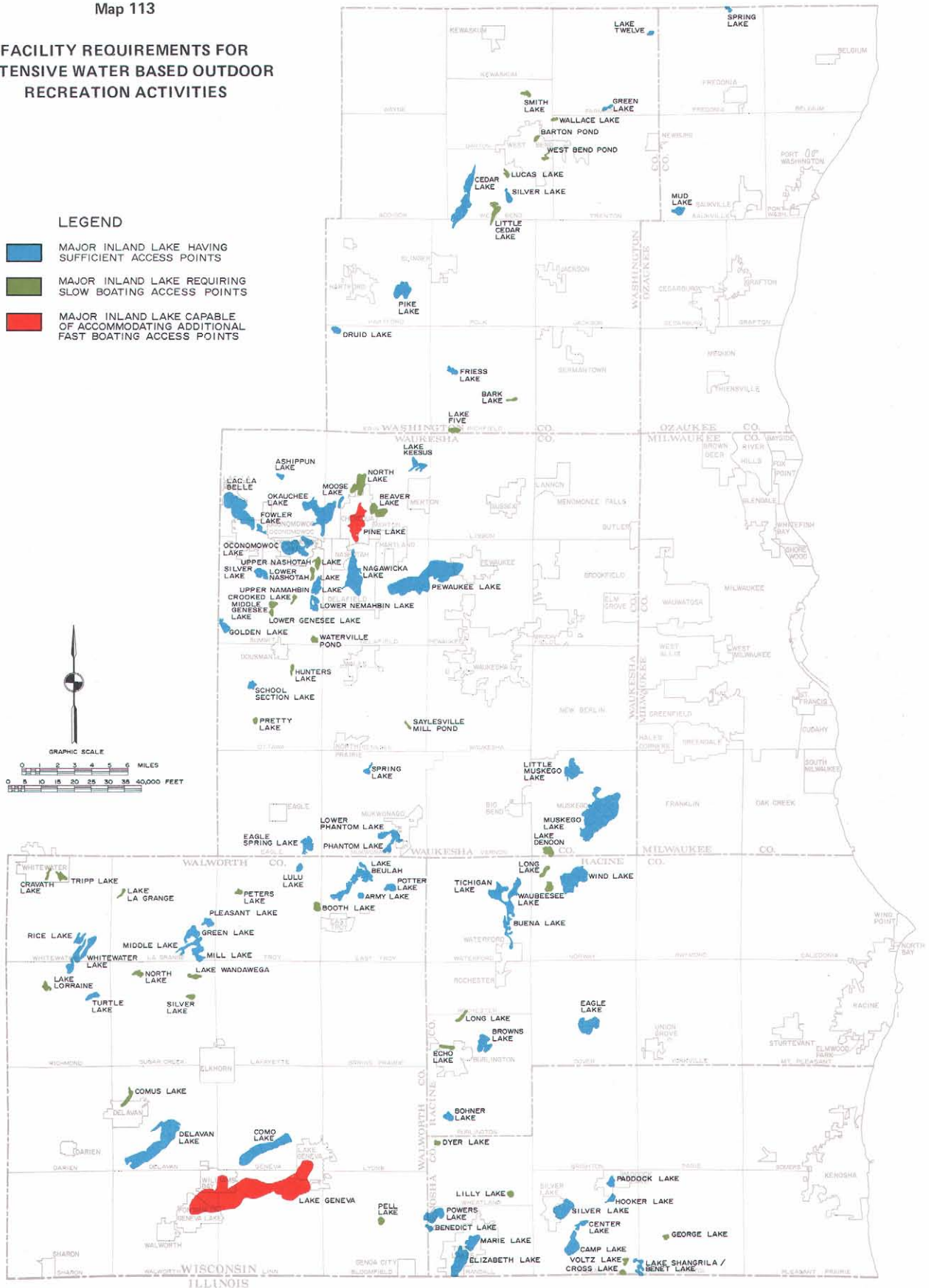
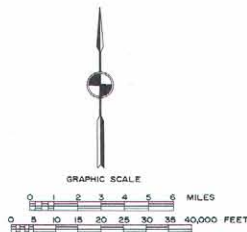
## SUMMARY

This chapter has presented information concerning the existing and probable future need for outdoor recreation sites and facilities within the Southeastern Wisconsin Region. The need for outdoor recreation sites and facilities has been defined for the purposes of this report as the shortfall determined from a comparison of the existing supply of such sites and facilities with the existing and anticipated demand for such sites and facilities. The existing supply of outdoor recreation sites and facilities was inventoried under the regional park and open space planning program, and the inventory results are presented in Chapters V and VI of this report. The existing and anticipated future demand for recreation sites and facilities was determined by the application of the adopted regional park and open space acquisition and development standards, set forth in Chapter XI of this report, to the existing and probable future resident population levels of the Region. Based on a comparison of the existing supply of outdoor recreation sites with the

<sup>17</sup> *An average river or stream width of 200 feet or more within a given county is required for classification as a large river. Wisconsin Outdoor Recreation Plan, Appendix C, 1977.*

<sup>18</sup> *Rivers having a minimum width of 50 feet for a distance of 10 miles provide desirable continuity for canoes and have been classified as “canoeable rivers.” It should be noted that other rivers and streams in the Region also are utilized for extensive water based activities such as canoeing and fishing.*





Source: SEWRPC.



Table 128

## FACILITY REQUIREMENTS FOR LAKE MICHIGAN ACCESS FACILITIES IN THE REGION: 1975 AND 2000

Facility	Existing Quantity	1975 (Estimated Population = 1,769,504)					2000 (Planned Population = 2,193,856)				
		Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need	Per Capita Provision <sup>a</sup>	Minimum Standard Per Capita Requirement <sup>b</sup>	Per Capita Difference <sup>c</sup>	Shortage-Surplus <sup>d</sup>	Need
Launch Ramps . .	35	0.020	0.025	- 0.005	- 9	9	0.016	0.025	- 0.009	- 19	19
Boat Slips . . . .	1,620	0.9	1.3	- 0.4	- 708	708	0.7	1.3	- 0.6	- 1,316	1,316

<sup>a</sup> Per capita provision is calculated by dividing the existing quantity of facility by the population in thousands of persons.

<sup>b</sup> Minimum per capita standard requirements for resource-oriented activities are set forth in Chapter XI in the standards under Objective No. 3.

<sup>c</sup> Per capita difference is per capita provision minus the minimum standard per capita requirement.

<sup>d</sup> Shortage-surplus is calculated by multiplying the per capita difference times the population in thousands of persons.

Source: SEWRPC.

existing and anticipated demand for outdoor recreation sites, existing and probable future needs were determined for Type I and Type II parks; Type III and Type IV public general use outdoor recreation sites; and public recreation corridors. Similarly, based upon a comparison of the existing supply of outdoor recreation facilities with the existing and anticipated demand for outdoor recreation facilities, existing and probable future needs were determined for facilities for four general types of outdoor recreation activities—namely, intensive resource-oriented outdoor recreation activities, extensive land based outdoor recreation activities, intensive nonresource-oriented outdoor recreation activities, and extensive water based outdoor recreation activities. Significant findings concerning the existing and anticipated future recreation site and facility needs in southeastern Wisconsin are summarized below.

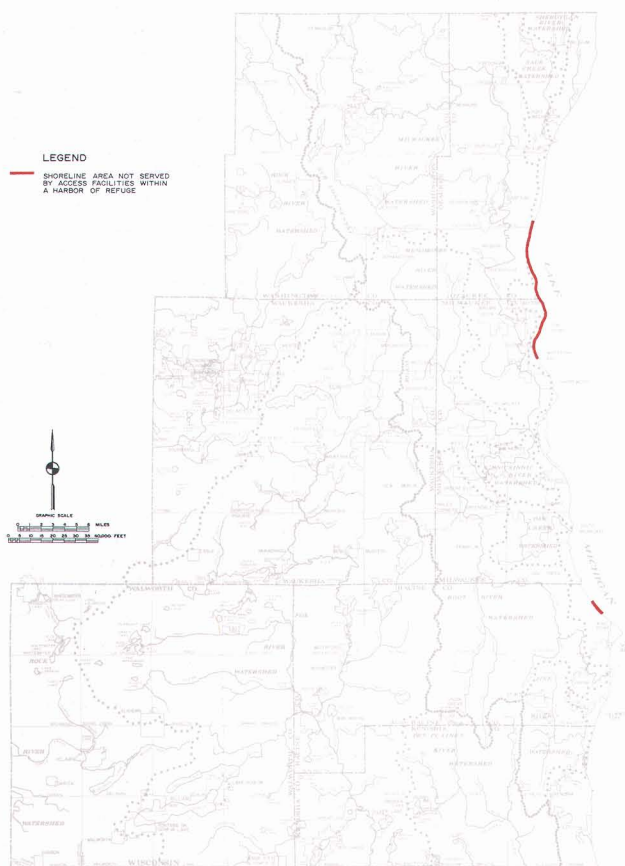
1. Type I and Type II parks are defined as large public general use outdoor recreation sites which generally provide opportunities for such activities as camping, golfing, picnicking, and swimming and which have a large area containing significant natural resource amenities. Type I and Type II parks attract users from relatively long distances and serve persons of all age groups residing in both urban and rural areas. Therefore, standards for Type I and Type II parks are appropriately applied to the total population—both urban and rural—of the Region. Application of the appropriate per capita acreage standards indicated a need for 2,370 additional acres of Type I and Type II parks to meet the recreation site demands of the existing population of the Region, an increase of 20 percent over the Type I and Type II park area—11,610 acres—in the Region in 1973. The analysis similarly indicated a need for a total of 5,720 additional acres of Type I and Type II parks by the year 2000, a relative increase of 49 percent over the 1973 acreage.

2. Application of the appropriate accessibility standards identified certain areas of the Region not adequately served by Type I or Type II parks. Rural areas lacking adequate access to Type I or Type II parks include portions of planning analysis areas 6 through 8 in northwestern Washington County and portions of planning analysis areas 59 and 60 in southwestern Walworth County. Urban areas lacking adequate access to Type I or Type II parks include the southern portion of the Kenosha metropolitan area and the south central portion of the Racine metropolitan area.

3. Type III and Type IV public general use outdoor recreation sites, which typically provide opportunity for intensive nonresource-oriented outdoor recreation activities—such as baseball, basketball, ice skating, softball, and tennis—generally attract users from a relatively small service area and are provided primarily to meet the outdoor recreation demands of residents of urban areas. Accordingly, standards for Type III and Type IV public general use sites are appropriately applied to the population residing in the urban area of the Region. Application of the per capita acreage standards for Type III and Type IV public general use outdoor recreation sites—including parks and public school-owned outdoor recreation sites—indicated a need for 3,017 additional acres of Type III and Type IV public general use sites to meet recreation site demands of the existing urban population of the Region, an increase of 30 percent over the Type III and Type IV public general use site area—10,093 acres—in urban areas of the Region in 1973. Owing to growth in the urban population, it is anticipated that the need for additional Type III and Type IV site area will increase to 3,978 acres by the year 2000. Large relative increases in Type III and Type IV site acreage needs by the year 2000 may be

Map 114

**SEGMENTS OF THE LAKE MICHIGAN SHORELINE  
IN SOUTHEASTERN WISCONSIN LACKING BOAT  
ACCESS FACILITIES IN HARBORS OF REFUGE**



The agreed-upon standard to facilitate safe and enjoyable use of Lake Michigan specifies that access to lake Michigan be provided within small boat harbors of refuge spaced no more than 15 miles apart. Application of the standard indicated that “voids” in suitable access to Lake Michigan existed in two areas along the Lake Michigan shoreline—a reach of shoreline between the harbor of the City of Racine and the boat launch site at the mouth of Oak Creek in the City of South Milwaukee and a reach of shoreline between the harbors of the Cities of Milwaukee and Port Washington.

Source: SEWRPC.

expected within each county of the Region except Milwaukee County. In 1975 Milwaukee County alone accounted for a very large proportion, 90 percent, of the total existing Type III and Type IV site acreage need in the Region. By the year 2000, however, substantial additional acreage will be needed, based upon anticipated population increases in the northern and southern areas of Milwaukee County. In contrast, because of the expected continued decline in population, the year 2000 acreage needs in many portions of

the City of Milwaukee as well as in certain first ring suburbs are expected to be somewhat lower than the existing site acreage needs. It is important to recognize that even urban areas which meet the overall Type III and Type IV site acreage requirement may have a need for additional local parks because the spatial distribution of existing parks does not provide sufficient access for residents of that urban area. Application of the appropriate accessibility standards for Type III and Type IV parks revealed that existing and planned urban areas with insufficient access to such local parks are distributed throughout the seven-county Region.

4. Recreation corridors are defined for the purposes of this report as publicly owned continuous linear expanses of land at least 15 miles in length which are located within scenic areas or areas of natural, cultural, or historic interest, and which provide opportunities for participation in trail-oriented outdoor recreation activities, especially through the provision of marked and maintained trails for such activities as hiking, biking, horseback riding, and ski touring. While under this definition there were no recreation corridors in the Region in 1973, it should be noted that the Kettle Moraine State Forest and the Milwaukee County parkway system are two publicly owned linear corridor systems within the Region which have the natural resource amenities and public land ownership required for the development of a true public recreation corridor system. Indeed such areas now provide facilities for trail-oriented activities and, thus, currently serve as segments of a true recreation corridor. These areas to the maximum extent possible will, therefore, be incorporated into alternative plans for a system of parks and recreation related open space. The adopted standard for public recreation corridors recommends the provision of 0.16 linear mile of recreation corridor per thousand population of the Region. In order to meet the minimum standard mileage requirement for recreation corridors in the Region in 1975, approximately 280 linear miles of recreation corridors would be required. In order to meet the minimum standard mileage requirement for the plan design year 2000, approximately 350 linear miles of recreation corridor would be required.

5. Intensive resource-oriented outdoor recreation facilities, including campsites, golf courses, picnic areas, skiing areas, and swimming beaches, generally attract users from relatively long distances and serve residents of both urban and rural areas. Accordingly, the adopted per capita standard for each of these facilities was applied to the total existing and forecast population in the Region to facilitate a determination of existing and probable future needs. In this manner, it was determined that there was a need for 71 additional public campsites in the Region in 1975 and a total of 219 additional public campsites by the plan

design year 2000. Five additional public golf courses were needed in the Region in 1975, and an anticipated total of 11 additional public golf courses will be needed by the year 2000. A total of 1,263 additional picnic tables located within public general use outdoor recreation sites was needed in the Region in 1975, including 425 picnic tables to facilitate resource-oriented picnicking in Type I and Type II parks and 838 to facilitate local picnicking activities. By the year 2000, it is expected that the total need for picnic tables at public general use outdoor recreation sites will increase to 3,281 with 2,040 of these being required for resource-oriented picnicking and 1,241 being required to facilitate local picnicking in urban areas of the Region. There was no need for additional public ski hills or public swimming beaches in the Region in 1975 based upon the application of the per capita facility standards. By the plan design year 2000, however, it is anticipated that an additional 2,193 linear feet of public beach will be required at the inland lakes of the Region and an additional 6,582 linear feet of public beach will be required along the Lake Michigan shoreline in southeastern Wisconsin. It should be noted that, based upon the application of the per capita facility standards, there was no need in 1975 for additional nonpublic facilities for any of the intensive resource-oriented outdoor recreation activities considered in the regional park and open space planning program. Due to the increase in demand generated by growth in the regional population, it is anticipated that a substantial quantity of additional nonpublic facilities will be required within the Southeastern Wisconsin Region by the year 2000, including the following: 592 nonpublic campsites; two nonpublic golf courses; 987 picnic tables at nonpublic general use outdoor recreation sites; 39 acres of developed slope for downhill skiing at nonpublic general use outdoor recreation sites; and 4,388 linear feet of nonpublic beach on inland lakes of the Region.

6. Since facilities for hiking, biking, horseback riding, and other extensive land based outdoor recreation activities attract users from relatively long distances and serve residents of both urban and rural areas, the per capita standards for the various trail facilities are appropriately applied to the total population—both urban and rural components—of the Region. Application of the per capita linear mileage standards—which relate only to trail facilities within public recreation corridors—indicated the following trail facility needs in 1975: 280 miles of designated biking and hiking trails; 35 miles of designated nature study and ski touring trails; 88 miles of designated horseback riding trails; and 195 miles of designated snowmobiling trails. Furthermore, in order to meet the minimum standard mileage requirement for trails within recreation corridors in the Region by the plan design year 2000, the

following facilities should be provided: 350 miles of designated biking and hiking trails; 44 miles of designated nature study and ski touring trails; 110 miles of designated horseback riding trails; and 241 miles of designated snowmobiling trails. It is important to recognize that there are currently a number of public and nonpublic trail facilities in the Region which are not located within a public recreation corridor, as defined for the purposes of this report, but which do indeed satisfy a portion of the existing demand for trail facilities. It is anticipated that some of these trail facilities will be incorporated into the recreation corridor system ultimately recommended as part of the regional park and open space plan. It is also anticipated that other existing trail facilities and perhaps similar additional facilities not located in the public recreation corridor will continue to accommodate trail activities in the Region, supplementing trail facilities to be provided within the public recreation corridor system.

7. Intensive nonresource-oriented outdoor recreation facilities, including baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, softball diamonds, swimming pools, and tennis courts, attract users from relatively short distances and primarily serve residents of urban areas; and, accordingly, the standards for such facilities are appropriately applied to the population residing within urban areas of the Region. Both public and nonpublic facilities for intensive nonresource-oriented outdoor recreation activities are usually available for use by the general public and, thus, both may be assumed to offset the need for intensive nonresource-oriented recreation facilities. Application of the appropriate per capita standards—public and nonpublic—to the existing and anticipated future population within urban areas of the Region facilitated a determination of additional urban outdoor recreation facility needs. Additional facility requirements for urban areas of the Region in 1975 and additional facility requirements anticipated within urban areas of the Region by the year 2000 are as follows: 43 baseball diamonds in 1975 and a total of 58 baseball diamonds by the year 2000; 179 basketball goals in 1975 and a total of 398 basketball goals by the year 2000; 64 ice skating rinks in 1975 and a total of 96 ice skating rinks by the year 2000; 78 playfields in 1975 and a total of 131 playfields by the year 2000; 120 playgrounds in 1975 and a total of 174 playgrounds by the year 2000; 194 softball diamonds in 1975 and a total of 253 softball diamonds by the year 2000; and 313 tennis courts in 1975 and a total of 412 tennis courts by the year 2000. A large portion of the existing need for intensive nonresource-oriented outdoor recreation facility occurs in the densely developed parts of the Kenosha, Milwaukee, and Racine metropolitan

areas. Additional facility needs beyond the 1975 requirements are, however, anticipated primarily in suburban and outlying urban areas expected to have relatively large population increases between 1975 and 2000. In addition to the aforementioned facility needs, it should be noted that one public swimming pool is currently needed to meet the per capita standard for swimming pools in the Racine metropolitan area, and additional swimming pools may be required in certain urban areas lacking sufficient access to a public pool, notably the northwestern and southern parts of the Milwaukee metropolitan area.

8. Boat access points, both public and nonpublic, provide an opportunity to participate in extensive water based recreation activities such as fishing, motor boating, sailing, canoeing, and water skiing for those individuals who do not own land contiguous to a body of water. Inland lakes, however, are a finite resource and the need for access points and related parking is constrained by the capacity of such lakes—as measured by usable surface area—to accommodate safe and enjoyable extensive water based activities. Based upon the usable surface area, 41 additional boat access points should be provided on the major inland lakes of the Region. It should be noted that only two of the 41 required boat access points are needed to optimize use of the 100 major inland lakes for fast boat activities like water skiing and motor boating; the remaining 39 boat access points are required to meet the minimum standard for access for slow boating activities, like fishing and canoeing, on those lakes which lack sufficient usable surface areas for fast boating and currently have no public access facilities. Furthermore, nine additional boat launch ramps and 708 additional boat slips were needed along the Lake Michigan shoreline in southeastern Wisconsin in 1975, and it is anticipated that a total of 19 additional launch ramps and 1,316 boat slips will be needed by the year 2000.

The following conclusions concerning outdoor recreation site and facility needs in the Region can be drawn from the data presented in this chapter:

1. Resource-oriented outdoor recreation site acreage and facility needs can be met with relatively little difficulty in rural areas of the Region because such areas possess ample resource amenities and open lands to accommodate such needs. Meeting both resource and nonresource-oriented site acreage and facility needs in high density urban areas, however, will be extremely difficult both because of the relatively large site acreage and facility needs identified and because of the relative scarcity of resource amenities and open space land in urban areas to meet such needs.

2. Most urban areas within the Southeastern Wisconsin Region with identified site acreage or recreation facility needs in 1975 will have even greater indicated acreage and facility needs by the year 2000 because of anticipated population increases. However, certain areas within Milwaukee County because of anticipated declines in population indicated lower site acreage and facility needs in the year 2000 than in 1975. Alternative park and open space plans, therefore, must consider both existing and forecast recreation site acreage and facility needs and, in areas where declines in population and, thus, lower site and facility needs are projected, recommend only those sites and facilities which may be required to accommodate the needs of the year 2000 population.

3. A significant need exists for extensive land based trail facilities to be accommodated within a system of recreation corridors. Such corridors should be owned and maintained by the public sector not only to maximize efficient and economical use of such lands by providing a variety of compatible trail facilities but also to provide greater assurance that such corridors—being in public ownership—will be available on a long-term basis to provide continuity in linear trail type facilities, facilities that also serve to physically connect existing and proposed parks and, thus, form a truly integrated park and recreation related open space system.

4. Only two major inland lakes in the Region—Pine Lake in Waukesha County and Lake Geneva in Walworth County—have usable surface water area sufficient to accommodate additional extensive water based recreation activities. Lake Michigan with virtually unlimited usable surface water area may, thus, become an increasingly important resource, capable of providing opportunities for participation in certain extensive water based activities such as sailing, boating, and fishing.

5. Finally, as indicated by the analysis of data presented in this chapter, recreation site and facility needs have been determined on the basis of the application of per capita site acreage and facility as well as accessibility standards. While alternative park and open space plans will be formulated to meet needs identified through per capita standards, such plans, due to the potentially large number of combinations of potential spatial location and site designs possible, may not equally meet the accessibility, site design, and cost standards. The extent to which each alternative park and open space plan best meets the accessibility, site design, and cost standards will, thus, provide the basis for the selection of a final recommended park and open space plan.



(This page intentionally left blank)

## OPEN SPACE PRESERVATION, URBAN OUTDOOR RECREATION, AND ALTERNATIVE RESOURCE-ORIENTED OUTDOOR RECREATION PLAN ELEMENTS

### INTRODUCTION

The results of the analysis of existing and probable future outdoor recreation needs in southeastern Wisconsin, as reported in Chapter XII of this report, indicated a substantial need for additional recreation sites and facilities for both resource-oriented and nonresource-oriented outdoor recreational activities in many areas of the Region in 1975. The analysis also indicated that, due to forecast increases in the regional population, this need for additional recreation sites and facilities may be expected to increase significantly by the year 2000. As further indicated in Chapter XII, in addition to these recreation needs, there is an existing need to preserve high quality open space lands—in particular, the regional primary environmental corridors and prime agricultural lands—in order to protect the underlying and sustaining natural resource base as well as to lend form and structure to urban development, thereby enhancing the social and economic well being and environmental quality of the Region. A sound regional park and open space plan must address both types of needs—that is, recreation needs and open space preservation needs—in a manner consistent with the adopted park and open space objectives, principles, and standards. This chapter presents the open space preservation plan element and the outdoor recreation plan element prepared under the park and open space planning program. These plan elements address the identified recreation and open space preservation needs. More specifically, this chapter presents an open space preservation plan element, which sets forth recommendations for the appropriate means to be used in achieving the adopted open space preservation objectives, and an outdoor recreation plan element which sets forth recommendations for the appropriate means to be used in achieving the adopted outdoor recreation objectives. The open space preservation plan element contains two components—a primary environmental corridor plan component and a prime agricultural land plan component. The outdoor recreation plan element also contains two plan components—a resource-oriented outdoor recreation plan component and an urban outdoor recreation plan component. The resource-oriented outdoor recreation plan component will result from the selection of one of two alternatives, both of which address the identified need for resource-oriented outdoor recreation sites and facilities through basically different designs (see Figure 71).

Plan elements which address outdoor recreation needs and open space preservation needs are by nature closely interrelated. The best remaining potential park sites and related recreation areas in southeastern Wisconsin are principally concentrated within the primary environmental corridors of the Region. Therefore, the development of parks and

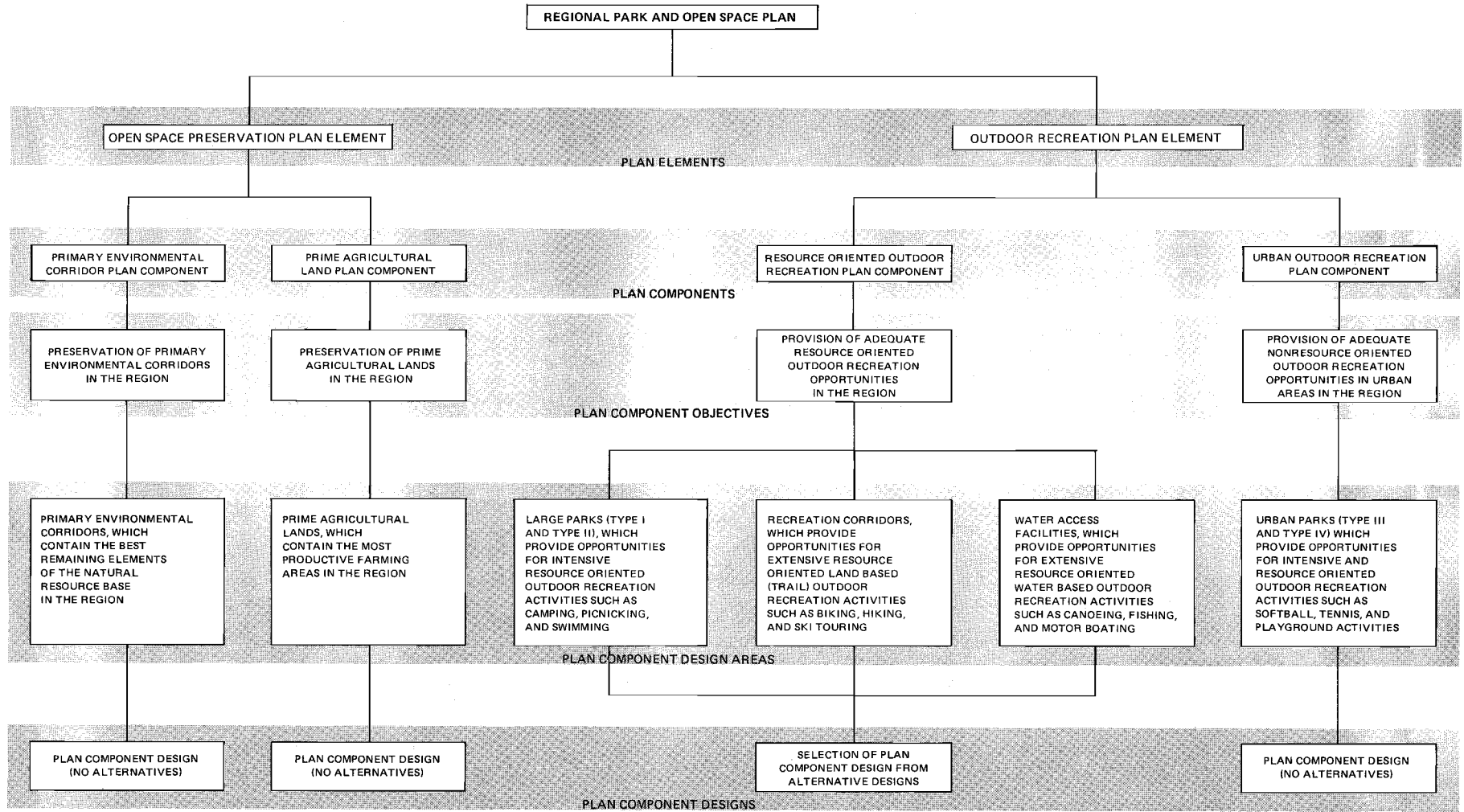
other outdoor recreation related areas within the primary environmental corridor lands can generate dual benefits, satisfying recreational demands in an appropriate setting while protecting and preserving valuable natural resource amenities. In general, an integrated park system properly related to the natural resource base—in particular, to the primary environmental corridor network—can effectively satisfy recreation demands while contributing significantly to the satisfaction of open space preservation needs. For these reasons, the primary environmental corridor network of the Region was utilized as a basic framework in the design of the alternative park and recreation plans presented here.

Although outdoor recreation plan and open space preservation plan elements are closely interrelated, these plan elements are presented separately in subsequent sections of this chapter to facilitate a description and evaluation of each. Because of the overriding importance of the primary environmental corridor concept in preparation of alternative outdoor recreation plans, the open space preservation plan components, which prescribe appropriate means for preserving and protecting the primary environmental corridors as well as prime agricultural lands in the Region, are presented in the first section of this chapter. The open space preservation plan element consists of recommendations for appropriate means—public land use controls and public acquisition—to be used to preserve specific segments of the primary environmental corridor within the Region which are not now so preserved and general recommendations to preserve the remaining prime agricultural lands in the Region. As part of the description of this plan element, estimates of the cost of acquiring segments of primary environmental corridors are provided.

The outdoor recreation plan components prepared under the park and open space planning program are intended to serve as guides to public acquisition and development of the outdoor recreation sites and facilities necessary to meet the existing and anticipated public outdoor recreation needs described in Chapter XII of this report. As indicated in Chapter XII, outdoor recreation needs may be generally categorized as needs for resource-oriented recreation sites and facilities and needs for nonresource, or urban, recreation sites and facilities. Resource-oriented outdoor recreation sites and facilities rely heavily on natural resource amenities to enhance the quality of the recreational experience; attract users from relatively long distances and large service areas; and generally have universal appeal, serving residents of both the urban and rural portions of the Region. In contrast, nonresource, or urban, sites and facilities rely less heavily on natural resource amenities; generally fulfill greater need in urban than in rural areas; and have relatively small service

Figure 71

## REGIONAL PARK AND OPEN SPACE PLAN ELEMENTS



Source: SEWRPC.

areas so that, as a practical matter, they can be readily provided only in areas having a significant population concentration. Because of these inherent differences between resource-oriented and nonresource-oriented recreation sites and facilities, separate plan components have been prepared for each. The urban outdoor recreation plan component addresses existing and anticipated future needs for public nonresource-oriented, urban outdoor recreation sites—including Type III and Type IV parks and public general use sites—and public urban outdoor recreation facilities, such as softball diamonds, basketball courts, and tennis courts. On the other hand, the resource-oriented outdoor recreation component alternative plans both attempt to meet existing and anticipated future needs for resource-oriented outdoor recreation sites—including Type I parks, Type II parks, and public recreation corridors—and public resource-oriented outdoor recreation facilities—including intensive facilities such as campsites and swimming beaches, extensive facilities such as hiking and biking trails, and water access facilities—through a basically different design. The selection from the two resource-oriented recreation component alternative plans is proposed to be made on the basis of the evaluation of these alternative plans as presented herein and through results of a public evaluation of those alternatives through a series of public informational meetings and hearings. A description of the two resource-oriented outdoor recreation component alternative plans is presented in the second section of the chapter, along with an evaluation of each alternative against the adopted park and open space objectives and standards. A description and evaluation of the proposed urban outdoor recreation plan component follows in the third section of this chapter.

#### OPEN SPACE PRESERVATION PLAN ELEMENT

A major consideration in the park and open space planning program, as set forth in Chapter XI under Objective No. 6, is the preservation of high quality open space lands to protect the underlying and sustaining natural resource base and to enhance the social and economic well being and environmental quality of the Region. As indicated in Chapter XII, the preservation of primary environmental corridors in the Region in an essentially open, natural state and the preservation of the prime agricultural lands of the Region in essentially agricultural use would largely achieve this objective. By definition, then, existing and future open space needs in southeastern Wisconsin can be met through appropriate land use controls on, or public acquisition of, the primary environmental corridors and prime agricultural lands of the Region which are not now so preserved. Recommendations for the appropriate means—land use controls or public acquisition—to be used to preserve specific segments of the primary environmental corridor as well as general recommendations for preserving the remaining prime agricultural lands in the Region are presented in this section.

##### Primary Environmental Corridor Plan Component

The concept of the environmental corridor was set forth in Chapter IV of this report together with a discussion of the importance of preservation of the primary environ-

mental corridors to the protection of the best remaining elements of the natural resource base of the Region. In general, primary environmental corridors are defined as elongated areas which encompass the best remaining elements of the natural resource base. The primary environmental corridors of southeastern Wisconsin generally lie along major stream valleys around major lakes and in the Kettle Moraine area (see Map 20). These primary environmental corridors contain almost all of the best remaining woodlands, wetlands, and wildlife habitat areas within the Region; all of the remaining bodies of surface water and associated undeveloped floodlands and shorelands; and important recharge areas for the groundwater aquifers underlying the Region. The gross primary environmental corridor area, defined as including all land uses, both urban and rural, within the corridor configuration delineated on Map 20, totaled 347,100 acres, or about 20 percent of the total area of the Region. Net primary environmental corridor areas are defined as the gross corridor acreage less the noncompatible urban land use acreage located in the corridor. Net corridor areas, therefore, consist of compatible land uses such as recreation, agriculture, water, wetlands, woodlands, and other open space uses. The net corridor area totaled over 279,700 acres,<sup>1</sup> or about 16 percent of the total area of the Region. Recommendations for preservation of primary environmental corridor lands through public acquisition and zoning are set forth below.

Primary Environmental Corridor Acquisition: The initial regional land use plan for the year 1990 adopted by the Commission in 1966 provided general recommendations for preservation of the remaining primary environmental corridor lands in southeastern Wisconsin, and these recommendations have been incorporated into the revised regional land use plan for the year 2000 under preparation by the Commission in 1977.<sup>2</sup> Under the Commission's Fox, Menomonee, Milwaukee, and Root River watershed planning programs, the general open space preservation recommendations embodied in the regional land use plan were refined, indicating in particular the type of mechanism—public land use control or public acquisition—which should be utilized to achieve preservation of specific segments of the primary environmental corridor within those watersheds. Implementation of the specific corridor acquisition recommendations of the adopted Fox, Menomonee, Milwaukee, and Root River watershed plans would have lasting benefits for the quality of life within the Region, providing a high degree of permanent preservation of primary environmental corridors within those watersheds. Accordingly, the

<sup>1</sup>Since recommendations set forth in this chapter are concerned with the preservation of land areas, net primary environmental corridor acreage figures presented in this chapter exclude about 42,500 acres of surface water, unless otherwise indicated.

<sup>2</sup>See SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin—2000, Volume 2, Alternative Plans and Recommended Plan.



specific corridor acquisition recommendations of the Fox, Menomonee, Milwaukee, and Root River watershed plans are incorporated herein as an integral part of the primary environmental corridor plan component of the regional park and open space plan.

Segments of the primary environmental corridor which are recommended for public acquisition under the adopted Fox, Menomonee, Milwaukee, and Root River watershed plans are shown on Map 115. In general, the watershed plans recommend the public acquisition of the following types of primary environmental corridor lands: undeveloped primary environmental corridor lands lying in, and adjacent to, areas of the watershed expected to be in urban use by the watershed plan design year; high value wetland and woodland areas located in the primary environmental corridor adjacent to existing publicly owned woodlands, wetlands, and wildlife areas; other undeveloped primary environmental corridor lands along the main stems of the rivers of the respective watersheds; and selected additional segments of the primary environmental corridor, the preservation of which was judged important to the social and economic well being and environmental quality of the watershed and the Region.

The total net primary environmental corridor acreage recommended for acquisition by the public sector under the Fox, Menomonee, Milwaukee, and Root River watershed plans combined is 67,960 acres, in addition to the 29,020 acres of primary environmental corridor lands in those watersheds already in public ownership.<sup>3</sup> A total, then, of 96,980 acres of corridor lands within the Fox, Menomonee, Milwaukee, and Root River watersheds would be permanently held in public trust upon full implementation of the watershed plans completed and adopted by the Commission to date. This total of 96,980 acres constitutes 52 percent of the net primary environmental corridor area within those watersheds and 35 percent of the total net primary environmental corridor area of the Region. The total cost of acquiring the 67,960 additional acres of primary environmental corridor lands proposed under the Commission's watershed plans is estimated at \$70,788,000.<sup>4</sup> It should be noted that the Fox, Menomonee, Milwaukee, and Root River watersheds have a combined area within the Region of 1,704 square miles, or 63 percent of the total area of the Region.

---

<sup>3</sup> A more detailed description of the open space preservation recommendation of the adopted Fox, Menomonee, Milwaukee, and Root River watershed plans is presented in SEWRPC Planning Report No. 12, A Comprehensive Plan for the Fox River Watershed, Volume 2, Alternative Plans and Recommended Plan; SEWRPC Planning Report No. 26, A Comprehensive Plan for the Menomonee River Watershed, Volume 2, Alternative Plans and Recommended Plan; SEWRPC Planning Report No. 13, A Comprehensive Plan for the Milwaukee River Watershed, Volume 2, Alternative Plans and Recommended Plan; and SEWRPC Planning Report No. 9, A Comprehensive Plan for the Root River Watershed.

In addition to the recommended public acquisition of primary environmental corridor lands under the Commission's watershed planning programs, recommendations are set forth herein on public acquisition of other segments of the primary environmental corridor which lie in, or adjacent to, areas expected to be in urban use by the year 2000 and which lie outside of the four watersheds for which plans have been prepared. The distribution of urban development anticipated under the Commission's revised regional land use plan was used to identify additional segments of the primary environmental corridors which may be expected to be threatened by urban encroachment by the year 2000. The public acquisition of such corridor segments would serve to maintain the integrity, and assure the permanent preservation, of these corridor areas from the degradation inflicted on other valuable open space land similarly situated near expanding urban areas in the Region. These additional segments of the primary environmental corridors recommended for public acquisition under the regional park and open space plan also are shown on Map 115. The additional net primary environmental corridor acreage thus recommended for acquisition under the park and open space plan is 15,200 acres, representing 5 percent of the total net primary environmental corridor acreage in the Region. The cost of acquiring these additional urban corridor lands is estimated at \$18,065,000.

Including both the segments of the primary environmental corridor which are recommended for public acquisition under the watershed plans completed by the Commission to date and the additional segments of primary environmental corridor recommended for public acquisition under the park and open space planning program, a total of 83,160 acres of net environmental corridor lands is recommended for public acquisition in southeastern Wisconsin. These lands, it should be noted, are required solely for open space and natural resource base protection, and are exclusive of any corridor lands recommended for public acquisition primarily for recreational purposes. The latter are described in succeeding sections of this chapter. As indicated in Table 129, the environmental corridors recommended for public acquisition for open space and natural resource protection purposes under this open space preservation plan element include 27,360 acres of high value wetlands, 9,870 acres

---

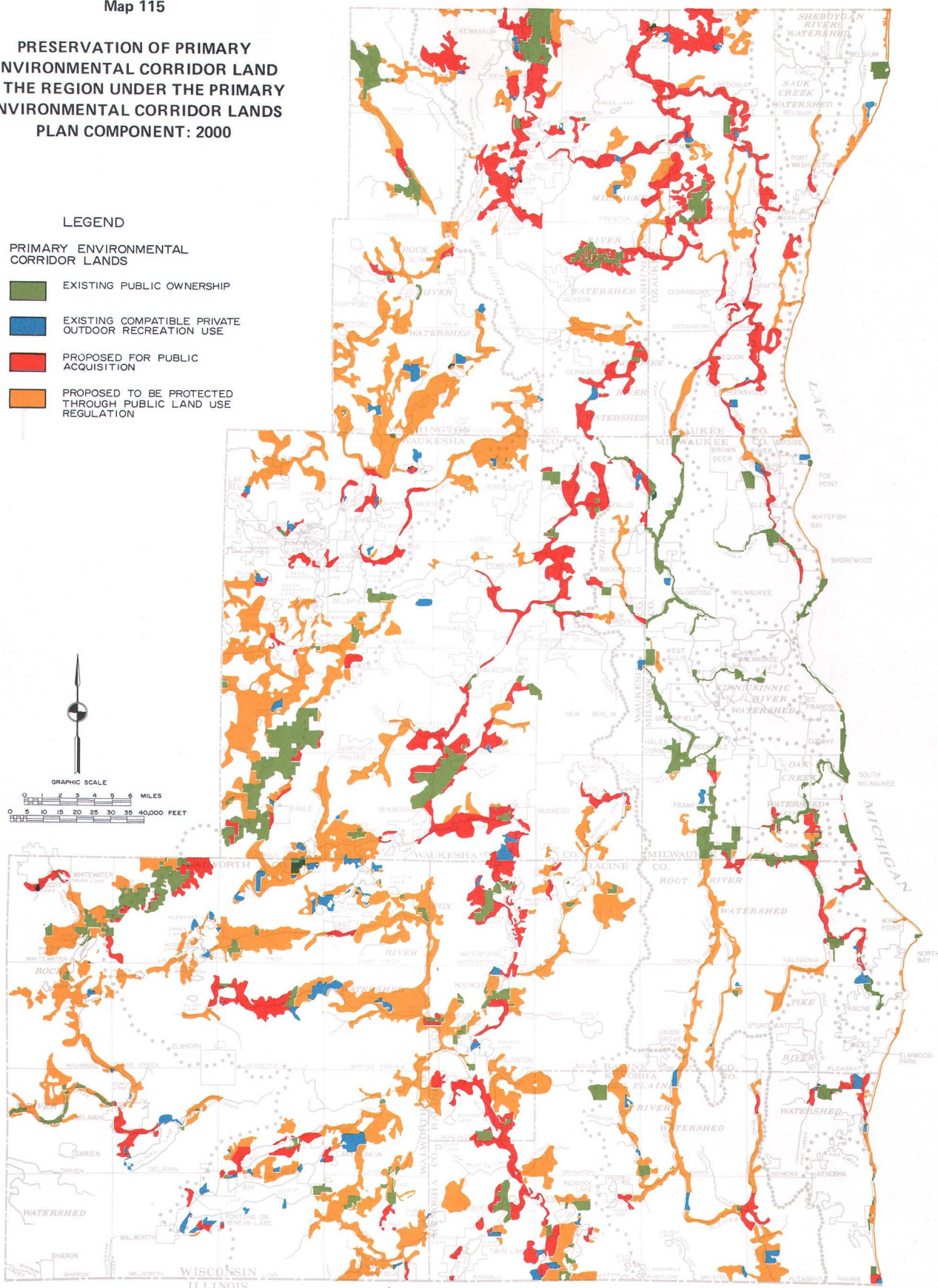
<sup>4</sup> The estimated 1975 land acquisition costs presented in this chapter were prepared on the basis of an analysis of the following land cost information: recent purchases of open space lands in southeastern Wisconsin by the State of Wisconsin Department of Natural Resources; recent purchases of open space land by local units of government in southeastern Wisconsin under state and federal aid programs; land cost information collected and collated under the Fox, Menomonee, Milwaukee, and Root River watershed planning programs; and estimates of 1975 land acquisition costs provided by county and local park officials in each of the seven counties of the Region.

**PRESERVATION OF PRIMARY  
ENVIRONMENTAL CORRIDOR LAND  
IN THE REGION UNDER THE PRIMARY  
ENVIRONMENTAL CORRIDOR LANDS  
PLAN COMPONENT: 2000**

**LEGEND**

**PRIMARY ENVIRONMENTAL  
CORRIDOR LANDS**

- EXISTING PUBLIC OWNERSHIP
- EXISTING COMPATIBLE PRIVATE  
OUTDOOR RECREATION USE
- PROPOSED FOR PUBLIC  
ACQUISITION
- PROPOSED TO BE PROTECTED  
THROUGH PUBLIC LAND USE  
REGULATION



The primary environmental corridor component of the regional park and open space plan recommends that all of the remaining 437 square miles of net primary environmental corridor lands in the Region be preserved in essentially natural open use. About 72 square miles, or 16 percent of these lands, are currently preserved through public ownership. The plan component recommends public acquisition of an additional 130 square miles of net primary environmental corridor lands—including 106 square miles previously recommended for public acquisition under the Commission Fox, Menomonee, Milwaukee, and Root River watershed planning programs and 24 square miles of lands recommended for acquisition under the regional park and open space plan which lie in or adjacent to areas expected to be in urban use by the year 2000. Including the 72 miles currently in public ownership, a total of 202 square miles of such lands, or about 46 percent of the primary environmental corridor lands and about 7 percent of the total area of the Region, would be permanently held in public trust upon full implementation of this plan component. The remaining 235 square miles of net primary environmental corridor lands, 23 square miles of which are in existing compatible private outdoor recreation use, are recommended to be preserved through appropriate land use controls such as agricultural, floodland, shoreland, parkland, conservancy, and very low density residential zoning.

Source: SEWRPC.

Table 129

**EXISTING AND PROPOSED PUBLIC OWNERSHIP OF NET PRIMARY ENVIRONMENTAL  
CORRIDOR LANDS IN THE REGION BY COUNTY: 1973 and 2000**

County	Net Primary Environmental Corridor Lands																			
	Total Existing Net Primary Environmental Corridor (1973)		Wetlands						Woodlands						Other					
			Existing Public Ownership (1973)		Proposed Public Acquisition (1973-2000)		Total (2000)		Existing Public Ownership (1973)		Proposed Public Acquisition (1973-2000)		Total (2000)		Existing Public Ownership (1973)		Proposed Public Acquisition (1973-2000)		Total (2000)	
	Acres	Percent of Region	Acres	Percent of Region <sup>a</sup>	Acres	Percent Change	Acres	Percent of Region <sup>b</sup>	Acres	Percent of Region <sup>a</sup>	Acres	Percent Change	Acres	Percent of Region <sup>b</sup>	Acres	Percent of Region <sup>a</sup>	Acres	Percent Change	Acres	Percent of Region <sup>b</sup>
Kenosha	24,550	8.8	900	0.3	1,950	217.8	2,850	1.0	150	0.1	30	20.0	180	0.1	2,070	0.7	4,390	212.1	6,460	2.3
Milwaukee	13,260	4.7	1,220	0.4	410	33.6	1,630	0.5	20	0.0	0	0.0	20	0.0	7,630	2.7	1,860	24.4	9,490	3.4
Ozaukee	20,750	7.4	1,420	0.5	4,940	347.9	6,360	2.3	50	0.0	490	980.0	540	0.2	1,020	0.4	6,320	619.6	7,340	2.6
Racine	27,840	9.9	1,200	0.4	2,150	179.2	3,350	1.2	80	0.0	640	800.0	720	0.3	2,610	0.9	6,400	245.2	9,010	3.2
Walworth	70,240	25.2	1,830	0.7	1,210	66.1	3,040	1.1	3,420	1.2	4,180	122.2	7,600	2.7	1,890	0.7	6,190	327.5	8,080	2.9
Washington	50,150	17.9	4,140	1.5	8,880	214.5	13,020	4.7	1,150	0.4	1,720	149.6	2,870	1.0	1,770	0.6	9,690	547.5	11,460	4.1
Waukesha	72,910	26.1	5,150	1.8	7,810	151.7	12,960	4.6	4,340	1.6	2,810	64.7	7,150	2.5	3,850	1.4	11,080	287.8	14,930	5.4
Region	279,700	100.0	15,860	5.7	27,360	172.5	43,220	15.4	9,210	3.3	9,870	107.2	19,080	6.8	20,840	7.4	45,930	220.4	66,770	23.9

<sup>a</sup> Percent of total net primary environmental corridor lands in the Region in 1973.

<sup>b</sup> Under the primary environmental corridors plan component, all existing corridor lands (279,700 acres) would be preserved as net corridor lands in the year 2000.

<sup>c</sup> Less than 0.05 percent.

Source: SEWRPC.

of high value woodlands, and 45,930 acres of other corridor lands. The cost of acquiring these environmental corridor lands is estimated at \$88,853,000.

As further indicated in Table 129, a total of 45,910 acres of net primary environmental corridor lands in the Region presently is in public ownership. Including the 83,160 acres recommended for public acquisition, then, a total of 129,070 acres of corridor lands would be permanently held in public trust upon full implementation of the open space preservation plan element. This total area of 129,070 acres constitutes 46 percent of the net primary environmental corridor acreage in the Region and 7 percent of the total area of the Region.

**Primary Environmental Corridor Zoning:** Public acquisition of the primary environmental corridor lands within the Region is the most positive and effective means of permanently protecting and enhancing the natural resource base of the Region, protecting floodlands from incompatible urban uses, and lending form and structure to urban development. Those areas of the primary environmental corridors which are not actually acquired for public use—including, importantly, existing private outdoor recreation areas—should, however, be kept in compatible, essentially natural, open uses. This can largely be achieved through the use of agricultural, floodland, shoreland, parkland, conservancy, or very low-density residential zoning within the Region. At a minimum, this zoning should encompass all the riverine areas of the Region lying within the 100-year recurrent flood hazard line and all areas within 1,000 feet of the shoreline of the 100 major lakes within the Region. Such zoning would assist in protecting the remaining woodlands, wetlands, and wildlife habitat areas as well as the flood-water movement and storage areas and water quality within the Region from continued deterioration and destruction by fragmented and incompatible urban

development. These zoning measures would also serve to prevent intensification of costly flood damage problems within the Region, and to avoid the need to construct expensive public flood control works. It is proposed that 150,630 acres, or 54 percent of the net primary environmental corridor land within the Region—14,590 acres of which are currently in compatible private outdoor recreation and open space use—be zoned in a manner appropriate to the preservation of the natural resource element. In addition, those areas of the corridors proposed to be acquired by the public sector should also be initially zoned as exclusive agricultural, floodland, shoreland, parkland, or conservancy districts in order to achieve immediate protection from urban encroachment, pending acquisition.

#### Prime Agricultural Land Plan Component

Prime agricultural lands in the Region have been defined by the Commission as lands which are highly productive for agricultural purposes on the basis of soils, the size and extent of the areas farmed, and the historic capability of the area to produce better than average crop yields. The preservation of these prime agricultural lands is desirable for economic reasons as well as to maintain the natural beauty and unique cultural heritage of southeastern Wisconsin, thereby ensuring the future environmental wholesomeness of the Region. In addition to the prime agricultural lands as defined above, certain additional agricultural lands surrounding major sites having scientific, educational, and recreational value in the Region should be preserved in order to provide a suitable setting for such sites.

The revised regional land use plan for the year 2000 provides recommendations for the preservation of the prime agricultural lands and other agricultural lands surrounding major sites having scientific, educational, and recreational value, and these recommendations are

incorporated as part of the open space preservation element of the regional park and open space plan. In this regard, the adopted regional land use plan recommends the preservation of all remaining prime agricultural lands as well as certain agricultural lands surrounding major scientific, educational, and recreational sites except for a small portion of such agricultural lands that was generally committed to urban development as early as 1970 due to nearby existing and expanding concentrations of urban uses and the prior commitment of heavy capital investment in utility expansions. The agricultural lands recommended for preservation are shown on Map 116. In 1970, prime agricultural lands in the Region consisted of 404,900 acres,<sup>5</sup> or 24 percent of the total area of the Region and 39 percent of the total area of the Region devoted to agricultural use. Under the proposed new regional land use plan, 396,500 acres, or 98 percent of the existing prime agricultural acreage in the Region, are recommended to be preserved in agricultural use through exclusive agricultural zoning. The small balance—8,400 acres, or 2 percent of the remaining prime agricultural acreage—would be converted to urban use by the regional land use plan design year 2000.

In 1970 31,000 acres of agricultural land also were considered to provide a desirable open space setting around major scientific, educational, and recreational sites in the Region. Under the adopted regional land use plan, approximately 26,600 acres, or 86 percent of these lands, would be preserved in agricultural use through exclusive agricultural zoning. The remainder—4,400 acres, or 14 percent of the existing acreage—would be converted to urban use by the year 2000.

Including both prime agricultural lands and additional agricultural lands which are required as a desirable open space setting for the major scientific, educational, and recreational sites in the Region, a total of 423,100 acres of agricultural land are recommended to be preserved through exclusive agricultural zoning. This total represents 25 percent of the total area of the Region, and 41 percent of the existing agricultural land in the Region in 1970.

#### Concluding Remarks—

##### Open Space Preservation Plan Element

Adoption and implementation of the open space preservation plan element of the regional park and open space plan would substantially achieve regional park and open space preservation and development Objective No. 6 and its associated standards, thereby providing desirable and far-reaching effects on the quality of life within the Region. Under the open space preservation plan element, the total net primary environmental corridor acreage—279,700 acres—would be preserved, with 129,070 acres,

or 46 percent of this total, permanently preserved in public ownership, and the remainder, 150,630 acres, or 54 percent, preserved through floodland, shoreland, parkland, conservancy, or very-low density residential zoning. By protecting the primary environmental corridors in this manner, flood damage can be reduced, soil erosion abated, water supply protected, air cleansed, wildlife population enhanced, and continued opportunities provided for scientific, educational, and recreational pursuits. In addition, the preservation of primary environmental corridor lands as recommended under the open space preservation plan element would help to satisfy the human need for natural surroundings and ensure that many scenic areas and areas of natural, cultural, or historic interest assume their proper place as form determinants for existing and future land use patterns.

Under the open space preservation plan element of the park and open space plan, 396,500 acres of prime agricultural lands, representing 23 percent of the total area of the Region and 98 percent of the existing 1970 prime agricultural land in the Region, would be preserved through exclusive agricultural zoning. In addition, 26,700 acres of other agricultural lands, surrounding major scientific and recreational sites in the Region and representing 2 percent of the total area of the Region and 3 percent of the existing 1970 agricultural land in the Region would be similarly preserved. The preservation of these agricultural areas—especially the prime agricultural lands—would contribute significantly to maintaining the ecological balance between the various plant and animal communities; provide locations proximal to urban centers for the production of certain flood commodities which may require nearby population concentration for an efficient production-distribution relationship; lend form and structure to urban development; and serve to maintain the natural beauty and unique cultural heritage of the Region.

Under the open space preservation plan element, the recommended public acquisition of land is confined to the primary environmental corridors of the Region. The environmental corridor lands recommended for public acquisition under the open space preservation plan element would provide space for many of the additional outdoor recreation sites and recreation corridors recommended under the two resource-oriented outdoor recreation component alternative plans which are described in the next section of this chapter. It should be noted, however, that both resource-oriented outdoor recreation component alternative plans recommend public acquisition and development of other recreation sites and recreation corridors in segments of the primary environmental corridor which are not recommended for public acquisition under the open space preservation plan element. The adoption and implementation of either of the two resource-oriented outdoor recreation component alternative plans would, therefore, increase the public ownership of primary environmental corridor lands beyond the recommendations of the open space preservation plan element.

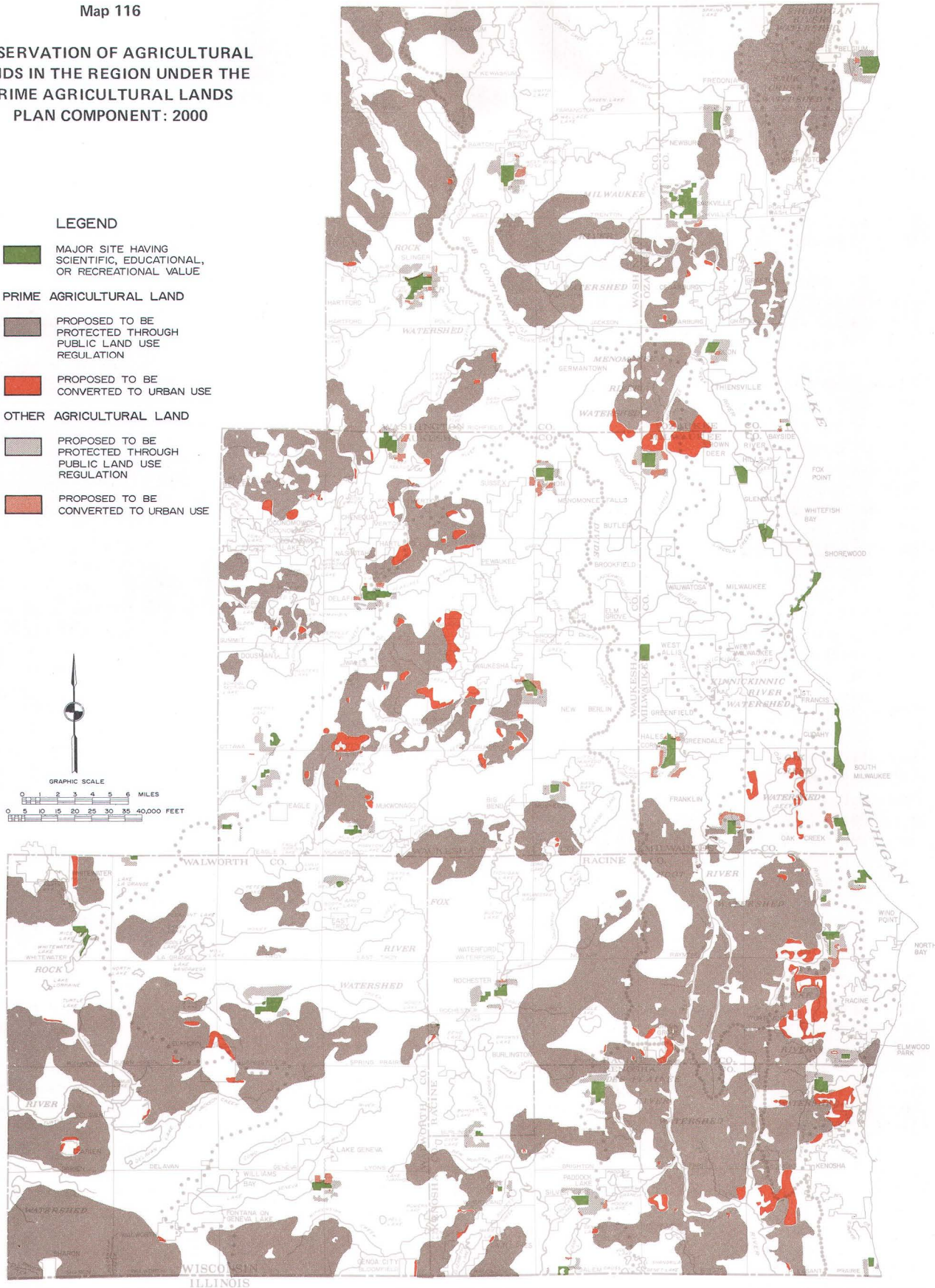
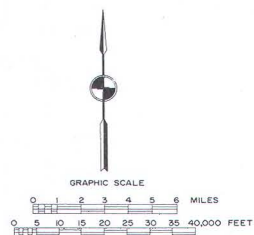
---

<sup>5</sup>Prime agricultural acreage figures presented in this chapter represent land within the prime agricultural configuration shown on Map 23 which is actually devoted to agricultural use.



**PRESERVATION OF AGRICULTURAL  
LANDS IN THE REGION UNDER THE  
PRIME AGRICULTURAL LANDS  
PLAN COMPONENT: 2000**

- LEGEND**
- MAJOR SITE HAVING SCIENTIFIC, EDUCATIONAL, OR RECREATIONAL VALUE
  - PRIME AGRICULTURAL LAND**
    - PROPOSED TO BE PROTECTED THROUGH PUBLIC LAND USE REGULATION
    - PROPOSED TO BE CONVERTED TO URBAN USE
  - OTHER AGRICULTURAL LAND**
    - PROPOSED TO BE PROTECTED THROUGH PUBLIC LAND USE REGULATION
    - PROPOSED TO BE CONVERTED TO URBAN USE



The prime agricultural lands component of the regional park and open space plan recommends the preservation of virtually all of the remaining prime agricultural lands in the Region. In addition, agricultural lands surrounding major sites having scientific, educational, and recreational values are recommended to be preserved in order to provide a suitable setting for such sites. The plan recommends that 620 square miles, or 98 percent, of the 633 square miles of prime agricultural lands in the Region be preserved in agricultural use through exclusive agricultural zoning. The remainder—13 square miles, or 2 percent of the remaining prime agricultural acreage—would be converted to urban use by the year 2000. Of the 48 square miles of agricultural land which were considered to provide a desirable open space setting around major scientific, educational, and recreational sites in the Region, approximately 41 square miles would be preserved in agricultural use through exclusive agricultural zoning while the remainder—seven square miles—would be converted to urban use by the year 2000. Including both prime agricultural lands and additional agricultural lands which are required as a desirable open space setting for the major scientific, educational, and recreational sites in the Region, a total of 661 square miles of agricultural land are recommended to be preserved through exclusive agricultural zoning. This total represents 25 percent of the total area of the Region and 41 percent of the existing agricultural land in the Region in 1970.

Source: SEWRPC.

## OUTDOOR RECREATION PLAN ELEMENT

A major consideration in the park and open space planning program, as set forth in Chapter XI under Objectives No. 1 through No. 5, is the provision of adequate outdoor recreation opportunities for the resident population of the Region. The outdoor recreation plan element of the regional park and open space plan consists of two plan components—the resource-oriented outdoor recreation plan component, which addresses the identified need for resource-oriented outdoor recreation sites and facilities, and the urban outdoor recreation plan component, which addresses the identified need for nonresource-oriented outdoor recreation sites and facilities. Two alternatives were considered in selecting the resource-oriented outdoor recreation plan component design. A description of each alternative design and an evaluation of the two alternatives are presented below, while a description of the urban outdoor recreation plan component follows.

### Resource-Oriented Outdoor Recreation Plan Component

The analysis of outdoor recreation needs, described in Chapter XII of this report, indicated a substantial need for additional public resource-oriented recreation sites—including Type I and Type II parks and public recreation corridors—as well as public resource-oriented recreation facilities—including campsites, swimming beaches, golf courses, and picnic facilities—in the Region in 1975. Anticipated growth in the regional population, as well as in recreation demand by out-of-Region residents, may be expected to increase this existing need by the year 2000. The satisfaction of the identified site and facility requirements could be achieved through any one of a number of park system designs, each of which would meet the agreed-upon regional park and open space objectives to varying degrees. One of the important tasks in planning for the orderly satisfaction of outdoor recreation needs consists, therefore, of selecting from among the available alternatives the ultimate resource-oriented outdoor recreation plan component which offers the greatest potential for attaining the recommended objectives.

This section presents two alternative plans, namely, a resource based alternative plan and an accessibility based alternative plan, each of which represents an attempt to meet the identified needs for resource-oriented recreation sites and facilities through a basically different park system design. It should be noted that the concepts embodied in these two plans are not mutually exclusive but that, within each alternative plan, an attempt is made to utilize good sites and provide good accessibility—the difference being primarily one of degree of emphasis. While many variations of these two resource-oriented outdoor recreation component plans are possible, the two plans selected represent the basic choices practically available to the Region. The balance of this section presents a description of the design methodology underlying the resource-oriented outdoor recreation plan component; a description of the component alternative plans themselves; and an evaluation of the component alterna-

tive plans against the adopted park and open space objectives and standards. It should be recognized that the component alternative plans set forth in this section address only the need for resource-oriented outdoor recreation sites and facilities.

Basic Concepts: Resource-oriented outdoor recreation activities rely heavily on natural resource amenities at the site to enhance the quality of the recreational experience. Accordingly, facilities for such activities, to the maximum extent possible, should be provided at sites which contain the desired natural resource amenities. At the same time, outdoor recreation sites and facilities which satisfy the demand for resource-oriented activities should be located close to the population which they are intended to serve. In the Southeastern Wisconsin Region, however, a disparity exists between the location of the best remaining resource amenities—and, therefore, of the best remaining potential outdoor recreation sites—and the location of the major population centers of the Region. This disparity is illustrated on Map 117, which shows the existing distribution of the population within southeastern Wisconsin and 14 broad areas within the Region which were identified under the Commission's initial potential park site inventory as possessing recreation resource values of regional significance.<sup>6</sup> As indicated on Map 117, major population concentrations in the Region occur in the Kenosha, Milwaukee, and Racine metropolitan areas, somewhat removed from important resource areas, such as the Kettle Moraine, Recessional Moraine, and undeveloped riverine areas, which are situated in the western and northern portions of the Region.

The most critical choices in planning efforts which attempt to meet resource-oriented outdoor recreation needs in southeastern Wisconsin must center on this disparity between the location of the population centers of the Region and the location of regionally significant natural resource amenities. In this regard, the development of all the required resource-oriented outdoor recreation facilities on the best remaining potential recreation sites could only be accomplished by sacrificing, to some extent, the overall accessibility of the recreation sites and facilities to the regional population. Conversely, in order to achieve desirable accessibility by developing the required recreation facilities at sites near the population centers, site quality would necessarily be somewhat sacrificed.

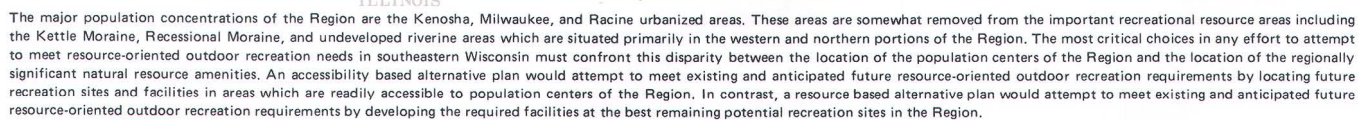
The two resource-oriented outdoor recreation component alternative plans prepared under the park and open space planning program, identified as the accessibility based alternative plan and the resource based alternative plan, differ primarily in the manner in which they approach the basic park planning problem described above. As its name implies, the accessibility based alternative plan

---

<sup>6</sup> See *SEWRPC Technical Report No. 1, Potential Parks and Related Open Spaces*.



### SIGNIFICANT RECREATIONAL RESOURCE AREAS AND POPULATION DISTRIBUTION WITHIN THE REGION: 1975



378

represents an effort to meet existing and anticipated future resource-oriented outdoor recreation requirements by locating future recreation sites and facilities in areas which are readily accessible to the population centers of the Region. Yet to the maximum extent practicable, the accessibility based alternative plan recommends the development of the required facilities within high value potential park sites and primary environmental corridor lands.

In contrast, the resource based alternative plan represents an effort to meet existing and anticipated future resource-oriented outdoor recreation requirements by developing the required facilities at the best remaining potential recreation sites in the Region. With this emphasis on site quality, the resource based alternative plan recommends development of more facilities within the regionally significant resource areas located in the outlying portions of the Region than does the accessibility based alternative plan. In the effort to ensure the high quality of future recreation sites, however, the resource based alternative plan places a priority on the development of high value potential recreation areas which also meet accessibility requirements.

**Methodology:** The primary purpose of each of the resource-oriented outdoor recreation component alternative plans is to guide the public sector in the provision of additional resource-oriented outdoor recreation sites and facilities which will be needed by the plan design year 2000. The anticipated needs for additional resource-oriented outdoor recreation sites and facilities in the Region by the year 2000 are summarized in Table 130. As described in Chapter XII, these site and facility requirements were determined by applying the adopted per capita recreation site and facility standards to the forecast year 2000 population of the Region. An analysis of service areas of existing recreation facilities in the Region, also described in Chapter XII, identified portions of the Region which would not be appropriately served by resource-oriented recreation facilities in the year 2000. A graphic summary of the areas of the Region not served by various resource-oriented recreation facilities is provided by Map 118.

The methodology applied in preparing the resource-oriented outdoor recreation component alternative plans consisted basically of a design-oriented mapping activity concerned primarily with spatial distribution of the additional recreation sites and facilities to be provided to meet the per capita and accessibility needs noted above. This design process was conducted within a context of the regional primary environmental corridor delineations, the results of the regional potential park sites inventory, and information on individual natural features of the Region including topography, surface water, wetlands, and woodlands. In addition, county and local plans for Type I and Type II parks were incorporated into the resource-oriented outdoor recreation component alternative plans to the maximum extent possible.

Table 130

**ADDITIONAL PUBLIC RESOURCE-ORIENTED  
OUTDOOR RECREATION SITES AND FACILITIES  
REQUIRED IN THE REGION: 2000**

Site or Facility	Additional Site and Facility Requirements for the Plan Design Year 2000	
Outdoor Recreation Sites and Related Recreation Open Space		
Type I and Type II Parks . . . . .	5,720	acres
Public Recreation Corridor . . . . .	350	linear miles
Intensive Facilities		
Campsites . . . . .	219	campsites
Golf Courses . . . . .	11	18-hole regulation courses
Picnic Tables . . . . .	2,040 <sup>a</sup>	picnic tables
Swimming Beaches		
Inland . . . . .	2,193	linear feet of beach
Lake Michigan . . . . .	6,582 <sup>b</sup>	linear feet of beach
Ski Slopes . . . . .	--	
Extensive Land Based Facilities		
Bike Trails . . . . .	350	linear miles
Hiking Trails . . . . .	350	linear miles
Horseback Riding Trails . . . . .	110	linear miles
Nature Study Facilities		
Nature Study Trails . . . . .	44	linear miles
Nature Center . . . . .	5 <sup>c</sup>	centers
Ski Trails (cross country) . . . . .	44	linear miles
Snowmobile Trails . . . . .	241	linear miles
Water Access Facilities		
Access Points		
Inland Lakes . . . . .	42	access points
River . . . . .	9	access points
Lake Michigan		
Launch Ramps . . . . .	19	ramps
Boat Slips . . . . .	1,310	slips

<sup>a</sup> Required for resource-oriented picnicking at Type I and Type II parks.

<sup>b</sup> No additional need for public ski slopes was indicated by application of the appropriate per capita standards to the regional population. As indicated on Map 118, however, certain portions of the Region lack ready access to existing public skiing areas.

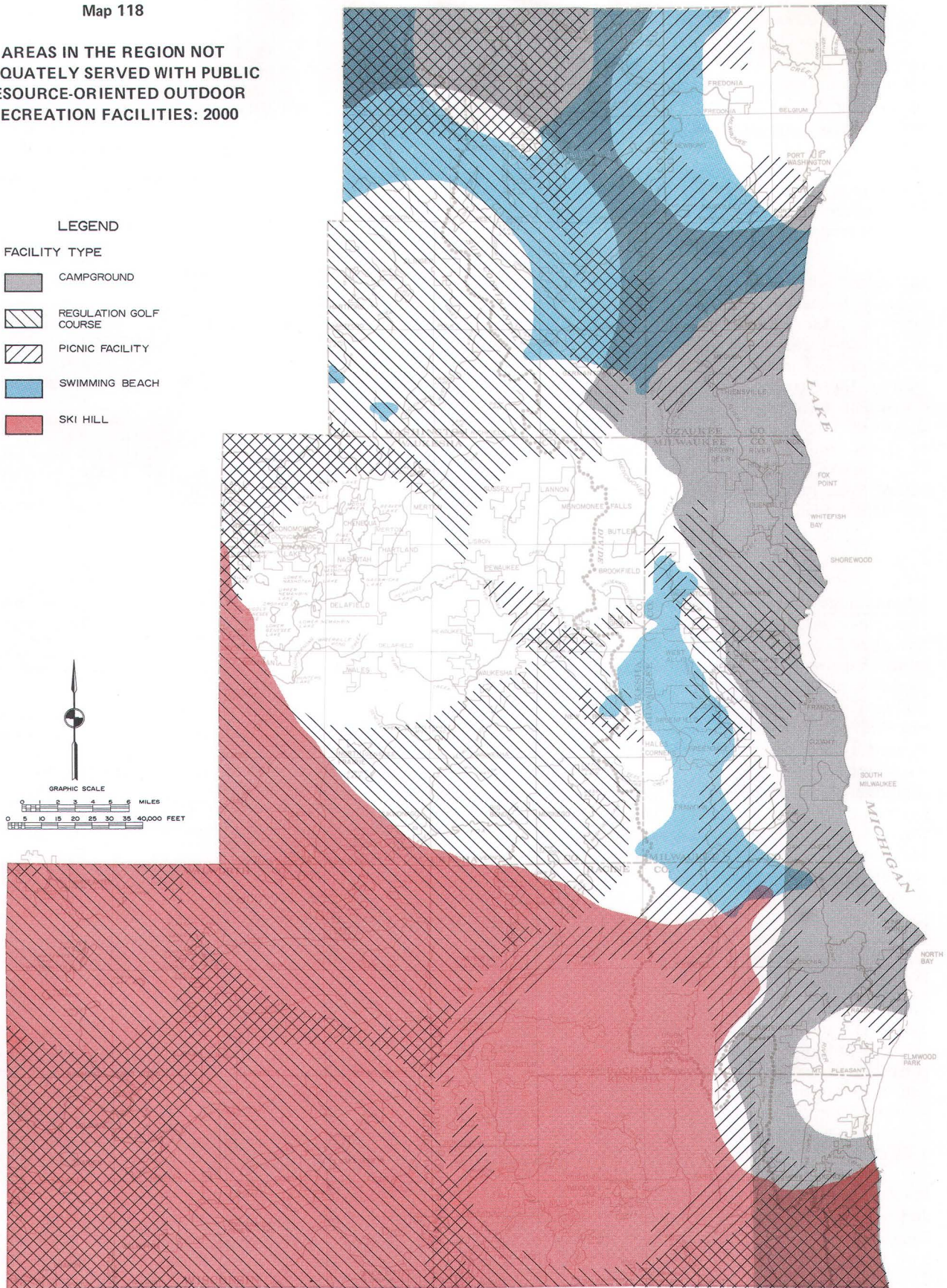
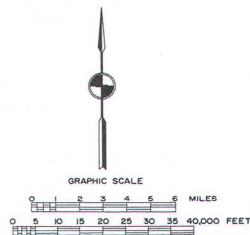
<sup>c</sup> Nature centers are required in Kenosha, Ozaukee, Racine, Walworth, and Washington Counties.

Source: SEWRPC.

The first work element in the plan design process was delineation of a public recreation corridor network for each resource-oriented outdoor recreation component plan. Recreation corridors have been defined for the purposes of this report as publicly owned, continuous, ribbons of land at least 15 miles in length which are located within scenic areas or areas of natural, historical, or other cultural value, and which provide opportunities for participation in trail-oriented outdoor recreation activities, especially through the provision of trails marked and maintained for such activities as hiking, biking, horseback riding, and ski touring. Such recreation corridors can serve to physically connect existing and proposed public parks, thus forming a truly integrated regional



**AREAS IN THE REGION NOT  
ADEQUATELY SERVED WITH PUBLIC  
RESOURCE-ORIENTED OUTDOOR  
RECREATION FACILITIES: 2000**



The regional park and open space plan sets forth per capita and service area standards for intensive resource-oriented outdoor recreation facilities. Such standards were utilized to identify areas of the Region which probably would not be adequately served with public resource-oriented outdoor recreation facilities in the year 2000 given the existing quantity and distribution of such facilities. Application of the standards indicated that eastern Kenosha and Racine Counties, northern and eastern Milwaukee and Washington Counties, and southern Ozaukee County would not be adequately served with public campsites; southern Kenosha County, central Milwaukee County, northwestern Racine County, all of Walworth County, virtually all of Washington County, and northern and southern portions of Waukesha County would not be adequately served with a public regulation golf course; portions of each county in the Region would not be adequately served by resource-oriented picnic areas; western Milwaukee County, western and central Ozaukee County, and northern Washington County would not be adequately served with public swimming beaches; and southern and western Kenosha County, western Racine County, all of Walworth County, and southwestern Waukesha County would not be adequately served with public ski hills.

Source: SEWRPC.



park and open space system. Under both resource-oriented recreation component alternative plans, virtually all proposed recreation corridors are located within the primary environmental corridors of the Region. Under the accessibility based alternative plan, an effort was made to locate the recreation corridors within primary environmental corridors near population concentrations within the Region. Under the resource based alternative plan, greater emphasis was placed on developing recreation corridors through primary environmental corridor lands containing natural resource amenities of regional significance. Many such corridor lands are located in the outlying areas of the Region. After the delineation of an overall recreation corridor network for each resource-oriented outdoor recreation component alternative plan, a determination was made on the suitability of segments of each recreation corridor network for specific trail-oriented activities.

The second work element in the plan design process was allocation of the required intensive land based resource-oriented facilities to publicly owned undeveloped or partially developed outdoor recreation sites and to potential park sites currently in nonpublic ownership. In this allocation process, the required facilities were "assigned" to publicly owned undeveloped or partially developed recreation lands to the maximum extent possible. The remaining facilities were then "assigned" to potential park sites throughout the Region. Under both plan component alternatives, an effort was made to assign specific facilities to high value potential park sites situated in areas of the Region not currently served by such facilities.<sup>7</sup> Under the accessibility based alternative plan, if there were no high value potential park site in a "need" area, the required facilities were assigned to a lower value potential park site in that area in order to satisfy the accessibility standards. In contrast, under the resource based alternative plan, if there were no high value potential park site in a "need" area, the required facilities were assigned to the closest high value potential park site located in another area of the Region, thereby maintaining site quality standards. Under both plan alternatives, priority was given to developing suitable potential park sites located on, or close to, the public recreation corridors proposed for the respective plans.

---

<sup>7</sup>Open space lands designated as potential park sites under the potential parks inventory were assigned value ratings after analysis of the available physical planning data with respect to the potential park use. No consideration was given in the value rating to site cost, ownership, or specific demand for a park facility in any particular area of the Region. Sites rated as high value are those sites which possess the most favorable developmental potential for the type of development recommended and for which the inventory results revealed no serious development limitations. Sites rated as medium value possess minor development limitations, as revealed by the inventory. Sites rated as low value possess some major development limitations and, therefore, have relatively poor potential for development as park sites without major modification.

The final work element of the plan design process was development of recommendations to guide provision of the water access facilities required to facilitate opportunities for safe and enjoyable participation in extensive water based activities on the major inland lakes and the rivers of the Region and on Lake Michigan. The recommendations for provision of access points on the rivers and major inland lakes and the provision of launch ramps and boat slips within harbors of refuge on Lake Michigan are the same for the two alternative resource-oriented outdoor recreation component plans.

#### Accessibility Based Alternative Plan Description

Both of the resource-oriented outdoor recreation component alternative plans prepared under the regional park and open space planning program address the anticipated need for public resource-oriented outdoor recreation sites and facilities in the Region by the plan design year 2000. This section presents a description of the accessibility based alternative plan proposals for resource-oriented sites—Type I and Type II parks and public recreation corridors—and for resource-oriented facilities—intensive and extensive land based facilities and water access facilities.

Outdoor Recreation Sites: To effectively satisfy resource-oriented outdoor recreation demand requires the provision of large parks and public recreation corridors which together provide the space needed for intensive and extensive outdoor recreation activities. The resource-oriented outdoor recreation sites, including public recreation corridors as well as Type I and Type II parks proposed under the accessibility based alternative plan, described here. It should be noted that certain segments of the primary environmental corridors of the Region have been recommended for public acquisition under the open space preservation plan element, described previously in this chapter. The accessibility based alternative plan recommends the development of public recreation corridors and parks both within, and outside of, portions of the primary environmental corridors recommended for public acquisition under the open space preservation plan element. In the description of the accessibility based alternative plan, appropriate acreage and cost data are presented for this "overlap" between the open space preservation plan element and the accessibility based alternative plan component.

Recreation Corridors: As previously indicated, recreation corridors are defined as publicly owned ribbons of land at least 15 miles in length located through areas of scenic, scientific, historical, or other cultural interest, which contain trails marked and maintained for such activities as hiking, biking, horseback riding, and ski touring. Based upon this definition, there were no recreation corridors in the Region in 1973. It should be noted, however, that there are publicly owned linear expanses of land in the Region—most notably, the Milwaukee County parkway lands and the Kettle Moraine State Forest lands—which possess significant natural resource amenities and which, therefore, warrant consideration for possible inclusion in any recreation corridor network. The adopted per capita standard for public recreation corridors is 0.16 linear

mile per thousand persons. In order to meet this standard, 350 miles of public recreation corridor would be required in the Region by the year 2000.

The public recreation corridor network proposed under the accessibility based alternative plan to meet the anticipated year 2000 need is shown on Map 119. Under this alternative plan, recreation corridors would be located primarily in primary environmental corridors in areas readily accessible to large population concentrations within the Region. More specifically, as shown on Map 119, recreation corridors would be developed in locations which provide convenient access to residents of the Kenosha, Milwaukee, and Racine metropolitan areas. In addition, individual recreation corridor segments in outlying areas of the Region would provide convenient access to residents of smaller urban centers including Whitewater, Oconomowoc, Hartford, and West Bend. As further shown on Map 119, the recreation corridor network proposed under this alternative plan includes a number of loops with lengths appropriate for day-long outings involving trail-oriented activities. Participation in trail activities on such loops would be facilitated by allowing participants to start and finish at the same point.

Recreation corridors proposed under the accessibility based alternative plan would provide a diversity of recreation experiences for trail users. Thus, recreation corridors in the outlying areas of the Region would accommodate trail activities within natural surroundings offering many scenic areas and points of natural interest. On the other hand, recreation corridor segments traversing densely populated areas of the Region would provide unique opportunities for the enjoyment of cultural and historical features. Such segments of the recreation corridor would provide recreational opportunities in areas having significant shortages of park and open space lands and provide valuable links to existing and proposed parks for a large portion of the population.<sup>8</sup>

A total of 380 linear miles of recreation corridor lands is proposed under the accessibility based alternative plan, with 356 miles, or 94 percent of the total, traversing primary environmental corridor lands. The small balance,

---

<sup>8</sup> Under the accessibility based alternative plan, the provision of recreation corridors within densely populated urban areas of the Region would rely heavily on existing parkway lands. Provision of recreation corridors other than through existing parkway lands would be difficult in such areas because of the lack of open space land. In this regard, it should be noted that a unique opportunity for the recreation corridor within the most densely populated portion of the Region may exist on lands which have been cleared for the Park West Freeway, the construction of which is currently uncertain. If it is ultimately determined that this land cannot be used as a transportation corridor, this land would provide an excellent opportunity to develop a recreation corridor in planning analysis areas 19 and 20 where a great need for outdoor recreation sites and facilities has been identified.

24 linear miles, or 6 percent of the total, traverses land outside the primary environmental corridors, primarily in order to provide continuity (see Table 131). The recreation corridor network proposed under this alternative plan element traverses much of the Milwaukee County parkway system as well as the Kettle Moraine State Forest. Including these lands and other smaller expanses of publicly owned land, the recreation corridor network proposed under the accessibility based alternative plan includes 130 linear miles of corridors through lands currently in public ownership. The remaining segments of the proposed public recreation corridor system, including 250 miles, or 66 percent of the total proposed recreation corridor mileage, traverse lands currently in nonpublic ownership.

The width of the proposed public recreation corridors would vary with the resource content of the lands traversed and the specific trail facilities to be provided. The precise width and location of individual segments of the recreation corridors are properly a matter for county and local park planning. At a minimum, however, a 200-foot-wide corridor is considered necessary to provide an open space setting for any trail activity. Since the accessibility based alternative plan recommends the development of recreation corridors through 250 linear miles of land currently in nonpublic ownership, a minimum of 3,070 acres of land would have to be acquired by the public sector to complete the recreation corridor network. Of this total, 1,900 acres lying within the primary environmental corridors would be acquired under the open space preservation plan element at an estimated cost of \$3,568,000 (see Table 132). The remaining acreage, including 940 acres within the primary environmental corridors and 230 acres outside the primary environmental corridors, would be acquired at an estimated cost of \$3,357,000.

*Type I and Type II Parks:* Type I and Type II parks are defined as large public general use outdoor recreation sites which provide opportunities for such activities as camping, golfing, picnicking, and swimming and have a large area containing significant natural resource amenities. The adopted per capita standard for Type I and Type II parks combined is 7.9 acres per thousand persons. The application of this standard to the forecast year 2000 population for southeastern Wisconsin indicated that a total of 17,330 acres of Type I and Type II parks will be required within the Region in the plan design year 2000. Since there was a total of 11,610 acres of Type I and Type II parks in the Region in 1973, an additional 5,720 acres of Type I and Type II parks would have to be added to the existing acreage to meet the adopted standard in the plan design year.

There were 42 Type I and Type II parks in the Region in 1973 with a combined area of 11,610 acres. The accessibility based alternative plan includes maintenance of these existing parks as well as development of additional facilities at certain of these sites (see Table 133). In addition, this alternative plan recommends the expansion of one existing Type I park and two existing Type III parks to the size required for a Type II general use site,

Table 131

## RECREATION CORRIDOR MILEAGE IN THE REGION UNDER THE ACCESSIBILITY BASED ALTERNATIVE PLAN: 2000

Ownership	Relationship to Primary Environmental Corridor			
	In Primary Environmental Corridor (linear miles)	Outside Primary Environmental Corridor (linear miles)	Total	
			Linear Miles	Percent
Recreation Corridor Segments through Existing Public Lands . . .	129.5	0.5	130.0	34.2
Recreation Corridor Segments to be Acquired . . . . .	226.5	23.5	250.0	65.8
Total	356.0	24.0	380.0	100.0

Source: SEWRPC.

Table 132

## PUBLIC LAND ACQUISITION REQUIREMENTS AND ACQUISITION COSTS FOR RECREATION CORRIDORS UNDER THE ACCESSIBILITY BASED ALTERNATIVE PLAN: 2000

	Land in Those Portions of the Primary Environmental Corridor Which Are to be Acquired Under the Open Space Preservation Plan Element <sup>a</sup>		Other Land to be Acquired Under Accessibility Based Alternative Plan				Total Land Acquisition			
			Acres			Acquisition Cost	Acres			Acquisition Cost
	Acres	Acquisition Cost	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total		In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	
Land to be Acquired for Recreation Use Under the Accessibility Based Alternative Plan Recreation Corridors.	1,900	\$3,568,000	940	230	1,170	\$3,357,000	2,840	230	3,070	\$6,925,000

<sup>a</sup> Includes land within the minimum 200 foot right-of-way required for recreation corridors through those primary environmental corridors which are recommended for public acquisition under the open space preservation plan element.

Source: SEWRPC.

thereby adding 450 acres to the existing Type I and Type II park acreage. This alternative plan further recommends the development as Type I or Type II parks of seven undeveloped areas which are currently in public ownership and which have a combined area of 1,391 acres. Finally, this alternative plan proposed the public acquisition and development of 19 new Type I and Type II parks having a combined area of 3,848 acres on lands currently in nonpublic ownership. A total, then, of 5,689 acres of additional Type I and Type II parks would be provided upon implementation of this alternative plan. Including the 11,610 acres of Type I and Type II parks existing in the Region in 1973, a total of 17,299 acres of Type I and Type II parks would thus be provided in the

Region by the year 2000. The accessibility based alternative plan would thus meet the anticipated demand for Type I and Type II parks in the Region in the plan design year.

Type I and Type II parks serve as a location for most of the existing intensive resource-oriented facilities, such as campsites, picnic facilities, swimming beaches, golf courses, and nature centers in the Region. Under the accessibility based alternative plan, all additional intensive resource-oriented facilities required in the Region by the year 2000 would be developed at existing or proposed Type I and Type II parks. In the selection of sites for development as Type I and Type II parks under this



Table 133

**EXISTING AND PROPOSED TYPE I AND TYPE II PARKS IN THE REGION  
UNDER THE ACCESSIBILITY BASED ALTERNATIVE PLAN: 2000**

Type of Site	Type I and Type II Parks Under Accessibility Plan for the Year 2000			
	Number of Sites	Acres		
		In Public Ownership 1973	In Nonpublic Ownership: 1973 (to be acquired)	Total
Existing Type I and Type II Parks				
Existing Type I and Type II Parks to be Maintained . . .	41	11,410	--	11,410
Existing Type I Park to be Expanded. . . . .	1	200	200	400
Proposed Additional Type I and Type II Parks				
Existing Type III Parks to be Expanded to Type II Parks . . . . .	2	170	80	250
Existing Undeveloped Areas to be Developed as Type I or Type II Parks . . . . .	7	1,391	--	1,391
New Type I and Type II Parks . . . . .	19	--	3,848	3,848
<b>Total</b>	<b>70</b>	<b>13,171</b>	<b>4,128</b>	<b>17,299</b>









Source: SEWRPC.

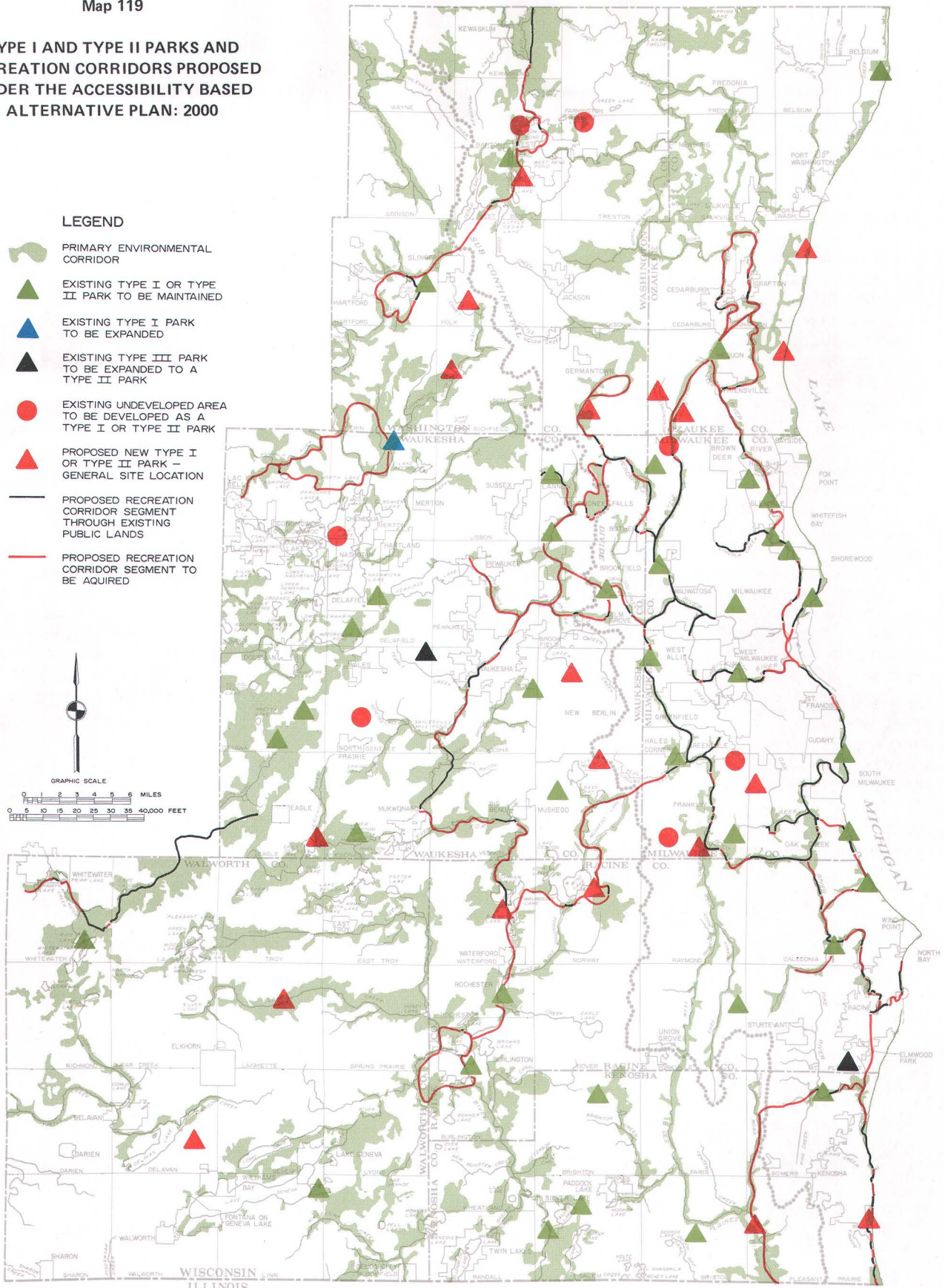
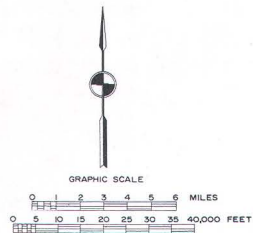
alternative plan, an effort was made to "assign" additional required facilities to publicly owned undeveloped, or partially developed, recreation lands to the maximum extent possible. Other additional facilities required by the plan design year were then assigned to potential park sites located as close as possible to the area of the Region in which the facility need exists, using high value potential park sites whenever possible and lower value potential park sites when there was no suitable high value potential park site in the need area. Within this framework, priority was given to the development of new Type I and Type II parks located on, or close to, the proposed public recreation corridors. The distribution of existing and proposed Type I and Type II parks under this alternative plan, obtained through the application of these guidelines, is shown on Map 119.

It should be noted that, rather than proposing specific sites for development as new Type I and Type II parks, the resource-oriented outdoor recreation component alternative plans identify general areas in which a Type I or Type II park should be developed (see Map 119). Frequently, these areas contain several high value potential park sites which could be developed to accommodate the required facilities. By recommending general areas for new Type I and Type II parks in this manner, the alternative park plans attempt to provide desirable flexibility to the public sector in efforts to implement the regional park plan, allowing the selection of a site which is suitable for the required facilities and which is actually available for purchase at a cost within the economic capability of the governmental units involved.

The analysis of outdoor recreation needs described in Chapter XII of this report indicated that many portions of Milwaukee County—and, in particular, the densely populated central portion of the City of Milwaukee—are not appropriately served with certain intensive resource-oriented outdoor recreation facilities. In an effort to satisfy these needs, the accessibility based alternative plan proposes a number of new Type I and Type II parks in open space lands located on the fringe of the Milwaukee urbanized area, as close to the "need" area as possible. As a result, under this alternative plan, nine of the 19 proposed new Type I and Type II parks would be situated within 20 miles of the central business district of the City of Milwaukee. Of these nine sites, five are designated as high value potential park sites in the potential park sites inventory and four are designated as medium value sites. It should be observed that the proposal to develop the four medium value sites is necessary to provide space sufficient for the resource-oriented facilities required in the Milwaukee urbanized area, in the absence of enough suitable high value potential parks. As further shown on Map 119, of the remaining 10 new parks proposed under this alternative plan, two sites would be located in eastern Kenosha County to provide space for resource-oriented facilities to serve residents of the Kenosha urbanized area and eight sites would be located in outlying portions of the Region to provide the space required to meet the resource-oriented facility needs of residents of the rural and outlying urban areas of the Region. Of these 10 sites, eight are designated as high value potential parks in the potential parks inventory and two are considered medium value sites.

**TYPE I AND TYPE II PARKS AND  
RECREATION CORRIDORS PROPOSED  
UNDER THE ACCESSIBILITY BASED  
ALTERNATIVE PLAN: 2000**

- LEGEND**
-  PRIMARY ENVIRONMENTAL CORRIDOR
  -  EXISTING TYPE I OR TYPE II PARK TO BE MAINTAINED
  -  EXISTING TYPE I PARK TO BE EXPANDED
  -  EXISTING TYPE III PARK TO BE EXPANDED TO A TYPE II PARK
  -  EXISTING UNDEVELOPED AREA TO BE DEVELOPED AS A TYPE I OR TYPE II PARK
  -  PROPOSED NEW TYPE I OR TYPE II PARK - GENERAL SITE LOCATION
  -  PROPOSED RECREATION CORRIDOR SEGMENT THROUGH EXISTING PUBLIC LANDS
  -  PROPOSED RECREATION CORRIDOR SEGMENT TO BE ACQUIRED



The accessibility based alternative plan recommends that both recreation corridors and large Type I and Type II parks be provided in areas which are readily accessible to population centers of the Region. A total of 380 linear miles of recreation corridor lands, which would provide opportunities for participation in extensive trail-oriented outdoor recreation activities, would be located in primary environmental corridors in areas readily accessible to residents of the Kenosha, Milwaukee, and Racine metropolitan areas. In addition, individual recreation corridor segments in outlying areas of the Region would provide convenient access to residents of smaller urban centers including the Cities of Whitewater, Oconomowoc, Hartford, and West Bend. About 130 linear miles, or about 34 percent of the proposed recreation corridor network, would traverse lands currently in public ownership. Under the accessibility based alternative plan all additional intensive resource-oriented facilities required in the Region by the year 2000 would be developed at existing or proposed Type I and Type II parks. The plan recommends the expansion of one existing Type I park and two existing Type III parks, the development as Type I sites of seven areas currently in public ownership, and the acquisition and development of 19 new Type I and Type II parks on land currently in nonpublic ownership. Nine of the 19 proposed new Type I and Type II parks would be located within 20 miles of the central business district of the City of Milwaukee.

Source: SEWRPC.

As indicated above, in the selection of potential sites for development as Type I and Type II parks under the accessibility based alternative plan, priority was given to sites situated in, or close to, the public recreation corridors proposed under that plan in an effort to enhance the integrity of the resulting park and recreation related open space system. As shown on Map 119 and indicated in Table 134, of the 70 Type I and Type II parks included under this alternative plan, 45 parks, or 64 percent of the total, are situated within two miles of the public recreation corridor network proposed under this alternative plan. More specifically, 11 of the 19 new parks proposed under this alternative plan are situated in, or close to, the proposed public recreation corridors; and 34 of the 51 sites already in public ownership—including existing parks and existing publicly owned undeveloped areas proposed to be developed as parks—are situated in, or close to, the proposed recreation corridors.

The public recreation corridor network proposed under this alternative plan traverses only a part of the total primary environmental corridor network in the Region. As noted in the introduction to this chapter, the development of parks within the primary environmental corridors is desirable since such development serves both to satisfy recreational demands in a desirable setting and to protect and preserve valuable natural resource amenities. It is appropriate, therefore, to examine the relationship between the Type I and Type II parks included in the accessibility based alternative plan and the overall regional primary environmental corridor

network. In this regard, of the 70 Type I and Type II parks included in this alternative plan, 52 parks, or 74 percent of the total, are located within the regional primary environmental corridors (see Table 134). In particular, 13 of the 19 new Type I and Type II parks proposed are located in the primary environmental corridors; and 39 of the 51 already-acquired sites—including existing parks and parks to be developed at existing publicly owned undeveloped areas—are located within the environmental corridors.

Implementation of the accessibility based alternative plan would require the acquisition of 4,128 acres of open space land for development of the 19 proposed new Type I and Type II parks and the expansion of three existing parks. Of this total, 788 acres, or 19 percent, lying in the primary environmental corridor would be acquired under the open space preservation plan at an estimated cost of \$1,030,000 (see Table 135). The remaining acreage, including 1,095 acres within the regional primary environmental corridor and 2,245 acres outside the regional primary environmental corridor, would be acquired at an estimated cost of \$6,928,000.

**Outdoor Recreation Facilities:** The analysis of existing and anticipated future outdoor recreation needs conducted under the park and open space planning program indicated a substantial need for additional public resource-oriented outdoor recreation facilities in the Region by the year 2000 (see Chapter XII). The accessibility based alternative plan proposals addressing these

Table 134

**EXISTING AND PROPOSED TYPE I AND TYPE II PARKS IN THE REGION UNDER THE ACCESSIBILITY BASED ALTERNATIVE PLAN BY RELATION TO PRIMARY ENVIRONMENTAL CORRIDOR AND PROPOSED PUBLIC RECREATION CORRIDOR: 2000**

Type of Site	Type I and Type II Parks Under Accessibility Based Alternative Plan for the Year 2000											
	By Relation to Primary Environmental Corridor						By Relation to Proposed Public Recreation Corridor					
	In Primary Environmental Corridor		Outside Primary Environmental Corridor		Total		Located Within Two Miles of Proposed Public Recreation Corridor		Located More Than Two Miles from Public Recreation Corridor		Total	
	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent
Existing Type I and Type II Parks												
Existing Type I and Type II Parks to be Maintained . . . . .	35	85.4	6	14.6	41	100.0	27	65.9	14	34.1	41	100.0
Existing Type I Park to be Expanded . . . . .	1	100.0	0	0.0	1	100.0	1	100.0	0	0.0	1	100.0
Proposed Additional Type I and Type II Parks												
Existing Type III Parks to be Expanded to Type II Parks . . . . .	0	0	2	100.0	2	100.0	1	50.0	1	50.0	2	100.0
Existing Undeveloped Areas to be Developed as Type I or Type II Parks . . . . .	3	42.9	4	57.1	7	100.0	5	71.4	2	28.6	7	100.0
New Type I and Type II Parks . . . . .	13	68.4	6	31.6	19	100.0	11	57.9	8	42.1	19	100.0
<b>Total</b>	<b>52</b>	<b>74.3</b>	<b>18</b>	<b>25.7</b>	<b>70</b>	<b>100.0</b>	<b>45</b>	<b>64.3</b>	<b>25</b>	<b>35.7</b>	<b>70</b>	<b>100.0</b>

Source: SEWRPC.

requirements for additional public facilities—including intensive facilities such as campsites and swimming beaches, extensive facilities such as hiking and biking trails, and water access facilities—are described in the following section.

**Intensive Resource-Oriented Outdoor Recreation Facilities:** Intensive resource-oriented outdoor recreation facilities, including campsites, regulation golf courses, picnic facilities, ski hills, swimming beaches, and nature study centers, rely heavily on natural resource amenities to enhance the quality of the recreational experience, attract users from relatively long distances, and generally have universal appeal, serving residents of both urban and rural portions of the Region. As indicated in Chapter XII, application of the adopted per capita facility standards to the forecast year 2000 regional population facilitated a determination of the number of additional public intensive resource-oriented outdoor recreation facilities required in the Region by the plan design year; and application of the accessibility standards facilitated a determination of areas of the Region not served with such public facilities. The emphasis under the accessibility based alternative plan is to develop additional required facilities at sites located as near as possible to the area of the Region in which the need actually exists.

**Campsites:** There were 552 public campsites in the Region in 1973. The accessibility based alternative plan proposes the development of an additional 219 public campsites in the Region by the year 2000. Under the accessibility based alternative plan, there would be a total of 771 public campsites in the Region in the year 2000, a quantity sufficient to meet the anticipated year 2000 need (see Table 136).

The additional campsites proposed under this alternative plan would be located at seven existing or proposed parks, with one additional public campground proposed in Kenosha, Milwaukee, and Washington Counties and two additional public campgrounds proposed in Ozaukee County and Racine County (see Map 120). Four of the seven proposed additional public campgrounds would be located within 20 miles of the Kenosha, Milwaukee, and Racine central business districts. Because of the relatively large service radius—25 miles—associated with public campgrounds, however, even the proposed new campgrounds in the outlying areas of the Region would serve areas of the Region not served by existing campsites—that is, the easternmost and northernmost portions of the Region.

**Golf Courses:** There was a total of 20 publicly owned and operated regulation golf courses in the Region in 1973, including 14 18-hole courses, five 9-hole courses, and one 27-hole course. The accessibility based plan proposes development of 10 additional public regulation 18-hole golf courses in the Region by the year 2000, addition of one 9-hole golf course, and expansion of the one existing 18-hole course. With the implementation of this alternative plan, then, there would be a total of 31 golf courses in the Region, including 23 18-hole courses, six 9-hole courses, and two 27-hole courses, thereby providing a quantity of regulation golf holes sufficient to meet the anticipated need in the year 2000.

Under the accessibility based alternative plan, the additional golf facilities would be developed at 12 existing or proposed parks, with three additional courses each provided in Washington and Waukesha Counties; two additional courses provided in Milwaukee County; one

Table 135

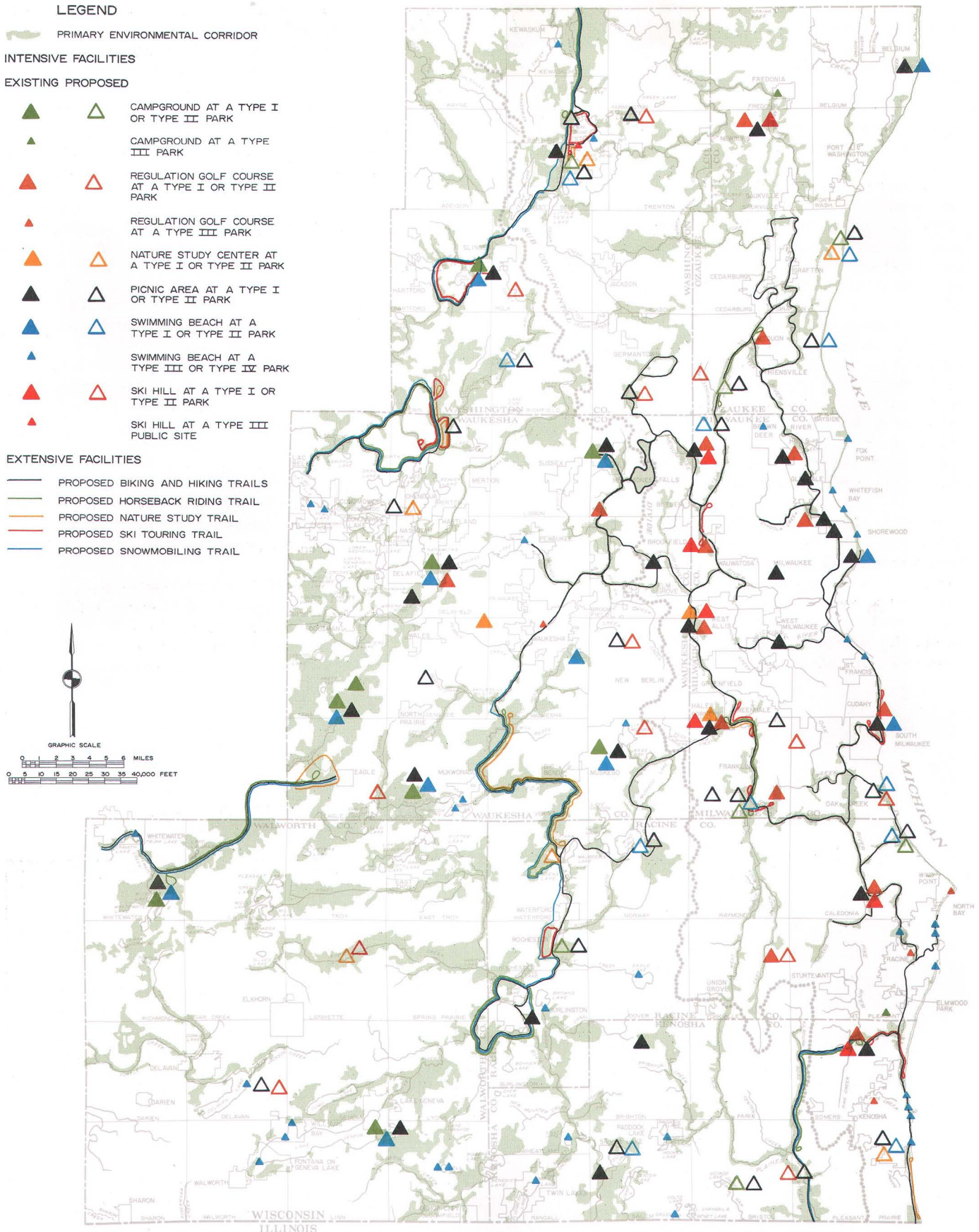
**PUBLIC LAND ACQUISITION REQUIREMENTS AND ACQUISITION COSTS FOR TYPE I AND TYPE II PARKS UNDER THE ACCESSIBILITY BASED ALTERNATIVE PLAN: 2000**

	Land in Those Portions of the Primary Environmental Corridor Which Are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under the Accessibility Based Alternative Plan				Total Land Acquisition			
			Acres			Acquisition Cost	Acres			Acquisition Cost
	Acres	Acquisition Cost	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total		In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	
Land to be Acquired for Recreation Use Under the Resource Based Alternative Plan Type I and Type II Parks . . . . .	788	\$1,030,000	1,095	2,245	3,340	\$6,928,000	1,883	2,245	4,128	\$7,958,000

Source: SEWRPC.



**PUBLIC LAND BASED RESOURCE-ORIENTED OUTDOOR RECREATION FACILITIES  
PROPOSED UNDER THE ACCESSIBILITY BASED ALTERNATIVE PLAN: 2000**



The accessibility based alternative plan recommends that additional intensive resource-oriented outdoor recreation facilities be developed at existing or proposed Type I and Type II parks in those areas of the Region where the need for each respective facility exists. The plan proposes the development of 219 campsites at seven parks; 10 additional public regulation 18-hole golf courses; one additional 9-hole regulation golf course, and the expansion of one existing 18-hole golf course to a 27-hole course; 2,035 picnic tables at 25 parks; 6,600 additional linear feet of swimming beach along Lake Michigan at five parks and 2,200 linear feet of swimming beach at inland lakes at six parks; one downhill skiing area at the proposed Type I site in Walworth County; and six nature centers. In addition, the plan recommends the development of 380 linear miles of hiking and biking trails, 105 linear miles of horseback riding trails, 45 miles of nature trails, 57 linear miles of ski touring trails, and 123 linear miles of snowmobiling trails—all located within a proposed recreation corridor network in areas readily accessible to the large population concentrations in the Region.

Source: SEWRPC.

Table 136

**EXISTING AND PROPOSED INTENSIVE RESOURCE-ORIENTED OUTDOOR RECREATION  
FACILITIES UNDER THE ACCESSIBILITY BASED ALTERNATIVE PLAN: 1973 and 2000**

Facility	Intensive Resource-Oriented Facilities			
	Existing: 1973	Additional Proposed Under Accessibility Based Alternative Plan by the Year 2000	Total Under Accessibility Based Alternative Plan in the Year 2000	Total Anticipated Requirement in the Year 2000 <sup>a</sup>
Campsites . . . . .	552	219	771	771
Golf Courses (equivalent 18-hole regulation courses) . . . . .	18	11	29	29
Picnic Tables (tables at Type I and Type II parks) . . . . .	6,452 <sup>b</sup>	2,035	8,487	8,332
Swimming Beaches				
Inland Lakes (linear feet) . . . . .	10,335	2,193	12,528	12,528
Lake Michigan (linear feet) . . . . .	28,830	6,600	35,430	35,412
Ski Hills (acres of developed slope) . . .	24	5 <sup>c</sup>	29	24
Nature Study Centers . . . . .	2 <sup>d</sup>	6	8	7

<sup>a</sup> Based upon application of the adopted per capita standard to the forecast regional population.

<sup>b</sup> Includes 160 tables at an existing Type III park proposed under the accessibility plan to be expanded to a Type II park by the year 2000.

<sup>c</sup> Five acres of developed slope provided to meet the accessibility standard for a public ski hill in Walworth County, which is currently not served by such a facility.

<sup>d</sup> Includes Wehr Nature Center, opened in 1974, in Whitnall Park in Milwaukee County and Retzer Nature Center in Waukesha County.

Source: SEWRPC.

additional course each developed in Ozaukee, Kenosha, and Walworth Counties; and one existing 18-hole course expanded to a 27-hole course in Racine County (see Map 120). Of these 12 sites, eight would be located within 20 miles of the Kenosha, Milwaukee, and Racine central business districts.

**Resource-Oriented Picnicking:** As indicated in Chapter XII of this report, in planning for the provision of picnic facilities, it is useful to distinguish between two general kinds of picnicking activity—namely, resource-oriented picnicking and local picnicking. Resource-oriented picnicking activity usually involves an all-day outing at a recreation site possessing scenic areas and natural resource amenities which significantly enhance the quality of the recreational experience. Such picnicking often includes other resource-oriented activities such as boating, swimming, and hiking as well as the picnicking activity itself. In comparison to resource-oriented picnicking, local picnicking typically involves a shorter length of stay and relies less on the natural resource amenities at the picnic site. Local picnicking outings often include participation in such nonresource-oriented recreation activities as softball and various playfield activities. In the analysis of outdoor recreation needs described in Chapter XII, separate need analyses were

conducted for resource-oriented picnicking and local picnicking. Accessibility based alternative plan proposals which address the identified resource-oriented picnicking needs are presented herein. It should be noted that local picnicking needs are addressed in the urban outdoor recreation plan component, presented in a following section of this chapter.

Resource-oriented picnicking activity typically occurs at Type I and Type II parks. In 1973, there were 6,292 picnic tables at Type I and Type II parks in the Region. The accessibility based alternative plan recommends the provision of 2,035 additional picnic tables at new picnic areas within existing or proposed Type I or Type II parks by the year 2000. In addition, in 1973 there were 160 picnic tables located at a Type III park which is proposed under this alternative plan to be expanded to a Type II park by the year 2000. A total, then, of 8,487 picnic tables at Type I and Type II parks would be provided within the Region by the year 2000, thereby meeting the per capita standard for resource-oriented picnicking (see Table 136).

Under the accessibility based alternative plan, the proposed new resource-oriented picnic areas would be developed at 25 existing or proposed Type I and Type II

parks. One new picnic area is proposed in Walworth County; three new picnic areas each are proposed in Ozaukee and Racine Counties, four new picnic areas are proposed in Waukesha County, and five new picnic areas each are proposed in Milwaukee and Washington Counties (see Map 120). Fifteen of the 25 proposed new picnic areas would be located within 20 miles of the Kenosha, Milwaukee, and Racine central business districts and would serve to meet the identified need for resource-oriented picnicking in those densely populated metropolitan areas. The remaining 10 new picnic areas would serve to meet the resource-oriented picnicking needs of the residents of the rural and outlying urban areas of the Region.

**Swimming Beaches:** In southeastern Wisconsin, beach swimming is pursued along the Lake Michigan shoreline as well as at the inland lakes of the Region. Because of the basic difference in the nature of Lake Michigan beach swimming and swimming at inland lakes, separate per capita standards have been adopted under the regional park and open space planning program. Separate need analyses were accordingly undertaken based on these adopted standards.

In 1973, there were 28,830 linear feet of swimming beach along the Lake Michigan shoreline in southeastern Wisconsin. The accessibility based alternative plan proposes the development of 6,600 additional linear feet of swimming beach along Lake Michigan to make a total of 35,430 linear feet of swimming beach along the Lake Michigan shoreline in the Region by the year 2000. Implementation of this plan proposal would satisfy the adopted per capita standard for Lake Michigan beach swimming (see Table 136). Under this alternative plan the additional beach area would be developed at two existing and at three proposed parks along the Lake Michigan shoreline, including one new park in Kenosha County, one existing park in Milwaukee County, two new parks in Ozaukee County (see Map 120), and one existing park in Racine County.

As indicated in Table 136, there were 10,335 linear feet of swimming beach at inland lakes within the Region in 1973. The accessibility based alternative plan proposes the development of an additional 2,193 linear feet of inland beach by the year 2000. Under this alternative plan, then, there would be a total of 12,528 linear feet of swimming beach at inland lakes by the plan design year and, therefore, the adopted per capita standard with respect to inland swimming beaches would be met. As shown on Map 120, under this alternative plan, two new inland swimming beaches each are proposed in Milwaukee<sup>9</sup> and Washington Counties, and one inland swimming beach each is proposed in Kenosha and Racine Counties. Of the six proposed new inland swimming beaches, four beaches would be located within 20 miles of the Kenosha, Milwaukee, and Racine central business districts.

**Ski Hills:** There were 24 developed acres of slope at public skiing areas in the Region in 1973, an amount sufficient to meet the adopted per capita standard for downhill skiing in the Region in the year 2000 (see

Table 136). It should be noted, however, that the existing public downhill skiing areas all are located in the eastern and northern portions of the Region and, consequently, residents of the southern portion of the Region, including all of Walworth County and parts of Racine, Kenosha, and Waukesha Counties, do not have proper access to public ski slopes (see Map 118). Accordingly, this alternative plan proposes the development of one additional public downhill skiing area at a new Type I park in the northeastern portion of Walworth County.

**Nature Study Centers:** The purpose of a nature study center is to provide an opportunity for the resident population to explore its natural surroundings, thereby gaining a better understanding of the interrelationships of various natural systems. A nature study center should include a structure which provides pertinent interpretative information and serves as the center for nature study activities. The structure should be situated within a site containing significant natural resource amenities and having a variety of species of vegetation and wildlife.

The adopted park and open space standards prescribe the provision of one public nature center in each county in the Region. In 1973 a nature center existed only in Waukesha County. The accessibility based alternative plan, therefore, proposes the development of a new nature study center in Kenosha, Milwaukee,<sup>10</sup> Ozaukee, Racine, Walworth, and Washington Counties, in accordance with the adopted standard. In addition, at the suggestion of the Technical and Citizen Advisory Committee, an additional nature center would be provided at Nashotah Park in Waukesha County. As shown on Map 120, the eight existing and proposed nature centers included in the accessibility based alternative plan are well distributed throughout the Region. These sites provide examples of significant natural resource amenities

---

<sup>9</sup>It should be noted that, while there are no existing inland lakes in the general vicinity of the two proposed parks recommended for development with inland swimming beaches in Milwaukee County, the need for inland beaches in those areas could be met through water impoundment projects. A major proposal of the comprehensive plan for the Root River watershed adopted by the Commission in 1966 calls for construction of a multi-purpose reservoir in the area around the confluence of the North Branch and the Root River Canal in the City of Franklin. Implementation of this plan recommendation would provide the surface water necessary for an inland swimming beach in southern Milwaukee County. In addition, a feasibility study, entitled North Lake Development, prepared for the Milwaukee County Park Commission in 1971, indicated that a water impoundment project could be effectively undertaken at the North Park Site, providing the necessary surface water for an inland swimming beach in northern Milwaukee County.

<sup>10</sup>The Wehr Nature Center located in Whitnall Park in Milwaukee County was opened in 1974 and, henceforth, this nature center will be included as an existing facility.

Table 137

## UNIT COSTS FOR FACILITY DEVELOPMENT AT PROPOSED TYPE I AND TYPE II PARKS: 1975

Facility	Unit Cost	Specific Costs Included
Camping Area	\$ 4,600 per campsite	Includes amounts for service road within camping area, site preparation, utility hookups, rest rooms, and showers needed at campsites
Golf Course	\$1,200,000 per 18-hole regulation course	Includes amounts for landscaping and other site preparation, clubhouse, maintenance buildings, and related parking
Picnic Area	\$ 1,100 per table	Includes amounts for tables, shelters, and grills; landscaping; and related parking
Nature Study Center	\$ 450,000 per center	Includes amount for construction of interpretative building, related parking, nature trails, and other site preparation
Ski Area	\$ 3,500 per acre of developed slope	Includes amounts for rope tow and landscaping; assumes use of building and parking provided for another facility
Swimming Beach	\$ 200,000 per beach, plus \$ 9.50 per linear foot of beach	Includes amount for construction of bath house; includes amount for beach development and related parking
Additional Park Development Costs	\$ 371,900 per Type I Park \$ 239,300 per Type II Park	Includes amounts for park roads, sanitary facilities, landscaping, and other site preparation costs not included above

Source: SEWRPC.

and topographical features in southeastern Wisconsin including wetlands, lowland and upland forest, prairie, Lake Michigan bluffs, Lake Michigan sand dunes, and Kettle Moraine topography.

It should be noted that within each County it may be desirable to supplement the nature study center with nature study areas located within other parks and public open space land. For example, headquarters for nature study activities in Waukesha County are located at the Retzer Nature Area, the County's existing nature center. As part of Waukesha County's nature study program, however, activities at the nature center itself are supplemented with nature study activities at other large parks in Waukesha County including Menomonee Park, Minooka Park, and Muskego Park. Such "satellite" nature areas can be used to supplement the facilities at the main nature center, providing opportunities for the study of diverse natural resource amenities and topographical features within a single county. It should also be noted that, under the accessibility based alternative plan, the existing and proposed nature study centers in the Region would be further supplemented by nature trails within the proposed public recreation corridor network.<sup>11</sup>

**Development Costs:** All of the new intensive resource-oriented outdoor recreation facilities proposed under the accessibility based alternative plan would be developed on existing or proposed Type I and Type II park lands. The cost of acquiring additional Type I and Type II park lands proposed under the accessibility based alternative

plan was presented in a previous portion of this chapter. Development cost estimates with respect to these park lands are presented here.

A large portion of the development cost of a typical new Type I or Type II park would consist of the cost of developing the specific proposed intensive resource-oriented facilities—for example, a campground or swimming beach—as well as the support facilities, such as parking spaces, directly related to the recommended facilities. Unit costs associated with the development of areas for specific resource-oriented facilities and related support facilities were prepared under the regional park planning program (see Table 137). In addition, the

<sup>11</sup> The City of Milwaukee is considering plans for the development of the Havenwoods site located in the City of Milwaukee north of McGovern County Park as "an environmental awareness center." The present proposal recommends that a wide range of educational facilities be provided at the site. These educational facilities would seek to provide information on a variety of topics—including natural sciences, social sciences, and political processes. The purpose of the "environmental awareness center" would be much broader in scope than a "nature center" envisioned in the regional park and open space planning program and, thus, is not included in plan proposals for nature centers under the accessibility based alternative plan.



development of any new major park may entail the construction of park roads, the provision of sanitary facilities, landscaping, and other site preparation activities which are not directly relatable to a specific recreation activity. Development costs for these general site development operations, estimated on a per park type basis, also are presented in Table 137. Utilizing the unit costs information contained in Table 137, the estimated overall development cost associated with new Type I and Type II park lands proposed under the accessibility based alternative plan was calculated as \$24,786,000.

**Extensive Resource-Oriented Outdoor Recreation Facilities:** Because of recent increased participation in extensive land based outdoor recreation activities, including biking, hiking, horseback riding, nature study, ski touring, and snowmobiling, there is presently a substantial need for related trail facilities, and this need is expected to increase considerably by the year 2000. Under the accessibility based alternative plan, the trail facilities proposed to meet the identified needs would be located within the public recreation corridor proposed under that plan. As previously noted, under the accessibility based alternative plan, public recreation corridors would be located primarily in primary environmental corridors in areas readily accessible to large population concentrations within the Region, thus facilitating convenient use of the future trail facilities within the public recreation corridors by residents of those areas.

By the formulation of specific trail facility development proposals, consideration was given first to the basic physical requirements of the trails necessary for safe and convenient trail use. For example, snowmobiling trails should be routed through the rural segments of the proposed recreation corridor; the location of such trails within developed urban areas is impractical because of the potential conflict with urban activities due to the speed and noise of the snowmobiles. Secondly, consideration was given to the natural resource amenities which enhance the enjoyment of participating in trail activities. It is important to recognize, however, that, while it is desirable to locate such trail facilities as hiking, biking, horseback riding, and ski touring trails within areas having significant natural resource amenities, care must be taken in the location and design of such trails to avoid degradation of the natural resource base. Third, in the formulation of specific trail development proposals, an effort was made to maximize the use of existing trail facilities located within the proposed public recreation corridor. For example, the Ice Age Trail, which currently provides opportunities for backpack hiking through public and nonpublic lands in the western part of the Region was partially incorporated into the system of hiking trails recommended under the accessibility based alternative plan.

The system of trail facilities proposed to be developed within the public recreation corridor network under the accessibility based alternative plan is shown on Map 120. It should be noted that the existing and proposed parks included in this alternative plan would serve as stopover

points and terminus points for the various trail activities. In addition, other terminus facilities, developed with parking areas and sanitary facilities, would be provided along certain recreation corridor segments when the need exists in the absence of an existing or proposed park.

**Biking and Hiking Trails:** As shown on Map 120, under the accessibility based alternative plan, hiking and biking trails would be developed throughout the entire proposed public recreation corridor. A total of 380 linear miles of hiking and biking trails would be provided within the public recreation corridor by the year 2000, thus satisfying the adopted per capita standard for biking and hiking trails in the Region in the plan design year (see Table 138). As shown on Map 120, the biking and hiking trails proposed under this alternative plan include a variety of loops conducive to day-long outings as well as long linear segments appropriate for overnight outings.

**Horseback Riding Trails:** The accessibility based alternative plan proposes the development of 105 linear miles of horseback riding trails in southeastern Wisconsin by the year 2000, a quantity sufficient to meet the adopted per capita standard for horseback riding trails in the Region in the plan design year. Under the accessibility based alternative plan, horseback riding trails would generally be provided in segments of the public recreation corridor in the rural areas of the Region, although one horseback riding trail is proposed in Milwaukee County. Outlying locations were selected for horseback riding trails not only to provide the natural setting desirable for horseback riding but also because of the outlying location of most rental stables and individuals who own horses.

Table 138

**PROPOSED EXTENSIVE RESOURCE-ORIENTED  
OUTDOOR RECREATION FACILITIES UNDER THE  
ACCESSIBILITY BASED ALTERNATIVE PLAN: 2000**

Type of Facility	Extensive Land Based Outdoor Recreation	
	Total Proposed Under Accessibility Based Plan in the Year 2000 <sup>a</sup> (linear miles)	Total Anticipated Requirement in the Year 2000 <sup>b</sup> (linear miles)
Biking . . . . .	380	350
Hiking . . . . .	380	350
Horseback Riding . . .	105	110
Nature Study . . . . .	45	44
Ski Touring . . . . .	57	44
Snowmobiling . . . . .	123	241

<sup>a</sup> The accessibility based plan proposals for recreation trail facilities relate only to trail facilities to be provided within the proposed public recreation corridor. There were no public recreation corridors in the Region in 1973, as defined for the purposes of this report.

<sup>b</sup> Based upon application of the adopted per capita linear mileage standards to the forecast regional population.

Source: SEWRPC.

**Nature Study Trails:** Under the accessibility based alternative plan, a total of 45 linear miles of nature study trails is proposed within six different segments of the public recreation corridor located throughout southeastern Wisconsin. The proposed trails would be sufficient to meet the per capita linear mileage standard for nature study trails in the Region in the year 2000. As shown on Map 120, the proposed nature trails are generally located in conjunction with an existing or proposed nature study center included in the accessibility based alternative plan. Segments of the proposed recreation corridor which were selected for nature study trail development are those linear expanses of land that have a significant natural resource amenity or a large diversity of vegetation and wildlife.

**Ski Touring Trails:** The accessibility based alternative plan proposes the development of a total of 57 linear miles of ski touring trails located within nine different segments of the public recreation corridor network distributed throughout the Region. Implementation of this plan proposal would satisfy the anticipated need for public ski touring trails in southeastern Wisconsin through the plan design year 2000. The recreation corridor segments proposed for development with ski touring facilities include areas having many points of natural interest which would provide the tourists with a variety of new and different features.

**Snowmobiling Trails:** As noted above, public snowmobiling trails should be located in essentially undeveloped portions of the Region. Owing to the speed and noise of the machines, recreational snowmobiling is incompatible with urban land use development. It should be recognized, however, that the public recreation corridor network proposed under the accessibility based alternative plan traverses large segments of primary environment corridor lands which are situated within existing urban areas or areas anticipated to be in urban use by the year 2000 and which, therefore, should not be developed for snowmobiling activity. Utilizing only the rural segments of the proposed public recreation corridor, the accessibility based alternative plan proposes the development of 123 linear miles of public snowmobiling trails within the Region by the year 2000.<sup>12</sup> As indicated in Table 138, this amount would fall substantially short of the total anticipated need for public snowmobiling trails—241 linear miles—within the Region in the plan design year.

**Development Costs:** As previously indicated, virtually all of the new trail facilities proposed under the accessibility based alternative plan would be developed within the proposed public recreation corridors. The cost of acquiring lands within the recreation corridors proposed under the accessibility based alternative plan was pre-

sented in a previous portion of this chapter. Development costs for the trail facilities proposed within the public recreation corridor are presented here.

The accessibility based alternative proposals for the trail facilities as outlined above are somewhat general in nature, prescribing only the segments of the overall proposed public recreation corridor network which would be developed with specific trail facilities. In order to estimate the cost of developing the proposed facilities, certain assumptions about their design were necessary. These assumptions were made within the context of the physical design requirements of the trails, the seasonal variation in trail use, and the compatibility of the various trail activities.

Development costs for the recommended trail facilities were determined under the assumption that two basic types of trails would be developed throughout the entire proposed public recreation corridor network. One type of trail would be relatively wide—approximately eight feet in width—and would accommodate vehicular trail activities such as biking in summer and snowmobiling in winter. Surface material was assumed to be bituminous pavement in areas expected to generate heavy trail use and compacted gravel in other areas. The second type of trail would be relatively narrow—approximately five feet in width—and would accommodate hiking, nature study, horseback riding activity in summer, and ski touring activity in winter. Surface material for the second type of trail was assumed to be compacted gravel in the areas expected to generate heavy use or areas subject to erosion and a natural surface in other areas. It is important to recognize that these assumptions were made only for the purpose of estimating trail facility development costs and that the actual design of the trails in specific segments of the public recreation corridor would vary somewhat from these assumptions. For example, biking and hiking trails can, in certain situations, utilize the same right-of-way, while horseback riding may require a separate right-of-way because of the general incompatibility of horseback riding and pedestrian activities.

Unit costs associated with the development of narrow and wide trails in heavily used and other portions of the recreation corridor were prepared under the park and open space planning program (see Table 139). In addition, development cost estimates for terminus facilities outside of existing or proposed parks have also been prepared. Utilizing the unit cost information contained in Table 139, then, the estimated overall development costs associated with trail facilities located within the public recreation corridor proposed under the accessibility based alternative plan were estimated at \$11,496,000.

**Water Access Facilities:** Small boat access points, both public and nonpublic, provide opportunities for individuals who do not own land abutting navigable streams and lakes to participate in extensive water based recreation activities including fast boating activities such as motor boating, water skiing, and sail boating as well as slow boating activities such as fishing and canoeing.

---

<sup>12</sup> It should be recognized that the proposed public snowmobiling trails may occasionally have to depart from the public recreation corridor in order to bypass urban centers in the outlying areas of the Region.

Table 139

## UNIT COSTS FOR TRAIL FACILITY DEVELOPMENT WITHIN THE PROPOSED PUBLIC RECREATION CORRIDOR: 1975

Trail Type	Unit Cost	Specific Costs Included
Wide Trail (eight feet) Accommodating Biking and Snowmobiling Activity	\$31,000 per linear mile in heavy use area \$13,000 per linear mile in other area	Clearing, bituminous paving, and signing  Clearing, compacted gravel surface, and signing
Narrow Trail (five feet) Accommodating Hiking, Horseback Riding, Nature Study, Study, and Ski Touring Activity	\$ 7,000 per linear mile in heavy use area \$ 3,000 per linear mile in other area	Clearing, compacted gravel surface, and signing Clearing and signing (assumes natural surface)
Additional Costs Terminus Facilities	\$18,500 per terminus point	Site preparation, sanitary facilities, and parking spaces

Source: SEWRPC.

Recommendations for the provision of boat access facilities on the major inland lakes and rivers of the Region as well as along the Lake Michigan shoreline are set forth here. It should be noted that the recommendations concerning boat access facilities are the same under both the accessibility based alternative plan and the resource based alternative plan, which is described in the next section of this chapter.

**Inland Lake Access:** The number of public lake access facilities provided should not only seek to meet the demand for such access but should be consistent with safe and enjoyable participation in various extensive water based recreation activities. Most of the major lakes of the Region are already heavily utilized for fast boating activities, and the number of access facilities consistent with safe and enjoyable lake use is generally exceeded for fast boating activities—including access points and car and trailer parking. In this regard, analysis of inland lake access needs, as described in Chapter XII of this report, indicated that only two of the 100 major inland lakes of the Region require additional access facilities to accommodate fast boating activities:<sup>13</sup> Pine Lake in Waukesha County, which requires an access point and a parking area sufficient to accommodate 10 car and trailer spaces and Geneva Lake in Walworth County, which requires 47 additional car and trailer parking spaces. Under the accessibility based alternative plan, it is recommended that these two specified boat access facility needs be met by the public sector to accommodate fast boating activity on these lakes.

The analysis of lake access needs described in Chapter XII further indicated that, while only two of the 100 major inland lakes in the Region require additional access facilities

ties to accommodate fast boating activities, many inland lakes require additional access facilities to accommodate slow boating activities such as fishing and canoeing. In this regard, the adopted park and open space standards prescribe the provision of one access point on every major inland lake and, as indicated in Chapter XII, the application of this standard indicates a need for 42 additional access points on 42 major inland lakes. Under the accessibility based alternative plan, however, it is recommended that these lake access needs be met only on those lakes deemed suitable for fishing or canoeing activity.<sup>14</sup> As a result, the accessibility based alternative plan recommends the public provision of 25 additional access points on 25 major inland lakes in the Region to accommodate slow boating activities (see Map 121). The attendant site area for these access points is estimated at two acres.

Including the need for access facilities for both slow and fast boating activities, it is estimated that 54 acres of site area would be required to provide the additional water access facilities proposed under the accessibility based alternative plan. It is recommended, however, that, to the maximum extent possible, the proposed water access facilities be developed within existing or proposed public park and open space lands. Assuming that existing or proposed public lands will be used as locations for the proposed facilities wherever possible, it is estimated that

<sup>13</sup> Inland lake access needs were determined by formulas which specify that the quantity of access facilities should vary directly with the surface area of a lake which is suitable for fast boating activities and inversely with the amount of residential development on the lake.

<sup>14</sup> The quality of fishing activity for lakes in the Fox and Milwaukee River watersheds was determined from lake use reports prepared for the Commission by the Wisconsin Department of Natural Resources. The quality of fishing activity in other major lakes of the Region was imputed from a study of hydrographic maps of each lake to determine its capability to support an adequate fish population. Lake suitability for canoeing activity was determined primarily on a basis of the length of natural shoreline. In general, lakes designated as suitable for canoeing had at least 25 percent of their shoreline in an open, essentially natural state.

## PROPOSED BOAT ACCESS ON MAJOR INLAND LAKES

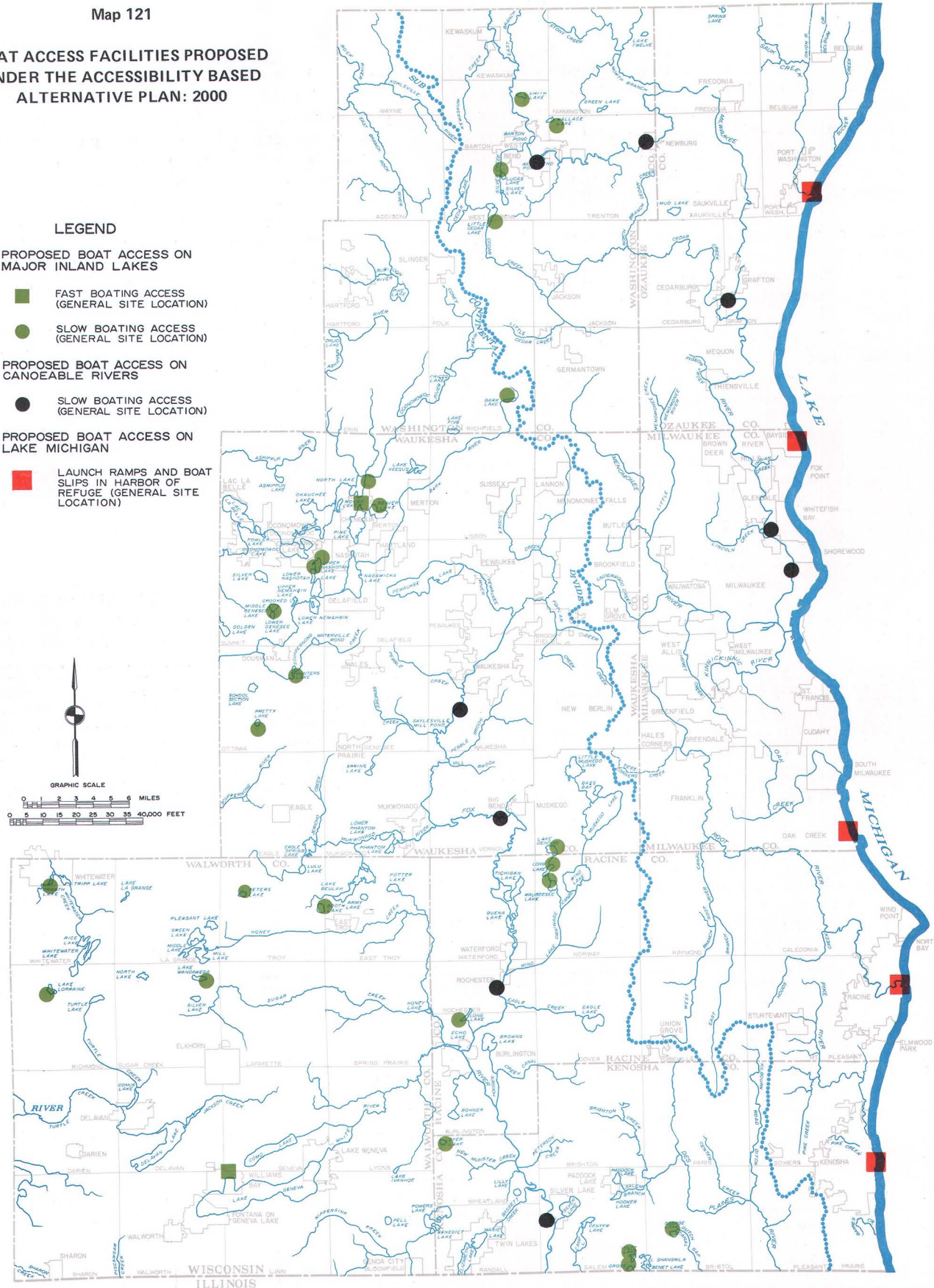
- FAST BOATING ACCESS  
(GENERAL SITE LOCATION)
- SLOW BOATING ACCESS  
(GENERAL SITE LOCATION)

## PROPOSED BOAT ACCESS ON CANOEABLE RIVERS

- SLOW BOATING ACCESS  
(GENERAL SITE LOCATION)

## PROPOSED BOAT ACCESS ON LAKE MICHIGAN

- LAUNCH RAMPS AND BOAT  
SLIPS IN HARBOR OF  
REFUGE (GENERAL SITE  
LOCATION)



The adopted park and open space standards specify boat access facilities required for safe and enjoyable use of major inland lakes, canoeable rivers, and Lake Michigan. Application of the standards indicates that only two of the 100 major inland lakes of the Region require additional access facilities to accommodate fast boating activities under the accessibility based alternative plan—Lake Geneva in Walworth County and Pine Lake in Waukesha County. Application of the standard to meet the need for slow boating access facilities indicated, however, that an additional 25 access points be provided on 25 major inland lakes in the Region, including four access points in Kenosha County, three access points in Racine County, five access points each in Walworth and Washington Counties, and eight access points in Waukesha County. In addition, the accessibility based alternative plan recommends that a total of nine additional access points for slow boating activities be provided on the main stem of the Fox and Milwaukee Rivers in the Region. The plan also recommends that additional boat launch ramps and mooring slips be provided in the harbors of refuge along Lake Michigan in southeastern Wisconsin. Under the plan it was assumed that two new small boat harbors would be provided, one at or in the vicinity of Bender Park in Milwaukee County and another in northern Milwaukee or southern Ozaukee County at a site that more detailed studies may determine; that improvements would be made to the harbor at Port Washington; and that additional boat launches and mooring slips would be provided at both the City of Racine harbor and the City of Kenosha harbor.

395



48 acres of land would have to be acquired by the public sector to accommodate the additional water access facilities. Of this total, 14 acres lying within the primary environmental corridor would be acquired under the open space preservation plan element at an estimated cost of \$24,000. The balance of 34 acres would be acquired at an estimated cost of \$86,400 (see Table 140).

Implementation of the accessibility based alternative plan proposals for water access on the major inland lakes of the Region would also entail public outlays for the development of launch ramps and related parking areas. Unit cost estimates for these facilities are presented in Table 141. Through an application of these unit costs to the additional access facilities proposed under the accessibility based alternative plan, total inland lake water access facility development costs have been estimated at \$137,900.

**River Access:** According to the Wisconsin Department of Natural Resources classification system, there are no major rivers in the Region suitable for extensive water based outdoor recreation activities. Nonetheless, certain rivers that exist in the Region may still be utilized for certain kinds of extensive water based activities like canoeing and fishing. As indicated in Chapter VI, the main stem of the Milwaukee River downstream from the City of West Bend and the main stem of the Fox River downstream from the City of Waukesha are suitable for certain slow boating activities, with both of the watercourses capable of supporting canoeing activity in particular. The adopted park and open space standards prescribed a maximum distance of 10 miles between access points along such navigable rivers, and the application of this standard to the main stems of the Milwaukee and Fox Rivers indicated a need for a minimum of 11 access points. Under the accessibility based alternative

plan, it is recommended that the identified access needs be met by the public sector to accommodate slow boating activity, especially canoeing, on these rivers. As shown on Map 121, two additional access points each would be provided along the Milwaukee River in Milwaukee and Washington Counties and one additional access point would be provided along the Milwaukee River in Ozaukee County. To provide access to the Fox River, two additional access points would be provided in Waukesha County and one additional access point each in Kenosha and Racine Counties. It should be noted that boat access opportunities currently exist at Frame Park on the Fox River in Waukesha County and Thiensville Park on the Milwaukee River in Ozaukee County. Thus a total of nine additional access points would be provided under the plan.

The access points proposed for development along the Fox and Milwaukee Rivers would be similar in design to the slow boating access points proposed on certain inland lakes of the Region. Thus, a river access point does

Table 141

**ESTIMATED UNIT DEVELOPMENT COSTS FOR THE DEVELOPMENT OF WATER ACCESS FACILITIES ON THE INLAND LAKES AND RIVERS: 1975**

Facility	Estimated Unit Cost	Specific Costs Included
Parking Area	\$ 300 per car and trailer space \$ 200 per car space	Site preparation and gravel surface
Boat Launch Ramp	\$3,500 per ramp	Gravel ramp

Source: SEWRPC.

Table 140

**PUBLIC LAND ACQUISITION REQUIREMENTS AND ACQUISITION COSTS FOR ACCESS POINTS ON THE MAJOR INLAND LAKES UNDER THE ACCESSIBILITY BASED OUTDOOR RECREATION PLAN: 2000**

	Land in Those Portions of the Primary Environmental Corridor Which Are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under Accessibility Based Outdoor Recreation Plan				Total Land Acquisition			
			Acres			Acquisition Cost	Acres			Acquisition Cost
			In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total		In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	
	Acres	Acquisition Cost								
Land to be Acquired for Recreation Use Under the Accessibility Based Outdoor Recreation Plan Inland Lake Access Points . . . . .	14	\$24,000	20	14	34	\$86,400	34	14	48	\$110,400

Source: SEWRPC.

not require a boat launch ramp, and the parking area associated with the access point may be relatively small because of reliance on car top carriers. The attendant site area for a river access point is also two acres.

Under the accessibility based plan, eight of the nine proposed river access points would be developed on existing publicly owned open space land or lands proposed for public ownership under the open space preservation plan element. Consequently, implementation of the river access proposals would require the public acquisition of only two additional acres of land for one access point at an estimated cost of \$2,000. Implementation of the accessibility based alternative plan river access proposals also would entail outlays for the development of the related parking area and other site preparation activities at the nine proposed access points at a total estimated cost of \$14,400.

Lake Michigan Access: Unlike the inland lakes of the Region, Lake Michigan has an almost unlimited surface water area to accommodate recreation activities. Consequently, boat access facilities can be located and designed to fully meet the existing and probable future water based recreation demand. In 1975, 35 boat launching ramps and 1,620 boat mooring slips existed along the Lake Michigan shore within the Region. Based upon the application of the minimum per capita standard for boat launch ramps and boat slips set forth in Chapter XII of this report, a minimum of an additional 19 launching ramps and an additional 1,310 boat slips will be required by the year 2000. The recommended maximum distance between boat access points set forth in Chapter XII is 15 miles and, based upon that standard, "voids" in the location of access points were noted to exist between the harbors of the City of Milwaukee and the City of Port Washington and between the harbor of the City of Racine and the boat launching site located in the mouth of Oak Creek in the City of South Milwaukee.

The exact location and design of facilities to provide safe harbor for recreational boats must be based upon detailed planning and engineering studies which include the application of sophisticated modeling techniques to simulate the effect of wind direction and velocity and wave action on alternative harbor designs; detailed environmental studies including evaluation of the potential adverse impact that construction of a given facility may have on water quality, on fish life, and on shoreline erosion; detailed economic analyses including evaluation of the benefits and costs involved; detailed social analyses including evaluation of the safety and aesthetic as well as expanded recreation opportunities involved; and finally, on more detailed land use analyses including the analysis of the potential effects on existing surface traffic patterns, automobile parking, potential displacement of homes and businesses, and existing and proposed land use in the immediate vicinity of the areas under consideration. It should be noted that two pertinent studies regarding recreational boat access to Lake Michigan have recently been prepared by the U. S. Army Corps of Engineers. The first study, Preliminary Feasibility Report on Harbors Between Kenosha and Kewaunee, Wisconsin (August

1975) also indicated a need for two additional small boat harbors along the Lake Michigan shore in southeastern Wisconsin. It further recommended that one such new harbor be located at Bender Park in the City of Oak Creek, Milwaukee County and the other be located at Doctors Park in the Villages of Fox Point and Bayside, Milwaukee County. However, after a public hearing and as a result of local opposition to the Doctors Park site, based in part on the potential adverse environmental impact, the Corps determined to eliminate the Doctors Park site from further consideration. The Corps did agree to study the possible construction of small boat harbors and launching facilities at the mouth of Oak Creek in Grant Park and at Sheridan Park and South Shore Park in addition to Bender Park. The second study prepared by the U. S. Army Corps of Engineers, Detailed Project Report, Small Boat Harbor Improvements at Port Washington Harbor, Wisconsin (August 1974) recommended improvement in the Port Washington harbor to accommodate general navigation facilities and associated facilities for recreational fishermen. The Corps' study indicates that such an improvement is required to provide a harbor of refuge and safe mooring for recreational boats in the Port Washington area.

In accordance with the recommendations set forth in the two reports prepared by the U. S. Army Corps of Engineers and the analysis of needs for Lake Michigan access facilities, as determined by the Commission through the application of per capita standards for launch ramps and boat slips and with the understanding that additional detailed studies must be completed, it is recommended that anticipated needs for additional boat launching ramps and boat mooring slips in harbors of refuge through the year 2000 be met by the public sector, eliminating, to the extent practicable, the identified voids along the Lake Michigan shoreline in southeastern Wisconsin through the provision of such additional access facilities. The development of the additional water access facilities required along the Lake Michigan shoreline in southeastern Wisconsin through the plan design year may be expected to entail the public outlay of approximately \$19,280,000.<sup>15</sup>

---

<sup>15</sup> *Estimated development costs for additional small boat water access facilities along the Lake Michigan shoreline were prepared under the assumption that two new small boat harbors would be provided—with each new harbor accommodating a marina and at least five boat launch ramps and 300 boat mooring slips and parking for 470 cars and trailers. One such harbor would be located at, or near, Bender Park in the City of Oak Creek and the other harbor would be located in northern Milwaukee or southern Ozaukee County, as more detailed studies may determine; improvements would be made to the harbor at Port Washington to provide a small boat harbor of refuge and safe mooring for recreational boats in the Port Washington area, and the harbor would be designed to accommodate at least two boat launch ramps and 210 boat mooring slips and parking for 270 cars and trailers; 250 boat mooring slips and three launch*

*(Footnote 15 continued on next page)*

Concluding Remarks—Accessibility Based Alternative Plan: Implementation of the accessibility based alternative plan proposals would satisfy the demand for resource-oriented outdoor recreation sites and facilities anticipated in the Region in the year 2000 within an overall park and recreation related open space system design which attempts to maximize the accessibility of recreation sites and facilities to the resident population of the Region. The accessibility based alternative plan includes three major components: existing and proposed Type I and Type II parks which would accommodate needed facilities for intensive resource-oriented activities, including camping, golf, nature study, resource-oriented picnicking, downhill skiing, and beach swimming; the proposed public recreation corridors which would accommodate needed facilities for trail-oriented activities, including biking, hiking, horseback riding, ski touring, and snowmobiling and which would serve to physically connect existing and proposed major parks, thereby enhancing the integrity of the resulting park and recreation related open space system; and water access facilities which would facilitate use of the rivers and major inland lakes of the Region and of Lake Michigan for extensive water based outdoor recreation activities.

It should be noted that large segments of the primary environmental corridors of the Region have been recommended for public acquisition under the open space preservation plan element, described in the first section of this chapter. The accessibility based alternative plan recommends the development of recreation lands both within and outside portions of the primary environmental corridors recommended for public acquisition under the open space preservation plan. Thus, including land required for new Type I and Type II parks, the proposed public recreation corridor, and the additional river and inland lake access points, a total of 7,248 acres of land would be acquired by the public sector upon full implementation of the accessibility based alternative plan (see Table 142). Of this total, 2,704 acres lying within the primary environmental corridor would be acquired under the open space preservation plan at an estimated cost

---

*ramps would be provided at the Racine Harbor; and 250 boat mooring slips and four launch ramps would be provided at the Kenosha Harbor. Estimated unit costs for facilities mentioned above are as follows: small boat harbor—\$8 million—including a nine-acre surface water area, small boat harbor, dredging, construction of breakwater, construction of marina, provision for at least 300 boat mooring slips, five launch ramps, and parking for 470 cars and trailers; improvement to existing small boat harbor at Port Washington—\$2.3 million—including a 13-acre surface water area, small boat harbor, dredging, construction of breakwater, provision for at least 210 boat mooring slips, two launch ramps, and parking for 270 cars and trailers; additional boat launch ramps—\$7,000—including concrete launching ramp; additional boat mooring slips—\$750—including individual slip and access pier; and parking—\$400 per space—including provisions for bituminous pavement.*

of \$4,624,000. The balance of 4,544 acres, including 2,055 acres lying in the primary environmental corridors and 2,489 acres lying outside the primary environmental corridor, would be acquired at an estimated cost of \$10,371,400. As indicated in Table 142, the open space preservation plan recommends public acquisition of 83,160 acres of primary environmental corridor lands not proposed for acquisition under the accessibility based alternative plan; the cost of acquiring these lands is estimated at \$84,229,000. The combined implementation of the open space preservation plan element and the accessibility based alternative plan would, therefore, require the public acquisition of a total of 87,704 acres of land at an estimated cost of \$99,224,400.

Implementation of the accessibility based alternative plan proposals also would involve public outlays for the development of facilities required at existing and proposed outdoor recreation sites. Development costs under the accessibility based alternative plan include \$24,786,000 for the development of additional Type I and Type II parks; \$11,496,000 for the development of trail facilities within proposed public recreation corridors; \$152,300 for the development of proposed boat access facilities on the rivers and inland lakes of the Region; and \$19,280,000 for the development of proposed boat access facilities on the Lake Michigan shoreline within the Region (see Table 143). Total development costs associated with implementation of the accessibility based alternative plan are estimated at \$55,714,300. Including both land acquisition and facility development costs, the total public capital outlay associated with implementation of the accessibility based plan and open space preservation plan combined is estimated at \$154,938,700.

#### Resource Based Alternative Plan Description

The second resource-oriented outdoor recreation component alternative plan prepared under the park and open space planning program, identified as the resource based alternative plan, addresses the identified needs for public resource-oriented recreation sites and facilities in the Region through a design which, in comparison to the accessibility based alternative plan, places greater emphasis the location of parks on site quality and less emphasis on the overall accessibility of recreation sites and facilities to the regional population. In general, the resource based alternative plan proposes to meet existing and anticipated future resource-oriented outdoor recreation requirements by developing the needed facilities at the best remaining potential park sites in the Region. In this effort to ensure the high quality of future recreation sites, however, the resource based alternative plan places—to the extent practicable—a priority on the development of high value potential recreation areas which also meet the identified accessibility requirements.

Recreation Corridors: Under the resource based alternative plan, public recreation corridors, which would accommodate trail facilities for hiking, biking, and other trail activities, would be located primarily in primary environmental corridors situated within areas of the Region identified in the Commission's potential park sites inventory as possessing recreational resource values of

Table 142

**PUBLIC LAND ACQUISITION REQUIREMENTS AND ACQUISITION COSTS  
UNDER THE ACCESSIBILITY BASED ALTERNATIVE PLAN: 2000**

	Land in Those Portions of the Primary Environmental Corridor Which Are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under Accessibility Based Alternative Plan				Total Land Acquisition			
							Acres			
	Acres	Acquisition Cost	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost
Land to be Acquired for Recreation Use Under the Accessibility Based Alternative Plan										
Type I and Type II Parks . . . . .	788	\$ 1,030,000	1,095	2,245	3,340	\$ 6,928,000	1,883	2,245	4,128	\$ 7,958,000
Recreation Corridor . . . . .	1,900	3,568,000	940	230	1,170	3,357,000	2,840	230	3,070	6,925,000
Inland Lake and River Access Points . . . . .	16	26,000	20	14	34	86,400	36	14	50	112,400
<b>Total</b>	<b>2,704</b>	<b>\$ 4,624,000</b>	<b>2,055</b>	<b>2,489</b>	<b>4,544</b>	<b>\$10,371,400</b>	<b>4,759</b>	<b>2,489</b>	<b>7,248</b>	<b>\$14,995,400</b>
Other Land to be Acquired Under Open Space Preservation Plan Element . . . . .	80,456	\$84,229,000	--	--	--	--	80,456	--	80,456	\$84,229,000
<b>Total Land to be Acquired Under the Accessibility Based Alternative Plan and Open Space Preservation Plan Combined . . . . .</b>	<b>83,160</b>	<b>\$88,853,000</b>	<b>2,055</b>	<b>2,489</b>	<b>4,544</b>	<b>\$10,371,400</b>	<b>85,215</b>	<b>2,489</b>	<b>87,704</b>	<b>\$99,224,400</b>

Source: SEWRPC.

Table 143

**ESTIMATED DEVELOPMENT COSTS UNDER THE  
ACCESSIBILITY BASED ALTERNATIVE PLAN: 1975**

Type of Site	Estimated Development Cost
Type I and Type II Parks . . . . .	\$24,786,000
Recreation Corridor . . . . .	\$11,496,000
River and Inland Lake Access Facilities . .	\$ 152,300
Lake Michigan Access Facilities . . . . .	\$19,280,000
<b>Total</b>	<b>\$55,714,300</b>

Source: SEWRPC.

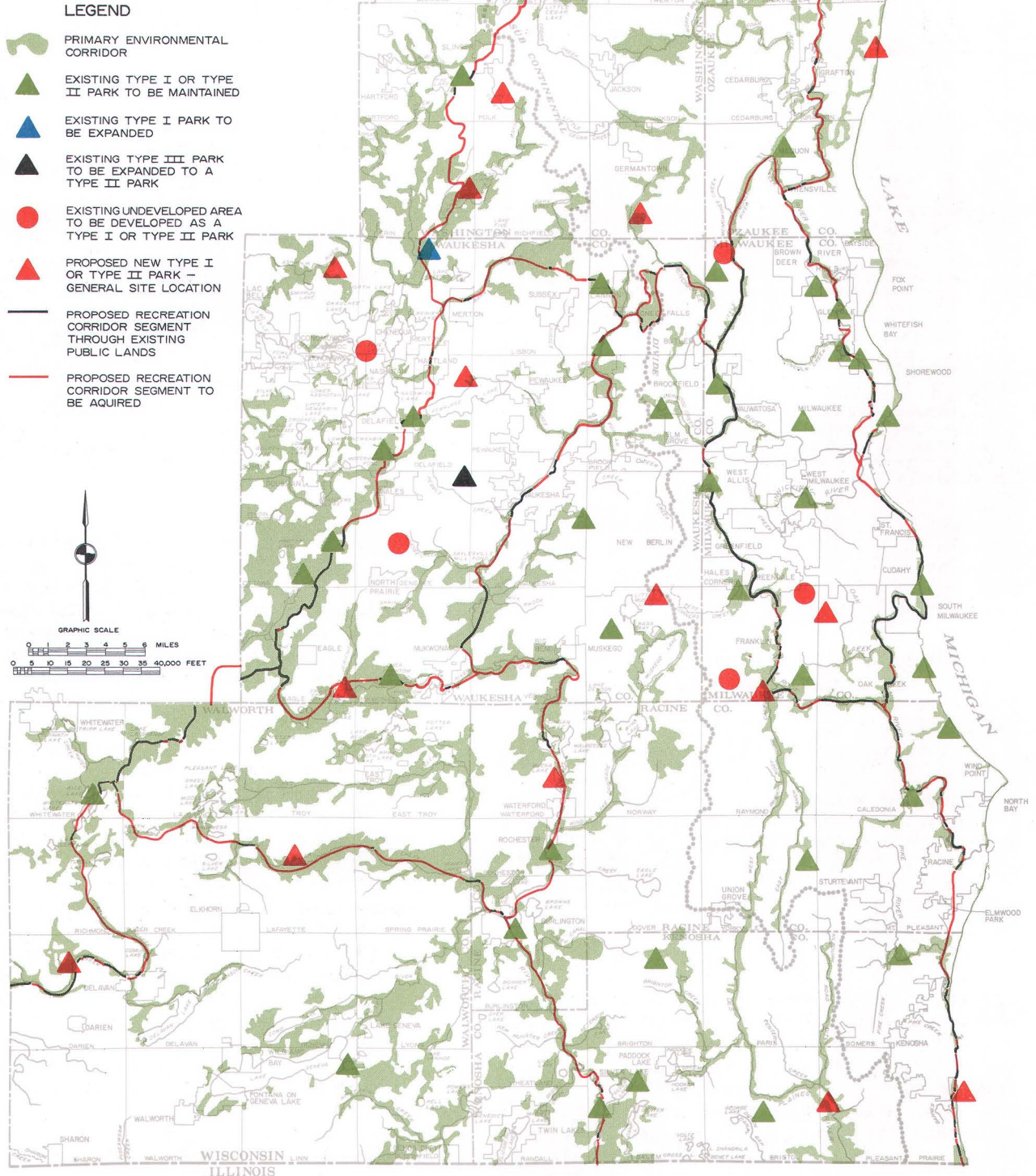
regional significance such as the Kettle Moraine, the Lake Michigan shoreline, and the Milwaukee River, Fox River, Root River, Sugar Creek, and Turtle Creek corridors. As shown on Map 122, the recreation corridor network proposed under this alternative plan includes a number of linear segments suitable for cross country trail activities. In addition, the proposed recreation corridor network includes a number of large loops having a length appropriate for use involving overnight outings. Participation in trail activities on such loops would be facilitated by allowing participants to start and finish at the same point.

As indicated in Table 144, a total of 361 linear miles of recreation corridor lands is proposed under the resource based alternative plan, with 334 miles, or 93 percent of the total, traversing primary environmental corridor lands. The small balance, 27 linear miles, or 7 percent of the total, traverses land outside the primary environmental corridors, and would be provided primarily in order to achieve continuity. The recreation corridor network proposed under this alternative plan traverses much of the Milwaukee County parkway system and virtually the entire length of the Kettle Moraine State Forest within southeastern Wisconsin. Including these lands and other smaller expanses of publicly owned lands, the recreation corridor network proposed under the resource based alternative plan includes 121 linear miles of corridors through lands currently in public ownership. The remaining segments of the proposed public recreation corridor system, including 240 miles, or 66 percent of the total proposed recreation corridor mileage, traverse lands currently in nonpublic ownership.

As previously noted in this chapter, the actual width and precise location of individual segments of the recreation corridor are properly matters to be addressed by county and local park planning efforts. While the width of the proposed recreation corridors would vary with the resource amenities of lands traversed and the specific type of trail facilities to be developed, a minimum width



**TYPE I AND TYPE II PARKS AND  
RECREATION CORRIDORS PROPOSED  
UNDER THE RESOURCE BASED  
ALTERNATIVE PLAN: 2000**



The resource based alternative plan recommends that recreation corridors and large Type I and Type II parks be provided in areas of the Region containing the best remaining potential recreation sites, namely, the regionally significant resource areas located in outlying portions of the Region. A total of 361 linear miles of recreation corridor lands which would provide opportunities for participation in extensive trail-oriented outdoor recreation activities would traverse virtually the entire length of Kettle Moraine State Forest within southeastern Wisconsin; the main stems of the Milwaukee and Fox Rivers and Sugar and Turtle Creeks; and much of the Milwaukee County parkway system. About 121 miles or about 34 percent of the proposed recreation corridor network would traverse lands currently in public ownership. Virtually all additional intensive resource-oriented facilities required in the Region by the year 2000 under the resource based alternative plan would be developed at existing or proposed Type I and Type II parks. The plan recommends the expansion of one existing Type I park and one existing Type III park, the development as Type I sites of seven areas currently in public ownership, and the acquisition and development of 17 new Type I and Type II parks on land currently in nonpublic ownership. Four of the 17 proposed new parks would be located within 20 miles of the central business district of the City of Milwaukee.

Source: SEWRPC.

Table 144

## RECREATION CORRIDOR MILEAGE IN THE REGION UNDER THE RESOURCE BASED ALTERNATIVE PLAN: 2000

Ownership	Relationship to Primary Environmental Corridor			
	In Primary Environmental Corridor (linear miles)	Outside Primary Environmental Corridor (linear miles)	Total	
			Linear Miles	Percent
Recreation Corridor Segments through Existing Public Lands . . . .	119.4	1.6	121.0	33.5
Recreation Corridor Segments to be Acquired . . . . .	214.5	25.5	240.0	66.5
Total	333.9	27.1	361.0	100.0

Source: SEWRPC.

of 200 feet is considered necessary to provide an open space setting for any trail activity. Since the resource based alternative plan recommends the development of recreation corridors through 240 linear miles of lands currently in nonpublic ownership, a minimum of 3,080 acres of land would have to be acquired by the public sector for complete implementation of the recreation corridor proposals. Of this total, 1,930 acres lying within the primary environmental corridors would be acquired under the open space preservation plan element at an estimated cost of \$3,331,000 (see Table 145). The remaining acreage, including 950 acres within the primary environmental corridor and 200 acres outside the primary environmental corridor, would be acquired at an estimated cost of \$2,533,000.

**Type I and Type II Parks:** The analysis of outdoor recreation site needs described in Chapter XII of this report indicated the need for a substantial number of additional Type I and Type II parks in the Region by the plan design year 2000. Type I and Type II parks, it should be noted, are large parks which provide facilities for resource-oriented activities such as camping, picnicking, beach swimming, and golf, and which have large natural areas containing significant resource amenities. There were 42 Type I and Type II parks in southeastern Wisconsin in 1973 with a combined area of 11,610 acres. The resource based alternative plan envisions continued maintenance of these existing parks as well as the development of additional facilities at certain of these sites. In addition, this alternative plan recommends the expansion of one existing Type I park and one existing Type III park to the size required for a Type II park, thereby adding 320 acres to the existing Type I and Type II park acreage (see Table 146). This alternative plan further recommends the development as Type I or Type II parks of seven undeveloped areas which are currently in public ownership and which have a combined area of 1,391 acres. Finally, this alternative plan proposes the public acquisition and development of 17 new Type I and Type II parks having a combined area of 4,028 acres on lands currently in nonpublic ownership. A total, then, of

5,739 acres of additional Type I and Type II parks would be provided upon implementation of the resource based alternative plan recommendations. Including the 11,610 acres of Type I and Type II parks existing in the Region in 1973, a total of 17,349 acres of Type I and Type II parks would, thus, be provided in southeastern Wisconsin by the year 2000. Implementation of the resource based alternative plan would, thus, meet the anticipated demand for Type I and Type II parks in the Region in the plan design year.

Type I and Type II parks accommodate most of the existing intensive resource-oriented facilities such as campsites, picnic facilities, swimming beaches and golf courses in the Region; and under the resource based alternative plan, virtually all additional intensive resource-oriented facilities required in the Region by the year 2000 would be developed at existing or proposed Type I and Type II parks.<sup>16</sup> Similar to the approach taken in the design of the accessibility based alternative plan in the selection of sites for development as Type I and Type II parks under the resource based alternative plan, an effort was made to "assign" additional required facilities to publicly owned undeveloped, or partially developed, recreation land to the maximum extent possible. Other additional facilities required by the plan design year were then assigned to high value potential park sites located within the area of the Region in which the facility need exists. In the absence of a suitable high value potential park site in the "need" area, however, the required facilities were assigned to a high value potential park site located as close as possible but in another portion of the Region, thereby ensuring good site quality but sacrificing, to some extent, the accessibility of the recreation sites and facilities to the resident population. Within this framework, priority was given to the development of

<sup>16</sup> The single exception is the proposed development of swimming beach facilities along the Lake Michigan shoreline at Virmond Park, an existing Type III park in Ozaukee County.

Table 145

**PUBLIC LAND ACQUISITION REQUIREMENTS AND ACQUISITION COSTS FOR  
RECREATION CORRIDORS UNDER THE RESOURCE BASED ALTERNATIVE PLAN: 2000**

	Land in Those Portions of the Primary Environmental Corridor Which Are to be Acquired Under the Open Space Preservation Plan Element <sup>a</sup>		Other Land to be Acquired Under Resource Based Alternative Plan				Total Land Acquisition			
							Acres			Acquisition Cost
			In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total		
	Acres	Acquisition Cost								
Land to be Acquired for Recreation Use Under the Resource Based Alternative Plan Recreation Corridors . .	1,930	\$3,331,000	950	200	1,150	\$2,533,000	2,880	200	3,080	\$5,864,000

<sup>a</sup> Includes land within the minimum 200 foot right-of-way required for recreation corridors through those primary environmental corridors which are recommended for public acquisition under the open space preservation plan element.

Source: SEWRPC.

Table 146

**EXISTING AND PROPOSED TYPE I AND TYPE II PARKS IN THE REGION  
UNDER THE RESOURCE BASED ALTERNATIVE PLAN: 2000**

Type of Site	Type I and Type II Parks Under the Resource Based Alternative Plan for the Year 2000			
	Number of Sites	Acres		
		In Public Ownership 1973	In Nonpublic Ownership: 1973 (to be acquired)	Total
Existing Type I and Type II Parks				
Existing Type I and Type II Parks to be Maintained . . .	41	11,410	--	11,410
Existing Type I Park to be Expanded . . . . .	1	200	200	400
Proposed Additional Type I and Type II Parks				
Existing Type III Park to be Expanded to a Type II Park . . . . .	1	80	40	120
Existing Undeveloped Areas to be Developed as Type I or Type II Parks . . . . .	7	1,391	--	1,391
New Type I and Type II Parks . . . . .	17	--	4,028	4,028
Total	67	13,081	4,268	17,349

Source: SEWRPC.

new Type I and Type II parks located on, or close to, the proposed public recreation corridor network. The distribution of existing and proposed Type I and Type II parks included in the resource based alternative plan, obtained through the application of these guidelines, is shown on Map 122.

As shown on Map 122, many of the new Type I and Type II parks proposed under this alternative plan would be situated in outlying portions of the Region, where, as previously noted, natural resource amenities with high recreational value of regional significance are relatively abundant. Under the resource based alternative plan,

16 of the 17 proposed new Type I and Type II parks would be developed at locations designated as high value potential park sites in the Commission potential park sites inventory. It is important to recognize, however, that, situated in the outlying areas of the Region, many of the new parks proposed under this alternative plan would be somewhat removed from the areas of the Region which have been identified as having substantial outdoor recreation facility needs. In this regard, despite the substantial existing need for resource-oriented outdoor recreation facilities in many portions of Milwaukee County, only four of the 17 proposed new parks would be located within 20 miles of the City of Milwaukee central business district. There are few remaining high value potential park sites located near the large urbanized areas of the Region; and this relative scarcity of high value potential park sites near the large urban centers of the Region necessitated the outlying locations of many of the new Type I and Type II parks proposed under this alternative plan.

Similar to the approach taken in the design of the accessibility based alternative plan in selection of potential sites for development as Type I and Type II parks under the resource based alternative plan, priority was given to sites situated in, or close to, the public recreation corridors proposed under that plan in an effort to enhance the integrity of the resulting park and recreation related open space system. As shown on Map 122 and indicated in Table 147, of the 67 Type I and Type II parks

included under this alternative plan, 47 parks, or 70 percent of the total, are situated within two miles of the public recreation corridor network proposed under this alternative plan. More specifically, 10 of the 17 new parks proposed under this alternative plan are situated in, or close to, the proposed public recreation corridors; and 37 of the sites already in public ownership—including existing parks and existing publicly owned undeveloped areas proposed to be developed as parks—are situated in, or close to, the proposed recreation corridors.

The public recreation corridor network proposed under this alternative plan traverses only a part of the total primary environmental corridor network in the Region. As noted throughout this chapter, the development of parks within the primary environmental corridors is highly desirable since such development generates the dual benefits of satisfying recreational demands in a desirable setting and protecting and preserving valuable natural resource amenities. Information concerning the relationship between the Type I and Type II parks included in the resource based alternative plan and the overall regional primary environmental corridor network also is presented in Table 147. As indicated in this table, of the 67 Type I and Type II parks included in this alternative plan, 53 parks, or 79 percent of the total, are located within the regional primary environmental corridors. In particular, 14 of the 17 new Type I and Type II parks proposed under this alternative plan are located in the primary environmental corridors; and 39 of

Table 147

**EXISTING AND PROPOSED TYPE I AND TYPE II PARKS IN THE REGION UNDER THE RESOURCE BASED ALTERNATIVE PLAN  
BY RELATION TO PRIMARY ENVIRONMENTAL CORRIDOR AND PROPOSED PUBLIC RECREATION CORRIDOR: 2000**

Type of Site	Type I and Type II Parks Under the Resource Based Alternative Plan for the Year 2000											
	By Relation to Primary Environmental Corridor						By Relation to Proposed Public Recreation Corridor					
	In Primary Environmental Corridor		Outside Primary Environmental Corridor		Total		Located Within Two Miles of Proposed Public Recreation Corridor		Located More Than Two Miles from Public Recreation Corridor		Total	
	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent
Existing Type I and Type II Parks												
Existing Type I and Type II Parks to be Maintained . . . . .	35	85.4	6	14.6	41	100.0	30	73.2	11	26.8	41	100.0
Existing Type I Park to be Expanded . . . . .	1	100.0	0	0.0	1	100.0	1	100.0	0	100.0	1	100.0
Proposed Additional Type I and Type II Parks												
Existing Type III Park to be Expanded to a Type II Park . . . .	0	0.0	1	100.0	1	100.0	0	0.0	1	100.0	1	100.0
Existing Undeveloped Areas to be Developed as Type I or Type II Parks . . . . .	3	42.9	4	57.1	7	100.0	6	85.7	1	14.3	7	100.0
New Type I and Type II Parks . . . .	14	82.4	3	17.6	17	100.0	10	58.8	7	41.2	17	100.0
<b>Total</b>	<b>53</b>	<b>79.1</b>	<b>14</b>	<b>20.9</b>	<b>67</b>	<b>100.0</b>	<b>47</b>	<b>70.1</b>	<b>20</b>	<b>29.9</b>	<b>67</b>	<b>100.0</b>

Source: SEWRPC.



the 50 already-acquired sites—including existing parks and parks to be developed at existing publicly owned undeveloped areas—are located within the primary environmental corridors.

Implementation of the resource based alternative plan would require the acquisition of 4,268 acres of open space land for the development of the 17 proposed new Type I and Type II parks and the expansion of two existing parks. Of this total, 1,116 acres, or 26 percent, lying in the primary environmental corridor network would be acquired under the open space preservation plan at an estimated cost of \$1,773,000 (see Table 148). The remaining acreage, including 1,385 acres within the regional primary environmental corridor and 1,767 acres outside of the primary environmental corridors, would be acquired at an estimated cost of \$7,376,000.

**Outdoor Recreation Facilities:** The analysis of outdoor recreation needs conducted under the park and open space planning program indicated a substantial need for additional public resource-oriented outdoor recreation facilities in the Region by the year 2000. These needs, which have been summarized in Table 130, include the additional requirements for such intensive facilities as campsites and swimming beaches, extensive facilities such as hiking and biking trails, and water access facilities. The resource based alternative plan proposals which address these additional facility requirements are set forth here.

**Intensive Resource-Oriented Outdoor Recreation Facilities:** The resource based alternative plan proposes development of the additional required facilities for camping, golf, resource-oriented picnicking, downhill skiing, beach swimming, and nature study within acquired park lands and high value potential park sites situated in areas of the Region in which the specific facility need exists. In the

absence of a suitable high value potential park site or an acquired site which could accommodate the required facilities within a "need" area, however, the required facilities were "assigned" to a high value potential park site or an undeveloped or partially developed acquired site in another area of the Region.

**Campsites:** There were 552 public campsites in the Region in 1973. The resource based alternative plan proposes the development of 219 additional campsites in the Region by the year 2000. Under the resource based alternative plan, there would be a total of 771 public campsites in the Region in the year 2000, a quantity sufficient to meet the anticipated demand for public campsites in the Region in the plan design year (see Table 149).

The additional campsites recommended under this alternative plan would be located at seven existing or proposed parks, with one additional public campground proposed in Milwaukee, Ozaukee, and Washington Counties and two additional public campgrounds each proposed in Kenosha and Racine Counties (see Map 123). Four of the seven proposed additional public campgrounds would be located within 20 miles of the Kenosha, Milwaukee, and Racine central business districts. It should be noted, however, that, because of the relatively large service radius of public campgrounds, even the new campgrounds proposed in the outlying areas of the Region would serve portions of the Region not served by existing campsites, namely, the easternmost and northernmost portions of the Region.

**Golf Courses:** There was a total of 20 public regulation golf courses in the Region in 1973 including 14 18-hole courses, five 9-hole courses, and one 27-hole course. The resource based alternative plan proposes the development of 10 additional public regulation 18-hole courses in the

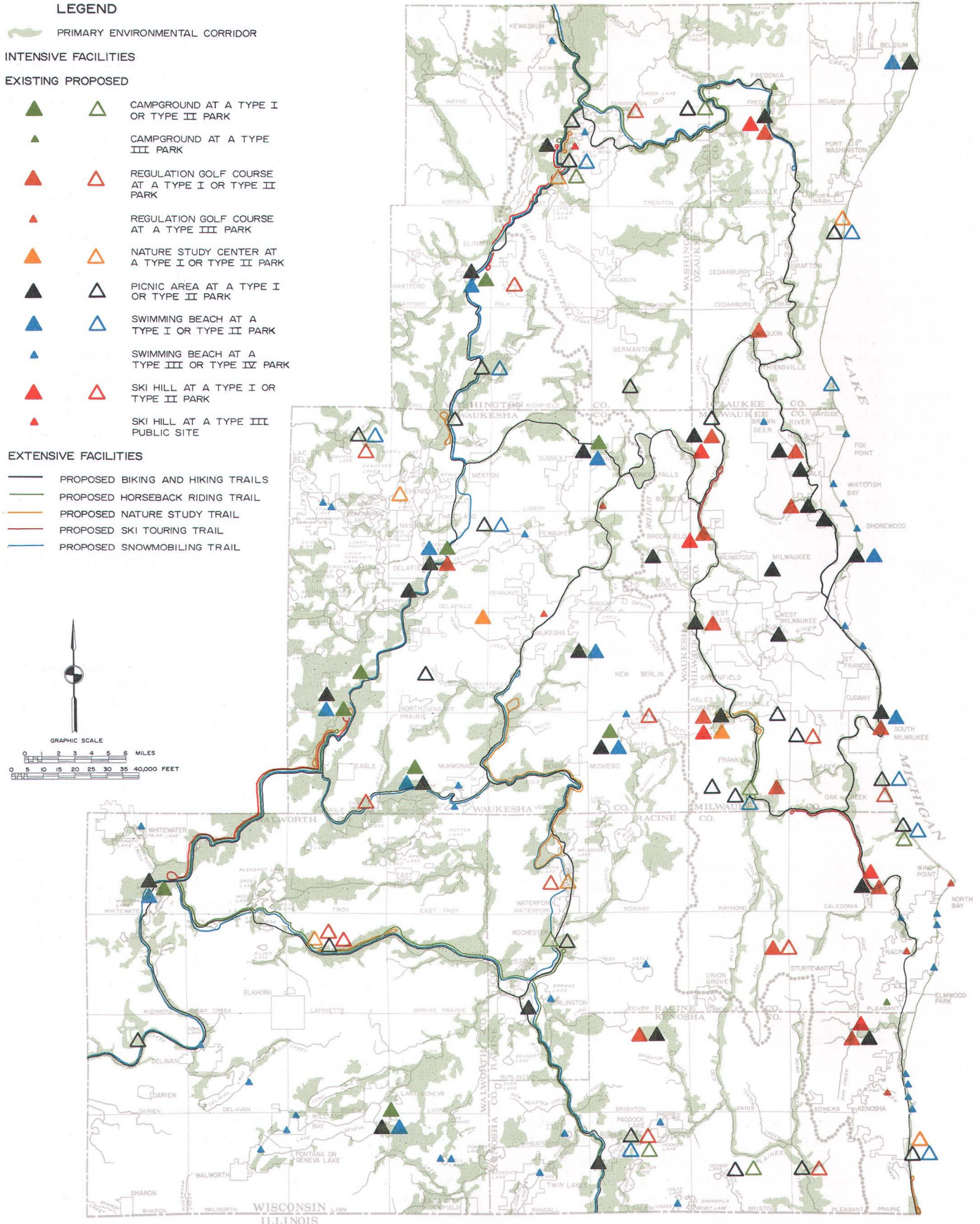
Table 148

**PUBLIC LAND ACQUISITION REQUIREMENTS AND ACQUISITION COSTS FOR TYPE I AND TYPE II PARKS UNDER THE RESOURCE BASED ALTERNATIVE PLAN: 2000**

Type of Site	Land in Those Portions of the Primary Environmental Corridor Which Are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under the Resource Based Alternative Plan				Total Land Acquisition			
	Acres	Acquisition Cost	Acres			Acquisition Cost	Acres			Acquisition Cost
			In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total		In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	
Land to be Acquired for Recreation Use Under the Resource Based Alternative Plan Type I and Type II Parks . . . . .	1,116	\$1,773,000	1,385	1,767	3,152	\$7,376,000	2,501	1,767	4,268	\$9,149,000

Source: SEWRPC.

**PUBLIC LAND BASED RESOURCE-ORIENTED OUTDOOR RECREATION FACILITIES  
PROPOSED UNDER THE RESOURCE BASED ALTERNATIVE PLAN: 2000**



The resource based alternative plan recommends that additional intensive resource-oriented outdoor recreation facilities be developed at existing or proposed high resource value Type I and Type II parks as close as possible to those areas of the Region where the need for each respective facility existed. The plan proposes the development of 219 campsites at seven parks; 10 additional public regulation 18-hole golf courses; one additional 9-hole regulation golf course and the expansion of one existing 18-hole golf course to a 27-hole course; 2,110 picnic tables at 24 parks; 6,600 additional linear feet of swimming beach along Lake Michigan at five parks and 2,200 additional linear feet of swimming beach at inland lakes at six parks; one downhill skiing area at the proposed Type I site in Walworth County; and six nature centers. In addition, the plan recommends the development of 361 linear miles of hiking and biking trails, 100 linear miles of horseback riding trails, 49 linear miles of nature trails, 45 linear miles of ski touring trails, and 207 linear miles of snowmobiling trails, all located within proposed recreation corridor network which is located in the primarily rural high value resource areas of the Region.

Source: SEWRPC.

Table 149

**EXISTING AND PROPOSED INTENSIVE RESOURCE-ORIENTED OUTDOOR  
RECREATION FACILITIES IN THE RESOURCE BASED ALTERNATIVE PLAN: 1973 and 2000**

Facility	Intensive Resource-Oriented Facilities			
	Existing 1973	Additional Proposed Under Resource Based Alternative Plan by the Year 2000	Total Under Resource Based Alternative Plan in the Year 2000	Total Anticipated Requirement in the Year 2000 <sup>a</sup>
Campsites . . . . .	552	219	771	771
Golf Courses (equivalent 18-hole regulation courses) . . . . .	18	11	29	29
Picnic Tables (tables at Type I and Type II parks) . . . . .	6,292	2,110	8,402	8,332
Swimming Beaches				
Inland Lakes (linear feet) . . . . .	10,335	2,193	12,528	12,528
Lake Michigan (linear feet) . . . . .	28,830	6,600	35,430	35,412
Ski Hills (acres of developed slope) . . . .	24	5 <sup>b</sup>	29	24
Nature Study Centers . . . . .	2 <sup>c</sup>	6	8	7

<sup>a</sup> Based upon application of the adopted per capita standard to the forecast regional population.

<sup>b</sup> Five acres of developed slope provided to meet the accessibility standard for a public ski hill in Walworth County, which is currently not served by such a facility.

<sup>c</sup> Includes Wehr Nature Center, which was opened in 1974, in Whitnall Park in Milwaukee County and Retzer Nature Center in Waukesha County.

Source: SEWRPC.

Region by the year 2000, one additional 9-hole course, and the expansion of one existing 18-hole course. Upon implementation of this alternative plan, then, there would be a total of 31 public regulation golf courses in the Region, including 23 18-hole courses, six 9-hole courses, and two 27-hole courses. The public golf courses included in the resource based alternative plan would provide a quantity of regulation golf holes sufficient to meet the anticipated demand in the year 2000.

Under the resource based alternative plan, the additional golf facilities would be developed at 12 existing or proposed parks, with three additional courses provided in Waukesha County; two additional courses provided in Kenosha, Milwaukee, and Washington Counties; one additional course developed in Racine and Walworth Counties; and one existing 18-hole course expanded to a 27-hole course also in Racine County (see Map 123). Of these 12 sites, six would be located within 20 miles of the Kenosha, Milwaukee, and Racine central business districts.

**Resource-Oriented Picnicking:** As noted previously in this chapter, within the wide range of picnic activity that is possible, it is useful to distinguish two basic types of outings, namely, resource-oriented picnicking and local picnicking. Resource based alternative plan recommendations for resource-oriented picnicking—which typically involves

an all-day outing at a recreation site possessing scenic areas and natural resource amenities which significantly enhance the quality of the recreational experience—are set forth here. Proposals for local picnicking—which typically involves a shorter stay and relies less on the presence of natural resource amenities at the picnic site—are set forth in the urban outdoor recreation plan component in the next section of this chapter.

Resource-oriented picnicking activity generally occurs at Type I and Type II parks. In 1973, there were 6,292 picnic tables at Type I and Type II parks in southeastern Wisconsin. The resource based alternative plan proposes the provision of 2,110 additional picnic tables at new picnic areas within existing and proposed Type I and Type II parks by the year 2000. Accordingly, a total of 8,402 picnic tables at Type I and Type II parks would be provided within the Region by the year 2000, a quantity sufficient to meet the anticipated demand for resource-oriented picnicking facilities in the Region in the plan design year.

The resource based alternative plan recommends the development of new resource-oriented picnicking areas at 24 existing and proposed Type I and Type II parks. Two new picnic areas each are proposed in Ozaukee, Racine, and Walworth Counties; four new picnic areas each are proposed in Kenosha, Washington, and Waukesha



Counties; and six new picnic areas are proposed in Milwaukee County (see Map 123). Twelve of the proposed new picnic areas would be located within 20 miles of the Kenosha, Milwaukee, and Racine central business districts, and would serve to meet the identified need for additional resource-oriented picnicking facilities in those densely populated urbanized areas. The other 12 new picnic areas would meet the demand for resource-oriented picnicking facilities for residents of the rural and outlying urban areas of the Region.

Swimming Beaches: As previously noted in this chapter, in southeastern Wisconsin beach swimming is pursued along the Lake Michigan shoreline and at the inland lakes of the Region. Because of the quite different nature of Lake Michigan beach swimming and beach swimming at the inland lakes of the Region, separate per capita standards were developed for these two kinds of beach swimming, and separate need analyses undertaken based upon the adopted standards.

There were 28,830 linear feet of public swimming beach along the Lake Michigan shoreline in southeastern Wisconsin in 1973. The resource based alternative plan recommends the development of 6,600 additional linear feet of public swimming beach along Lake Michigan, or a total of 35,430 linear feet of public swimming beach along the Lake Michigan shoreline in the Region by the design year. Implementation of this plan proposal would meet the anticipated demand for Lake Michigan beach swimming in the Region in the plan design year (see Table 149). Under this alternative plan, beach swimming areas would be developed at three existing parks and two proposed parks along the Lake Michigan shoreline, including one park each in Kenosha, Milwaukee, and Racine Counties and two parks in Ozaukee County (see Map 123).

There were also 10,335 linear feet of public swimming beach at inland lakes in the Region in 1973. The resource based alternative plan includes the development of 2,193 additional linear feet of inland beach by the design year. Under this alternative plan, then, there would be a total of 12,528 linear feet of public swimming beach at inland lakes in the Region by the year 2000, a quantity sufficient to meet the anticipated demand by the plan design year (see Table 149). As shown on Map 123, the resource based alternative plan includes the development of two new swimming beaches at inland lakes in Washington County, two in Waukesha County, one in Milwaukee County,<sup>17</sup> and one in Kenosha County.

Ski Hills: As indicated in Table 149, the existing supply of public skiing areas in the Region is sufficient to meet the adopted per capita standard for downhill skiing in southeastern Wisconsin in the Region in the plan design year. Because all existing public downhill skiing areas are located in the eastern and northern portions of the Region, however, application of the standards would indicate that residents of the southern portion of the Region do not have adequate access to public ski slopes. Accordingly, similar to the accessibility based alternative plan, the resource based alternative plan proposes the

development of one additional downhill skiing area at the proposed new Type I park in northeastern Walworth County.

Nature Study Centers: Resource based alternative plan recommendations for nature study centers in the Region are identical with those included in the accessibility based alternative. Thus, in addition to the two existing nature study centers in the Region located in Milwaukee and Waukesha Counties, the resource based alternative plan proposes the development of one new nature study center each in Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties. Each of the proposed nature study centers would include a structure which offers pertinent interpretative information and serves as a center for nature study activities. The structure would be located within a site containing significant natural resource amenities with a variety of species of vegetation and wildlife. The eight existing and proposed nature centers included in the resource based alternative plan are well distributed throughout southeastern Wisconsin and would provide opportunity for the inclusion of good examples of the most significant natural resource amenities and topographical features of the Region.

Development Costs: Similar to the approach taken in the development of the accessibility based alternative plan, virtually all of the new intensive resource-oriented outdoor recreation facilities proposed under the resource based alternative plan would be developed in existing or proposed Type I and Type II park lands. The cost of acquiring the additional Type I and Type II park lands proposed under the resource based alternative plan was presented in a previous section of this chapter. Development cost estimates with respect to these park lands are presented here.

As previously noted in this chapter, a large portion of the development costs of a typical new Type I or Type II park consists of the cost of developing the specific proposed intensive resource-oriented facilities—for example, a campground or swimming beach—together with the support facilities, such as parking spaces, directly related to the recommended facilities. Estimated unit costs associated with the development of areas for specific resource-oriented facilities and related support facilities are presented in Table 137. In addition, the development

---

<sup>17</sup> *It should be noted that, while there are no existing inland lakes in the vicinity of the park recommended for development of an inland swimming beach in Milwaukee County, the need for an inland beach in this area could be met through a water impoundment project. A major proposal of the comprehensive plan for the Root River watershed adopted by the Commission in 1966 is the construction of a multipurpose reservoir in the area around the confluence of the North Branch and the Root River Canal in the City of Franklin. Implementation of this plan recommendation would provide the surface water necessary for an inland swimming beach in southern Milwaukee County.*



of any new major park may involve the development of park roads, the provision of sanitary facilities, landscaping, and other site preparation activities which are not directly related to any of the specific recreation facilities proposed. Development cost estimates for these general site improvements, calculated on a per park type basis, also are presented in Table 137. Utilizing the unit cost information contained in Table 137, the estimated overall development cost associated with the additional Type I and Type II park lands proposed under the resource based alternative plan, along with the cost of developing additional facilities at existing Type I and Type II parks as proposed under this alternative plan, was calculated as \$25,606,000.

**Extensive Resource-Oriented Outdoor Recreation Facilities:** Under the resource based alternative plan, trail facilities proposed to accommodate the identified need for extensive resource-oriented outdoor recreation activities, such as hiking, biking, and horseback riding, would be located within the public recreation corridors proposed under that plan. The public recreation corridors would be located primarily in primary environmental corridors situated in areas of the Region identified as possessing recreational resource values of regional significance, including the Kettle Moraine, the Lake Michigan shoreline, and the Milwaukee River, Fox River, Root River, Sugar Creek, and Turtle Creek corridors. These high value natural resource areas would provide a desirable setting for the required trail facilities and should significantly enhance the quality of the recreational experience for trail users.

Similar to the approach taken in the design of the accessibility based alternative plan, in the formulation of specific trail facility development proposals under the resource based alternative plan, consideration was first given to the basic physical requirements of the trails which are necessary for safe and convenient trail use. Secondly, consideration was given to the natural resource amenities which enhance the enjoyment of participation in the respective activities. Third, in the formulation of specific trail development proposals, an effort was made to maximize the use of existing trail facilities located within the proposed public recreation corridor. In this regard, for example, virtually all of the Ice Age Trail in southeastern Wisconsin, which currently accommodates backpack hiking through both publicly and privately owned lands in the western portion of the Region, was incorporated into the system of hiking trails recommended under the resource based alternative plan.

The system of trail facilities proposed to be developed within the public recreation corridor network recommended under the resource based alternative plan is shown on Map 123. Existing and proposed parks included in this alternative plan would serve as terminus and stopover points for the various trail activities. In addition, other terminus or stopover point facilities, developed with parking areas and sanitary facilities, would be provided along certain recreation corridor segments when the need exists in the absence of an existing or proposed park.

**Biking and Hiking Trails:** As shown on Map 123, under the resource based alternative plan, hiking and biking trails would be developed throughout the entire proposed public recreation corridor network. A total of 361 linear miles of hiking and biking trails would be provided within the public recreation corridor, a quantity sufficient to satisfy the anticipated demand for biking and hiking trails in the Region in the plan design year (see Table 150). As shown on Map 123, the biking and hiking trails proposed under this alternative plan include a number of linear segments suitable for cross country trail activities. In addition, the proposed hiking and biking trail system includes a number of large loops which have a length appropriate for use for overnight outings and which allow participants to start and finish at the same point.

**Horseback Riding Trails:** Similar to the approach taken in the design of the accessibility based alternative plan, under the resource based alternative plan horseback riding trails would generally be provided in segments of the public recreation corridor in the rural areas of the Region, although one horseback riding trail is proposed in southern Milwaukee County. Outlying locations were selected for horseback riding trails not only to provide the natural setting desirable for horseback riding activity but also because of the outlying location of most rental stables and individuals who own horses. The resource based alternative plan proposes the development of a total of 100 linear miles of horseback riding trails in southeastern Wisconsin by the year 2000 (see Table 150). The proposed horseback riding trail system would be sufficient to accommodate the anticipated demand for public horseback riding trail facilities in the Region in the plan design year.

Table 150

**PROPOSED EXTENSIVE RESOURCE-ORIENTED  
OUTDOOR RECREATION FACILITIES UNDER THE  
RESOURCE BASED ALTERNATIVE PLAN: 2000**

Type of Trail Facility	Extensive Land Based Outdoor Recreation Facilities	
	Total Proposed Under Resource Based Plan in the Year 2000 <sup>a</sup> (linear miles)	Total Anticipated Requirement in the Year 2000 <sup>b</sup> (linear miles)
Biking . . . . .	361	350
Hiking . . . . .	361	350
Horseback Riding . .	100	110
Nature Study . . . .	49	44
Ski Touring . . . . .	45	44
Snowmobiling . . . .	207	241

<sup>a</sup> The resource based plan proposals for recreation trail facilities relate only to trail facilities to be provided within the proposed public recreation corridor. There were no public recreation corridors in the Region in 1973, as defined for the purposes of this report.

<sup>b</sup> Based upon the application of the adopted per capita linear mileage standards to the forecast regional population.

Source: SEWRPC.

Nature Study Trails: The resource based alternative plan proposes development of seven nature study trails in the public recreational corridor network. Generally, these nature trails would be so located as to supplement the existing and proposed nature study centers described above. Segments of the proposed recreation corridor which were selected for nature study trail development are those linear expanses of land having a significant natural resource amenity or a large diversity of vegetation and wildlife. As indicated in Table 150, a total of 49 linear miles of nature study trails is proposed under this alternative plan, a quantity which would be sufficient to meet the per capita linear mileage standard for nature study trails in the Region in the plan design year.

Ski Touring Trails: The resource based alternative plan proposes the development of a total of 45 linear miles of ski touring trails located within four different segments of the public recreation corridor network within southeastern Wisconsin. Implementation of this proposal would satisfy the per capita linear mileage standard for public ski touring trails through the plan design year. The recreation corridor segments proposed for development with ski touring trails would provide a desirable setting for ski touring activity providing the tourist with a variety of new and different features.

Snowmobiling Trails: As previously noted in this chapter, public snowmobiling trails should be located in essentially undeveloped portions of the Region, the location of such trails within developed urban areas being impractical because of potential conflict with urban activities due to the speed and noise of the machines. It should be noted that, even in rural areas, identification of a snowmobile trail alignment will be difficult because of the potential incompatibility of snowmobiling with other trail activities and with primary environmental corridor preservation. Thus, utilizing only the rural segments of the proposed public recreation corridors, the resource based alternative plan proposes the development of 207 linear miles of public snowmobiling trails within the Region by the plan design year (see Table 150).<sup>18</sup> The proposed snowmobiling trail mileage would meet 86 percent of the total anticipated need for public snowmobiling trails in the Region—241 linear miles—in the plan design year.

Development Costs: As previously indicated, virtually all of the new trail facilities proposed under the resource based alternative plan would be developed within the proposed public recreation corridor network. The cost of acquiring lands within the recreation corridors proposed under this plan alternative was presented in a previous section of this chapter. Development costs for the trail facilities proposed within the public recreation corridor are presented here.

The methodology used in estimating trail facility development costs under the resource based alternative plan is similar to that used for the accessibility based alternative plan. It was assumed that two basic types of trails would be developed through the entire proposed recreation corridor network. One type of trail would be relatively wide—approximately eight feet in width—and would accommodate vehicular activities such as biking in summer and snowmobiling in winter. The second type of trail would be relatively narrow—approximately five feet in width—and would accommodate hiking, nature study, and horseback riding activity in summer and ski touring in winter. Unit cost estimates associated with the development of narrow and wide trails are set forth in Table 139, along with estimated unit costs for the development of additional required terminus facilities. Utilizing the unit cost information contained in Table 139, then, the estimated overall development costs associated with trail facilities located within the public recreation corridor proposed under the resource based alternative plan were estimated at \$9,649,000.

Water Access Facilities: Recommendations of the resource based alternative plan for small boat access points on the rivers and major inland lakes of the Region and along the Lake Michigan shoreline in southeastern Wisconsin are the same as recommendations set forth under the accessibility based alternative plan. Thus, the resource based alternative plan proposes public provision of the following access facilities to accommodate additional fast boating activities on the major inland lakes: an access point and a parking area sufficient to accommodate 10 car and trailer spaces on Pine Lake in Waukesha County and 47 additional car and trailer parking spaces on Geneva Lake in Walworth County. The resource based alternative plan recommends public provision of a total of 25 additional boat access points on 25 major inland lakes to accommodate slow boating activities. Finally, the resource based alternative plan recommends public provision of a total of nine access points for slow boating activity along the Fox and Milwaukee Rivers in the Region. Implementation of these recommendations would require public acquisition of 50 acres of land. Of this total, 16 acres lying within the primary environmental corridor would be acquired under the open space preservation plan at an estimated cost of \$26,000. The remainder of 34 acres would be acquired at an estimated cost of \$86,400. Implementation of resource based plan proposals for water access facilities on the rivers and major inland lakes of the Region also would entail the public outlay of \$152,300 for the development of launch ramps and related parking.

In order to meet anticipated demand for boat access facilities along the Lake Michigan shoreline in southeastern Wisconsin, the resource based alternative plan, like the accessibility based alternative plan, proposes that the public sector provide additional boat launching ramps and boat mooring slips in harbors of refuge sufficient to meet the anticipated needs for such additional access facilities. Development of the additional water access facilities required along the Lake Michigan shoreline in

<sup>18</sup> The proposed public snowmobiling trails may occasionally have to depart from the public recreation corridors in order to bypass urban centers in the outlying areas of the Region.

southeastern Wisconsin through the plan design year may be expected to entail the public outlay of approximately \$19,280,000.

**Concluding Remarks—Resource Based Alternative Plan:** Implementation of the resource based alternative plan proposals would satisfy the demand for resource-oriented outdoor recreation sites and facilities within the Region to the plan design year 2000 within an overall park and recreation related open space system design which attempts to maximize recreation site quality by developing the additional required facilities within the best remaining potential outdoor recreation areas in the Region. In this effort to ensure the quality of future recreation sites, the resource based alternative plan places priority as much as possible on development of high value potential recreation areas which also meet the identified accessibility requirements. Similar to the accessibility based alternative plan, the resource based alternative plan includes three major components: existing and proposed Type I and Type II parks which would accommodate needed facilities for intensive resource-oriented outdoor recreation activities, including camping, golf, nature study, resource-oriented picnicking, downhill skiing, and beach swimming; the proposed public recreation corridors which would accommodate needed facilities for trail-oriented outdoor recreation activities, including biking, hiking, horseback riding, ski touring, and snowmobiling and which would serve to physically connect existing and proposed major parks, thereby enhancing the integrity of the resulting park and recreation related

open space system; and water access facilities, which would facilitate use of the rivers and major inland lakes of the Region and Lake Michigan for extensive water based outdoor recreation activities.

As indicated in the first section of this chapter, substantial segments of the primary environmental corridors of the Region have been recommended for public acquisition under the open space preservation plan element. The resource based alternative plan recommends the development of recreation lands both within, and outside, portions of the primary environmental corridors recommended for public acquisition under the open space preservation plan element. Thus, including land required for new Type I and Type II parks, the proposed public recreation corridor, and the additional river and inland lake access points, a total of 7,398 acres of land would be acquired by the public sector upon full implementation of the resource based alternative plan (see Table 151). Of this total, 3,062 acres lying within the primary environmental corridor would be acquired under the open space preservation plan element at an estimated cost of \$5,130,000. The balance of 4,336 acres, including 2,355 acres lying in the primary environmental corridors and 1,981 acres lying outside the primary environmental corridors, would be acquired at an estimated cost of \$9,995,400. As indicated in Table 151, the open space preservation plan element recommends public acquisition of 80,098 acres of primary environmental corridor lands not proposed for acquisition under the resource based alternative plan; the cost of acquiring these lands is

Table 151

**PUBLIC LAND ACQUISITION REQUIREMENTS AND ACQUISITION COSTS UNDER THE  
RESOURCE BASED ALTERNATIVE PLAN FOR THE YEAR 2000**

	Land in Those Portions of the Primary Environmental Corridor Which Are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under the Resource Based Alternative Plan				Total Land Acquisition			
							Acres			Acquisition Cost
	Acres	Acquisition Cost	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	
Land to be Acquired for Recreation Use Under the Resource Based Alternative Plan										
Type I and Type II Parks . . . . .	1,116	\$ 1,773,000	1,385	1,767	3,152	\$7,376,000	2,501	1,767	4,268	\$ 9,149,000
Recreation Corridor . . . . .	1,930	3,331,000	950	200	1,150	2,533,000	2,880	200	3,080	5,864,000
Inland Lake and River Access Points. . . . .	16	26,000	20	14	34	86,400	36	14	50	112,400
<b>Total</b>	<b>3,062</b>	<b>\$ 5,130,000</b>	<b>2,355</b>	<b>1,981</b>	<b>4,336</b>	<b>\$9,995,400</b>	<b>5,417</b>	<b>1,981</b>	<b>7,398</b>	<b>\$15,125,400</b>
Other Land to be Acquired Under the Open Space Preservation Plan Element . . . . .	80,098	\$83,723,000	--	--	--	--	80,098	--	80,098	\$83,723,000
<b>Total Land to be Acquired Under the Resource Based Alternative Plan and Open Space Preservation Plan Elements Combined. . . . .</b>	<b>83,160</b>	<b>\$88,853,000</b>	<b>2,355</b>	<b>1,981</b>	<b>4,336</b>	<b>\$9,995,400</b>	<b>85,515</b>	<b>1,981</b>	<b>87,496</b>	<b>\$98,848,400</b>

Source: SEWRPC.

estimated at \$83,723,000. The combined implementation of the open space preservation plan element and the resource based alternative plan would, therefore, require the public acquisition of a total of 87,496 acres of land at an estimated cost of \$98,848,400.

Implementation of the resource based alternative plan proposals also would require public outlays for the development of facilities required at existing and proposed outdoor recreation sites (see Table 152). Development costs under the resource based alternative plan include \$25,606,000 for the development of additional Type I and Type II park lands; \$9,649,000 for the development of trail facilities within the proposed public recreation corridors; \$152,300 for the development of proposed boat access facilities on the rivers and inland lakes of the Region; and \$19,280,000 for the development of proposed boat access facilities on the Lake Michigan shoreline in the Region. Total development costs associated with implementation of the resource based alternative plan are estimated at \$54,687,300. Including both land acquisition and facility development costs, the total public capital outlay associated with implementation of the resource based plan and open space preservation plan element combined is estimated at \$153,535,700.

#### Comparative Evaluation of Resource-Oriented Outdoor Recreation Component Alternative Plans

The accessibility based and resource based alternative plans represent attempts to meet existing and anticipated future resource-oriented outdoor recreation site and facility needs through basically different designs. Under the resource based alternative plan, emphasis is placed on development of the required resource-oriented outdoor recreation facilities on the best remaining potential recreation sites in the Region. Because of the disparity between the location of the best remaining natural resource amenities and the major population concentrations of the Region, implementation of the resource based alternative plan would necessarily sacrifice, somewhat, the overall accessibility of the recreation sites and facilities to the regional population. Conversely, under the accessibility based alternative plan, emphasis is placed on development of the required resource-oriented outdoor recreation facilities at sites near population centers, thereby achieving greater overall accessibility to

the regional population while somewhat sacrificing site quality. While many variations of these two alternative plans are possible, the two plans selected are believed to represent the basic choices practically available to the Region for future park and related recreation open space designs.

Selection of a recommended plan from the alternatives considered should be based, in part, upon an analysis of which alternative best meets the agreed-upon regional park and open space preservation, acquisition, and development objectives. In general, the two resource-oriented outdoor recreation component alternative plans prepared under the park and open space planning program would provide a similar quantity of recreation sites and facilities, and implementation of either alternative could be expected to meet virtually all resource-oriented outdoor recreation site and facility requirements prescribed by the recommended standards in the Region in the year 2000. It should be noted, however, that, because of their basically different designs, the resource-oriented outdoor recreation component alternative plans would meet other recommended standards—such as accessibility, site quality, and cost standards—to different degrees. A comparative evaluation of the component alternative plans against the resource-oriented outdoor recreation related standards of the park and open space planning program is presented in this section as a basis for selecting a recommended plan from the two alternatives considered. The comparison of the relative ability of the accessibility based alternative plan and the resource based alternative plan to meet the resource-oriented outdoor recreation related standards of the park and open space planning program is presented in summary form in Table 153. Comments on the Table are presented below.

**Objective 1, Part A, Standard 1:** The accessibility based alternative plan and the resource based alternative plan both propose the provision of more than 5,700 acres of Type I and Type II parkland in the Region by the year 2000, an increase of 49 percent over the 11,610 acres existing in the Region in 1973. The additional acreage proposed under either alternative plan may be expected to be sufficient to meet the recommended per capita standard—7.9 acres per thousand persons—in the Region in the year 2000.

**Objective 1, Part A, Standard 2:** The agreed-upon maximum service radius for a Type I park is 10 miles, while the maximum service radius for a Type II park is four miles in urban areas having a population of 40,000 or more and 10 miles in other areas of the Region. In order to evaluate the alternative plans against these standards, service radii of appropriate length were delineated on regional base maps around the Type I and Type II parks included in both plans. Portions of the Region lying outside the maximum service radius of a Type I or a Type II park are shown on Map 124. As shown on Map 124 and indicated in Table 153, the service radius standards for Type I and Type II parks would be largely achieved under either alternative plan.

Table 152

#### ESTIMATED DEVELOPMENT COSTS UNDER THE RESOURCE BASED ALTERNATIVE PLAN: 1975

Type of Site	Estimated Development Cost
Type I and Type II Parks. . . . .	\$25,606,000
Recreation Corridors . . . . .	\$ 9,649,000
River and Inland Lake Access Facilities . .	\$ 152,300
Lake Michigan Access Facilities. . . . .	\$19,280,000
Total	\$54,687,300

Source: SEWRPC.



Table 153

**COMPARISON OF THE RELATIVE ABILITY OF THE RESOURCE-ORIENTED OUTDOOR  
RECREATION COMPONENT ALTERNATIVE PLANS TO MEET THE RESOURCE-ORIENTED  
OUTDOOR RECREATION RELATED STANDARDS OF THE PARK AND OPEN SPACE STUDY**

Objective	Resource Based Plan	Accessibility Based Plan
<b>Type I and Type II Park Standards (Objective 1, Part A)</b>		
Acreage Requirement: 7.9 acres per 1,000 population . . . . .	7.97 acres per 1,000	7.97 acres per 1,000
Service Radius:		
Type I Parks: 10 miles. . . . .	2.18 million persons, or 99.3 percent of the forecast year 2000 regional population, and 2,596 square miles, or 96.6 percent of the total area of the Region, located within 10 miles of a Type I park	2.19 million persons, or 99.9 percent of the forecast year 2000 regional population, and 2,676 square miles, or 99.5 percent of the total area of the Region, located within 10 miles of a Type I park
Type II parks: Rural-10 miles; Urban-4 miles. . . . .	2.13 million persons, or 97.0 percent of the forecast year 2000 regional population, and 2,672 square miles, or 99.3 percent of the total area of the Region, located within the specified distance	2.18 million persons, or 99.4 percent of the forecast year 2000 regional population, and 2,683 square miles, or 99.8 percent of the total area of the Region, located within the specified distance
Locate Parks Within Primary Environmental Corridors . . . . .	53 of 67 parks, or 79 percent, located in primary environmental corridors	52 of 70 parks, or 74 percent, located in primary environmental corridors
<b>Public Recreation Corridor Standards (Objective 1, Part B)</b>		
Mileage Requirements: 0.16 linear mile per 1,000 population . . . . .	0.165 linear mile per 1,000	0.173 linear mile per 1,000
Population Served . . . . .	1.49 million persons, or 67.7 percent of the forecast year 2000 regional population, served	1.76 million persons, or 80.1 percent of the forecast year 2000 regional population, served
Maximize Use of:		
Primary Environmental Corridors . . .	93 percent in primary environmental corridors	94 percent in primary environmental corridors
Existing Publicly Owned Land . . . . .	34 percent currently in public ownership Met	34 percent currently in public ownership Met
Minimum Length: 15 miles . . . . .		
Locate Recreation Corridors in Areas Having Natural Resource Amenities of Regional Significance . . . . .	82 percent in resource areas of regional significance	59 percent in resource areas of regional significance
Physically Connect Existing and Proposed Type I and Type II Parks . .	47 of 67 parks, or 70 percent located on recreation corridor	45 of 70 parks, or 64 percent located on recreation corridor
<b>Intensive Resource-Oriented Recreation Facility Standards (Objective 3)</b>		
Per Capita Facility Requirements		
Campsites: 0.35 campsites per 1,000 population. . . . .	0.35 campsites per 1,000	0.35 campsite per 1,000
Golf Courses: 0.013 golf course per 1,000 population. . . . .	0.013 courses per 1,000	0.013 courses per 1,000
Picnic Tables: 3.80 picnic tables per 1,000 population . . . . .	3.83 tables per 1,000	3.87 tables per 1,000
Ski Hills: 0.01 developed acre per 1,000 population. . . . .	0.01 acres per 1,000	0.01 acre per 1,000
Swimming Beaches:		
Inland—6 linear feet per 1,000 population . . . . .	6 linear feet per 1,000	6 linear feet per 1,000
Lake Michigan—16 linear feet per 1,000 population. . . . .	16 linear feet per 1,000	16 linear feet per 1,000
Population Served		
Campsites . . . . .	1.68 million persons, or 76.4 percent of the forecast year 2000 regional population, served	1.74 million persons, or 79.4 percent of the forecast year 2000 regional population, served
Golf Courses . . . . .	1.63 million persons, or 74.5 percent of the forecast year 2000 regional population, served	1.79 million persons, or 81.4 percent of the forecast year 2000 regional population, served

Table 153 (continued)

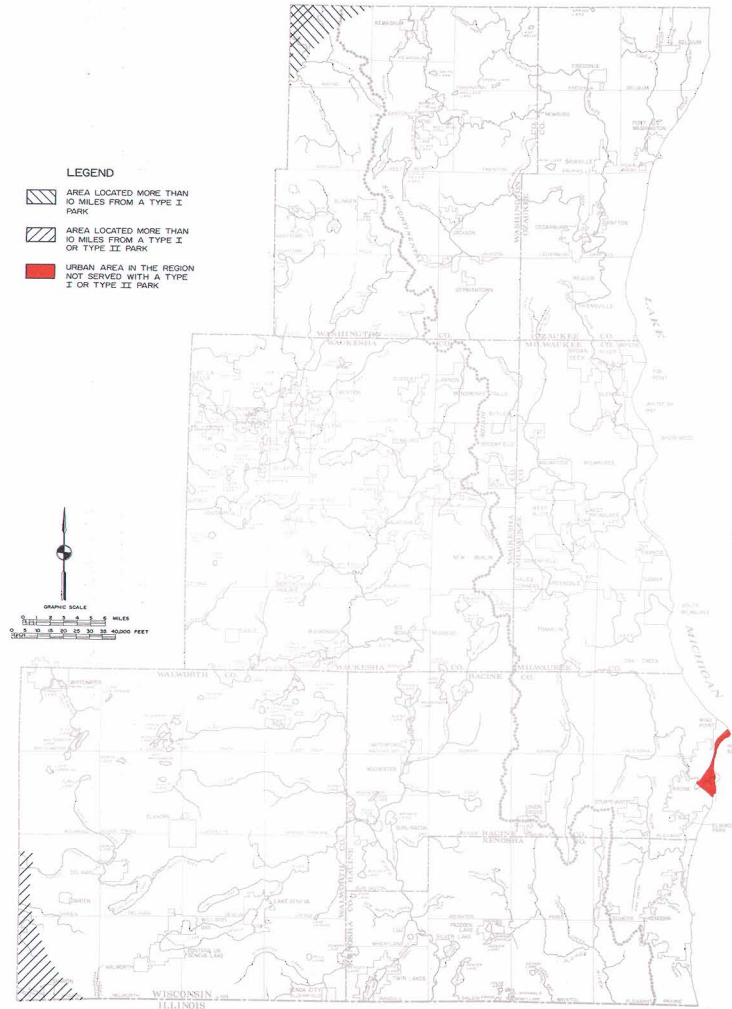
Objective	Resource Based Plan	Accessibility Based Plan
Picnic Tables . . . . .	2.03 million persons, or 92.6 percent of the forecast year 2000 regional population, served	2.05 million persons, or 93.4 percent of the forecast year 2000 regional population, served
Ski Hills . . . . .	2.12 million persons, or 96.6 percent of the forecast year 2000 regional population, served	2.12 million persons, or 96.6 percent of the forecast year 2000 regional population, served
Swimming Beaches . . . . .	2.16 million persons, or 98.6 percent of the forecast year 2000 regional population, served	2.17 million persons, or 98.9 percent of the forecast year 2000 regional population, served
Facility Design Standards . . . . .	Could be met	Could be met
Natural Resource Amenity Requirements . . . . .	16 of 17 new parks, or 94 percent, to be developed at high value potential park sites	13 of 19 new parks, or 68 percent, to be developed at high value potential park sites
Extensive Land Based Resource-Oriented Facility Standards (Objective 4)		
Per Capita Facility Requirements:		
Bike Trails: 0.16 linear miles per 1,000 population . . . . .	0.17 linear miles per 1,000	0.17 linear miles per 1,000
Hiking Trails: 0.16 linear miles per 1,000 population . . . . .	0.17 linear miles per 1,000	0.17 linear miles per 1,000
Horseback Riding Trails: 0.05 linear miles per 1,000 population . . . . .	0.05 linear miles per 1,000	0.05 linear miles per 1,000
Nature Study:		
Trails—0.02 linear miles per 1,000 population . . . . .	0.02 linear miles per 1,000	0.02 linear miles per 1,000
Center—one center in each county . . . . .	Met	Met
Ski Touring Trails: 0.02 linear miles per 1,000 population . . . . .	0.02 linear miles per 1,000	0.02 linear miles per 1,000
Snowmobile Trails: 0.11 linear miles per 1,000 population . . . . .	0.09 linear miles per 1,000	0.06 linear miles per 1,000
Facility Design Standards . . . . .	Could be met	Could be met
Water Access Facility Standards (Objective 5)		
Major Inland Lakes:		
Minimum Number of Access Points <sup>a</sup> . . . . .	Met	Met
Optimum Number of Parking Spaces <sup>a</sup> . . . . .	Met	Met
River Access: maximum distance between access points . . . . .	Met	Met
Lake Michigan:		
Per Capita Standards—boat launch ramps: 0.025 ramps per 1,000 population . . . . .	Could be met	Could be met
Boat Slips: 1.3 slips per 1,000 population . . . . .	Could be met	Could be met
Maximum Distance Between Access Points: 15 miles . . . . .	Could be met	Could be met
Facility Design Standards . . . . .	Could be met	Could be met
Cost Standard (Objective 7)		
Minimize Expenditures Required to Meet Park Demands and Open Space Needs . . . . .	\$248.3 million	\$249.7 million

<sup>a</sup> Formulas indicating the minimum number of access points and optimum number of parking spaces on the major inland lakes are presented in Chapter XI of this report.

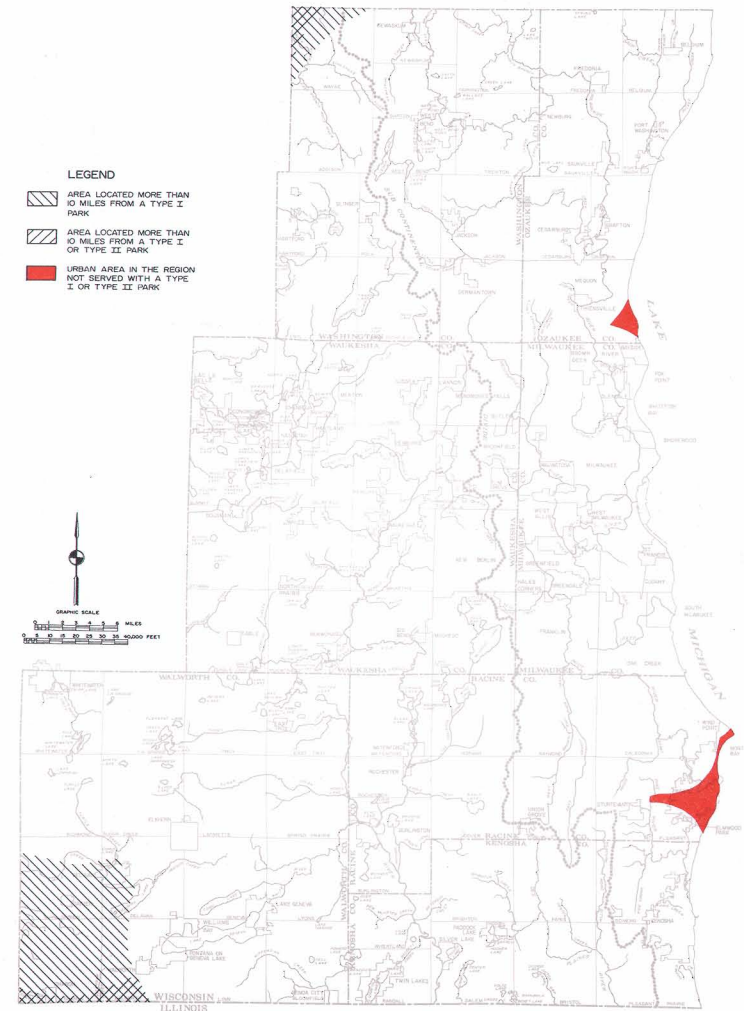
Source: SEWRPC.

# AREAS IN THE REGION NOT ADEQUATELY SERVED BY TYPE I AND TYPE II PARKS UNDER THE RESOURCE-ORIENTED OUTDOOR RECREATION COMPONENT ALTERNATIVE PLANS: 2000

Accessibility Based Alternative Plan



Resource Based Alternative Plan



Application of the adopted service radius standards for Type I and Type II parks indicated that a relatively small portion of northwestern Washington County, a portion of the City of Racine, and southwestern Walworth County would not be adequately served by Type I or Type II parks under either the resource based or accessibility based alternative plans. Analysis of the service radius for Type I parks indicated that over 2.18 million persons, or more than 99 percent of the forecast year 2000 regional population, would be served under both the resource based and accessibility based plans. For Type II parks the resource based alternative plan would serve 2.13 million persons, or about 97 percent of the year 2000 population, while the accessibility based alternative plan would serve 2.18 million, or over 99 percent of the year 2000 regional population.

Source: SEWRPC.

Objective 1, Part A, Standard 3: The development of parks within the primary environmental corridors of the Region is highly desirable since such development serves both to satisfy recreational demands in an appropriate setting and to protect and preserve valuable natural resource amenities. The proportion of all Type I and Type II parks which are situated in primary environmental corridors is relatively high under both the accessibility based alternative plan and the resource based alternative plan—74 percent and 79 percent, respectively. By focusing only on the new parks proposed under the alternative plans, however, it becomes apparent that the resource based alternative plan better meets this standard. In this regard, 14 parks, or 86 percent of the 17 new Type I and Type II parks proposed under the resource based alternative plan, would be situated in primary environmental corridors. In comparison, 13 parks, or 68 percent of the 19 new Type I and Type II parks proposed under the accessibility based alternative plan, would be located within the primary environmental corridors.

Objective 1, Part B, Standard 1: The resource based alternative plan proposes the development of 361 linear miles of public recreation corridors in the Region by the year 2000, while the accessibility based alternative plan proposes a 380 linear mile recreation corridor system. Implementation of either alternative plan would satisfy the adopted per capita linear mileage standard—0.16 linear mile per thousand persons—in the Region in the plan design year.

Objective 1, Part B, Standard 2: While the recreation corridor networks proposed under both alternative plans would be of sufficient length to meet the anticipated overall demand for most trail facilities in the Region in the year 2000, not all residents of the Region would have ready access to the proposed recreation corridors. An analysis of the service areas of the recreation corridor systems proposed under the alternative plans was conducted in order to identify portions of the Region which would not be adequately served.

The extent of the service area of a segment of the recreation corridor depends on the length of the segment as well as on the population density in the surrounding area. The service area of an individual segment of the recreation corridor may be identified by first determining the total population which that segment is capable of serving<sup>19</sup> and then by delineating on a regional base map an area on either side of the recreation corridor segment containing an equivalent population. It should be noted that the recommended maximum travel distance to a recreation corridor is five miles in an urban area and 10 miles in

---

<sup>19</sup> As indicated in Table 152, the adopted per capita standard for public recreation corridors is 0.16 linear mile per thousand persons, or one linear mile for each 6,250 persons. The number of persons which a given recreation corridor segment is capable of serving, therefore, may be approximated by multiplying the number of linear miles in that segment by 6,250.

a rural area. Therefore, the service areas delineated in the manner described above should never extend more than five miles from the recreation corridor in an urban area and 10 miles from the recreation corridor in a rural area.

The service areas of the public recreation corridor networks proposed under both alternative plans were identified in the context of the planned 2000 population distribution in the Region. Under the accessibility based alternative plan, 1.76 million persons, or 80 percent of the forecast year 2000 population of the Region, would be served by the recreation corridors. Most of the 0.43 million persons not adequately served by the public recreation corridor network proposed under the accessibility based alternative plan would be residents of the densely populated central portion of Milwaukee County. It should also be noted, however, that residents of the northeasternmost and southwesternmost portions of the Region would not be adequately served by the public recreation corridor network proposed under the accessibility based alternative plan (see Map 125). Under the resource based alternative plan, 1.49 million persons, or 68 percent of the forecast year 2000 population of the Region, would be served by the public recreation corridor system. Under this alternative plan, most of the 0.70 million persons not properly served by the proposed recreation corridor network would be residents of the central portion of Milwaukee County and the eastern portions of Kenosha, Racine, and Waukesha Counties. Thus, the accessibility based alternative plan better meets this standard.

Objective 1, Part B, Standard 3a: Recreation corridors should be located in primary environmental corridors as much as possible to provide an appropriate setting for trail-oriented facilities and to achieve important open space preservation objectives. Under the resource based alternative plan, 93 percent of the proposed recreation corridor network would be situated in primary environmental corridors; under the accessibility based alternative plan, 94 percent of the proposed recreation corridor system would be situated in primary environmental corridors. The alternative plans may, therefore, be considered to meet this standard equally well.

Objective 1, Part B, Standard 3b: Recreation corridors should, to the maximum extent possible, traverse open space lands already in public ownership, thereby minimizing recreation corridor land acquisition cost requirements. Under each alternative resource-oriented recreation plan, 34 percent of the proposed recreation corridor network would traverse existing public open space lands.

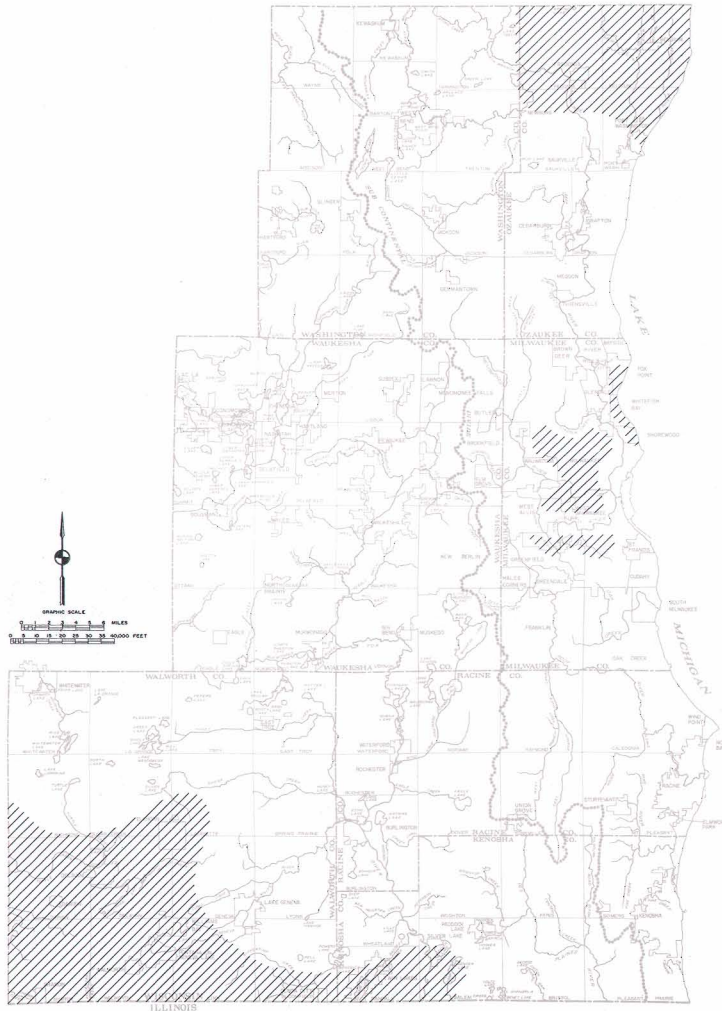
Objective 1, Part B, Standard 4: The agreed-upon minimum length of individual recreation corridor segments within the overall recreation corridor network is 15 miles. This standard would be met by adoption and implementation of either alternative resource-oriented recreation plan.

Objective 1, Part B, Standard 5: The development of recreation corridors in high value natural resource areas would increase the enjoyment of participation in trail

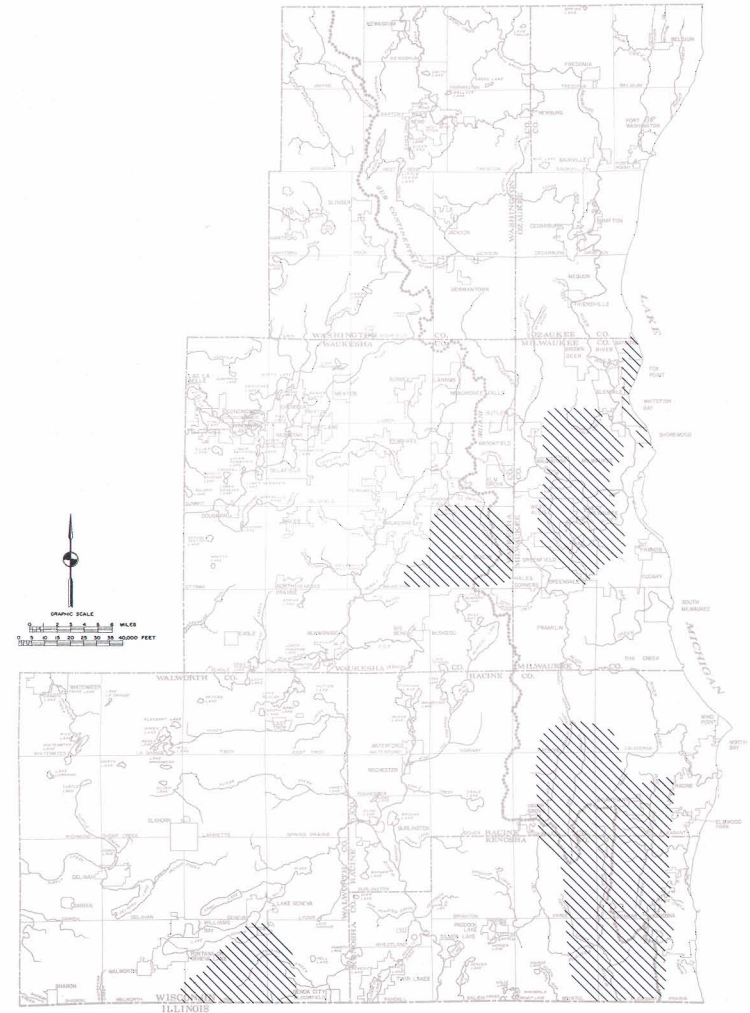


# AREAS IN THE REGION NOT ADEQUATELY SERVED BY THE PUBLIC RECREATION CORRIDOR NETWORK PROPOSED UNDER THE RESOURCE-ORIENTED OUTDOOR RECREATION COMPONENT ALTERNATIVE PLANS: 2000

Accessibility Based Alternative Plan



Resource Based Alternative Plan



Areas of the Region not adequately served by the public recreation corridor network under the accessibility based alternative plan include all of northern Ozaukee County, the central portion of Milwaukee County, all of southwestern Walworth County, and a portion of southwestern Kenosha County. Areas not adequately served under the resource based alternative plan include portions of central Milwaukee County, an area corresponding to the City of New Berlin in Waukesha County, portions of eastern Racine and Kenosha Counties, and a small portion of southeastern Walworth County. The recreation corridor network proposed under the accessibility based alternative plan would serve a greater percentage of the forecast year 2000 regional population, 80 percent, compared to 68 percent under the resource based alternative plan. The recreation corridor network proposed under the resource based alternative plan, however, would place 82 percent of the proposed corridor network in areas of the Region identified as having regional significance while only 59 percent of the corridor network under the accessibility based alternative plan would be located in such areas. In addition, under the resource based alternative plan the recreation corridor network would connect 47 of the 67 existing and proposed Type I and Type II parks, or 70 percent of such parks, while only 64 percent of such parks would be connected by the corridor network proposed under the accessibility based alternative plan.

Source: SEWRPC.

activities within those corridors. Under the resource based alternative plan, 82 percent of the recreation corridor network would be situated in areas identified in the Commission's potential park sites inventory as possessing natural resource amenities of regional significance, including the Kettle Moraine, the Lake Michigan shoreline, and the Milwaukee River, Fox River, Root River, Sugar Creek, and Turtle Creek corridors. In comparison, only 59 percent of the recreation corridor proposed under the accessibility based alternative plan would be located in resource areas of regional significance. The resource based alternative plan, therefore, better meets this standard.

**Objective 1, Part B, Standard 6:** A public recreation corridor should serve to physically connect major parks, thereby enhancing the integrity of the resulting park and recreation related open space system. Under the resource based alternative plan, 47 Type I and Type II parks, or 70 percent of the 67 Type I and Type II parks included in this alternative plan, would be located within two miles of the proposed public recreation corridor. Under the accessibility based alternative plan, 45 Type I and Type II parks, or 64 percent of the 70 Type I and Type II parks included in this alternative plan, would be located on, or close to, the proposed public recreation corridor. Therefore, the resource based alternative plan would somewhat better meet this standard.

**Objective 3, Standard 1:** The resource based alternative plan and the accessibility based alternative plan recommend the provision of a similar quantity of public intensive resource-oriented outdoor recreation facilities. Specifically, both alternative plans recommend the development of the following facilities: 219 additional public campsites, an increase of 40 percent over the existing supply of 552 public campsites; the equivalent of 11 additional public 18-hole regulation golf courses, an increase of 61 percent over the existing supply of 18 public 18-hole regulation golf courses; 2,193 additional linear feet of public swimming beach on the inland lakes of the Region, an increase of 21 percent over the existing supply of 10,335 linear feet of public swimming beach on the inland lakes; 6,600 additional linear feet of public swimming beach along the Lake Michigan shoreline, an increase of 23 percent over the existing supply of 28,830 linear feet of Lake Michigan beach; five additional acres of developed slope for downhill skiing, an increase of 21 percent over the existing supply of 24 acres of slope for downhill skiing; six additional public nature study centers, three times the existing supply of two public nature study centers; and more than 2,000 picnic tables for resource-oriented picnicking activity at Type I and Type II parks, an increase of more than 30 percent over the existing supply of approximately 6,000 picnic tables. As indicated in Table 137, implementation of either resource-oriented outdoor recreation component alternative plan may be expected to meet the adopted per capita standards for intensive resource-oriented outdoor recreation facilities in the Region in the plan design year.

**Objective 3, Standard 2:** Although the quantity of public intensive resource-oriented outdoor recreation facilities

included under each alternative plan would be sufficient to meet anticipated overall demand for such public facilities in the Region in the year 2000, not all residents of the Region would have ready access to these facilities. An analysis of the service areas of the intensive resource-oriented facilities included in the alternative plans was undertaken in order to identify portions of the Region which would not be properly served with such facilities.

The methodology utilized in determining the service areas of recreational facilities under the park and open space planning program has been set forth in Chapter XII. Basically, the service area for a given facility, such as a campground or swimming beach, was identified by first determining the total population which the facility is capable of serving<sup>20</sup> and then delineating on an appropriate base map a circular service area around that facility containing an equivalent population. The service area around a specific type of facility, however, never extended beyond the maximum service radius established for that facility.

The service areas of the intensive resource-oriented facilities included in both alternative plans were identified in the context of the planned year 2000 population distribution in the Region. As indicated in Table 153, the accessibility based alternative plan would serve a slightly higher proportion of the year 2000 regional population with facilities for camping, golf, picnicking, and beach swimming than the resource based alternative plan. The largest difference in this regard occurs with respect to golf, with the accessibility based alternative plan serving 81 percent of the forecast year 2000 regional population, compared to 74 percent under the resource based alternative plan. Owing to the higher proportion of the regional population served under the accessibility based alternative plan compared to the resource based alternative plan, it may be concluded that the accessibility based plan better meets the "serviceability" standards. It should be noted that recommendations for public downhill ski facilities are identical under both plan alternatives, so that the proportion of the population served with ski facilities is the same under each alternative.

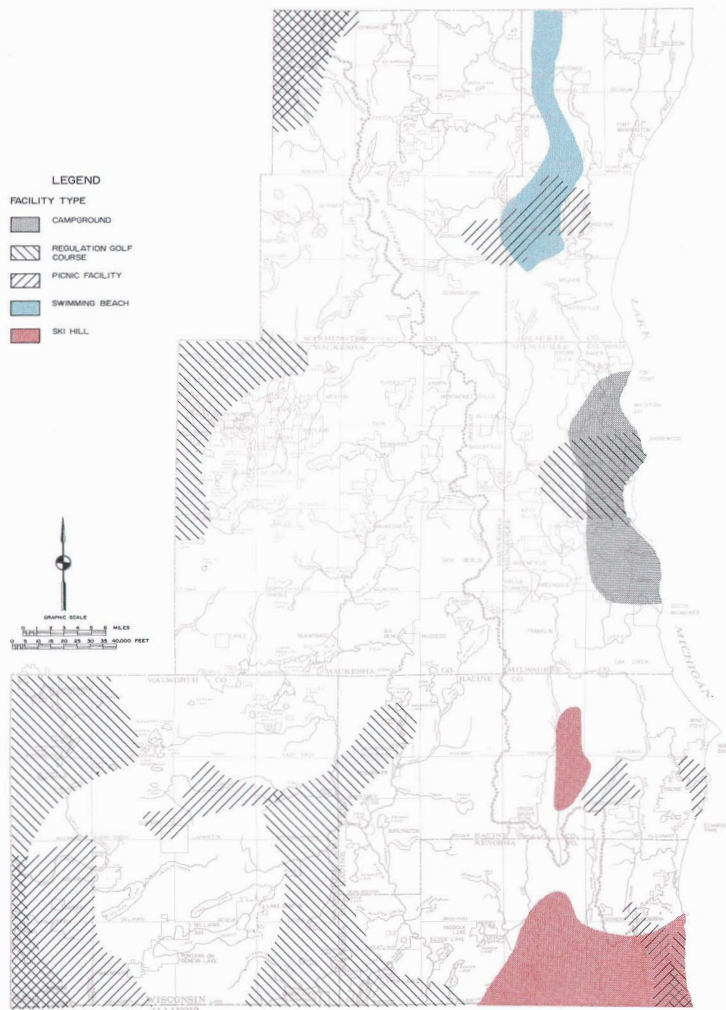
The areas of the Region which would not be served with intensive resource oriented outdoor recreation facilities under the accessibility based alternative plan and the resource based alternative plan are shown on Maps 126 and 127, respectively. Under either alternative plan, appropriate facilities could be provided to meet the

---

<sup>20</sup> As indicated in Chapter XII, the number of persons which a facility complex is capable of serving may be calculated by multiplying the number of "units" of the facility by an appropriate factor. For example, the adopted per capita standard for public campsites is 0.35 campsite per thousand persons, or one campsite for each 2,857 persons. The number of persons which a given campground is capable of serving, therefore, may be approximated by multiplying the number of campsites at the campground by 2,857.



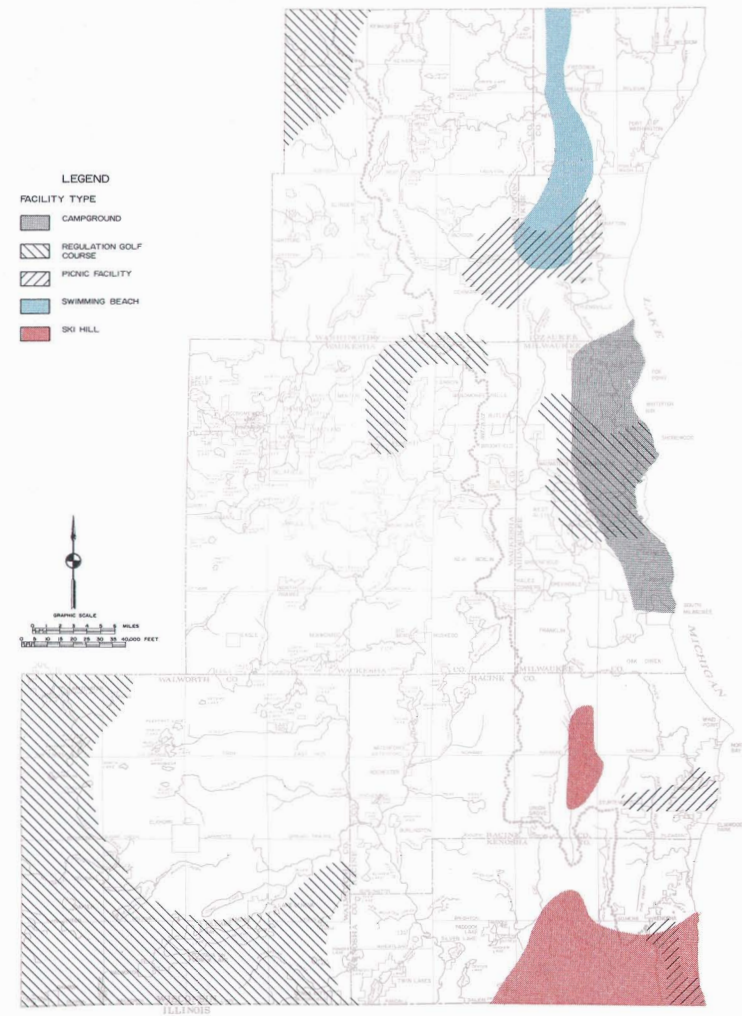
# AREAS IN THE REGION NOT ADEQUATELY SERVED BY INTENSIVE RESOURCE-ORIENTED FACILITIES PROPOSED UNDER THE ACCESSIBILITY BASED ALTERNATIVE PLAN: 2000



Application of adopted service radius standards for intensive resource-oriented facilities under the accessibility based alternative plan indicated that the eastern portion of Milwaukee County would not be adequately served by campsites; the northwestern portions of Washington and Waukesha Counties, the eastern and western portion of Walworth County, and the western portion of Racine and Kenosha Counties, and the central portion of Milwaukee County would not be adequately served by golf courses; the western portion of Ozaukee County would not be adequately served by swimming beaches; the southern and eastern portion of Racine and Kenosha Counties would not be adequately served by ski hills; and south central Ozaukee County, portions of eastern Racine and Kenosha Counties, northwestern Washington County, and central and southwestern Walworth County would not be adequately served by resource-oriented picnicking facilities. Thirteen of the 19 new parks proposed under the accessibility based alternative plan, or 68 percent, would be developed as high value potential park sites.

Source: SEWRPC.

# AREAS IN THE REGION NOT ADEQUATELY SERVED BY INTENSIVE RESOURCE-ORIENTED FACILITIES PROPOSED UNDER THE RESOURCE BASED ALTERNATIVE PLAN: 2000



Application of the adopted service radius standards for intensive resource-oriented facilities proposed under the resource based alternative plan indicated that eastern Milwaukee County would not be adequately served by campsites; northwestern Washington County, north central Waukesha County, the central part of Milwaukee County, and western and southern portions of Walworth County would not be adequately served by golf courses; the western portion of Ozaukee County would not be adequately served by swimming beaches; central Racine and southeastern Kenosha County would not be adequately served by ski hills; and southern Ozaukee County and southeastern portions of Racine and Kenosha Counties would not be adequately served by resource-oriented picnicking facilities. Sixteen of the 17 proposed new Type I and Type II parks, or 94 percent, would be developed at high value potential park sites in the Region under the resource based alternative plan.

Source: SEWRPC.

identified needs in the unserved areas. It should be recognized, however, that, since the per capita standards for intensive resource-oriented facilities are met at a regional level under both alternative plans, such additional efforts would result in an oversupply of recreational facilities for the Region overall.

Objective 3, Standard 3: Facility design standards prescribing facility area requirements as well as support facilities and backup lands could be met only through detailed park design activities primarily at the county and local level.

Objective 3, Standard 4: Each intensive resource-oriented activity relies on a combination of natural resource amenities and topographical features either for the very existence of the activity, as in the case of downhill skiing, or to enhance the enjoyment of participation in the activity, as in the case of picnicking and camping. An important consideration in evaluating the resource-oriented outdoor recreation component alternative plans is the extent to which each plan would meet the natural resource requirements of the planned facilities. This is largely reflected in the value ratings of the potential park sites which would be developed under the alternative plans to accommodate many of the additional intensive resource-oriented outdoor recreation facilities required in the Region by the plan design year. It should be recalled that, under the potential park sites inventory, a determination was made on the development potential of each site for specific recreational facilities; the value rating assigned to each site reflects its suitability for the specific development possibility recommended. In general, sites rated as high value are those areas which possess the natural resource amenities and topographical features required for the types of facilities recommended. In comparison, sites rated as medium or low value have less significant natural resource amenities or a smaller variety of resources and, therefore, less favorable development potential.

As indicated in Table 153, under the resource based alternative plan, 16 Type I and Type II parks, or 94 percent of the 17 new Type I and Type II parks proposed under that plan alternative, would be developed at high value potential park sites. In comparison, only 13 Type I and Type II parks, or 68 percent of the 19 new Type I and Type II parks proposed under the accessibility based alternative plan, would be developed at high value potential park sites. In view of the higher proportion of high value potential park sites recommended for development under the resource based alternative plan, it may be concluded that this alternative plan better meets this standard.

Objective 4, Standard 1: Implementation of the trail facility development recommendations for hiking, biking, horseback riding, ski touring, and nature study under either resource-oriented outdoor recreation component alternative plan may be expected to meet the per capita linear mileage standard for these trail facilities in the Region in the year 2000 (see Table 153). Both plans,

however, would fail to meet the adopted per capita standard for snowmobiling trails—0.11 linear mile per thousand persons. Thus, the resource based alternative plan would provide 207 linear miles of snowmobiling trail, or 0.09 linear mile per thousand persons in the Region in the year 2000. The accessibility based alternative plan would provide 123 linear miles of snowmobiling trails, or 0.06 linear mile per thousand persons in the Region in the plan design year. The inability of the alternative plans to meet the adopted snowmobiling standard is due to the fact that, under both alternative plans, the proposed recreation corridors, which would serve as locations for all trail facilities, traverse large segments of primary environmental corridor lands which are situated within existing urban areas or areas anticipated to be in urban use by the year 2000 and which, therefore, should not be developed for snowmobiling activity. The recreation corridor system proposed under the accessibility based alternative plan would traverse more urban lands than the recreation corridor system of the resource based alternative plan and, therefore, it would accommodate a shorter snowmobiling network.

Objective 4, Standard 2: Facility design standards prescribing facility area requirements as well as support facility and backup lands for the various trail facilities could be met only through detailed design activities primarily at the county and local level.

Objective 5, Standard 1: Recommendations for small boat water access facilities, which accommodate extensive water based recreation activities on the major inland lakes in the Region, the navigable rivers of the Region, and Lake Michigan, are identical under the resource-oriented outdoor recreation component alternative plans. For the major inland lakes of the Region, the alternative plan recommendations include the development of additional access facilities at two lakes to accommodate fast boating activities and the development of boat access points at an additional 25 lakes to accommodate slow boating activities. The adopted inland lake access standards would be met under either alternative plan.

Objective 5, Standard 2: Both resource-oriented outdoor recreation component alternative plans recommend the development of a total of nine additional access points to be located along the main stems of the Fox and Milwaukee Rivers, thereby meeting the adopted standard for river access facilities.

Objective 5, Standard 3: Both alternative plans recommend the provision of 19 additional launch ramps and 1,310 additional boat slips and at least two additional small boat harbors of refuge thereby meeting the adopted standards with respect to Lake Michigan access facilities.

Concluding Remarks—Comparison of the Resource-Oriented Outdoor Recreation Component Alternative Plans: The final selection of a recommended resource-oriented outdoor recreation plan component from the two alternatives is predicated on the total ability of each of the alternative plans to meet the specific resource-



oriented outdoor recreation related standards of the park and open space study. Since some of the standards pertain to similar functional areas, these standards have been grouped into five major categories in order to facilitate total plan evaluation (see Table 154). The alternative plans were then ranked according to their ability to meet the respective groups of standards.

**Per Capita Recreation Site and Facility Standards:** The resource based alternative plan and the accessibility based alternative plan meet the recommended per capita resource-oriented recreation site and facility standards equally well. Implementation of either alternative plan may be expected to meet virtually all the per capita standards for recreation sites—including Type I and Type II parks and public recreation corridors—and resource-oriented facilities—including intensive facilities such as campsites and golf courses, extensive facilities such as hiking and biking trails, and water access facilities—in the Region through the plan design year.

**Serviceability Standards:** The accessibility based alternative plan would meet the recommended “serviceability” standards better than the resource based alternative plan. In this regard, the recreation corridor network proposed under the accessibility based alternative plan may be expected to serve a significantly higher proportion of the year 2000 regional population than would the recreation corridor network proposed under the resource based alternative plan. Furthermore, the accessibility based alternative plan may be expected to serve a slightly higher proportion of the year 2000 regional population with facilities for camping, golf, picnicking, and beach swimming than would the resource based alternative plan.

**Site Quality Standards:** The resource based alternative plan would better meet the recommended site quality standards than the accessibility based plan. In this regard, the recreation corridors proposed under the resource based alternative plan would traverse areas having natural resource amenities of regional significance to a greater extent than would the recreation corridors proposed under the accessibility based alternative plan. In addition, the superiority of the resource based alternative plan in terms of this standard is reflected in the larger proportion of high value potential park sites which would be developed as new parks under the resource based alternative plan in comparison to the accessibility based alternative plan.

**Cost Minimization Standard:** Public outlays required for implementation of the resource-oriented outdoor recreation component alternative plans—including amounts required for the implementation of the open space preservation plan element—are of the same order of magnitude and, therefore, the alternative plans may be considered to meet the cost minimization standard equally well.

**Other Miscellaneous Standards:** In addition to differences in the major groups of standards noted above, the alternative plans would differ in terms of two other standards—namely, the extent to which the proposed recreation corridor would connect Type I and Type II parks and the extent to which the Type I and Type II parks would be located within the primary environmental corridors of the Region. The resource based alternative plan would meet both of these standards better than the accessibility based alternative plan.

#### Concluding Remarks

As previously indicated in this chapter, the disparity that exists within the Region between the location of potential park sites possessing regionally significant high value natural resource amenities and the location of the major population centers of the Region presents a difficult problem in the design of a regional park and open space system plan for southeastern Wisconsin. The developed accessibility based alternative plan and the resource based alternative plan differ primarily in the manner in which these two plans approach this disparity. It should be noted, however, that the concepts embodied in the two alternative plans are not mutually exclusive and, in the design of each alternative plan, an attempt was made to both utilize good potential park sites and provide good accessibility to the population served.

Evaluation of these two alternative plans with respect to the established regional park and open space preservation, acquisition, and development objectives and standards indicates that the two plans do not differ significantly in ability to meet the existing and probable future demand in terms of number, size, and type of parks included and in terms of capital cost.

The resource based alternative plan would, however, provide a higher quality of recreational experience than the accessibility based alternative plan because it incorporates the highest quality potential park sites and does

Table 154

#### RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT SELECTION CRITERIA

Type of Standard	Resource Based Alternative Plan Rank <sup>a</sup>	Accessibility Based Alternative Plan Rank <sup>a</sup>
Overall per Capita Site and Facility Standards . . . . .	1	1
Serviceability Standards . . . . .	1	2
Site Quality Standards . . . . .	2	1
Cost Minimization Standard . . .	1	1
Other Miscellaneous Standards		
Recreation Corridor		
Should Link Type I and Type II Parks. . . . .	2	1
Locate Type I and Type II Parks Within Primary Environmental Corridors . . .	2	1

<sup>a</sup> A numerical rank of two indicates the alternative plan which better meets the standard. When both plans meet the standard equally well, a numerical rank of one has been assigned to both plans.

Source: SEWRPC.

so within an appropriate natural setting, thus enhancing the overall quality of the recreational experience involved. This alternative plan, moreover, also would contribute significantly to the protection and wise use of valuable natural resource amenities within the Region. Thus, in addition to satisfying recreation needs within an appropriate setting, the resource based alternative plan would serve to implement open space preservation objectives as well. Accordingly, it is recommended that the resource based alternative plan be selected as the resource-oriented outdoor recreation plan component for incorporation into the recommended park and open space system plan for the Region.

#### Urban Outdoor Recreation Plan Component

The analysis of outdoor recreation needs, described in Chapter XII of this report, indicated that there is a substantial need for additional public general use outdoor recreation sites—including Type III and Type IV parks and Type IV school recreation sites—as well as public nonresource-oriented outdoor recreation facilities—including baseball diamonds, basketball courts, ice skating rinks, playfields, playgrounds, softball diamonds, and tennis courts—within existing urban areas of the Region as well as within areas anticipated to be in urban use by the year 2000. In comparison to the resource-oriented outdoor recreation sites and facilities, these nonresource-oriented outdoor recreation sites and facilities rely less heavily on natural resource amenities; generally have greater need in urban rather than rural areas; and have relatively small service radii. For these reasons, nonresource-oriented recreation sites and facilities, as a practical matter, can be readily provided only in areas of the Region having a significant population concentration.

This section presents an urban outdoor recreation plan component for the provision of the nonresource-oriented recreation sites and facilities required within urban areas of the Region through the plan design year. As previously indicated in this chapter, this urban outdoor recreation plan component and one of the resource-oriented outdoor recreation component alternative plans, along with the two plan components of the open space preservation plan element, are proposed to be adopted together as the regional park and open space system plan. The urban outdoor recreation plan component presented herein consists of recommendations concerning the quantity of urban outdoor recreation sites and facilities which should be provided to meet existing and probable future recreation needs within the urban areas shown on Map 128. In the formulation of these recommendations, consideration was given to the availability of open space lands suitable for park development within each urban area. It should be recognized, however, that the recommendations set forth herein relate to the quantity and general location of needed sites and facilities. The precise location and design of the recommended urban outdoor recreation sites are matters which can only be properly addressed at the county and local level of planning.

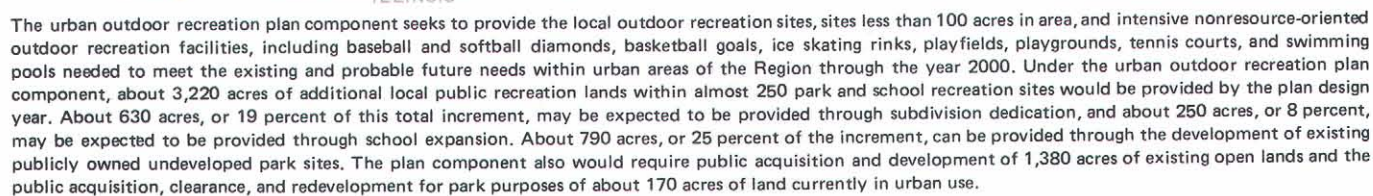
#### Methodology

The primary purpose of the urban outdoor recreation plan component is to help guide public sector decisionmaking

related to the provision of the additional nonresource-oriented recreation sites and facilities which will be needed within urban areas of the Region by the plan design year 2000. As indicated in Chapter XII, these site and facility requirements have been determined, in part, on the basis of application of the adopted per capita urban outdoor recreation site and facility standards to the forecast year 2000 population of the urban areas shown on Map 128. In addition, portions of the urban areas not appropriately served by local parks have been identified by application of the adopted accessibility standards for Type III and Type IV general use sites. It should be recognized that, in some situations, per capita standards are met, but a need for additional sites still exists because of the inaccessibility of the existing recreation areas while, in other situations, accessibility standards are met but a need for additional acreage still exists.

In general, under the urban outdoor recreation plan component, it is recommended that the identified urban outdoor recreation needs within each urban area, as set forth in Chapter XII, be met through public provision of the required urban recreation sites and facilities. This general recommendation can be implemented in various ways within most urban areas, including through dedication as a part of the urban land subdivision process, the development of additional school related recreation sites, the development of existing publicly owned undeveloped park sites, or the public purchase and development of other open space lands. As indicated in Chapter XII, however, satisfaction of all the identified urban site and facility requirements will be difficult within certain urban areas—particularly in densely populated urban areas in the central part of Milwaukee County—due to the lack of open space lands. Satisfaction of the identified needs within such areas could be accomplished only through a substantial amount of urban demolition, clearance, and redevelopment. Because of the great economic cost of such redevelopment and the attendant disruption of urban activities, it is recommended that the redevelopment for park purposes of land currently in urban use be restricted to amounts required to meet the adopted accessibility standards. This approach seeks to ensure that each resident of an urban area would at least have ready access to a public outdoor recreation site; however, the quantity of outdoor recreation sites and facilities provided under such an approach may be less than that required to fully meet the recreation demand within a densely populated urban area.

Recommendations of the park and open space planning program which address identified site and facility needs were formulated within the context of the types of open space land available within each urban area. In this regard, it is recommended that, within each urban area, any additional required recreation land be provided by dedication during land subdivision and normal school expansion, and through the development of existing publicly owned undeveloped park sites to the maximum extent possible. Where such possibilities do not exist, it is recommended that the public sector acquire suitable existing open land for local park development. In the



422

absence of suitable open land, however, it is recommended that land currently in urban use be acquired, cleared, and redeveloped as urban parkland. As indicated above, however, it is recommended that such redevelopment activity be undertaken only to the extent that is necessary to meet the recommended accessibility standards. Within this general framework, specific recommendations were formulated for each urban area as follows:

**Type III Park Accessibility Standards:** Type III parks are parks of 25 to 99 acres in areas which primarily provide opportunities for participation in nonresource-oriented outdoor recreation activities—such as baseball, basketball, ice skating, softball, and tennis. As indicated in Chapter XI, a Type III park should be provided within two miles of each resident of urban areas of the Region that have a population greater than 7,500 persons.<sup>21</sup> Under the urban outdoor recreation plan component, it is recommended that this accessibility standard be met within urban areas of the Region having a year 2000 forecast population of more than 7,500 persons, with the public sector providing any additional required Type III parks, first, by developing any existing publicly owned undeveloped park site; second, by acquiring open space land and developing it as a Type III park; and third, by acquiring land currently in urban use, clearing such land, and redeveloping it as a Type III park. It should be noted that, because a Type III park is relatively large, typically consisting of 50 acres or more, it is unlikely that the land required for a new Type III park could be obtained through subdivision dedication.

**Type IV Park Accessibility Standards:** Type IV are small parks of less than 25 acres in area which, like Type III parks, provide facilities for intensive nonresource-oriented facilities but which, in contrast to Type III parks, provide a smaller variety and quantity of such facilities at any one site. As indicated in Chapter XI, a Type IV park should be provided within 0.5 mile of each resident of a high-density urban area, 0.75 mile of each resident of a medium-density urban area, and 1.0 mile of each resident of a low-density urban area.<sup>22</sup> Under the urban outdoor recreation plan component, it is recommended that the accessibility standards be satisfied within each urban area of the Region, with the public sector providing any additional required parkland, first, by developing land to be acquired through subdivision dedication; second, by developing existing publicly owned undevel-

oped park sites; third, by acquiring open space land and developing it as a Type IV park; and fourth, in the absence of the foregoing alternatives, by acquiring land currently in urban use, clearing such land, and redeveloping it as a Type IV park. It should be noted that under the urban outdoor recreation plan element, it was assumed that additional lands required for a Type IV park could be obtained through subdivision dedication only to meet accessibility needs associated with residential development occurring between 1975 and the plan design year 2000. It is unlikely that land required to meet the identified Type IV park accessibility needs associated with existing residential areas could be obtained through subdivision dedication.

**Per Capita Local Recreation Site Acreage Standard:** It should be recognized that Type III and Type IV general use sites are of two basic kinds—namely, parks and public-school-owned recreation sites. Although not generally perceived as parks, school recreation sites do provide areas for the pursuit of the intensive nonresource-oriented recreational activities at the neighborhood level, and acreage standards for both park and public school general use sites have been set forth in Chapter XI of this report. In the determination of local outdoor recreation site acreage needs, because of the importance attached to natural areas for passive recreation use usually provided in local parks but not usually provided at school recreation sites, it was assumed that the standard for local parks—3.9 acres per thousand persons—must be met within each urban area, while the remainder of the overall local outdoor recreation site acreage requirement—2.5 acres per thousand persons—may be met either at parks or public school recreation sites. The local recreation site acreage needs, determined by applying these standards to the plan year 2000 population of each urban area of the Region, have been set forth in Chapter XII of this report.

Under the urban outdoor recreation plan component, it is recommended that the per capita local park acreage standard be met to the maximum extent possible through ordinary recreation land acquisition and development efforts. It should be noted that the urban outdoor recreation plan component does not recommend clearing and redevelopment activities in efforts to satisfy the per capita recreation site acreage standard. Thus, the urban outdoor recreation plan component recommends that additional required local recreation land be provided, first, through normal school expansion as well as through the development of land to be acquired by subdivision dedication; secondly, through the development of existing publicly owned undeveloped park sites; third, through the acquisition of open space land and the development of such land for local park purposes. It should be noted that, under the urban outdoor recreation plan component, it was assumed that the additional land required for a new local recreation site could be obtained through subdivision dedication and normal school expansion only to meet the per capita local recreation acreage needs associated with residential development occurring between 1975 and the year 2000. It is unlikely that

<sup>21</sup> In urban areas, the need for a Type III park may be met by the presence of a Type II park or a Type I park. Thus, each resident of an urban area having a population greater than 7,500 should be within two miles of a Type III, Type II, or a Type I park.

<sup>22</sup> In urban areas, the need for a Type IV park is met by the presence of a Type I, Type II, or Type III park. It should be noted that Type III parks proposed under Step 1 were considered in the formulation of specific recommendations which address Type IV park accessibility needs under Step 2.



land required to meet any identified local recreation sites acreage needs associated with existing residential areas could be met through subdivision dedication or school expansion.

Per Capita Nonresource-Oriented Outdoor Recreation Facility Standards: The adopted park and open space standards prescribe on a per capita basis the quantity of intensive nonresource-oriented outdoor recreation facilities including baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, softball diamonds, and swimming pools that is required to meet recreation demands within urban areas. Specific needs for additional intensive nonresource-oriented facilities obtained through the application of these standards to the plan year 2000 population within each urban area have been set forth in Chapter XII. The urban outdoor recreation plan component recommends provision of the required additional facilities to the extent that they can be accommodated on the additional recreation land recommended under Steps 1 through 3 above. Under this general recommendation, all additional required intensive nonresource-oriented outdoor recreation facilities would be provided within each urban area except those that lack open space lands to make provision of the required recreation site area feasible.

#### Urban Outdoor Recreation Plan Component Description: Outdoor Recreation Sites

Utilizing the guidelines set forth above, recommendations concerning additional public local recreation lands were formulated for each urban area in the Region within the context of the identified recreation site needs, the general availability of open space land suitable for development as local recreation sites, the availability of existing publicly owned undeveloped park sites, and the potential to provide new recreation areas through subdivision dedication and school expansion. Urban plan component recommendations concerning additional Type III parks and Type IV parks and school recreation sites are presented in Table 155. As indicated in this table, the urban outdoor recreation plan component recommends the provision of 3,221 additional acres of local park land at a total of 32 Type III parks and 211 Type IV parks and school recreation sites within urban areas of the Region by the plan design year 2000. Under the urban outdoor recreation plan component, 628 acres, or 19 percent of the total planned increment, may be expected to be provided through subdivision dedication; 246 acres, or 8 percent of the total increment, may be expected to be provided through school expansion; and 794 acres, or 25 percent of the total increment, would be provided through the development of the existing publicly owned undeveloped park sites. As further indicated in Table 155, 1,379 acres, or 43 percent of the additional local recreation site area proposed under the urban outdoor recreation plan component, would involve the public purchase of suitable existing open land at an estimated acquisition cost of \$7,857,500. In addition, implementation of the urban outdoor recreation plan component would require the acquisition and clearance of 174 acres of land currently in urban use at an estimated cost of \$67,860,000, including relocation assistance. Implementation of the

urban outdoor recreation plan component would, thus, require the public outlay of \$75,717,500 for land acquisition and clearance.

Under the urban outdoor recreation plan component, relatively large amounts of additional local parkland would be provided within urban areas which are expected to experience significant population growth between 1975 and the year 2000 and which have sufficient quantities of open space land to accommodate the required park development. Redevelopment activities under the urban outdoor recreation plan element would be undertaken primarily in Milwaukee County—in particular, within the densely populated areas of the central portion of the City of Milwaukee. High acquisition costs, clearing costs, and relocation assistance payments account for the large capital outlays in connection with the redevelopment activities in these areas.

#### Urban Outdoor Recreation Plan Component Description: Outdoor Recreation Facilities

The urban outdoor recreation plan component recommends provision of all additional facilities for intensive nonresource-oriented recreation activities which are expected to be required within urban areas of the Region by the year 2000 and which can be accommodated on the additional local parklands recommended under this plan component as outlined above. More specifically, implementation of the urban outdoor recreation plan component would meet the anticipated demand for intensive nonresource-oriented facilities in all urban areas except for the 11 urban areas in which provision of the required recreation site area is not feasible owing to the lack of suitable open space land. As indicated in Table 156, implementation of the urban outdoor recreation plan component would result in provision of the following additional facilities within urban areas of the Region by the plan design year: 38 baseball diamonds; 350 basketball goals; 86 playfields; 102 playgrounds; 125 softball diamonds; 251 tennis courts; 91 ice skating rinks; and one additional swimming pool. Under the urban outdoor recreation plan component, additional intensive nonresource-oriented outdoor recreation facilities would be provided, to a large extent, within urban areas which are expected to have relatively large population increases between 1975 and 2000 and within which local recreation sites accommodating these facilities can be readily provided. On the other hand, despite a large existing and anticipated need for additional intensive nonresource-oriented outdoor recreation facilities within the densely populated central portions of the Cities of Kenosha, Milwaukee, and Racine, relatively few additional intensive nonresource-oriented facilities would be provided in these areas because of the lack of available open space to accommodate the required facilities.<sup>23</sup>

<sup>23</sup> Even though the need for facilities is expected to decline somewhat owing to anticipated population decreases within certain of these urban areas, the anticipated year 2000 need for additional facilities within these areas remains substantial.

It should be noted that the urban outdoor recreation plan component proposed the provision of one additional public swimming pool, which would be located in the southern portion of the Racine urbanized area. Implementation of this proposal would meet the adopted per capita standard for public swimming pools—0.015 swimming pool per thousand persons—in each urban area having a forecast year 2000 population of more than 7,500 persons, as prescribed in Chapter XI of this report. It should also be noted, however, that the accessibility analysis conducted for public swimming pools, described in Chapter XII of this report, indicated that residents of certain urban areas of the Region do not have proper access to public swimming pools. Particularly noteworthy are two large areas which are not properly served, namely, the northwestern and the southern portion of the Milwaukee urbanized area. To some extent, these areas may be served by additional swimming beaches to be provided under whichever resource-oriented outdoor recreation component alternative plan is ultimately adopted.<sup>24</sup> Any remaining accessibility needs, however, may require the provision of one or more additional public swimming pools. Recommendations for such additional required swimming pools will be set forth in the recommended park and open space system plan, described in the next chapter of this report.

#### Development Costs

All of the new intensive nonresource-oriented outdoor recreation facilities proposed under the urban outdoor recreation plan component would be developed on existing or proposed Type III and Type IV park lands and school recreation sites. The acquisition and clearance costs for additional Type III and Type IV recreation sites proposed under the urban outdoor recreation plan component were presented in a previous section of this chapter. Development cost estimates for these recreation lands are presented here.

A large portion of the development costs of a new Type III or Type IV park would consist of the cost of developing the specific proposed intensive nonresource-oriented facilities—for example, softball diamonds, tennis courts, and playfields—as well as the support facilities, primarily parking spaces, directly related to the recommended facilities. Unit costs associated with the development of areas for specific intensive nonresource-oriented facilities and related support facilities were prepared under the park and open space planning program (see Table 157). In addition, the development of any new local park may entail the development of a shelter building, sanitary facilities, general parking area, walkways, and other facilities which are not directly relatable to a specific activity. Development costs of these general site development operations, estimated for typical

---

<sup>24</sup> A swimming beach may offset the need for a swimming pool and, in fact, is generally a more desirable facility for swimming. Accordingly, under the park and open space study, swimming beaches located within urban areas were considered to be a suitable substitute for swimming pools.

Type III and Type IV parks,<sup>25</sup> also are presented in Table 157. Utilizing the unit cost information contained in Table 157, the estimated overall development costs associated with new Type III and Type IV public general use sites proposed under the urban outdoor recreation plan element were calculated as \$19,056,495.

#### Concluding Remarks—Urban Outdoor Recreation Plan Component

Implementation of the urban outdoor recreation plan component would satisfy the demand for public local recreation sites, including Type III parks and Type IV parks and school recreation sites, as well as the demand for nonresource-oriented facilities, such as baseball diamonds, basketball courts, and tennis courts, in a majority of the urban areas of the Region through the year 2000. Under the urban outdoor recreation plan component, residents within these areas would have ready access to public recreation sites, and the overall quantity of recreation land and nonresource-oriented recreation facilities to be provided within these urban areas may be expected to meet the adopted per capita urban recreation site and facility standards through the plan design year. Under the urban outdoor recreation plan component, however, the adopted per capita urban outdoor recreation site and facility standards would not be met in 11 urban areas located in Kenosha, Milwaukee, and Racine Counties, because of the dense nature of the existing urban development and the attendant lack of open space lands. Within these 11 areas, a sufficient quantity of additional park sites would be provided to ensure that each resident would have ready access to a public recreation site, and additional required facilities would be provided to the extent that they can be accommodated on such new park lands. Implementation of the urban outdoor recreation plan component proposals within these areas would result, however, in provision of a quantity of urban sites and facilities sufficient to meet anticipated demands within these densely populated areas.

Implementation of the urban outdoor recreation plan component would require public provision of 3,221 additional acres of local public general use outdoor recreation sites. Under the urban outdoor recreation plan component, 1,668 acres, or 52 percent of this total, would be provided through subdivision dedication, school expansion, and the development of existing publicly owned undeveloped park sites. In addition, 1,379 acres, or 43 percent of the additional local recreation site area proposed under the urban recreation plan element, would involve the public purchase of suitable land at an estimated cost of \$7,857,500. Finally, implementation of the urban recreation plan component would require the acquisition and clearance of 174 acres of land currently in urban use at an estimated cost of \$67,860,000. Total land acquisition and clearance costs under the urban outdoor recreation plan element are, therefore, estimated at \$75,717,500.

---

<sup>25</sup> The size of typical Type III parks and typical Type IV parks assumed for the estimation of development costs was 45 acres and 12 acres, respectively.

Table 155

## TYPE III AND TYPE IV SITES PROPOSED UNDER THE URBAN OUTDOOR RECREATION PLAN COMPONENT: 2000

County	Planning Analysis Area	Urban Area	Additional Recreation Land to be Provided Through Subdivision Dedication, School Expansion, and the Development of Existing Publicly Owned Park Sites														Additional Recreation Land to be Acquired Through Fee Simple Purchase													
			Total			Parkland to be Obtained Through Subdivision Dedication			Recreation Land to be Provided Through School Expansion			Parkland to be Developed at Existing Publicly Owned Park Sites			Subtotal			Existing Open Land				Land Presently in Urban Use— to be Cleared				Subtotal				
			Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Sites	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost	
Ozaukee	1	Belgium	0	0	0.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	1	Fredonia	0	0	0.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	2	Port Washington	0	1	6.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	3	Saukville	0	3	29.3	--	1	11.4	--	1	11.9	0	0	0.0	0	2	23.3	0	1	6.0	15,000	0	0	0.0	--	0	1	6.0	15,000	
	4	Cedarburg-Grafton	1	2	80.0	--	0	0.0	--	0	0.0	0	1	29.0	0	1	29.0	1	1	51.0	183,000	0	0	0.0	--	1	1	51.0	183,000	
	5	Mequon-Thiensville	2	9	194.9	--	4	24.0	--	1	3.9	0	3	71.0	0	8	98.9	2	1	96.0	543,000	0	0	0.0	--	2	1	96.0	543,000	
	County Total	3	15	310.2	--	6	41.4	--	2	15.8	0	4	100.0	0	12	157.2	3	3	153.0	741,000	0	0	0.0	--	3	3	153.0	741,000		
Washington	6	Kewaskum	0	1	6.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	7	West Bend	0	5	35.0	--	4	24.0	--	0	0.0	0	1	11.0	0	5	35.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	7	Newburg	0	2	16.1	--	1	12.0	--	1	4.1	0	0	0.0	0	2	16.1	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	8	Allenton	0	1	6.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	9	Jackson	0	2	18.0	--	1	6.0	--	1	12.0	0	0	0.0	0	2	18.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	10	Hartford	1	0	45.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	1	0	45.0	90,000	0	0	0.0	--	1	0	45.0	90,000	
	10	Slinger	0	1	6.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	11	Germantown	1	1	52.4	--	1	7.4	--	0	0.0	0	0	0.0	0	1	7.4	1	0	45.0	135,000	0	0	0.0	--	1	0	45.0	135,000	
		County Total	2	13	184.5	--	10	67.4	--	2	16.1	0	1	11.0	0	13	94.5	2	0	90.0	225,000	0	0	0.0	--	2	0	90.0	225,000	
	Milwaukee	13	Bayside-Fox Point-River Hills	0	0	0.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--
14		Brown Deer-Glendale	0	6	83.0	--	2	23.7	--	0	0.0	0	0	0.0	0	2	23.7	0	4	59.3	1,186,000	0	0	0.0	--	0	4	59.3	1,186,000	
15		Shorewood-Whitefish Bay	0	0	0.0 <sup>a</sup>	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
16		Milwaukee (part)	0	1	6.0 <sup>a</sup>	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	1	6.0	2,340,000	0	1	6.0	2,340,000	
17		Milwaukee (part)	2	13	258.8	--	5	101.8	--	2	18.0	0	6	49.0	0	13	168.8	2	0	90.0	720,000	0	0	0.0	--	2	0	90.0	720,000	
18		Milwaukee (part)	0	6	36.0 <sup>a</sup>	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	6	36.0	14,040,000	0	6	36.0	14,040,000	
19		Milwaukee (part)	0	2	12.0 <sup>a</sup>	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	2	12.0	4,680,000	0	2	12.0	4,680,000	
20		Milwaukee (part)	2	5	85.0 <sup>a</sup>	--	0	0.0	--	0	0.0	1	0	25.0	1	0	25.0	0	0	0.0	--	1	5	60.0	23,400,000	1	5	60.0	23,400,000	
21		Milwaukee (part)	0	2	12.0 <sup>a</sup>	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	2	12.0	4,680,000	0	2	12.0	4,680,000	
22		Milwaukee (part)	0	1	6.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	1	6.0	2,340,000	0	1	6.0	2,340,000	
23		Milwaukee (part)	0	2	20.9 <sup>a</sup>	--	0	0.0	--	1	9.9	0	1	11.0	0	2	20.9	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
24		Milwaukee (part)	0	2	18.0	--	0	0.0	--	0	0.0	0	1	12.0	0	1	12.0	0	0	0.0	--	0	1	6.0	2,340,000	0	1	6.0	2,340,000	
25		Milwaukee (part)	1	0	32.0	--	0	0.0	--	0	0.0	1	0	32.0	1	0	32.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
26		Cudahy-St. Francis-South Milwaukee	0	3	18.9 <sup>a</sup>	--	0	0.0	--	1	6.9	0	0	0.0	0	1	6.9	0	2	12.0	240,000	0	0	0.0	--	0	2	12.0	240,000	
27		Oak Creek	3	6	201.4	--	2	28.4	--	0	0.0	3	2	161.0	3	4	189.4	0	2	12.0	168,000	0	0	0.0	--	0	2	12.0	168,000	
28		Franklin	1	8	122.6	--	4	53.6	--	0	0.0	1	0	45.0	1	4	98.6	0	4	24.0	72,000	0	0	0.0	--	0	4	24.0	72,000	
29		Greendale-Greenfield-Hales Corners	0	6	75.0	--	2	12.0	--	0	0.0	0	3	57.0	0	5	69.0	0	1	6.0	120,000	0	0	0.0	--	0	1	6.0	120,000	
30		West Allis-West Milwaukee	0	2	12.0 <sup>a</sup>	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	2	12.0	4,680,000	0	2	12.0	4,680,000	
31		Wauwatosa	0	2	21.2	--	0	0.0	--	0	0.0	0	2	21.2	0	2	21.2	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
		County Total	9	67	1,020.8	--	15	219.5	--	4	34.8	6	15	413.2	6	34	667.5	2	13	203.3	2,506,000	1	20	150.0	58,500,000	3	33	353.3	61,006,000	
Waukesha	32	Menomonee Falls-Butler	1	5	75.0	--	2	12.0	--	0	0.0	0	0	0.0	0	2	12.0	1	3	63.0	504,000	0	0	0.0	--	1	3	63.0	504,000	
	32	Lannon	0	1	6.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	33	Brookfield-Elm Grove	3	7	183.0	--	2	12.0	--	0	0.0	0	1	12.0	0	3	24.0	3	4	159.0	822,000	0	0	0.0	--	3	4	159.0	822,000	
	34	New Berlin	1	9	143.9	--	3	18.0	--	3	25.9	1	0	82.0	1	6	125.9	0	3	18.0	192,000	0	0	0.0	--	0	3	18.0	192,000	
	35	Muskego	1	2	92.0	--	1	6.0	--	0	0.0	1	0	80.0	1	1	86.0	0	1	6.0	48,000	0	0	0.0	--	0	1	6.0	48,000	
	36	Duplainville	0	2	12.3	--	1	6.0	--	1	6.3	0	0	0.0	0	2	12.3	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	36	Sussex	0	2	12.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	0	1	6.0	15,000	0	0	0.0	--	0	1	6.0	15,000	
	36	Pewaukee	1	2	57.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	1	1	51.0	408,000	0	0	0.0	--	1	1	51.0	408,000	
	37	Merton	0	0	0.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	38	Delafield	0	3	21.3	--	2	12.0	--	1	9.3	0	0	0.0	0	3	21.3	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	38	Hartland	0	2	12.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	0	1	6.0	15,000	0	0	0.0	--	0	1	6.0	15,000	
	39	Oconomowoc	1	3	63.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	1	2	57.0	120,000	0	0	0.0	--	1	2	57.0	120,000	
	39	Okauchee	0	3	14.4	--	1	7.1	--	1	1.3	0	0	0.0	0	2	8.4	0	1	6.0	60,000	0	0	0.0	--	0	1	6.0	60,000	
	40	Waukesha	1	2	65.0	--	0	0.0	--	0	0.0	1	2	65.0	1	2	65.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	41	Dousman	0	0	0.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--	
	41	Eagle																												

Table 155 (continued)

County	Planning Analysis Area	Urban Area	Number of Type III Sites	Total Number of Type IV Sites	Acres	Additional Recreation Land to be Provided Through Subdivision Dedication, School Expansion, and the Development of Existing Publicly Owned Park Sites												Additional Recreation Land to be Acquired Through Fee Simple Purchase																			
						Parkland to be Obtained Through Subdivision Dedication						Recreation Land to be Provided Through School Expansion			Parkland to be Developed at Existing Publicly Owned Park Sites			Subtotal						Existing Open Land						Land Presently in Urban Use— to be Cleared				Subtotal			
						Number of Type III Sites	Number of Type IV Sites	Sites	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost					
County	Planning Analysis Area	Urban Area	Number of Type III Sites	Total Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Sites	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost								
Racine	43	Racine-North	0	4	25.4 <sup>a</sup>	--	0	0.0	--	1	6.4	0	1	7.0	0	2	13.4	0	1	6.0	120,000	0	1	6.0	2,340,000	0	2	12.0	2,460,000								
	43	Caledonia-East	1	2	57.0	--	1	6.0	--	0	0.0	0	1	6.0	0	2	12.0	1	0	45.0	360,000	0	0	0.0	--	1	0	45.0	360,000								
	44	Racine-South	0	1	6.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	1	6.0	2,340,000	0	1	6.0	2,340,000								
	44	Mt. Pleasant-East	0	2	12.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	1	6.0	120,000	0	1	6.0	2,340,000	0	2	12.0	2,460,000								
	45	Caddy Vista	0	1	6.0	--	0	0.0	--	0	0.0	0	1	6.0	0	1	6.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--								
	45	Caledonia-West	0	0	0.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--								
	46	Mt. Pleasant-Sturtevant	1	7	98.5	--	2	12.0	--	3	29.5	0	0	0.0	0	5	41.5	1	2	57.0	231,000	0	0	0.0	--	1	2	57.0	231,000								
	47	Union Grove	0	2	12.0	--	1	6.0	--	0	0.0	0	0	0.0	1	6.0	0	1	6.0	15,000	0	0	0.0	--	0	1	6.0	15,000									
	48	Wind Lake	0	3	29.8	--	1	14.1	--	1	9.7	0	0	0.0	0	2	23.8	0	1	6.0	15,000	0	0	0.0	--	0	1	6.0	15,000								
	48	Waterford-Rochester	0	4	37.4	--	1	13.7	--	1	9.5	0	0	0.0	2	23.2	0	2	14.2	35,500	0	0	0.0	--	0	2	14.2	35,500									
	49	Burlington	0	1	6.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--								
	County Total		2	27	290.1	--	7	57.8	--	6	55.1	0	3	19.0	0	16	131.9	2	8	140.2	896,500	0	3	18.0	7,020,000	2	11	158.2	7,816,500								
Kenosha	50	Kenosha-North	0	2	12.0	--	0	0.0	--	0	0.0	0	1	6.0	0	1	6.0	0	1	6.0	120,000	0	0	0.0	--	0	1	6.0	120,000								
	51	Kenosha-South	0	1	6.0 <sup>a</sup>	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	1	6.0	2,340,000	0	1	6.0	2,340,000								
	51	South Kenosha	0	2	12.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	2	12.0	96,000	0	0	0.0	--	0	2	12.0	96,000									
	52	Somers-East	0	9	100.6	--	4	60.5	--	3	28.1	0	0	0.0	0	7	88.6	0	2	12.0	36,000	0	0	0.0	--	0	2	12.0	36,000								
	52	Somers-West	0	2	23.6	--	1	12.0	--	1	11.6	0	0	0.0	2	23.6	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--									
	53	Pleasant Prairie-Central	1	2	55.2	--	1	6.0	--	1	4.2	0	0	0.0	2	10.2	1	0	45.0	135,000	0	0	0.0	--	1	0	45.0	135,000									
	53	Pleasant Prairie-West	0	2	9.2	--	0	0.0	--	1	3.2	0	0	0.0	1	3.2	0	1	6.0	48,000	0	0	0.0	--	0	1	6.0	48,000									
	53	Pleasant Prairie-East	1	5	78.9	--	2	12.0	--	2	15.9	0	1	6.0	0	5	33.9	1	0	45.0	135,000	0	0	0.0	--	1	0	45.0	135,000								
	54	Bristol	0	0	0.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--								
	55	Paddock Lake	0	1	6.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	1	6.0	15,000	0	0	0.0	--	0	1	6.0	15,000									
	55	Silver Lake	0	2	7.9	--	1	6.0	--	1	1.9	0	0	0.0	2	7.9	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--									
	55	Twin Lakes	0	1	6.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	1	6.0	15,000	0	0	0.0	--	0	1	6.0	15,000									
	County Total		2	29	317.4	--	9	96.5	--	9	64.9	0	2	12.0	0	20	173.4	2	8	138.0	600,000	0	1	6.0	2,340,000	2	9	144.0	2,940,000								
Walworth	56	East Troy	0	2	21.0	--	1	12.0	--	0	0.0	0	0	0.0	0	1	12.0	0	1	9.0	22,500	0	0	0.0	--	0	1	9.0	22,500								
	57	Whitewater	1	3	70.3	--	1	6.0	--	1	13.3	0	0	0.0	2	19.3	1	1	51.0	127,500	0	0	0.0	--	1	1	51.0	127,500									
	58	Elkhorn	1	1	51.0	--	1	6.0	--	0	0.0	0	0	0.0	1	6.0	1	0	45.0	112,500	0	0	0.0	--	1	0	45.0	112,500									
	59	Como Lake	0	2	12.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	2	12.0	30,000	0	0	0.0	--	0	2	12.0	30,000									
	59	Genoa City	0	0	0.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--								
	59	Lake Geneva	1	0	45.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	1	0	45.0	112,500	0	0	0.0	--	1	0	45.0	112,500								
	59	Pell Lake	0	1	6.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	1	6.0	15,000	0	0	0.0	--	0	1	6.0	15,000									
	59	Williams Bay-Fontana-	1	2	57.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	1	2	57.0	142,500	0	0	0.0	--	1	2	57.0	142,500								
	60	Darien	0	1	6.0	--	0	0.0	--	0	0.0	0	0	0.0	0	0	0.0	1	6.0	15,000	0	0	0.0	--	0	1	6.0	15,000									
	60	Delavan	0	1	6.0	--	1	6.0	--	0	0.0	0	0	0.0	0	1	6.0	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--								
	60	Sharon	0	2	9.7	--	1	6.0	--	1	3.7	0	0	0.0	2	9.7	0	0	0.0	--	0	0	0.0	--	0	0	0.0	--									
	County Total		4	15	284.0	--	5	36.0	--	2	17.0	0	0	0.0	7	53.0	4	8	231.0	577,500	0	0	0.0	--	4	8	231.0	577,500									
	Region Total		32	211	3,220.9	--	70	627.7	--	31	246.5	9	28	794.2	9	129	1,668.4	22	58	1,378.5	7,857,500	1	24	174.0	67,860,000	23	82	1,552.5	75,717,500								

<sup>a</sup> Only acreage satisfying accessibility standards are recommended for provision in this urban area.

Source: SEWRPC.



Table 156

## FACILITIES AND DEVELOPMENT COSTS PROPOSED UNDER THE URBAN OUTDOOR RECREATION PLAN COMPONENT: 2000

County	Planning Analysis Area	Urban Area	Additional Intensive Nonresource-Oriented Facilities Proposed Under Urban Outdoor Recreation Plan Component							Estimated Facility Development Costs	Estimated General Park Development Costs	Total Estimated Development Costs	
			Baseball Diamonds	Basketball Goals	Playfields	Playgrounds	Softball Diamonds	Tennis Courts	Swimming Pools				Ice Skating Rinks
Ozaukee	1	Belgium	--	--	--	--	1	--	--	1	\$ 16,375	\$ --	\$ 16,375
	1	Fredonia	--	--	--	--	--	--	--	1	--	--	--
	2	Port Washington	--	--	--	--	--	1	--	--	12,350	40,840	53,190
	3	Saukville	--	6	1	2	2	2	--	1	82,520	81,680	164,200
	4	Cedarburg-Grafton	--	--	--	--	4	3	--	--	102,550	191,180	293,730
	5	Mequon-Thiensville	1	9	7	5	7	9	--	4	312,300	545,720	858,020
		County Total	1	15	8	7	14	15	--	7	\$ 526,095	\$ 859,420	\$ 1,385,515
Washington	6	Kewaskum	--	1	--	--	--	1	--	--	\$ 14,475	\$ 40,840	\$ 55,315
	7	West Bend	2	15	--	--	5	5	--	--	223,500	204,200	427,700
	7	Newburg	--	--	--	--	--	--	--	1	--	40,840	40,840
	8	Allenton	--	--	--	--	--	1	--	1	12,350	40,840	53,190
	9	Jackson	1	5	--	--	2	4	--	--	116,775	40,840	157,615
	10	Hartford	--	3	--	--	--	4	--	--	55,775	109,500	165,275
	10	Slinger	--	3	--	--	--	--	--	1	6,375	40,840	47,215
	Germantown	2	20	7	8	8	5	--	3	340,930	150,340	491,270	
	County Total	5	47	7	8	15	20	--	6	\$ 770,180	\$ 668,240	\$ 1,438,420	
Milwaukee	13	Bayside-Fox Point-River Hills	--	--	--	--	--	--	--	--	\$ --	\$ --	\$ --
	14	Brown Deer-Glendale	--	12	1	2	--	--	--	--	37,820	245,040	282,860
		Shorewood-Whitefish Bay <sup>a</sup>	--	--	--	--	--	--	--	1	--	--	--
	16	Milwaukee (part) <sup>a</sup>	--	2	--	--	1	--	--	--	20,625	40,840	61,465
	17	Milwaukee (part)	--	24	12	13	18	26	--	3	762,330	668,240	1,430,570
	18	Milwaukee (part) <sup>a</sup>	--	--	--	3	3	5	--	--	125,155	245,040	370,195
	19	Milwaukee (part) <sup>a</sup>	--	--	--	1	1	4	--	1	70,535	81,680	152,215
	20	Milwaukee (part) <sup>a</sup>	1	--	1	2	8	6	--	1	241,420	423,200	664,620
	21	Milwaukee (part) <sup>a</sup>	--	--	--	--	1	--	--	2	16,375	81,680	98,055
	22	Milwaukee (part)	--	--	--	--	--	--	--	--	--	40,840	40,840
	23	Milwaukee (part) <sup>a</sup>	--	2	--	2	1	6	--	--	104,245	40,840	145,085
	24	Milwaukee (part)	2	--	--	--	9	3	--	--	232,425	81,680	314,105
	25	Milwaukee (part)	1	2	--	--	4	9	--	--	204,900	109,500	314,400
	26	Cudahy-St. Francis-South Milwaukee <sup>a</sup>	--	--	--	2	--	9	--	5	120,670	81,680	202,350
	27	Oak Creek	4	21	9	10	7	12	--	3	476,250	573,540	1,049,790
	28	Franklin	3	20	4	5	11	18	--	4	551,925	436,220	988,145
	29	Greendale-Greenfield-Hales Corners	--	14	--	--	--	9	--	6	140,900	245,040	385,940
30	West Allis-West Milwaukee <sup>a</sup>	--	--	--	1	--	3	--	--	41,810	81,680	123,490	
31	Wauwatosa	--	42	1	7	--	4	--	3	174,770	81,680	256,450	
	County Total	11	139	28	48	64	114	--	29	\$3,322,155	\$ 3,558,420	\$ 6,880,575	
Waukesha	32	Menomonee Falls-Butler	--	3	11	4	8	7	--	5	\$ 273,665	\$ 313,700	\$ 587,365
	32	Lannon	--	--	--	--	--	--	--	1	--	40,840	40,840
	33	Brookfield-Elm Grove	1	--	--	--	--	--	--	--	24,000	614,380	638,380
	34	New Berlin	--	23	9	9	--	16	--	4	314,515	354,540	669,055
	35	Muskego	--	--	--	--	--	2	--	2	24,700	191,180	215,880
	36	Duplainville	1	--	1	1	--	2	--	1	56,260	40,840	97,100
	36	Sussex	--	1	2	1	1	4	--	--	78,260	81,680	159,940
	36	Pewaukee	--	--	--	--	--	5	--	2	61,750	191,180	252,930
	37	Merton	--	--	--	--	--	--	--	--	--	--	--
	38	Delafield	--	--	--	--	--	4	--	1	49,400	81,680	131,080
	38	Hartland	--	--	--	--	--	--	--	--	--	81,680	81,680
	39	Oconomowoc	1	6	--	--	--	--	--	--	36,750	232,020	268,770
	39	Okauchee	1	2	--	--	1	1	--	1	56,975	81,680	138,655
	40	Waukesha	3	20	--	--	--	6	--	7	188,600	191,180	379,780
	41	Dousman	--	--	--	--	--	--	--	1	--	--	--
	41	Eagle	--	1	--	--	--	--	--	--	2,125	--	2,125
	41	North Prairie	--	1	--	--	--	--	--	1	2,125	--	2,125
	41	Wales	--	--	--	--	--	--	--	1	--	40,840	40,840
	42	Big Bend	--	--	--	--	--	--	--	--	--	--	--
	42	Mukwonago	--	--	--	--	--	2	--	--	24,700	150,340	175,040
	County Total	7	57	23	15	10	49	--	27	\$1,193,825	\$ 2,687,760	\$ 3,881,585	

Table 156 (continued)

County	Planning Analysis Area	Urban Area	Additional Intensive Nonresource-Oriented Facilities Proposed Under Urban Outdoor Recreation Plan Component								Estimated Facility Development Costs	Estimated General Park Development Costs	Total Estimated Development Costs
			Baseball Diamonds	Basketball Goals	Playfields	Playgrounds	Softball Diamonds	Tennis Courts	Swimming Pools	Ice Skating Rinks			
Racine	43	Racine-North <sup>a</sup>	1	--	1	--	3	3	--	1	\$ 112,975	\$ 122,520	\$ 235,495
	43	Caledonia-East	2	1	4	--	--	--	--	--	61,325	191,180	252,505
	44	Racine-South	4	--	1	--	--	2	--	--	123,500	40,840	164,340
	44	Racine Suburbs-South	1	--	--	--	--	7	1	--	782,950	81,680	864,630
	45	Caddy Vista	--	--	--	--	--	1	--	1	12,350	40,840	53,190
	45	Caledonia-West	--	--	--	--	--	--	--	--	--	--	--
	46	Mt. Pleasant-East	--	11	2	--	6	6	--	2	201,325	272,860	474,185
	47	Union Grove	--	--	--	--	--	4	--	--	49,400	81,680	131,080
	48	Wind Lake	--	4	2	1	--	3	--	1	55,910	81,680	137,590
	48	Waterford-Rochester	--	--	--	--	--	--	--	--	--	122,520	122,520
	49	Burlington	--	--	--	--	--	2	--	--	24,700	40,840	65,540
County Total			8	16	10	1	9	28	1	5	\$1,424,435	\$ 1,076,640	\$ 2,501,075
Kenosha	50	Kenosha-North	--	16	--	2	--	--	--	1	\$ 43,520	\$ 81,680	\$ 125,200
	51	Kenosha-South <sup>a</sup>	--	4	--	1	--	3	--	--	50,310	40,840	91,150
	51	South Kenosha	1	--	--	1	--	--	--	1	28,760	81,680	110,440
	52	Somers-East	--	13	6	8	9	--	--	3	229,880	245,040	474,920
	52	Somers-West	1	5	1	2	1	3	--	--	100,370	40,840	141,210
	53	Pleasant Prairie-Central	1	1	--	--	--	2	--	--	50,825	40,840	91,665
	53	Pleasant Prairie-West	2	17	3	5	--	3	--	2	153,375	232,020	385,395
	53	Pleasant Prairie-Central	--	1	--	1	--	1	--	1	19,235	150,340	169,575
	54	Bristol	--	2	--	--	--	--	--	1	4,250	--	4,250
	55	Paddock Lake	--	1	--	--	1	3	--	--	55,550	40,840	96,390
	55	Silver Lake	--	--	--	--	--	1	--	1	12,350	40,840	53,190
	55	Twin Lakes	--	--	--	--	--	3	--	--	37,050	40,840	77,890
County Total			5	60	10	20	11	19	--	10	\$ 785,475	\$ 1,035,800	\$ 1,821,275
Walworth	56	East Troy	--	--	--	--	--	1	--	1	\$ 12,350	\$ 81,680	\$ 94,030
	57	Whitewater	--	7	--	2	2	--	--	--	57,145	191,180	248,325
	58	Elkhorn	--	3	--	--	--	1	--	--	18,725	150,340	169,065
	59	Como Lake	--	--	--	--	--	1	--	1	12,350	81,680	94,030
	59	Genoa City	--	--	--	--	--	1	--	1	12,350	--	12,350
	59	Lake Geneva	--	4	--	1	--	--	--	1	13,260	109,500	122,760
	59	Pell Lake	--	--	--	--	--	1	--	1	12,350	40,840	53,190
	59	Williams Bay-Fontana	--	--	--	--	--	--	--	--	--	191,180	191,180
	60	Darien	--	--	--	--	--	--	--	1	--	40,840	40,840
	60	Delavan	--	--	--	--	--	--	--	--	--	40,840	40,840
County Total			1	16	--	3	2	6	--	7	\$ 179,130	\$ 968,920	\$ 1,148,050
Region Total			38	350	86	102	125	251	1	91	\$8,201,295	\$10,855,200	\$19,056,495

<sup>a</sup> Only facilities which are capable of being provided in existing or proposed sites are recommended. Per capita standards are not met in this urban area.

Source: SEWRPC.

Implementation of the urban outdoor recreation plan component proposals would also involve public outlays for development of the facilities proposed at the recommended local recreation sites. Total development costs associated with implementation of the urban outdoor recreation plan component are estimated at \$19,056,495. Including both land acquisition and clearance costs and facility development costs, the total public outlay associated with implementation of the urban outdoor recreation plan component combined is estimated at \$94,773,995. It should be recognized that the urban recreation plan element proposals were formulated without regard to new Type I and Type II park sites which are recommended under the resource-oriented outdoor recreation component alternative plans, described in a previous section of this chapter. To some extent, provision of the additional Type I and Type II parks proposed under either of the alternative plans may reduce

the need for Type III and Type IV parks recommended under the urban outdoor recreation plan component. Accordingly, implementation of the urban outdoor recreation plan element may require capital outlays for local park acquisition and development somewhat lower than those presented above.

As previously indicated, implementation of the urban outdoor recreation plan component may be expected to meet the adopted per capita urban recreation site and facility standards within all but 11 urban areas of the Region through the plan design year. A complete evaluation of the urban outdoor recreation plan component requires an understanding of the probable shortages of urban recreation sites and facilities within these 11 areas as well as an understanding of the costs which would be encountered upon attempts to meet these shortages through the acquisition of land currently

in urban use, clearance, and redevelopment for park purposes. Accordingly, the additional amount of local park land and the additional quantity of intensive non-resource-oriented recreation facilities which would necessarily be provided within these urban areas are presented in Tables 158 and 159, respectively. As indicated in Table 158, 2,094 acres of local parks—in addition to the acreage recommended under the urban outdoor recreation plan element—would necessarily be provided within these 11 urban areas to meet the adopted per capita standard in the plan design year. About 1,202 acres, or 57 percent of this total, would be needed in planning analysis areas 18, 19, and 20 on the north side of the City of Milwaukee. If all of this recreation land were provided through the acquisition and clearance of land currently in urban use, public outlays for such acquisition and clearance activities would total \$816,660,000.<sup>26</sup>

As indicated in Table 159, elimination of the probable facility shortages within these 11 areas also would require provision of the following facilities, in addition to those recommended under the urban outdoor recreation plan component: 20 baseball diamonds; 48 basketball goals; five ice skating rinks; 42 playfields; 65 playgrounds; 122 softball diamonds; and 161 tennis courts. Total development costs for the additional required parkland, including development costs associated with these facilities, are estimated at \$5,203,100. Accordingly, the total public outlay for acquisition, clearance, and park development activities to meet the probable shortages in the 11 urban areas is estimated at \$821,863,100. As previously indicated in this section, because of the high cost and the disruption in urban activities associated with such redevelopment, these recreation sites and facilities would not be provided under the urban outdoor recreation plan component.

---

<sup>26</sup> *Local planning efforts which address the recreation site and facility needs in these densely populated urban areas may identify opportunities to reduce the amount of redevelopment activity. An example of such an opportunity relates to the land which has been cleared for the Park West Freeway in the City of Milwaukee, the construction of which is uncertain at the present time. If it is ultimately determined that this land cannot be used as a transportation corridor, this open land would provide an excellent opportunity for development of local parks in planning analysis areas 19 and 20, in which a substantial need for local outdoor recreation sites and facilities has been identified. Thus, as indicated in Table 158, even with complete implementation of the urban outdoor recreation plan, there would be a shortage of 2,094 acres of local park lands in these planning analysis areas in the year 2000. The development as local parks of the land cleared for the Park West Freeway could reduce this shortage to about 1,950 acres. Furthermore, such lands would be able to accommodate most of the additional intensive nonresource-oriented outdoor recreation facilities required to eliminate the facility shortages indicated in Table 159.*

## CONCLUDING REMARKS

As indicated in the introduction of this chapter, the open space preservation plan element together with the outdoor recreation plan element are proposed to be adopted together as the regional park and open space system plan. The outdoor recreation plan element is composed of two components—the urban outdoor recreation component and the resource-oriented outdoor recreation component. For the resource-oriented outdoor recreation component, two alternatives were proposed. Based upon the results of a comparative evaluation of the resource-oriented outdoor recreation component alternative plans against the adopted park and open space standards, it has been recommended that the resource based alternative plan be adopted as the resource-oriented outdoor recreation plan component for southeastern Wisconsin. This concluding section presents a summary of the public outlays associated with the implementation of the overall park and open space system plan, including the recommended resource-oriented outdoor recreation plan component, the urban outdoor recreation plan component, and the open space preservation plan element.<sup>27</sup>

The resource based alternative plan, which has been recommended for adoption as the resource-oriented outdoor recreation plan component, would provide a quantity of outdoor recreation sites and facilities sufficient to satisfy recreation demands in the Region through the plan design year within an overall park and recreation related open space system which attempts to maximize recreation site quality. The recommended resource-oriented outdoor recreation plan component includes three major parts: (1) existing and proposed Type I and Type II parks—which would accommodate needed facilities for intensive resource-oriented activities, including camping, golf, nature study, resource-oriented picnicking, downhill skiing, and beach swimming; (2) the proposed public recreation corridor—which would accommodate needed facilities for trail-oriented activities, including biking, hiking, horseback riding, ski touring, and snowmobiling, and which would serve to physically connect the existing and proposed parks; and (3) water access facilities—which would facilitate use of the rivers and the major inland lakes of the Region and Lake Michigan for extensive water based outdoor recreation activities. The total public outlay required for implementation of the recommended resource-oriented outdoor

---

<sup>27</sup> *It should be noted that the open space preservation plan element also is composed of two components—the primary environmental corridor land plan component and the prime agricultural land plan component. However, no public outlays for acquisition and development are required under the prime agricultural land plan component. Therefore, the public outlays associated with implementation of the open space preservation plan element are related only to the primary environmental corridor land component of the open space preservation plan element.*

Table 157

## UNIT COSTS FOR PROPOSED FACILITY DEVELOPMENT AT TYPE III AND TYPE IV SITES

Facility	Unit Costs	Specific Costs Included
Baseball Diamond	\$ 14,000 per diamond (base cost) \$ 30,000 optional lighting and fences per diamond	Base cost per diamond includes amounts for backstop, grading and field preparation, and related parking
Basketball Goal	\$ 2,125 per goal	Cost per goal includes amounts for goal and backboard, site preparation and paving, and fencing
Playfield	\$ 2,800 per playfield	Cost per playfield includes amounts for grading, seeding, fertilizer, and top soil
Playground	\$ 4,700 per playground	Cost per playground includes amounts for play equipment and surface material
Softball Diamond	\$ 10,000 per diamond (base cost) \$ 25,500 optional lighting and fences per diamond	Base cost per diamond includes amounts for backstop, grading, and field preparation, and related parking
Swimming Pool	\$672,500 per pool	Cost per pool includes amounts for bathhouse, pool equipment, concessions, site preparation, and related parking
Tennis Court	\$ 10,600 per court (base cost) \$ 3,500 optional lighting per court	Base cost per court includes amounts for grading and surfacing, fencing, nets and posts, and related parking
Additional Park Development Costs	\$109,500 per Type III park	Cost per Type III park includes amounts for general park lighting, small shelter building and rest rooms, general landscaping and walkways, park furnishings (including picnic tables, benches, waste containers and signs), and a parking lot
	\$ 28,340 per Type IV park (base cost) \$ 25,000 optional small shelter and rest rooms	Base cost per Type IV park includes amounts for general park lighting, general landscaping, walkways, and park furnishings (including picnic tables, benches, waste containers, and signs)

Source: SEWRPC.

recreation plan component is estimated at \$69.8 million, including \$15.1 million for land acquisition and \$54.7 million for site development. As indicated in Table 160, the largest of these outlays would be required for the development of the proposed additional Type I and Type II parklands and the development of small boat water access facilities along the Lake Michigan shoreline.

The urban outdoor recreation plan element represents an attempt, to provide a quantity of local recreation sites and intensive nonresource-oriented recreation facilities sufficient to meet the overall demand within most urban areas through the plan design year. Within most urban areas the required recreation lands would be obtained in various ways, including dedication as a part of the urban land subdivision process, development of additional school related recreation sites, development of existing publicly owned undeveloped park sites, or public purchase and development of other open space lands.

Satisfaction of all identified urban site and facility requirements would be difficult, however, within certain areas—particularly in densely populated urban areas in the central part of Milwaukee County—due to the lack of open space lands. Satisfaction of the identified needs within such areas could be accomplished only through a substantial amount of urban demolition, clearance, and redevelopment. Because of the great economic cost of such redevelopment and the attendant disruption of urban activities, it is recommended that the redevelopment for park purposes of land currently in urban use be restricted to amounts required to meet the adopted accessibility standards. This approach seeks to ensure that each resident of an urban area would at least have ready access to a public outdoor recreation site; however, the quantity of outdoor recreation sites and facilities provided under such an approach may be less than that required to fully meet the recreation demand within a densely populated urban area. As indicated in Table 160, the



Table 158

## MINIMUM ACREAGE REQUIREMENTS NOT MET UNDER THE URBAN OUTDOOR RECREATION PLAN COMPONENT: 2000

County	Planning Analysis Area	Urban Area	Additional Land <sup>a</sup> Currently in Urban Use Which Would Necessarily be Acquired Through Fee Simple Purchase, Cleared, and Redeveloped as Local Parkland for Complete Satisfaction of the Adopted per Capita Local Recreation Site Acreage Standard Within Urban Areas Through the Year 2000	
			Acres	Acquisition and Clearance Cost
Milwaukee	15	Shorewood-Whitefish Bay	85	\$ 33,150,000
	16	Milwaukee (part)	145	56,550,000
	18	Milwaukee (part)	423	164,970,000
	19	Milwaukee (part)	272	106,080,000
	20	Milwaukee (part)	507	197,730,000
	21	Milwaukee (part)	173	67,470,000
	23	Milwaukee (part)	119	46,410,000
	26	Cudahy-St. Francis-South Milwaukee	56	21,840,000
	30	West Allis-West Milwaukee	133	51,870,000
		County Totals	1,913	\$746,070,000
Racine	43	Racine-North	53	\$ 20,670,000
		County Totals	53	\$ 20,670,000
Kenosha	51	Kenosha-South	128	\$ 49,920,000
		County Totals	128	\$ 49,920,000
Region Totals			2,094	\$816,660,000

<sup>a</sup> Required beyond that recommended under the urban outdoor recreation plan component.

Source: SEWRPC.

total public outlay required for implementation of the urban outdoor recreation plan component is estimated at \$94.8 million. It is important to recognize that \$67.9 million, or 72 percent of this total outlay, would be required for the acquisition of land currently in urban use, clearance, and relocation assistance payments.

The primary environmental corridor plan component recommends public acquisition of large segments of the primary environmental corridors of the Region in order to ensure the preservation of these valuable resource areas, thereby meeting existing and future open space needs within the Region. Segments of the primary environmental corridor which are recommended for public acquisition are those segments which have been previously recommended for acquisition under the four watershed plans completed by the Commission to date as well as other corridor segments which lie in, or adjacent to, areas expected to be in urban use by the year 2000 and which lie outside of these watersheds. Large seg-

ments of the primary environmental corridors of the Region which have been recommended for public acquisition under the primary environmental corridor plan component would be acquired in efforts to provide the major parks and recreation corridors recommended under the resource-oriented outdoor recreation plan component; and acquisition costs for these corridor segments are included in the outlay for land acquisition under the resource-oriented outdoor recreation plan component. Outlays required for acquiring the remainder of the primary environmental corridor lands recommended for public purchase under the primary environmental corridor plan component have been estimated at \$83.7 million.

The total public outlay required for implementing the regional park and open space system—including the recommended resource-oriented outdoor recreation plan component, the urban outdoor recreation plan component, and the primary environmental corridor plan component—is estimated at \$248.3 million, including

Table 159

## MINIMUM FACILITY REQUIREMENTS NOT MET UNDER THE URBAN OUTDOOR RECREATION PLAN COMPONENT: 2000

County	Planning Analysis Area	Urban Area	Additional Facilities <sup>a</sup> Which Would Necessarily be Provided for the Complete Satisfaction of the Adopted per Capita Standards for Intensive Nonresource-Oriented Facilities Within Urban Areas of the Region Through the Year 2000								Estimated Development Costs
			Baseball Diamonds	Basketball Goals	Playfields	Playgrounds	Softball Diamonds	Tennis Courts	Swimming Pools	Ice Skating Rinks	
Milwaukee	15	Shorewood-Whitefish Bay	--	8	1	2	2	--	--	--	\$ 62,070
	16	Milwaukee (part)	2	5	6	6	12	5	--	--	362,235
	18	Milwaukee (part)	5	--	2	17	19	30	--	--	888,145
	19	Milwaukee (part)	2	--	--	15	10	22	--	--	554,850
	20	Milwaukee (part)	7	--	25	17	54	52	--	5	2,053,370
	21	Milwaukee (part)	2	11	4	2	23	15	--	--	653,970
	23	Milwaukee (part)	--	5	--	4	--	14	--	--	202,565
	26	Cudahy-St. Francis-South Milwaukee	--	--	--	--	--	5	--	--	61,750
	30	West Allis-West Milwaukee	--	--	--	1	--	6	--	--	78,860
		County Totals	18	29	38	64	120	149	--	5	4,917,815
Racine	43	Racine-North	2	--	4	--	2	2	--	--	\$ 116,650
		County Totals	2	--	4	--	2	2	--	--	\$ 116,650
Kenosha	51	Kenosha-South	--	19	--	1	--	10	--	--	\$ 168,635
		County Totals	--	19	--	1	--	10	--	--	\$ 168,635
Region Totals			20	48	42	65	122	161	--	5	\$5,203,100

<sup>a</sup> Required beyond those recommended under urban outdoor recreation plan component.

Source: SEWRPC.

\$174.6 million for land acquisition and any required demolition and clearance as well as \$73.7 million for site development.

## SUMMARY

This chapter has presented a description of the open space preservation plan element—composed of a primary environmental corridor plan component and a prime agricultural land plan component—which sets forth recommended means for achieving regional open space preservation objectives; a description of the urban outdoor recreation plan component, which addresses the existing and anticipated future need for nonresource-oriented, urban outdoor recreation sites, and facilities; and a description, comparison, and evaluation of the resource-oriented outdoor recreation component alternative plans, which address the existing and anticipated future needs for resource-oriented outdoor recreation sites and facilities through basically different designs. The open space preservation plan element, together with the urban outdoor recreation plan component and one of the resource-oriented outdoor recreation component alternative plans, are proposed to be adopted together as the regional park and open space system plan. The most important aspects of each of these plan elements are summarized below.

## Open Space Preservation Plan Element

The open space preservation plan element consists of recommendations concerning the appropriate means of preserving specific segments of the primary environmental corridors of the Region as well as recommendations concerning the appropriate means of preserving the remaining prime agricultural lands in the Region. The primary environmental corridor plan component recommends the public acquisition of selected reaches of the primary environmental corridors encompassing a total of 130 square miles, or about 30 percent of the remaining net corridor lands. The reaches of the primary environmental corridors recommended for public acquisition are those previously recommended for acquisition under the four watershed plans completed by the Commission to date as well as other corridor reaches which lie in existing urban areas or areas expected to be in urban use by the year 2000 but outside of these watersheds. A total of 72 square miles, or about 16 percent of the net primary environmental corridor lands, are presently in public ownership within the Region. Including the approximately 130 square miles recommended for public acquisition, then, a total of about 202 square miles of corridor lands, or about 7 percent of the total area of the Region, would be permanently held in public trust upon full implementation of the open space preservation plan element. Under the primary environ-

Table 160

**PUBLIC OUTLAYS FOR ACQUISITION AND DEVELOPMENT UNDER THE  
REGIONAL PARK AND OPEN SPACE SYSTEM PLAN: 1975-2000**

Plan Components <sup>a</sup>	Estimated Plan Component Costs (1975 dollars)		
	Acquisition	Development	Total
Recommended Resource-Oriented Outdoor Recreation Plan Component <sup>b</sup>			
Type I and Type II Parks	\$ 9,149,000	\$25,606,000	\$ 34,755,000
Recreation Corridors	5,864,000	9,649,000	15,513,000
Inland Lake and River Access	112,400	152,300	264,700
Lake Michigan Access	--	19,280,000	19,280,000
Subtotal	\$ 15,125,400	\$54,687,300	\$ 69,812,700
Urban Outdoor Recreation Plan Component			
Provision of Type III and Type IV Parks Through School Expansion, Subdivision Dedication, Development of Existing Publicly Owned Undeveloped Park Sites, and Acquisition and Development of Other Open Space Land	\$ 7,857,500	\$19,056,495 <sup>c</sup>	\$ 26,913,995
Acquisition of Land in Urban Use, Clearance, and Relocation Assistance	67,860,000 <sup>d</sup>	--	67,860,000
Subtotal	\$ 75,717,500	\$19,056,495	\$ 94,773,995
Primary Environmental Corridor Plan Component	\$ 83,723,000 <sup>e</sup>	--	\$ 83,723,000 <sup>e</sup>
Subtotal	\$ 83,723,000 <sup>e</sup>	--	\$ 83,723,000 <sup>e</sup>
Total	\$174,565,900	\$73,743,795	\$248,309,695

<sup>a</sup> No public outlays for acquisition and development are required under the prime agricultural land plan component.

<sup>b</sup> The resource based alternative plan was selected as the resource-oriented outdoor recreation plan component.

<sup>c</sup> Includes all Type III and Type IV site development costs, including sites to be developed on cleared land.

<sup>d</sup> Outlays for acquisition of land presently in urban use, clearance, and redevelopment relate only to that amount which is necessary for meeting the minimum local park accessibility standards. It is estimated that efforts to meet the total identified need for urban outdoor recreation sites and facilities through further redevelopment activities would require an additional public outlay of \$819 million.

<sup>e</sup> Does not include outlays for Type I and Type II parks, recreation corridors, and inland lake and river access, which have been included in costs under the recommended resource-oriented outdoor recreation plan component.

Source: SEWRPC.

mental corridor plan component, those areas of the primary environmental corridors which are not actually acquired by the public sector would be kept in compatible, essentially natural, open spaces through the use of agricultural, floodland, shoreland, conservancy, parkland, and very low-density residential zoning. In this regard, it is recommended that 212 square miles, or about 49 percent of the net primary environmental corridor lands within the Region, be zoned in a manner appropriate to the preservation of the corridors. It is further recommended that 23 square miles, or about

5 percent of net primary environmental corridors in the Region currently in nonpublic recreation site ownership, be maintained in such ownership.

The prime agricultural land plan component reaffirms the recommendations of the proposed new regional land use plan for the year 2000 with respect to the preservation of prime agricultural lands and other agricultural lands surrounding major sites having scientific, educational, and recreational value. In this regard, the prime agricultural land plan component recommends the preservation

through exclusive agricultural zoning of 620 square miles of prime agricultural land, or 98 percent of the existing prime agricultural acreage in the Region, as well as 41 square miles of agricultural land which were considered as providing a desirable open space setting around major scientific, educational, and recreational sites. Thus, in all, a total of 661 square miles of agricultural land, or about 25 percent of the total area of the Region, would be preserved in agricultural use. Under the prime agricultural land plan component, the conversion of prime agricultural land to urban use would be restricted to those lands which were generally committed to urban development as early as 1970 due to the proximity to existing and expanding concentrations of urban uses and the prior commitment of heavy capital investment in utility extensions.

#### Resource-Oriented Outdoor Recreation Component Alternative Plans

Two resource-oriented outdoor recreation component alternative plans were prepared and evaluated under the regional park and open space planning program—an accessibility based alternative plan and a resource based alternative plan. Both alternative plans include three major parts: (1) existing and proposed Type I and Type II parks—which would accommodate needed facilities for intensive resource-oriented activities, including camping, golf, resource-oriented picnicking, downhill skiing, and beach swimming; (2) the proposed public recreation corridors—which would accommodate needed facilities for trail-oriented activities, including biking, hiking, horseback riding, ski touring and snowmobiling, and which would serve to connect existing and proposed parks; and (3) water access facilities—which would facilitate use of the rivers and major inland lakes of the Region and of Lake Michigan for extensive water based outdoor recreation activities. Both alternative plans address the identified need for resource-oriented outdoor recreation sites and facilities within the Region through the plan design year. These alternative plans differ primarily in the manner in which they approach the disparity that exists in the Region between the location of the potential park sites possessing regionally significant high value resource amenities and the location of the major population centers.

The accessibility based alternative plan represents an effort to meet existing and anticipated future resource-oriented outdoor recreation requirements by locating future recreation sites and facilities in areas which are readily accessible to the population centers of the Region. Thus, under this alternative plan, a large portion of the proposed public recreation corridor network—which accommodates trail facilities for such extensive activities as hiking, biking, horseback riding, and ski touring—would be developed in locations which provide convenient access to residents of the Kenosha, Milwaukee, and Racine urbanized areas. In addition, individual recreation corridor segments in the outlying areas of the Region would provide convenient access to residents of smaller urban centers including Whitewater, Oconomowoc, Hartford, and West Bend. Under the accessibility based alternative

plan, new Type I and Type II parks, which accommodate intensive resource-oriented outdoor recreation facilities such as campsites, golf courses, and swimming beaches, would be located as close as possible to the area of the Region in which the facility needs exist, using high value potential park sites wherever possible and lower value potential park sites when there was no suitable high value potential park site in the need area. Because of the substantial need for additional resource-oriented facilities to serve residents of Milwaukee County—and, in particular, the densely populated central portion of the City of Milwaukee—nine of the 19 new Type I and Type II parks proposed under the accessibility based alternative plan would be situated within 20 miles of the central business district of the City of Milwaukee. Of the remaining 10 new parks proposed under this alternative plan, two would be located in eastern Kenosha County to provide space for resource-oriented facilities to serve residents of the Kenosha urbanized area and eight would be located in outlying portions of the Region to provide the space required to meet resource-oriented facility needs of residents of the rural and outlying urban areas of the Region.

The resource based alternative plan addresses the identified need for public resource-oriented outdoor recreation sites and facilities in the Region through a design which, in contrast to the accessibility based alternative plan, would place greater emphasis in the location of parks on site quality and less emphasis on the overall accessibility of the recommended sites and facilities to the regional population. In general, the resource based alternative plan proposes to meet existing and anticipated future resource-oriented outdoor recreation requirements by developing the needed facilities at the best remaining potential park sites within the Region. In the effort to ensure the high quality of future recreation sites, however, the plan places—to the extent practicable—a priority on the development of high value potential park sites which also meet the identified accessibility requirements. Under the resource based alternative plan, public recreation corridors would be located to the maximum extent practicable in primary environmental corridors situated within areas of the Region identified in the Commission potential park sites inventory as possessing recreational values of regional significance, including the Kettle Moraine, the Lake Michigan shoreline, and the Milwaukee River, Fox River, Root River, Sugar Creek, and Turtle Creek corridors. Under this alternative plan, many of the proposed new Type I and Type II parks would be situated in outlying portions of the Region, where natural resource amenities with high recreational value of regional significance are relatively abundant. Only four of the 17 new parks proposed under this alternative would be located within 20 miles of the central business district of the City of Milwaukee, owing to the relative scarcity of high value potential park sites in this need area.

Implementation of either alternative plan may be expected to provide a quantity of resource-oriented outdoor recreation sites—Type I and Type II parks and public recreation corridors—sufficient to meet the anticipated total demand



for outdoor recreation in the Region through the plan design year 2000. Both alternative plans recommend the provision of about 7,300 additional acres of Type I and Type II parks and public recreation corridors. Under the accessibility based alternative plan, of the approximate 7,300 acres recommended for acquisition, 2,700 acres, or about 37 percent, were recommended for acquisition under the open space preservation plan element. Under the resource based alternative plan for the approximate 7,300 acres recommended for acquisition, 3,100 acres, or about 42 percent, were recommended for acquisition under the open space preservation plan element. In addition, implementation of either alternative plan may be expected to meet the overall demand for intensive resource-oriented facilities, such as campsites, golf courses, and swimming beaches, and extensive resource-oriented facilities such as hiking trails, biking trails, and ski touring trails, in the Region through the plan design year.

Although the quantity of public intensive resource-oriented facilities included under each alternative plan would be sufficient to meet the anticipated overall demand for such facilities in the Region in the year 2000, not all residents of the Region would have ready access to these facilities. In this regard, the accessibility based alternative plan could be expected to conveniently serve a slightly higher proportion of the year 2000 regional population with facilities for camping, golf, picnicking, and beach swimming than the resource based alternative plan. The largest difference in this regard occurs for golf, with the accessibility based alternative plan conveniently serving about 81 percent of the forecast resident population of the Region, compared to 74 percent under the resource based alternative plan. Furthermore, under the accessibility based alternative plan, 80 percent of the forecast resident population of the Region would be conveniently served by public recreation corridors which would accommodate trails for hiking, ski touring, and other extensive trail-oriented recreation activities. Under the resource based alternative plan, about 68 percent of the forecast resident population would be served conveniently by the public recreation corridor system.

The quality of the major parks and recreation corridors in terms of the natural resource amenities provided at these sites would, in general, be higher under the resource based alternative plan than under the accessibility based alternative plan. Thus, under the resource based alternative plan, 16 Type I and Type II parks, or about 94 percent of the 17 proposed new Type I and Type II parks, would be located at high value potential park sites. In contrast, only 13 proposed new Type I and Type II parks, or about 68 percent of the 19 new Type I and Type II parks proposed under the accessibility based alternative plan, would be located at high value potential park sites. Moreover, under the resource based alternative plan, about 82 percent of the recreation corridor network would be situated in areas of the Region identified under the Commission potential park site inventory as possessing natural resource amenities of regional significance, including the Kettle Moraine, the Lake Michigan shoreline, and the Milwaukee River, Fox River, Root River,

Sugar Creek, and Turtle Creek corridors. In contrast, only 59 percent of the recreation corridor proposed under the accessibility based alternative plan would traverse such regionally significant resource areas.

Recommendations for the provision of small boat access facilities on the rivers and inland lakes of the Region and along the Lake Michigan shoreline are identical under the two alternative plans. Both alternative plans recommend the provision of 36 additional access points on the rivers and inland lakes of the Region, primarily to accommodate slow boating activity such as fishing and canoeing. The alternative plans further recommend the provision of two new small boat harbors along the Lake Michigan shoreline in southeastern Wisconsin: the exact location of such harbors requiring more detailed feasibility and engineering studies. It is further recommended that the public sector meet the anticipated needs for additional boat launching ramps and boat mooring slips through the year 2000 within harbors of refuge along the Lake Michigan shoreline.

Evaluation of the resource-oriented outdoor recreation component alternative plans with respect to the established regional park and open space preservation, acquisition, and development objectives and standards indicates that the two plans do not differ significantly in their ability to meet the existing and probable future recreation demand in terms of the number, size, and types of parks included and with respect to capital costs. The resource based alternative plan, however, would provide a higher quality of recreational experience than the accessibility based alternative plan because it incorporates the highest quality potential park sites, thereby providing an appropriate natural setting for resource-oriented recreation activities. This alternative plan, moreover, also would contribute significantly to the protection and wise use of valuable natural resource amenities within the Region. Thus, in addition to satisfying recreation needs within an appropriate setting, the resource based alternative plan also would serve to implement open space preservation objectives. Accordingly, it is recommended that the resource based alternative plan be selected for incorporation into the recommended park and open space system plan for the Region.

#### Urban Outdoor Recreation Plan Component

The urban outdoor recreation plan component recommends the public provision of local recreation sites—including Type III parks and Type IV parks and school recreation sites—and intensive nonresource-oriented facilities—including baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, softball diamonds, and tennis courts—sufficient to meet the overall demand within most urban areas of the Region. Within most urban areas, the required local recreation lands could be readily obtained in various ways, including dedication as part of the urban land subdivision process, development of additional school related recreation sites, development of existing publicly owned but undeveloped park sites, or public purchase and development of other open space lands. The satisfaction of all the identified urban

recreation site and facility requirements would be difficult, however, within certain densely populated urban areas situated in Kenosha, Milwaukee, and Racine Counties. The satisfaction of the identified need within these areas could be accomplished only through a substantial amount of urban demolition, clearance, and redevelopment. Because of the high cost of such redevelopment—over \$800 million—and the attendant disruption of the urban land use pattern, redevelopment for park purposes of land currently in urban use would be restricted to amounts required to meet the adopted accessibility standards. This approach seeks to ensure that each resident of an urban area would at least have ready access to a public outdoor recreation site. It should be noted that the quantity of outdoor recreation sites and facilities provided under this approach may be less than that required to fully meet the recreation site and facility requirements within certain densely populated urban areas.

#### Capital Cost of the Park and Open Space System Plan

The total public outlay required for implementation of the regional park and open space system—including the recommended resource-oriented outdoor recreation plan component, the urban outdoor recreation plan component, the primary environmental corridor plan component, and the prime agricultural land plan component—is estimated at \$248.3 million. Implementation of the recreation related element of the park and open space system plan—including the recommended resource-

oriented outdoor recreation plan component and the urban outdoor recreation plan component—would entail an estimated public outlay of \$164.6 million, or 66 percent of this total. The balance, \$83.7 million, would be required under the primary environmental corridor plan component for the purchase of primary environmental corridor lands which are not recommended for acquisition under the recreation related plan components.

Of the total outlay of \$164.6 million required for implementation of the recreation related elements of the park and open space system plan, \$69.8 million, or 42 percent, would be required for implementation of the recommended resource-oriented outdoor recreation plan component. It should be noted that a relatively large proportion, 28 percent, of the capital cost under the resource-oriented outdoor recreation plan component would be required for the development of small boat access facilities along Lake Michigan.

Implementation of the urban outdoor recreation plan component would entail the public outlay of \$94.8 million, or 58 percent of the total outlay of \$164.6 million required for implementation of the recreation related elements of the park and open space system plan. About \$67.9 million, or 72 percent of this total, would be required for the acquisition of land currently in urban use, clearance, and relocation assistance in order to meet local park accessibility requirements within certain densely populated urban areas of the Region.

(This page intentionally left blank)

## RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

## INTRODUCTION

The previous chapter of this report presented an open space preservation plan element composed of a plan component for primary environmental corridors and a plan component for prime agricultural lands. The open space preservation plan element offered recommendations for appropriate means of achieving the adopted open space preservation objectives. In addition, an urban outdoor recreation plan component addressed the identified need for nonresource-oriented, urban outdoor recreation sites and facilities, while alternative resource-oriented outdoor recreation component plans dealt with the identified need for resource-oriented recreation sites and facilities through basically different designs. The open space preservation plan element, together with the urban outdoor recreation plan component and one of the alternative resource-oriented outdoor recreation plan components, are proposed to be adopted together as the regional park and open space system plan for the year 2000.

Choosing from the two alternative resource-oriented outdoor recreation component plans—namely, the accessibility based alternative plan and the resource based alternative plan—must follow an evaluation of many tangible and intangible factors. Primary emphasis, however, is upon the degree to which the alternatives meet the established park and open space development standards. A comparative evaluation of the two alternative plans with respect to the established objectives and standards, summarized in Chapter XIII, indicated that the two plans do not differ significantly in the ability to meet existing and probable future recreation demand in terms of number, size, and types of parks included or in plan cost. The resource based alternative plan would, however, provide a higher quality of recreation experience than would the accessibility based alternative plan because it incorporates the highest quality potential park sites and does so within an appropriate natural setting, thus enhancing the overall quality of the recreation experience involved. This alternative plan also would contribute significantly to the protection and wise use of valuable natural resource amenities within the Region. Thus, in addition to satisfying recreation needs within an appropriate setting, the resource based plan alternative would serve to implement important open space preservation objectives as well. For these reasons, the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning recommended that the resource based alternative plan be selected for incorporation into the recommended park and open space system plan for southeastern Wisconsin.

In recommending the resource based alternative plan, the Committee did, however, suggest certain modifications to the original plan design. For example, the Committee recommended that trails for motorized vehicles, such as snowmobiles and trail bikes, should not be located within primary environmental corridors, as suggested in the original plan design, due to the incompatibility of such motorized vehicles with the preservation of corridors as well as with the pursuit of other trail activities. In addition, the Committee suggested that certain modifications be made to the number and spatial distribution of resource-oriented outdoor recreation sites and facilities set forth under the resource based alternative plan in order to incorporate major existing county and local recreation plan proposals. Finally, the Committee recommended that, in view of the outlying locations of many of the park and recreation corridor segments proposed under the resource based alternative plan, the recommended plan should include proposals on the provision of mass transit service between densely populated urban centers of the Region and certain outdoor recreation sites of regional significance.

In addition to selecting the resource based alternative plan, modified as indicated above, as the recommended resource-oriented outdoor recreation plan component for southeastern Wisconsin, the Technical and Citizen Advisory Committee also recommended that the urban outdoor recreation plan component, as set forth in Chapter XIII, be adopted to guide public provision of needed local parks and nonresource-oriented recreation facilities within urban areas of the Region through the plan design year 2000. Furthermore, the Committee recommended that the open space preservation plan element set forth in Chapter XIII, be adopted with certain modifications to guide the preservation through public acquisition and land use regulation of the remaining primary environmental corridors and prime agricultural lands in the Region.

This chapter presents a description of the recommended park and open space system plan for southeastern Wisconsin as modified by the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning,<sup>1</sup>

<sup>1</sup> *This recommended plan was presented at five public informational meetings and one public hearing. Revisions to this plan as a result of the public testimony received through the informational meetings, hearing, and written correspondence are summarized in Chapter XVI of this report. The revised final recommended plan is presented graphically on the map inside the back cover of this report.*



including a description of the open space preservation plan element composed of the primary environmental corridor plan component and the prime agricultural land plan component and the outdoor recreation plan element composed of the resource-oriented outdoor recreation plan component and the urban outdoor recreation plan component. Although the two plan elements are by nature closely interrelated, they are presented separately in this chapter in order to facilitate a detailed description of each. In addition, recognizing that public financial resources available for park and open space purposes are limited, this chapter establishes general priorities among the recommendations of the park and open space system plan for the year 2000, indicating those recommendations which should be implemented first.

#### OPEN SPACE PRESERVATION PLAN ELEMENT RECOMMENDATIONS

A major consideration in the park and open space planning program—as set forth in regional park and open space preservation, acquisition, and development Objective No. 6—is the preservation of high quality open space lands for protection of the underlying and sustaining natural resource base and enhancement of the social and economic well being and environmental quality of the Region. As indicated in Chapter XII, the preservation of primary environmental corridors in the Region in an essentially open, natural state, and the preservation of prime agricultural lands of the Region in essentially agricultural use would largely achieve this objective. Under the open space preservation plan element, existing and future open space needs in southeastern Wisconsin would be met through appropriate land use controls on, or public acquisition of, the primary environmental corridors and prime agricultural lands of the Region which are not now so preserved.

##### Primary Environmental Corridor Plan Component

Primary environmental corridors are defined as elongated areas which encompass the best remaining elements of the natural resource base. The primary environmental corridors in southeastern Wisconsin generally lie along major stream valleys, around major lakes, and in the Kettle Moraine area (see Map 129). These primary environmental corridors contain almost all of the best remaining woodlands, wetlands, and wildlife habitat areas within the Region; all of the bodies of surface water and associated undeveloped floodlands and shorelands; and important groundwater recharge and discharge areas. Moreover, primary environmental corridors encompass areas of rough topography, significant geological formations, and areas of wet or poorly drained soils. Primary environmental corridors also contain many existing outdoor recreation sites, most of the remaining high value potential park sites, and many areas of scenic, historic, and other cultural value. The gross primary environmental corridor area, defined as including all land uses, both urban and rural, and all surface water area within the corridor configuration delineated on Map 129, totaled 347,100 acres, or about 20 percent of the total area of the Region. Net primary environmental corridor areas are defined as the gross corridor acreage

less any incompatible urban use acreage located in the corridors. Net corridor areas, therefore, consist of compatible land uses such as recreation, agriculture, water, wetlands, woodlands, and other open space uses. The net corridor area exclusive of surface water area totaled over 279,700 acres, or about 16 percent of the total area of the Region.<sup>2</sup>

Implementation of the recommended primary environmental corridor plan component would serve to protect all of the net primary environmental corridor lands in the Region through a combination of public acquisition and regulation of the corridor lands. Under this plan element, a total of 144,860 acres of land, or about 52 percent of the net primary environmental corridor land within the Region, would eventually be placed in public ownership. The public ownership could be in fee simple or in the form of ownership of the urban development rights only, as more detailed studies looking to plan implementation might indicate was most cost-effective. Of this total area recommended for eventual public ownership, 45,910 acres, or about 32 percent, are already in public ownership while 98,950 acres, or 68 percent, are recommended for future acquisition at an estimated cost of \$100,312,000 (see Table 160A).

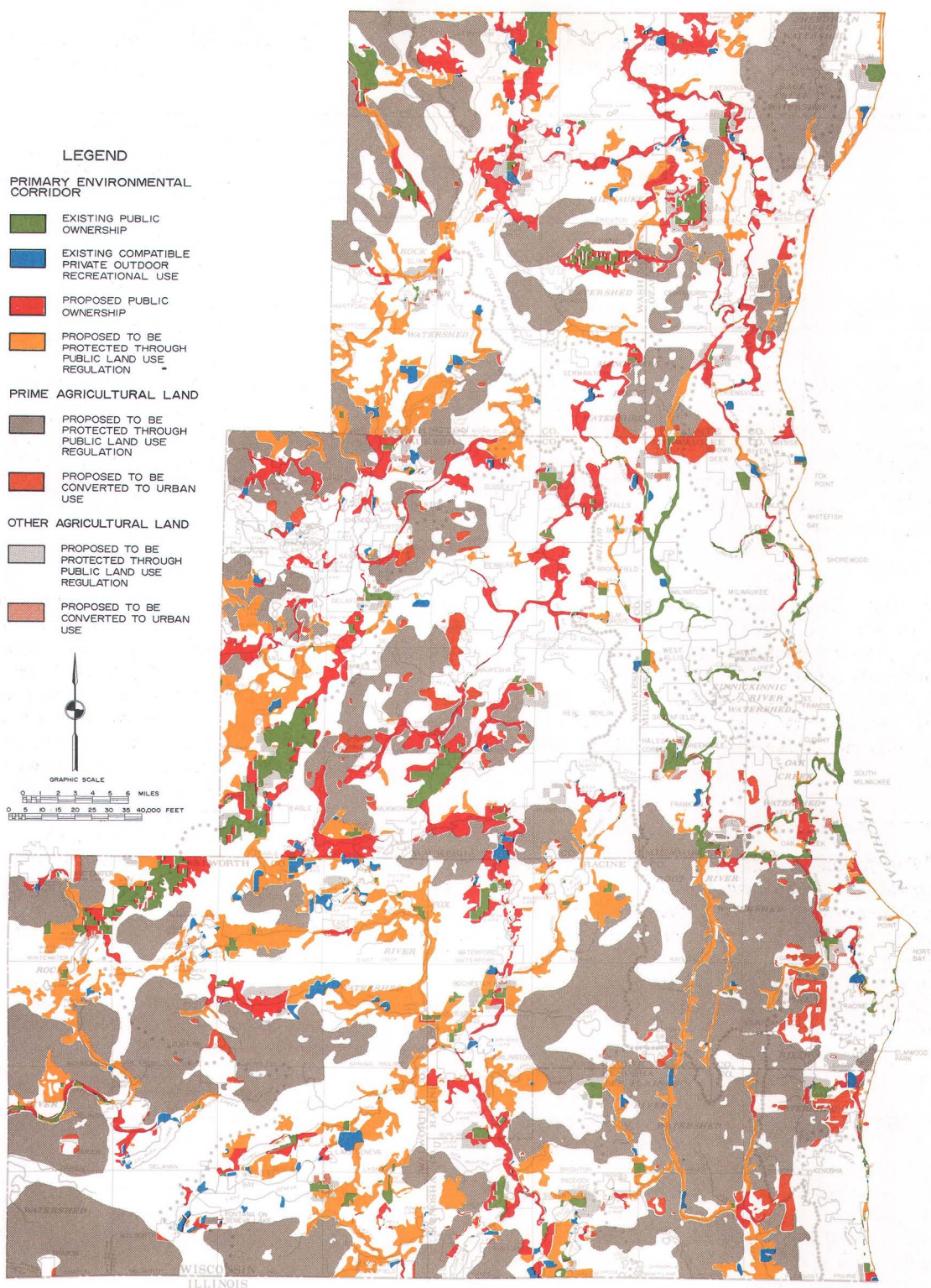
Of the 98,950 acres of net primary environmental corridor lands recommended for public acquisition, 67,960 acres, or 69 percent, have been previously recommended for acquisition by the public sector under the adopted Fox, Milwaukee, Menomonee, and Root River watershed plans. In general, the watershed plans recommend public acquisition of the following types of primary environmental corridor lands: undeveloped primary environmental corridor lands lying in urban areas or areas of the watershed expected to be in urban use by the plan design year; high value wetland and woodland area located in primary environmental corridor adjacent to existing publicly owned woodlands, wetlands, and wildlife areas; other undeveloped primary environmental corridor lands along the main stems of the rivers of the respective watersheds; and selected additional segments of the primary environmental corridor, the preservation of which was judged important to the social and economic well being and environmental quality of the watershed in the Region.

In addition to primary environmental corridor lands recommended for public acquisition under the Commission's watershed planning programs, the primary environmental corridor plan component recommends public acquisition of 15,200 acres of primary environmental corridor lands which lie in existing urban areas or areas expected to be in urban use by the year 2000 and which lie outside the four watersheds for which plans have been prepared. Moreover, at the request of the Waukesha County representative on the Technical and Citizen

---

<sup>2</sup>Henceforth, net primary environmental corridor acreage figures presented in this chapter exclude surface water, unless otherwise indicated.

**PRESERVATION OF PRIMARY ENVIRONMENTAL CORRIDOR LANDS AND  
AGRICULTURAL LANDS UNDER THE OPEN SPACE PRESERVATION PLAN ELEMENT: 2000**



The open space preservation plan element consists of recommendations for the protection of the remaining primary environmental corridors and prime agricultural lands of the Region. Primary environmental corridor lands, excluding the 66 square miles of surface water area of lakes and streams, totaled 437 square miles in 1970. About 72 square miles, or 16 percent of this area, were in public ownership. The primary environmental corridor plan component recommends public acquisition of an additional 155 square miles, or an additional 36 percent, of the primary environmental corridor lands. Including the 72 square miles currently in public ownership, a total of 227 square miles of such lands, or about 52 percent of the net primary environmental corridor lands and about 8 percent of the total area of the Region, would be permanently held in public trust upon full implementation of this plan component. Those areas of the primary environmental corridors which are not actually acquired by the public sector, including existing private outdoor recreation areas, would be kept in compatible, essentially natural open uses through the use of exclusive agricultural floodland, shoreland, parkland, conservancy, and very low-density residential zoning. In total, about 210 square miles, or 48 percent of the primary environmental corridor lands in the Region, would be zoned in such a manner.

About 620 square miles of prime agricultural lands, or about 98 percent of the existing prime agricultural acreage of the Region, would be protected through exclusive agricultural zoning. An additional 41 square miles of other agricultural lands would also be zoned for agricultural use to provide essential open space around major scientific, educational, and recreational sites. A total of 661 square miles of agricultural lands, or about 41 percent of the total agricultural land and 25 percent of the total area of the Region, would thus be preserved in agricultural use.

Source: SEWRPC.



Table 160A

**PRESERVATION OF NET PRIMARY ENVIRONMENTAL CORRIDOR LANDS UNDER THE  
RECOMMENDED PRIMARY ENVIRONMENTAL CORRIDOR PLAN COMPONENT**

County	Net Primary Environmental Corridor Lands										Estimated Acquisition Cost (dollars)
	Total		Proposed to be Zoned		Proposed Public Ownership: 2000						
					Existing Public Ownership 1973		Proposed Public Acquisition 1973-2000		Total		
Acres	Percent of Region	Acres	Percent of Region	Acres	Percent of Region	Acres	Percent of Region	Acres	Percent of Region		
Kenosha . . . .	24,550	8.8	15,050	11.2	3,120	6.8	6,380	6.4	9,500	6.6	5,585,000
Milwaukee . . .	13,260	4.7	2,120	1.6	8,870	19.3	2,270	2.3	11,140	7.7	7,251,000
Ozaukee . . . .	20,750	7.4	6,510	4.8	2,490	5.4	11,750	11.9	14,240	9.8	9,835,000
Racine . . . . .	27,840	9.9	14,760	10.9	3,890	8.5	9,190	9.3	13,080	9.0	9,575,000
Walworth . . . .	70,240	25.2	51,520	38.2	7,140	15.6	11,580	11.7	18,720	12.9	14,847,000
Washington . . .	50,150	17.9	22,800	16.9	7,060	15.4	20,290	20.5	27,350	18.9	18,656,000
Waukesha . . . .	72,910	26.1	22,080	16.4	13,340	29.0	37,490	37.9	50,830	35.1	34,563,000
Total	279,700	100.0	134,840	100.0	45,910	100.0	98,950	100.0	144,860	100.0	100,312,000

Source: SEWRPC.

Advisory Committee on Regional Park and Open Space Planning, and with the concurrence of that Committee, the primary environmental corridor plan component as originally set forth in Chapter XIII has been modified to include public acquisition of certain additional segments of the primary environmental corridor in Waukesha County encompassing a total of 15,790 acres.<sup>3</sup>

<sup>3</sup>The following segments of the primary environmental corridor in Waukesha County have been proposed for public acquisition under the recommended open space preservation plan element at the suggestion of the Waukesha County representative on the Technical and Citizen Advisory Committee, and with the concurrence of the Committee: a 3,720-acre segment of the primary environmental corridor west of the Village of Mukwonago along the Mukwonago River and Jericho Creek; a 1,900-acre segment of the primary environmental corridor east of the Village of North Prairie along Genesee Creek; a 610-acre segment of the primary environmental corridor south of the City of Waukesha along Pebble Brook; a 2,040-acre segment of the primary environmental corridor west of the Village of Wales in the Kettle Moraine; a 1,310-acre segment of the primary environmental corridor west of the Village of Dousman along the Bark River; a 590-acre segment of the primary environmental corridor east of the Village of Dousman along the Bark River extending to Nagawicka Lake; a 1,780-acre segment of the primary environmental corridor along the Ashippun River in the Town of Oconomowoc; a 1,550-acre segment of the primary environmental corridor along the Oconomowoc River in the Town of Merton; and a 2,290-acre segment of the primary environmental corridor northeast of the Village of Merton along the Bark River.

As indicated in Table 160A, of the 98,950 acres of primary environmental corridors recommended for public acquisition under the open space preservation plan element, 37,490 acres, or 38 percent, are in Waukesha County. In contrast, under the primary environmental corridor plan component, Milwaukee County, which has developed an excellent parkway system through the acquisition and development of primary environmental corridor lands, would only acquire an additional 2,270 acres of primary environmental corridor. The outlay for primary environmental corridor lands in Milwaukee would, nevertheless, be substantial because of the high value attached to remaining open space lands in the County.

It should be recognized that the primary environmental corridor lands recommended for public acquisition under the open space preservation plan element are required solely for open space and natural resource base protection and are exclusive of any corridor lands recommended for public acquisition primarily for recreation purposes. The public acquisition of these corridor segments would serve, however, to provide outdoor recreation opportunities to the resident population and, in particular, would offer locations for many of the additional parks and recreation corridor segments recommended for development within the Region by the year 2000 under the recommended resource-oriented outdoor recreation plan component.

Under the primary environmental corridor plan component, those areas of the primary environmental corridor not actually acquired for public use, including existing private outdoor recreation areas, would be maintained in compatible, essentially natural, open uses through the use of agricultural, floodland, shoreland, conservancy, and very low-density residential zoning. At a minimum this zoning would encompass all the

riverine areas of the Region lying within the 100-year recurrence interval flood hazard lines and all areas within 1,000 feet of the shoreline of the 100 major lakes within the Region. Such zoning would assist in protecting the remaining woodlands, wetlands, and wildlife habitat areas as well as the floodwater movement and storage areas within the Region from continued deterioration and destruction by fragmented and incompatible urban development. Under the primary environmental corridor plan component, 134,840 acres, or 48 percent of the net primary environmental corridor land within the Region, would be zoned in a manner appropriate to preservation of the natural resource element. In addition, those areas of the corridors proposed to be acquired by the public sector would also be initially zoned as agricultural, floodland, parkland, or conservancy districts in order to achieve immediate protection from urban encroachment pending acquisition.

#### Prime Agricultural Land Plan Component

Prime agricultural lands in the Region have been defined by the Commission as lands which are highly productive for agricultural purposes on the basis of soils, the size and extent of the areas farmed, and the historic capability of the area to produce better than average crop yields. The preservation of these prime agricultural lands is desirable for economic reasons as well as to maintain the natural beauty and agricultural heritage of southeastern Wisconsin, thereby ensuring the future environmental wholesomeness of the Region. In addition to the prime agricultural lands as defined above, certain additional agricultural lands surrounding major sites having scientific, educational, and recreational value in the Region should be preserved in order to provide a suitable setting for such sites.

The prime agricultural land plan component recommends the preservation through exclusive agricultural zoning of all remaining prime agricultural lands in the Region as well as certain agricultural lands surrounding major scientific, educational, and recreational sites except for small portions of such agricultural lands which were generally committed to urban development as early as 1970 due to proximity to existing and expanding concentrations of urban uses and the prior commitment of heavy capital investment in utility extensions. These agricultural lands recommended for preservation are shown on Map 129. In 1970, prime agricultural lands in the Region comprised 404,900 acres,<sup>4</sup> or 24 percent of the total area of the Region, and 39 percent of the total area of the Region devoted to agricultural use. Under the prime agricultural land plan component, 396,500 acres, or 98 percent of the existing prime agricultural acreage in the Region, are recommended to be preserved in agricultural use through exclusive agricultural zoning. It is

anticipated that the small balance—8,400 acres, or 2 percent of the remaining prime agricultural acreage—would be converted to urban use by the plan design year 2000 (see Table 161).

In 1970, there were also 31,000 acres of agricultural land which were considered to provide a desirable open space setting around the major scientific, educational, and recreational sites in the Region. Under the prime agricultural land plan component, approximately 26,600 acres, or 86 percent of these lands, would be preserved in agricultural use through exclusive agricultural zoning. The remainder—4,400 acres, or 14 percent of the existing acreage—would be converted to urban use by the year 2000.

Including both prime agricultural lands and additional agricultural lands which are required as a desirable open space setting for the major scientific, educational, and recreational sites in the Region, a total of 423,100 acres of agricultural land are recommended to be preserved through exclusive agricultural zoning. This total represents 25 percent of the total area of the Region and 41 percent of the existing agricultural land in the Region in 1970.

In addition to prime agricultural lands and agricultural lands surrounding major scientific, educational, and recreation sites described above, there were 604,300 acres of general agricultural lands in the Region in 1970. While general agricultural lands in the Region serve as a land reserve for urban expansion necessitated by growth in the regional population, the preservation of these general agricultural lands also is important to the economic well being, natural beauty, and quality of life in the Region. Under the prime agricultural land plan component, it is proposed that these general agricultural lands also be preserved as far as possible and that the extent of conversion of general agricultural lands to urban land use be confined to that proposed under the adopted regional land use plan. Under the regional land use plan, approximately 67,000 acres, or 11 percent of the general agricultural lands remaining in the Region in 1970, would be converted to urban use by the plan design year 2000. The preservation of general agricultural lands should be accomplished through the use of agricultural zoning districts which are designed to reflect community needs, the pattern of land ownership, and suitability of the land for farming. In no case, however, should such agricultural zoning districts allow residential land development on lots of less than five acres.

#### OUTDOOR RECREATION PLAN ELEMENT RECOMMENDATIONS

A major consideration in the park and open space planning program—as set forth in the regional park and open space preservation, acquisition, and development of objectives—is the provision of a system of outdoor recreation sites and open space areas that will allow the resident population of the Region adequate opportunity to participate in a wide range of outdoor recreation

---

<sup>4</sup>Prime agricultural acreage figures presented in this chapter represent land within the prime agricultural configuration shown on Map 129 which is actually devoted to agricultural use.



Table 161

**PRESERVATION OF PRIME AGRICULTURAL LANDS AND AGRICULTURAL LANDS SURROUNDING MAJOR SCIENTIFIC, EDUCATIONAL, AND RECREATION SITES UNDER THE PRIME AGRICULTURAL LAND PLAN COMPONENT**

County	Net Prime Agricultural Lands				Agricultural Lands Surrounding Major Scientific, Educational, and Recreation Sites				Total			
	Total 1970 (acres)	Proposed Conversion to Urban Use 1970-2000 (acres)	Proposed to be Preserved Through Exclusive Agricultural Zoning: 2000		Total 1970 (acres)	Proposed Conversion to Urban Use 1970-2000	Proposed to be Preserved Through Exclusive Agricultural Zoning: 2000		Total 1970 (acres)	Proposed Conversion to Urban Use 1970-2000 (acres)	Proposed to be Preserved Through Exclusive Agricultural Zoning: 2000	
			Acres	Percent of Region			Acres	Percent of Region			Acres	Percent of Region
Kenosha . . . .	66,000	2,300	63,700	16.1	3,900	200	3,700	13.9	69,900	2,500	67,500	16.0
Milwaukee . . .	7,100	800	6,300	1.6	3,000	1,100	1,900	7.1	10,100	1,900	8,200	1.9
Ozaukee . . . .	37,100	200	36,900	9.3	5,200	400	4,800	18.0	42,300	600	41,700	9.9
Racine . . . . .	69,000	1,100	67,900	17.1	4,400	500	3,900	14.7	73,400	1,600	71,700	16.9
Walworth . . . .	112,500	600	111,900	28.2	4,400	500	3,900	14.7	116,900	1,100	115,800	27.3
Washington . . .	49,500	600	48,900	12.3	3,100	500	2,600	9.8	52,600	1,100	51,500	12.2
Waukesha . . . .	63,700	2,800	60,900	15.4	7,000	1,200	5,800	21.8	70,700	4,000	66,700	15.8
<b>Total</b>	<b>404,900</b>	<b>8,400</b>	<b>396,500</b>	<b>100.0</b>	<b>31,000</b>	<b>4,400</b>	<b>26,600</b>	<b>100.0</b>	<b>435,900</b>	<b>12,800</b>	<b>423,100</b>	<b>100.0</b>

Source: SEWRPC.

activities. As indicated in Chapter XII, the provision of resource-oriented outdoor recreation opportunities—including large parks, recreation corridors, and water access facilities—and urban outdoor recreation opportunities would largely achieve this objective. The regional park and open space plan recommendations for the provision of adequate outdoor recreation opportunities, as proposed under the resource-oriented outdoor recreation plan component and the urban outdoor recreation plan component, are discussed in this section.

#### Resource-Oriented Outdoor Recreation Plan Component

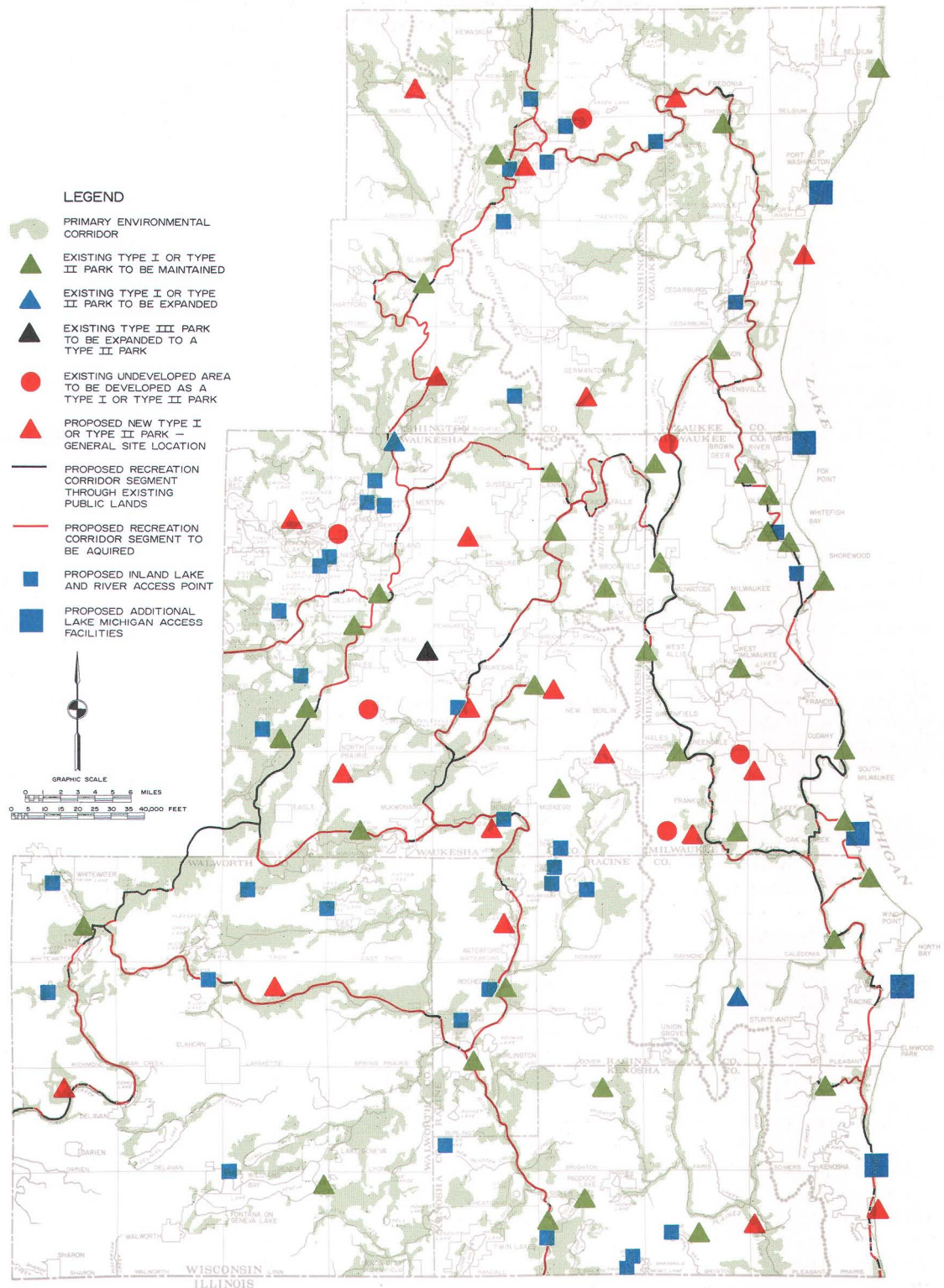
The resource based alternative plan, as set forth in Chapter XIII, has been recommended by the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning for adoption with modifications as the resource-oriented outdoor recreation plan component for southeastern Wisconsin. The plan component would serve to guide the public sector in the provision of resource-oriented outdoor recreation sites—including Type I and Type II parks and public recreation corridors—and resource-oriented facilities—including intensive facilities such as campsites and swimming beaches, extensive facilities such as hiking and biking trails, and recreational water access facilities—required within the Region through the year 2000. The resource based alternative plan represents an effort to meet existing and anticipated future resource-oriented outdoor recreation requirements by developing the required facilities at the best remaining potential recreation sites within the Region. In this effort to ensure the high quality of future recreation sites, however, the resource based alternative plan places a priority to the extent practicable on the development of potential recreation areas which also meet the identified accessibility needs. Because the resource based alternative plan incorporates the highest

quality potential park sites, implementation of this plan may be expected to provide opportunities for resource-oriented recreation activities within an appropriate setting and to contribute significantly to the protection and wise use of valuable natural resource amenities within the Region.

This section presents a regional description of the major proposals of the recommended resource-oriented outdoor recreation plan component, including a description of modifications to the original plan design suggested by the Technical and Citizen Advisory Committee, followed by a more detailed description of the plan proposals within each of the seven counties.

Recreation Corridors: Recreation corridors have been defined for purposes of this report as publicly owned ribbons of land of at least 15 miles in length located through areas of scenic, scientific, historic, or other cultural interest which contain trails marked and maintained for such activities as hiking, biking, horseback riding, and ski touring. Based upon this definition, there were no recreation corridors in the Region in 1973. The recommended resource-oriented outdoor recreation plan element proposes the development of a recreation corridor network having an overall length of 405 linear miles which would, to a large extent, traverse primary environmental corridors situated within areas of the Region identified in the Commission's potential park sites inventory as possessing recreational resource values of regional significance, including the Kettle Moraine, the Lake Michigan shoreline, and the Milwaukee River, Root River, Sugar Creek, and Turtle Creek corridors (see Map 130). As indicated in Table 162, of the total of 405 linear miles of public recreation corridors proposed under the recommended plan, 378 linear miles, or 93 per-

**TYPE I AND TYPE II PARKS, RECREATION CORRIDORS, AND WATER ACCESS POINTS PROPOSED  
UNDER THE RECOMMENDED RESOURCE-ORIENTED PLAN COMPONENT: 2000**



The recommended resource-oriented outdoor recreation plan component recommends increasing the acreage of large parks within the Region from 11,610 acres in 1973 to about 17,565 acres by the year 2000. About 4,225 acres, or about 71 percent of this 5,955-acre increase, would result from the public acquisition and development of 20 new large—greater than 100 acres—parks. The remaining 1,730 acres would result from expansion of existing parks. The plan component also proposes the development of a recreation corridor network with a total length of about 405 linear miles. This network would accommodate trails for biking and hiking, horseback riding, and ski touring and would connect many of the existing and proposed large parks, thereby creating an integrated system of park and open space lands within the Region. In addition, the plan component recommends additional access to 28 major inland lakes, an additional five access points to the Milwaukee River, and an additional four access points to the Fox River, all primarily to facilitate slow boating activities. Finally, this plan component also proposes over 1,300 additional boat mooring slips and 19 additional launch ramps within harbors of refuge along the Lake Michigan shoreline within the Region.

Source: SEWRPC.

Table 162

**PROPOSED RECREATION CORRIDOR MILEAGE UNDER THE RECOMMENDED  
RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: 2000**

County	In Primary Environmental Corridor		Outside Primary Environmental Corridor		Total	
	Linear Miles	Percent	Linear Miles	Percent	Linear Miles	Percent
Kenosha . . . . .	24	96.0	1	4.0	25	100.0
Milwaukee . . . . .	70	95.9	3	4.1	73	100.0
Ozaukee . . . . .	38	97.4	1	2.6	39	100.0
Racine . . . . .	40	90.9	4	9.1	44	100.0
Walworth . . . . .	53	100.0	0	0.0	53	100.0
Washington . . . . .	44	83.0	9	17.0	53	100.0
Waukesha . . . . .	109	92.4	9	7.6	118	100.0
Total	378	93.3	27	6.7	405	100.0

Source: SEWRPC.

cent, would traverse primary environmental corridor lands. The small remainder, 27 linear miles, or 7 percent of the total, traverse land outside the primary environmental corridors, primarily in order to provide continuity.

The recreation corridor network which is recommended for incorporation into the regional park and open space plan for the year 2000 is essentially the same as that proposed under the resource based alternative plan, somewhat modified by the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning. Thus, at the request of the Kenosha County representative on the Technical and Citizen Advisory Committee, and with the concurrence of that Committee, the recreation corridor network set forth under the resource based alternative plan has been expanded to include a spur from Petrifying Springs Park to the proposed recreation corridor in eastern Kenosha County. Furthermore, at the request of the Racine County and Milwaukee County representatives on the Technical and Citizen Advisory Committee and with the concurrence of that Committee, the recommended plan includes a proposal for the provision of a recreation corridor loop to be located in southeastern Milwaukee County and northeastern Racine County, connecting Bender Park and Cliffside Park to the recreation corridor proposed along the Root River. In addition, at the request of the Waukesha County representative on the Technical and Citizen Advisory Committee and with the concurrence of that Committee, the recommended plan includes proposals for the provision of a recreation corridor segment connecting Minooka Park in Waukesha County with the proposed recreation corridor segment along the Fox River south of the City of Waukesha, and for the provision of a recreation corridor segment from Nagawaukee Park in Waukesha County along the Bark River west to the Waukesha County line. Finally, at the request of the Washington

County representative on the Technical and Citizen Advisory Committee and with the concurrence of that Committee, the recommended plan includes proposals for the provision of a recreation corridor loop traversing primary environmental corridors located northeast and southeast of the City of Hartford connecting the City of Hartford with Pike Lake State Park, and for the provision of a recreation corridor segment along Silver Creek and through Regner Park in the City of West Bend.

It should be noted that the recreation corridor network proposed under the recommended resource-oriented outdoor recreation plan component includes segments which traverse intensively developed portions of the Kenosha, Milwaukee, and Racine urbanized area as well as fully developed areas within certain outlying urban centers of the Region. Because of the density of existing urban development and the attendant lack of open space lands, it would be extremely difficult to develop a continuous public recreation corridor through such areas. Implementation of the recreation corridor proposals within such urbanized areas—and, in particular, within the Kenosha, Milwaukee, and Racine urbanized areas—would, therefore, rely heavily on the use of such public open space lands as already exist and would, in addition, rely on the use of designated bike routes over existing roads and designated hiking routes over existing walks in order to provide the desired continuity.

Under the recommended resource-oriented outdoor recreation plan component, hiking and biking trails would be developed throughout the entire proposed public recreation corridor, with 405 linear miles of such trails being provided in the Region by the year 2000 (see Table 163). The recreation corridor would also accommodate 113 linear miles of horseback riding trails, with such trails proposed primarily in outlying

Table 163

**PROPOSED RECREATION TRAILS WITHIN  
THE PUBLIC RECREATION CORRIDOR UNDER  
THE RECOMMENDED RESOURCE-ORIENTED  
OUTDOOR RECREATION PLAN COMPONENT**

Recreation Trails	Proposed Mileage 2000		Recommended Per Capita Standard (linear miles per 1,000 residents)
	Total Linear Miles	Per Capita (linear miles per 1,000 residents) <sup>a</sup>	
Biking Trails . . . . .	405	0.18	0.16
Hiking Trails . . . . .	405	0.18	0.16
Horseback Riding Trails . .	113	0.05	0.05
Nature Study Trails . . . .	45	0.02	0.02
Ski Touring Trails . . . . .	48	0.02	0.02
Total Recreation Corridor	405	0.18	0.16

<sup>a</sup> Total proposed mileage divided by forecast year 2000 regional population.

Source: SEWRPC.

areas of the Region to provide natural settings desirable for horseback riding and take advantage of the outlying location of most rental stables and the residences of individuals who own horses. The recommended plan proposes the development of 45 linear miles of nature study trails within seven different segments of the proposed recreation corridors, such trails being generally located in conjunction with an existing or proposed nature study center. Finally, the recommended plan proposes the development of 48 linear miles of trails within five different segments of the recreation corridor to accommodate ski touring activity (see Map 131).

As noted in the introduction to this chapter, it was the consensus of the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning that snowmobiling trails should not be located within primary environmental corridors due to the basic incompatibility of snowmobiling with the preservation of the corridors themselves as well as with other trail-oriented recreation activities such as ski touring, which may utilize such corridors. Accordingly, proposals for the development of snowmobiling trails within the public recreation corridor, as originally set forth in the resource based alternative plan, have been deleted from the recommended resource-oriented outdoor recreation plan component. It should be noted that there are currently approximately 133 linear miles of snowmobiling trails under the jurisdiction of county or local units of government within the Region; and these and similar additional facilities may be expected to continue to meet a portion of the demand for snowmobiling trails within the Region through the plan design year. It should also be noted, however, that the location of such trails, being primarily on leased lands, is essentially ephemeral in nature and the length and location of such trails may vary from year to year over the plan design period.

Implementation of the recreation corridor proposals of the recommended resource-oriented outdoor recreation plan component may be expected to meet the adopted per capita linear mileage standard for recreation corridors within the Region overall as well as the adopted per capita linear mileage standards for specific trail facilities, with the single exception of snowmobiling trails. In fact, the overall length of the proposed recreation corridor exceeds the anticipated recreation corridor mileage requirement for the year 2000 by approximately 55 linear miles, due primarily to additions suggested by the Technical and Citizen Advisory Committee to the original recreation corridor configuration of the resource based alternative plan.

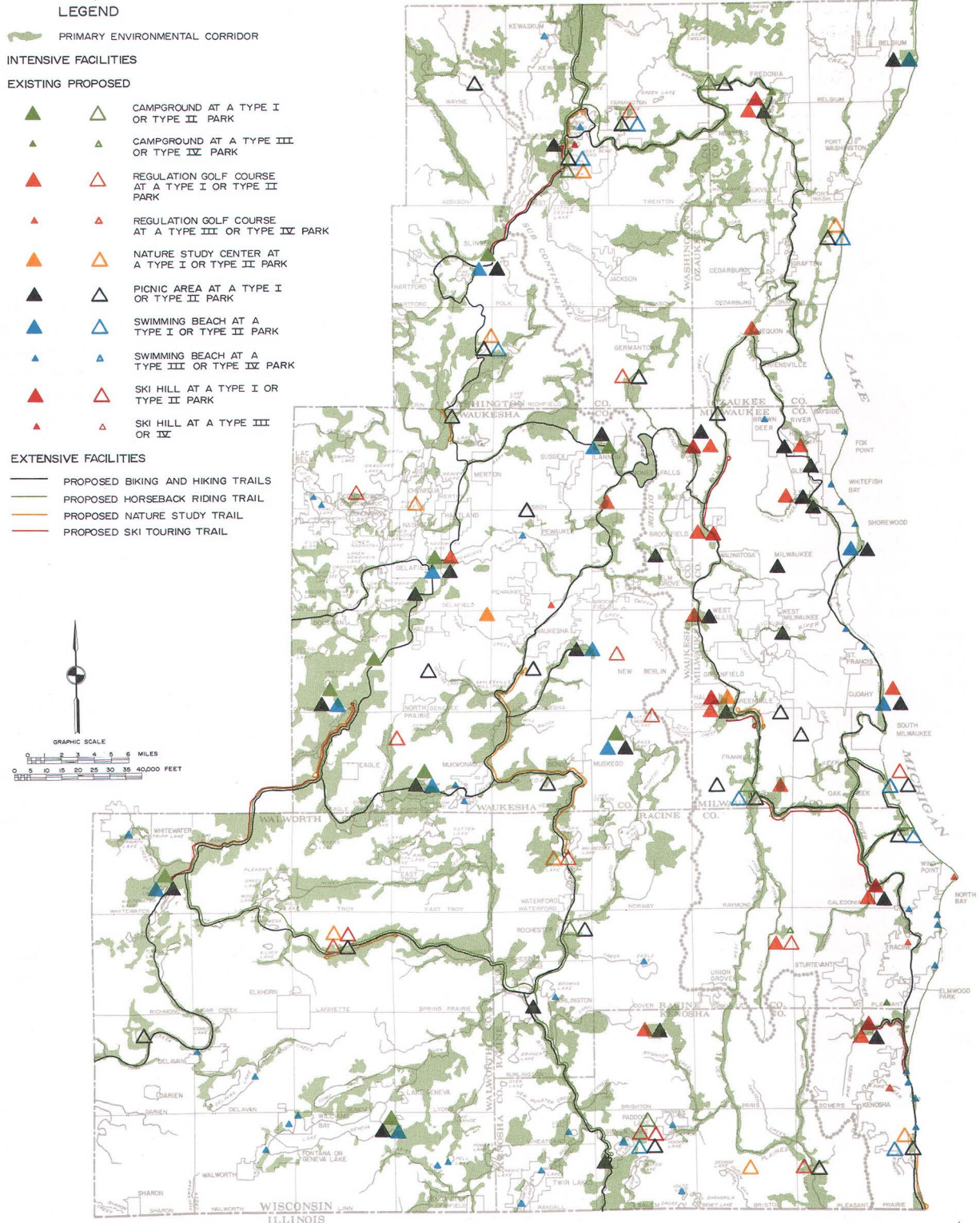
The recreation corridor network proposed under the recommended resource-oriented outdoor recreation plan component traverses much of the Milwaukee County parkway system and virtually the entire length of the Kettle Moraine State Forest within southeastern Wisconsin. As indicated in Table 164, including these lands and other smaller expanses of publicly owned lands, the proposed recreation corridor network includes 132 linear miles of corridors on lands currently in public ownership. The remaining segments of the proposed recreation corridor system, including 273 linear miles, or 67 percent of the proposed recreation corridor mileage, traverse lands currently in private ownership. Provision of recreation corridors through such nonpublic lands would require public acquisition of a minimum of 3,470 acres of land (see Table 165).<sup>5</sup> Of this total, 2,470 acres lying within the primary environmental corridor would be acquired under the primary environmental corridor plan component at an estimated cost of \$3,562,000. The remaining acreage, including 780 acres within the primary environmental corridor and 220 acres outside the primary environmental corridor, would be acquired at an estimated cost of \$2,025,000. In addition to these land acquisition costs, the development of trail facilities within the proposed public recreation corridor would require an estimated public outlay of \$10,671,500.

**Type I and Type II Parks:** Type I and Type II parks are major public general use outdoor recreation sites which ordinarily provide opportunities for such activities as camping, golf, picnicking, and swimming and, by having a large area, contain significant natural resource amenities. The adopted per capita standard for Type I and Type II parks combined is 7.9 acres per thousand persons. The

<sup>5</sup> The width of the proposed public recreation corridors would vary with the resource content of the land traversed and the specific trail facilities to be provided. The actual width and precise location of individual segments of the recreation corridors are properly a matter for county and local park planning. At a minimum, however, a 200-foot-wide corridor is considered necessary to provide an open space setting for any trail activity. Accordingly, a 200-foot-width was assumed for the determination of recreation corridor land acquisition requirements and land acquisition costs.



# FACILITIES FOR RESOURCE-ORIENTED OUTDOOR RECREATION ACTIVITIES UNDER THE RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: 2000



Under the resource-oriented outdoor recreation plan component, virtually all additional intensive resource-oriented outdoor recreation facilities would be developed at existing or proposed Type I and Type II parks. The plan component proposes the development of the following facilities: 219 additional public campsites at seven parks in the Region; additional golf facilities at 12 existing or proposed major parks, including the development of 10 new 18-hole courses and one 9-hole course as well as the expansion of an existing 18-hole course to a 27-hole course; 2,155 additional picnic tables at 25 existing and proposed major parks; two additional downhill skiing areas, including one at an existing park and one at a proposed park; five additional public swimming beaches along the Lake Michigan shoreline; five additional public swimming beaches on inland lakes; and eight additional public nature study centers at major parks within the Region. The resource-oriented outdoor recreation plan component also proposes the development of extensive resource-oriented outdoor recreation facilities (trail-oriented facilities) within the proposed recreation corridor network. Biking and hiking trails would be developed throughout the entire 405 miles of proposed recreation corridor, while the corridor network would also accommodate 113 miles of horseback riding trails, 45 linear miles of nature study trails, and 48 linear miles of ski touring trails.

Source: SEWRPC.

application of this standard to the forecast year 2000 population for southeastern Wisconsin indicated that a total of 17,330 acres of Type I and Type II parks will be required within the Region in the plan design year 2000. Since there was a total of 11,610 acres of Type I and Type II parks in the Region in 1973, an additional 5,720 acres of Type I and Type II parks would have to be added to the existing acreage to meet the adopted standard in the plan design year.

There were 42 Type I and Type II parks in southeastern Wisconsin in 1973 having a combined area of 11,610 acres (see Map 130). The recommended resource-oriented outdoor recreation plan component envisions continued maintenance of these existing parks as well as the devel-

opment of additional facilities at certain of these sites. In addition, the recommended plan proposes the expansion of one existing Type I park and one existing Type II park as well as the expansion of one existing Type III park to the size required for a Type II park, thereby adding 410 acres to the existing Type I and Type II park acreage (see Table 166). The recommended plan further proposes the development as major parks of six undeveloped areas which are currently in public ownership and which have a combined area of 1,320 acres. Finally, the recommended plan proposes the public acquisition and development of 20 new major parks having a combined area of 4,225 acres. A total, then, of 5,955 acres of additional Type I and Type II parks would be provided upon implementation of the recommended resource-oriented outdoor recreation plan. Including the 11,610 acres of Type I and Type II parks existing in the Region in 1973, a total of 17,565 acres of Type I and Type II parks would, thus, be provided in southeastern Wisconsin by the year 2000. The overall Type I and Type II park acreage proposed under the recommended plan would slightly exceed the anticipated minimum requirement for major parks in the plan design year—17,330 acres—as determined from an application of the adopted per capita standard for Type I and Type II parks to the forecast year 2000 population of the Region. This slight excess anticipated for Type I and Type II park acreage would occur primarily because of additional park acquisition and development proposals which have been included in the recommended plan at the request of the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning.

The distribution of new parks within the Region proposed under the recommended resource-oriented outdoor recreation plan component is essentially the same as that proposed under the resource based alternative plan set forth in Chapter XIII, modified somewhat, however, by the Technical and Citizen Advisory Committee. Thus, at the request of the Waukesha County representative on

Table 164

**OWNERSHIP STATUS OF  
RECREATION CORRIDOR PROPOSED UNDER  
THE RECOMMENDED RESOURCE-ORIENTED  
OUTDOOR RECREATION PLAN COMPONENT**

County	Proposed Recreation Corridors					
	Through Lands in Public Ownership 1973		Through Lands in Nonpublic Ownership 1973		Total	
	Linear Miles	Percent	Linear Miles	Percent	Linear Miles	Percent
Kenosha . . . .	9	36.0	16	64.0	25	100.0
Milwaukee . . .	54	74.0	19	26.0	73	100.0
Ozaukee . . . .	4	10.3	35	89.7	39	100.0
Racine . . . . .	8	18.2	36	81.8	44	100.0
Walworth . . . .	17	32.1	36	67.9	53	100.0
Washington . . .	8	15.1	45	84.9	53	100.0
Waukesha . . . .	32	27.1	86	72.9	118	100.0
<b>Total</b>	<b>132</b>	<b>32.6</b>	<b>273</b>	<b>67.4</b>	<b>405</b>	<b>100.0</b>

Source: SEWRPC.

Table 165

**PUBLIC LAND ACQUISITION REQUIREMENTS, ACQUISITION COSTS, AND DEVELOPMENT COSTS  
UNDER THE RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: REGION**

Plan Subelement	Proposed Public Land Acquisition Under the Recommended Resource-Oriented Recreation Plan Component										Estimated Facility Development Costs (dollars)	Total Public Outlay for Land Acquisition and Facility Development Under Recommended Resource-Oriented Outdoor Recreation Plan Component (dollars)
	Primary Environmental Corridor Lands Which Are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under Recommended Resource-Oriented Outdoor Recreation Plan Component				Total Land Acquisition Under Recommended Resource-Oriented Outdoor Recreation Plan Component					
			Acres		Total	Acquisition Cost (dollars)	Acres		Total	Acquisition Cost (dollars)		
			In Primary Environmental Corridor	Outside Primary Environmental Corridor			In Primary Environmental Corridor	Outside Primary Environmental Corridor				
Acres	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)			
Public Recreation Corridor	2,470	3,562,000	780	220	1,000	2,025,000	3,250	220	3,470	5,587,000	10,671,500	16,258,500
Type I and Type II Parks	2,510	3,908,000	455	1,480	1,935	3,023,000	2,965	1,480	4,445	6,931,000	30,717,000	37,648,000
Inland Boat Access	16	26,000	22	14	36	89,400	38	14	52	115,400	64,300	179,700
Lake Michigan Boat Access	--	--	--	--	--	--	--	--	--	--	19,280,000	19,280,000
Total	4,996	7,496,000	1,257	1,714	2,971	5,137,400	6,253	1,714	7,967	12,633,400	60,732,800	73,366,200

Source: SEWRPC.

Table 166

**EXISTING AND PROPOSED TYPE I AND TYPE II PARKS IN THE REGION UNDER THE  
RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT**

Park Type	Type I and Type II Parks Under Resource-Oriented Plan Element for the Year 2000			
	Number of Sites	Acres		
		In Public Ownership: 1973	In Nonpublic Ownership: 1973 (to be acquired)	Total
Existing Type I and Type II Parks				
Existing Type I and Type II Parks to be Maintained . . . . .	40	11,210	--	11,210
Existing Type I and Type II Parks to be Expanded . . . . .	2	400	240	640
Proposed Additional Type I and Type II Parks				
Existing Type III Park to be Expanded to a Type II Park . . . . .	1	90	80	170
Existing Undeveloped Areas to be Developed as Type I or Type II Parks . . . . .	6	1,320	--	1,320
New Type I and Type II Parks . . . . .	20	100 <sup>a</sup>	4,125	4,225
<b>Total</b>	<b>69</b>	<b>13,120</b>	<b>4,445</b>	<b>17,565</b>

<sup>a</sup> Approximately 100 acres already acquired as part of the Root River Parkway have been allocated, along with approximately 110 additional acres proposed for acquisition, for development as proposed new site number 3 in Milwaukee County.

Source: SEWRPC.

the Technical and Citizen Advisory Committee, and with the concurrence of that Committee, the resource based alternative plan has been expanded to include a proposal for the development of a major park including a golf course in the City of New Berlin in Waukesha County and proposals for the development of two major parks to be located along the Fox River in Waukesha County, including one park south of the City of Waukesha and one park west of the Village of Big Bend. In addition, at the request of the Washington County representative on the Technical and Citizen Advisory Committee, and with the concurrence of that Committee, the recommended plan includes a proposal for the development of a major park to be located in the Town of Wayne in Washington County and eliminates a proposal for the development of a new major park southeast of the Village of Slinger in Washington County, as originally set forth under the resource based alternative plan. As shown on Map 130, many of the Type I and Type II parks proposed under the recommended plan would be situated in outlying portions of the Region where natural resource amenities with high recreational value of regional significance are relatively abundant.<sup>6</sup> Under the recommended plan, 17 of the 20 proposed new major parks would be developed at locations designated as high value potential park sites in the Commission's potential park site inventory.

Many of the major parks included in the recommended resource-oriented outdoor recreation plan component are physically connected by the proposed public recreation

corridor, thereby enhancing the integrity of the overall park and recreation related open space system. As indicated in Table 167, of the 69 Type I and Type II parks included in the recommended plan, 41 parks, or 59 percent of the total, are situated on the proposed public recreation corridor network. More specifically, 10 of the 20 new parks proposed under the recommended plan are situated on the proposed recreation corridor; and 31 of the 49 sites already in public ownership—including existing parks and existing publicly owned undeveloped sites proposed to be developed as parks—are situated on the public recreation corridors.

<sup>6</sup>It should be noted that, rather than proposing specific sites for development as new Type I or Type II parks, the recommended resource-oriented outdoor recreation plan component identified general areas in which a major park should be developed. Frequently, these areas contain several high value potential park sites which could be developed to accommodate the required facilities. By recommending general areas for new major parks in this manner, the recommended plan attempts to provide desirable flexibility to the public sector in efforts to implement the regional park and open space plan, allowing the selection of a site which is suitable for the required facilities and which is actually available for purchase at a cost within the economic capability of the governmental units involved.

Table 167

**EXISTING AND PROPOSED TYPE I AND TYPE II PARKS IN THE REGION UNDER THE  
RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT BY RELATION  
TO PRIMARY ENVIRONMENTAL CORRIDOR AND PROPOSED PUBLIC RECREATION CORRIDOR**

Park Type	Type I and Type II Parks Under Recommended Resource-Oriented Outdoor Recreation Plan Component											
	By Relation to Primary Environmental Corridor						By Relation to Proposed Public Recreation Corridor					
	In Primary Environmental Corridor		Outside Primary Environmental Corridor		Total		Located on the Proposed Public Recreation Corridor		Located Away from the Public Recreation Corridor		Total	
	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent	Number of Sites	Percent
Existing Type I and Type II Parks												
Existing Type I and Type II Parks to be Maintained. . . . .	35	87.5	5	12.5	40	100.0	29	72.5	11	27.5	40	100.0
Existing Type I and Type II Parks to be Expanded . . . . .	1	50.0	1	50.0	2	100.0	1	50.0	1	50.0	2	100.0
Proposed Additional Type I and Type II Parks												
Existing Type III Park to be Expanded to a Type II Park. . . .	0	0.0	1	100.0	1	100.0	0	0	1	100.0	1	100.0
Existing Undeveloped Areas to be Developed as Type I or Type II Parks . . . . .	2	33.3	4	66.7	6	100.0	1	16.7	5	83.3	6	100.0
New Type I and Type II Parks . . .	14	70.0	6	30.0	20	100.0	10	50.0	10	50.0	20	100.0
<b>Total</b>	<b>52</b>	<b>75.4</b>	<b>17</b>	<b>24.6</b>	<b>69</b>	<b>100.0</b>	<b>41</b>	<b>59.4</b>	<b>28</b>	<b>40.6</b>	<b>69</b>	<b>100.0</b>

Source: SEWRPC.

Because many of the parks included in the recommended resource-oriented outdoor recreation plan are located within the primary environmental corridors, implementation of the park proposals of the recommended plan would contribute to the preservation and enhancement of valuable natural resource amenities in the Region. As further indicated in Table 167, of the 69 Type I and Type II parks included in the recommended plan, 52 parks, or 75 percent of the total, are located within the primary environmental corridors. In particular, 14 of the 20 new major parks proposed under the recommended plan are located in the primary environmental corridors; and 38 of the 49 already acquired sites—including existing parks and parks to be developed at existing publicly owned undeveloped areas—are located within the primary environmental corridors.

Under the recommended resource-oriented outdoor recreation plan component, virtually all additional intensive resource-oriented recreation facilities would be developed at existing or proposed Type I and Type II parks.<sup>7</sup> The

<sup>7</sup> The exceptions are the proposed development of a public swimming beach along the Lake Michigan shoreline at Virmond Park, a Type III park in Ozaukee County, and the proposed development of a public camping area at Evans Park, a Type III park in Racine County.

recommended plan proposes the development of a total of 219 additional public campsites at seven parks in the Region by the plan design year 2000. The recommended plan further proposes the provision of additional public golf facilities at 12 existing or proposed major parks, including the development of 10 18-hole regulation golf courses, one 9-hole regulation golf course, and the expansion of an existing 18-hole regulation golf course to a 27-hole course. Under the recommended plan, a total of 2,155 additional picnic tables would be provided to facilitate resource-oriented picnicking activity within 25 existing and proposed major parks. Public downhill skiing facilities in the Region would be increased under the recommended plan, with skiing areas proposed to be developed at one existing and one proposed major park. Opportunities for beach swimming would be expanded under the recommended plan through the development of five additional public swimming beaches along the Lake Michigan shoreline in southeastern Wisconsin and the development of five additional inland swimming beaches. Finally, the recommended plan proposes the development of eight additional public nature study centers within the Region, which would provide opportunity for the inclusion of good examples of the most significant natural resource amenities and topographical features of the Region (see Map 131). As indicated in Table 168, implementation of the facility development proposals of the recommended resource-oriented outdoor recreation plan component may be expected to satisfy



Table 168

**PUBLICLY OWNED INTENSIVE RESOURCE-ORIENTED OUTDOOR RECREATION FACILITIES  
EXISTING 1973 AND PROPOSED UNDER THE RECOMMENDED RESOURCE-ORIENTED  
OUTDOOR RECREATION PLAN COMPONENT FOR THE YEAR 2000**

Facility	Existing: 1973		Planned Increment 1973-2000	Total Proposed: 2000		Per Capita Standard
	Total Number	Per 1,000 Population		Total Number	Per 1,000 Population	Per 1,000 Population
Campsites . . . . .	552	0.31	219	771	0.35	0.35
Golf Courses (Equivalent 18-hole Regulation Courses) . . . . .	18	0.010	11	29	0.013	0.013
Picnic Tables (Tables at Type I and Type II Parks) . . . . .	6,292	3.56	2,155	8,447	3.85	3.85
Swimming Beaches:						
Inland (linear feet) . . . . .	10,335	6	2,193	12,528	6	6
Lake Michigan (linear feet) . . . . .	28,830	16	6,600	35,430	16	16
Nature Centers . . . . .	2	--	8	10	--	1/County
Ski Hills (Developed Acres of Slope) . . . . .	24	0.014	10	34	0.015	0.010

Source: SEWRPC.

the adopted per capita standards for intensive resource-oriented facilities within the Region in the plan design year 2000.

It should be noted that the proposals of the recommended plan for additional intensive resource-oriented facilities of the Region are basically the same as the facility development proposals of the resource based alternative plan described in Chapter XIII of this report, modified somewhat by the Technical and Citizen Advisory Committee to include the following additional facilities: the development of picnic facilities at Park Site No. 13 in Washington County and Park Sites No. 15 and No. 17 in Waukesha County and the development of an 18-hole regulation golf course at Park Site No. 18 in Waukesha County, all of which parks were proposed as additions to the original design of the resource based plan by the Technical and Citizen Advisory Committee; the development of an 18-hole regulation golf course at Park Site No. 10 in the Village of Germantown in Washington County; the addition of a swimming beach and picnic area at the Sandy Knoll Park Site in Washington County; the development of a nature study center in Park Site No. 11 in Washington County; and the development of downhill ski facilities at Silver Lake Park in Kenosha County. In addition, the Technical and Citizen Advisory Committee modified the original design of the resource based alternative plan by deleting the proposed development of camping facilities at the Bristol Woods Park in Kenosha County.

Implementation of the park proposals of the recommended resource-oriented outdoor recreation plan component would require the acquisition of 4,445 acres

of open space land for the development of the 20 proposed new Type I and Type II parks and the expansion of three existing parks. Of this total, 2,510 acres, or 47 percent, lying in the primary environmental corridors would be acquired under the open space preservation plan at an estimated cost of \$3,908,000 (see Table 165). The remaining acreage, including 455 acres within primary environmental corridor and 1,480 acres outside of the primary environmental corridors, would be acquired at an estimated cost of \$3,023,000. In addition to these land acquisition costs, park facility development proposals under the recommended resource-oriented outdoor recreation plan component would entail an additional public outlay of approximately \$30,717,000.

Water Access Facilities: Small boat water access points, both public and nonpublic, provide opportunities for individuals who do not own land abutting navigable streams and lakes to participate in extensive water based recreation activities including fast boating activities such as motor boating, water skiing, and sail boating as well as slow boating activities such as fishing and canoeing. Proposals of the recommended resource-oriented outdoor recreation plan component for the provision of water access facilities on rivers and major inland lakes of the Region as well as along the Lake Michigan shoreline are essentially the same as those included in the resource based plan set forth in Chapter XIII.

Inland Water Access: The number of public lake access facilities provided should not only serve to meet the demand for such access but should be consistent with safe and enjoyable participation in various extensive water based recreation activities. Most of the major

lakes of the Region are already heavily utilized for fast boating activities, and the number of access facilities for fast boating activities—including access points and car and trailer parking—consistent with safe and enjoyable lake use generally is exceeded. Accordingly, analysis of inland lake access needs, as described in Chapter XII of this report, indicated that only two of the 100 major inland lakes of the Region require additional access facilities to accommodate fast boating activities: Pine Lake in Waukesha County, which requires an access point and a parking area sufficient to accommodate 10 car and trailer spaces, and Geneva Lake in Walworth County, which requires 47 additional car and trailer parking spaces. Under the recommended resource-oriented outdoor recreation plan component, it is proposed that these two boat access needs be met by the public sector to accommodate fast boating activity on these lakes. In addition, at the suggestion of the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning, the inland water access recommendations of the resource based alternative plan, as set forth in Chapter XIII, have been expanded to include a proposal for the development of a boat access point to accommodate fast boating activity on Wind Lake in Racine County.

While only three of the 100 major inland lakes require additional access facilities to accommodate fast boating activities, many inland lakes require additional access facilities to accommodate slow boating activities such as fishing and canoeing (see Map 130). In this regard, the recommended resource-oriented outdoor recreation plan component proposes the public provision of 25 additional slow boating access points on 25 major inland lakes. It should be noted that a distinction has been drawn between a fast boating access point and a slow boating access point because of the different facility requirements involved. A fast boating access point requires a boat launch ramp and provisions for car and trailer parking. A slow boating access point should not be provided with a launch ramp, and the related parking areas should be designed to accommodate only cars because of the reliance on cartop carriers rather than trailers.

In addition to access facilities on the major inland lakes of the Region, the recommended plan also proposes the provision of additional water access facilities along the main stems of navigable rivers in the Region. More specifically, the recommended plan proposes that five additional boat access points be provided along the Milwaukee River, two each in Milwaukee and Washington Counties, and one in Ozaukee County. In addition, under the recommended plan, two access points would be provided along the Fox River in Waukesha County and one access point each would be provided along the Fox River in Kenosha and Racine Counties. The access points proposed for development along the Fox and Milwaukee Rivers would be similar in design to the slow boating access points proposed on certain inland lakes of the Region. Thus, a river access point does not require a boat launch ramp, and the parking area associated with the access point should be designed for cars only because of the reliance on cartop carriers.

Implementation of these inland water access facility proposals would require the public acquisition of 50 acres of land (see Table 165). Of this total, 16 acres lying within the primary environmental corridor would be acquired under the open space preservation plan at an estimated cost of \$26,000. The remainder of 34 acres would be required at an estimated cost of \$89,400. Implementation of the recommended plan proposals for water access facilities on the rivers and major inland lakes of the Region also would entail the public outlay of \$64,300 for the development of launch ramps and related parking.

Lake Michigan Access: In contrast to the situation of inland lakes in the Region where the number of access facilities is necessarily related to the capacity of each lake to accommodate water based recreation activities, access facilities on Lake Michigan can be provided in quantities sufficient to fully meet existing and probable future demand. In 1975, 35 boat launching ramps and 1,620 boat mooring slips existed along the Lake Michigan shoreline within the Region. Based upon application of the recommended per capita standard for boat launch ramps and boat slips set forth in Chapter XII of this report, an additional 19 launch ramps and an additional 1,310 boat slips will be required by the year 2000. Moreover, the recommended maximum distance between boat access points set forth in Chapter XII is 15 miles and, based upon that standard, "voids" in the location of access points exist between the harbors of the City of Milwaukee and the City of Port Washington and between the harbor of the City of Racine and the boat launching site located at the mouth of Oak Creek in the City of South Milwaukee. The recommended resource-oriented outdoor recreation plan component proposes that the anticipated needs for additional boat launching ramps and boat mooring slips through the year 2000 be met by the public sector, eliminating, to the extent practicable, the identified voids along the Lake Michigan shoreline in southeastern Wisconsin through the provision of such additional access facilities. Development of the additional water access facilities required along the Lake Michigan shoreline in southeastern Wisconsin through the plan design year may be expected to entail the public outlay of approximately \$19,280,000.<sup>8</sup>

---

<sup>8</sup>The estimated development costs for additional small boat water access facilities along the Lake Michigan shoreline were prepared under the assumptions that two new small boat harbors would be provided—with each new harbor accommodating a marina and at least five boat launch ramps, 300 boat mooring slips, and parking for 470 cars and trailers. One such harbor would be located at, or in the vicinity of, Bender Park in the City of Oak Creek and the other harbor would be located in the vicinity of Doctors Park in the Village of Bayside, at a site that detailed studies may determine. It was further assumed that improvements would be made to the harbor at Port Washington to provide a small boat

Footnote 8 continued on next page

Recreational boat launch ramps and boat mooring slips on Lake Michigan require protection from frequently rough Lake Michigan waters. The required additional small boat access facilities may be provided within existing or new harbors of refuge along the Lake Michigan shoreline. In addition, it is possible that some of the additional required boat launch ramps and boat mooring slips would be provided on major rivers which flow into Lake Michigan. For example, the county executive of Milwaukee County has recommended a study of the feasibility of providing recreational boat mooring slips on the Kinnickinnic River in Milwaukee County. In any event, the location and design of facilities to provide safe harbor for recreational boats must be based upon detailed planning and engineering studies which include the application of sophisticated modeling techniques to simulate the effect of wind direction and velocity as well as wave action on alternative harbor designs; detailed environmental studies including evaluation of the potentially adverse impact that construction of a given facility may have on water quality, fish life and shoreline erosion; detailed economic analyses including evaluation of the benefits and costs involved; detailed social analyses including evaluation of the safety and aesthetic as well as expanded recreational opportunities involved; and, finally, more detailed land use analyses including analysis of the potential effects on existing surface traffic patterns, automobile parking, potential displacement of homes and businesses, and existing and proposed land use in the immediate vicinity of the areas under consideration. Accordingly, the exact location and design of additional water access facilities along the Lake Michigan shoreline in southeastern Wisconsin must be determined through subsequent detailed engineering and environmental studies.

Mass Transit Service: In the Southeastern Wisconsin Region, a disparity exists between the location of the best remaining resource amenities—and, therefore, the best remaining potential outdoor recreation sites—and the location of the major population concentrations of the Region. The largest population concentrations in the Region occur in the Kenosha, Milwaukee, and Racine metropolitan areas, somewhat removed from important resource areas, including the Kettle Moraine and undeveloped riverine areas, which are situated in the western and

---

*harbor of refuge and safe mooring for recreational boats in the Port Washington area and that the harbor would be designed to accommodate at least two boat launch ramps, 210 boat mooring slips, and parking for 270 cars and trailers; that 250 boat mooring slips and three launch ramps would be provided at the Racine harbor; and that 250 boat mooring slips and four launch ramps would be provided at the Kenosha harbor. These assumptions, which provide a basis for estimating development costs for the required additional Lake Michigan access facilities, reflect an ideal distribution of harbors, launch ramps, and boat slips along the Lake Michigan shoreline in southeastern Wisconsin, a distribution that is consistent with the adopted Lake Michigan water access standards.*

northern portions of the Region. As previously indicated in this chapter, under the recommended resource-oriented outdoor recreation plan component, resource-oriented recreation facilities would be developed at the best remaining potential recreation areas in the Region. While the recommended plan places a high priority on the development of high value potential recreation areas which also meet the identified accessibility needs, many of the major parks and recreation corridor segments are proposed in outlying areas of the Region where resource amenities having recreational value of regional significance exist. As a result, many of the best public recreation sites in the Region may be inaccessible to those segments of the regional population who do not have personal means of transportation. In view of the outlying locations of many of the parks and recreation corridor segments proposed under the recommended resource-oriented outdoor recreation plan component, the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning suggested that the recommended plan could include proposals on the provision of mass transit service—at least on a trial basis—between densely populated urban areas, where concentrations of households with no personal means of transportation exist, and certain recreational sites of regional significance.

In accordance with the Committee's suggestion, the first step in the formulation of mass transit service recommendations was the identification of areas of the Region containing concentrations of households without personal means of transportation. This was accomplished through an analysis of the responses to a question on automobile availability included in the 1970 census. According to the census results, 88,849 households, or 17 percent of the total, in the Region had no automobile available for regular use in 1970 and, of this total, 71,170 households, or 80 percent, resided in the Cities of Kenosha, Milwaukee, or Racine. Analysis of data on automobile availability on a census tract basis<sup>9</sup> further indicated that, within the Cities of Kenosha, Milwaukee, and Racine, households lacking direct command of an automobile were concentrated, to a large extent, in the densely populated "core" areas of these cities. Thus, within certain census tracts within the core areas of the Cities of Kenosha, Milwaukee, and Racine, more than 35 percent of all households had no automobile available for regular use. In contrast, within many census tracts in the outlying portions of these cities, less than 10 percent of all households were without direct command of an automobile. Within these extremes, it is recommended that recreation related mass transit service be provided to census tracts within the Cities of Kenosha, Milwaukee, and Racine in which the proportion of households without personal means of transportation is relatively high—greater than 20 percent. Census tracts in the

---

<sup>9</sup> Census tracts are relatively permanent areas into which large cities, villages, and towns are divided for the purpose of providing small area demographic statistics. Tracts are originally designed to be relatively homogeneous with respect to population characteristics, economic status, and living conditions.

Cities of Kenosha, Milwaukee, and Racine within which more than 20 percent of all households had no automobile available for regular use in 1970 are shown on Map 132.

As further shown on Map 132, the recommended resource-oriented outdoor recreation plan component proposes the provision of mass transit service in the form of buses operating over public streets and highways, at least on a trial basis, between the central portions of the Kenosha, Milwaukee, and Racine urbanized areas and major outlying recreation sites. The recommended plan proposes bus service between each of the identified urban centers and one or more outlying parks situated within urban areas having natural resource amenities of regional significance located a substantial distance from the urban centers, primarily to facilitate day-long recreational outings. For example, bus service could be provided between the central portion of the Milwaukee urbanized area and Pike Lake State Park in Washington County and Harrington Beach State Park in Ozaukee County. Similarly, bus service could be provided between the central portions of the Kenosha and Racine urbanized areas and Silver Lake County Park in Kenosha County. Moreover, the recommended plan proposes bus service between each of the identified urban centers and a major park located closer to the urban centers in order to accommodate both day-long and shorter recreational outings. For example, bus service could be provided between the central portion of the Milwaukee urbanized area and Whitnall Park in Milwaukee County as well as between the central portions of the Kenosha and Racine urbanized areas and Petrifying Springs County Park in Kenosha County. The precise route configuration and the frequency of service over the generalized routes proposed under the recommended plan are properly matters to be addressed by county and local planning efforts.

#### Kenosha County

There were five major parks in Kenosha County in 1973 including Brighton Dale Park in the Town of Brighton, Petrifying Springs Park in the Town of Somers, Bristol Woods Park in the Town of Bristol, and Fox River Park and Silver Lake Park in the Town of Salem (see Table 169). The recommended resource-oriented outdoor recreation plan component proposes the continued maintenance of these five parks as well as the further development of Bristol Woods Park and Silver Lake Park. In addition, the recommended plan proposes the public acquisition and development of two additional major parks—namely, Park Site No. 1, which is proposed to be located along the Lake Michigan shoreline south of the City of Kenosha, and Park Site No. 2, which is proposed to be located in the primary environmental corridor along the main stem of the Des Plaines River in southeastern Kenosha County. Implementation of these park proposals would result in the provision of a total of seven major parks in Kenosha County by the plan design year. These parks would encompass a total of 1,705 acres, an increase of 425 acres, or 33 percent, over the 1973 acreage (see Table 170).

Under the recommended plan, all additional public intensive resource-oriented outdoor recreation facilities to be provided within Kenosha County through the plan design year would be developed at the existing and proposed major park sites, with most of the additional facilities to be developed at Silver Lake Park and Park Sites No. 1 and No. 2. Under the recommended plan, a single additional public campground would be provided in Kenosha County at Silver Lake Park. Two additional public regulation golf courses would be provided in the County, one 9-hole course at Silver Lake Park and one 18-hole course at Park Site No. 2. Additional facilities for resource-oriented picnicking would be provided at Silver Lake Park and Park Sites No. 1 and No. 2. Nature study centers would be developed at both Bristol Woods Park and Park Site No. 1. Opportunities for beach swimming would be provided at Silver Lake Park and Park Site No. 1. Finally, public downhill ski facilities would be provided at Silver Lake Park.

The recommended resource-oriented recreation plan component also proposes the provision of two recreation corridor segments within the County having a combined length of 25 linear miles (see Table 171). One recreation corridor would traverse the easternmost portion of the County, primarily along the Lake Michigan shoreline, and would accommodate biking and hiking activity throughout the entire corridor segment as well as nature study activities south of the City of Kenosha and ski touring activity near Petrifying Springs Park. It should be noted that owing to the character of existing urban development, it would be extremely difficult to develop a continuous public recreation corridor through the Kenosha urbanized area. It is anticipated that, within the urbanized area, the proposed recreation corridor would primarily traverse existing public open space lands, while designated bike routes over existing roads and designated hiking routes over existing walks may be incorporated into the system to provide continuity.

The second recreation corridor proposed in Kenosha County would traverse the primary environmental corridor along the main stem of the Fox River. The Fox River, which flows through an area of irregular recessional moraine in western Kenosha County, offers the best potential recreation resource area remaining within the County. The recommended plan proposes the development of hiking, biking, and horseback riding trails along this recreation corridor.

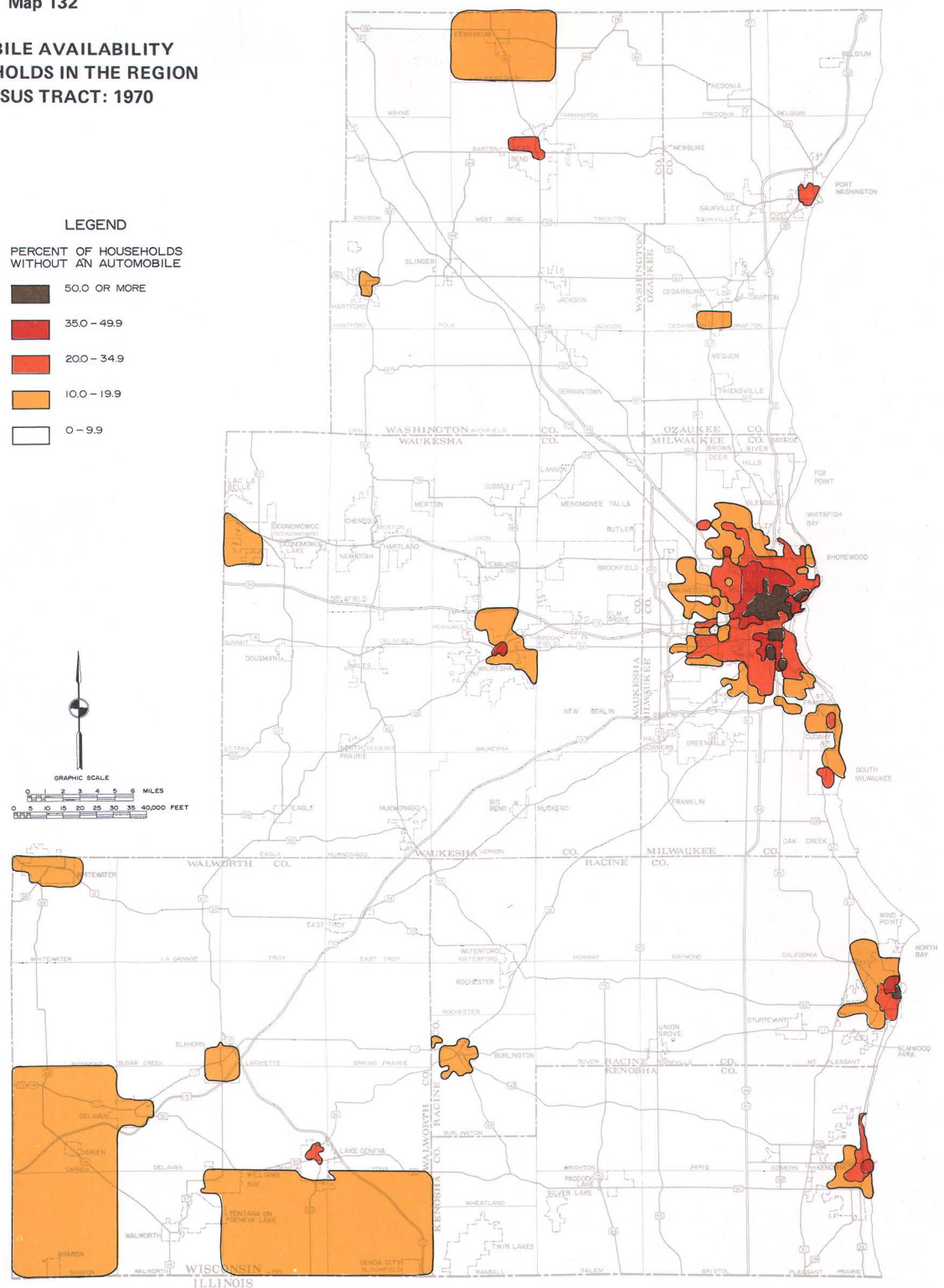
Under the recommended resource-oriented outdoor recreation plan component, additional water access facilities on the rivers and the major inland lakes in Kenosha County would be provided only insofar as they are required to accommodate slow boating activities such as fishing and canoeing. In this regard, the recommended plan proposes the provision of additional public boat access points on four major inland lakes—Cross Lake, Dyer Lake, George Lake, and Voltz Lake—as well as a public boat access point on the Fox River at Fox River Park.



Map 132

**AUTOMOBILE AVAILABILITY  
FOR HOUSEHOLDS IN THE REGION  
BY CENSUS TRACT: 1970**

**LEGEND**  
PERCENT OF HOUSEHOLDS  
WITHOUT AN AUTOMOBILE



The outlying locations of many of the proposed high value resource parks under the resource based alternative plan possess an accessibility problem for households with no ready access to an automobile for transportation. Such households were located primarily within the Cities of Kenosha, Milwaukee, and Racine, where over 71,000 households, or about 13 percent of all households in the Region, in 1970 had no personal means of transportation. Especially noteworthy are the central city portions of Milwaukee, Racine, and Kenosha where more than 35 percent of all households in some census tracts had no automobile available for regular use. In contrast, less than 10 percent of all households in most census tracts in the remainder of the Region were without the direct command of an automobile. Therefore, the recommended resource-oriented outdoor recreation plan component proposes the provision of mass transit service in the form of buses operating over public streets and highways on a trial basis between the central portions of the Kenosha, Milwaukee, and Racine urbanized areas and major outlying recreation sites, primarily to facilitate day-long recreational outings.

Table 169

## EXISTING AND PLANNED TYPE I AND TYPE II PARKS IN KENOSHA COUNTY: 2000

Type I and Type II Parks	Acres		Intensive Resource- Oriented Facilities		Remarks
	Existing Acquired	Proposed Additional <sup>a</sup>	Existing	Proposed	
Existing					
Brighton Dale . . . . .	360	--	Golf Course (27) Picnic Area	--	--
Bristol Woods . . . . .	190	--	--	Nature Center	--
Fox River . . . . .	140	--	Picnic Area	--	Located along Fox River Recreation corridor activity node
Petrifying Springs . . . . .	350	--	Golf Course Picnic Area Ski Hill	--	Located along Pike River Recreation corridor activity node
Silver Lake . . . . .	240	--	--	Camping Golf Course (18) Ski Hill Picnic Area Swimming Beach	Frontage on Silver Lake Variety of natural features
Proposed New					
No. 1 . . . . .	--	210	--	Nature Center Picnic Area Swimming Beach	Lake Michigan frontage Native prairie and sand dunes
No. 2 . . . . .	--	215	--	Golf Course (18) Picnic Area	--

<sup>a</sup> For proposed new sites the acreage proposal represents suggested minimum park acreage.

Source: SEWRPC.

As indicated in Table 172, including land required for new major parks, the proposed public recreation corridor, and the additional inland water access facilities, a total of 671 acres of land would be acquired by the public sector upon full implementation of the recommended resource-oriented outdoor recreation plan component within Kenosha County. Of this total, 275 acres lying within the primary environmental corridor would be acquired under the open space preservation plan element at an estimated cost of \$269,000. The remainder of 396 acres, including 260 acres lying in the primary environmental corridors and 136 acres lying outside the primary environmental corridors, would be acquired at an estimated cost of \$774,200.

As further indicated in Table 172, implementation of the recommended resource-oriented outdoor recreation plan component also would require public outlays for the development of facilities at existing and proposed outdoor recreation sites. Development costs under the recommended plan within Kenosha County would

include \$4,586,000 for the development of major parks; \$774,000 for the development of trail facilities within the proposed public recreation corridors; and \$6,000 for the development of the proposed inland small boat water access facilities. In addition, the development of needed launch ramps, boat mooring slips, and related parking to facilitate participation in boating activity on Lake Michigan could be expected to cost an additional \$473,500.<sup>10</sup> Total development costs under the recommended resource-oriented outdoor recreation plan component, including Lake Michigan water access facilities, are estimated at \$5,839,500. Including both land acquisition and facility development costs, the total public outlay associated with implementation of the recommended resource-oriented recreation plan component within Kenosha County is estimated at \$6,882,700.

<sup>10</sup> Lake Michigan water access facility development costs for Kenosha County were estimated under assumptions set forth in footnote 8.

Table 170

**TYPE I AND TYPE II PARK ACREAGE IN THE REGION BY COUNTY: EXISTING 1973 AND PROPOSED UNDER THE  
RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT FOR THE YEAR 2000**

County	Existing Type I and Type II Park Area to be Maintained Under the Recommended Resource-Oriented Outdoor Recreation Plan Component (acres)	Additional Type I and Type II Park Acreage Proposed Under the Recommended Resource-Oriented Outdoor Recreation Plan Component				Total Existing Type I and Type II Park Area Under the Recommended Resource-Oriented Outdoor Recreation Plan Component for the Year 2000 (acres)
		Existing Publicly Owned Undeveloped Areas to be Developed as Type I and Type II Parks (acres)	Proposed New Type I and Type II Parks (acres) <sup>a</sup>	Expansion of Existing Type I and Type II Parks (acres) <sup>a</sup>	Existing Type III Park to be Expanded to a Type II Park (acres) <sup>b</sup>	
Kenosha . . . . .	1,280	--	425	--	--	1,705
Milwaukee . . . .	4,280	510	325 <sup>c</sup>	--	--	5,115
Ozaukee . . . . .	1,150	--	340	--	--	1,490
Racine . . . . .	1,150	--	240	40	--	1,430
Walworth . . . . .	510	--	770	--	--	1,280
Washington . . . .	810	260	1,040	--	--	2,110
Waukesha . . . . .	2,430	550	1,085	200	170	4,435
Total	11,610	1,320	4,225	240	170	17,565

<sup>a</sup> Acreage to be acquired and developed.

<sup>b</sup> Total of 170 acres includes 90 acres at Retzer Nature Center and 80 acres to be acquired and developed.

<sup>c</sup> Total of 325 acres includes, for proposed new Site No. 3, 100 acres already acquired in the Root River Parkway and an additional 110 acres proposed for acquisition and, for proposed new Site No. 4, an additional 115 acres proposed for acquisition.

Source: SEWRPC.

Table 171

**TRAIL FACILITIES WITHIN THE PUBLIC RECREATION CORRIDOR PROPOSED UNDER THE  
RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: 2000**

County	Recreation Trails Proposed to be Developed Within the Public Recreation Corridor Under the Recommended Resource-Oriented Outdoor Recreation Plan Component (linear miles)					Proposed Public Recreation Corridor (linear miles)
	Biking Trails	Hiking Trails	Horseback Riding Trails	Nature Study Trails	Ski Touring Trails	
Kenosha . . . . .	25	25	7	4	5	25
Milwaukee . . . .	73	73	20	3	12	73
Ozaukee . . . . .	39	39	4	0	0	39
Racine . . . . .	44	44	24	4	7	44
Walworth . . . . .	53	53	30	5	8	53
Washington . . . .	53	53	21	4	9	53
Waukesha . . . . .	118	118	7	25	7	118
Total	405	405	113	45	48	405

Source: SEWRPC.

Table 172

**PUBLIC LAND ACQUISITION REQUIREMENTS, ACQUISITION COSTS, AND DEVELOPMENT COSTS UNDER THE  
RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: KENOSHA COUNTY**

Resource-Oriented Facility	Proposed Public Land Acquisition Under the Recommended Resource-Oriented Recreation Plan Component										Estimated Facility Development Costs (dollars)	Total Public Outlay for Land Acquisition and Facility Development Under Recommended Resource-Oriented Outdoor Recreation Plan Component (dollars)
	Primary Environmental Corridor Lands Which Are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under Recommended Resource-Oriented Outdoor Recreation Plan Component				Total Land Acquisition Under Recommended Resource-Oriented Outdoor Recreation Plan Component					
			Acres		Total	Acquisition Cost (dollars)	Acres		Total	Acquisition Cost (dollars)		
			In Primary Environmental Corridor	Outside Primary Environmental Corridor			In Primary Environmental Corridor	Outside Primary Environmental Corridor				
Acres	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total			Acquisition Cost (dollars)	In Primary Environmental Corridor			Outside Primary Environmental Corridor	Total
Public Recreation Corridor	190	226,000	40	10	50	191,000	230	10	240	417,000	774,000	1,191,000
Type I and Type II Parks	85	43,000	220	120	340	576,000	305	120	425	619,000	4,586,000	5,205,000
Inland Boat Access	--	--	--	6	6	7,200	--	6	6	7,200	6,000	13,200
Lake Michigan Boat Access	--	--	--	--	--	--	--	--	--	--	473,500	473,500
Total	275	269,000	260	136	396	774,200	535	136	671	1,043,200	5,839,500	6,882,700

Source: SEWRPC.

**Milwaukee County**

Milwaukee County has one of the finest existing park systems in the nation, the result of an active well planned program of park land acquisition and development over many years. There were 14 major parks in Milwaukee County in 1973, including Bender, Brown Deer, Currie, Dretzka, Estabrook, Greenfield, Jackson, Kletzsch, Lake Michigan North,<sup>11</sup> Lake Michigan South,<sup>12</sup> Lincoln, Oakwood, Washington, and Whitnall Parks (see Table 173). The recommended resource-oriented outdoor recreation plan component proposes the continued maintenance of these 14 parks as well as the development of additional facilities at Bender Park. In addition, the recommended plan proposes the development as major parks of three existing publicly owned undeveloped areas, namely, the Franklin Park Site and the Grobschmidt Park Site in the City of Franklin and the North Lake Park Site in the City of Milwaukee. Finally, the recommended plan proposes public acquisition and development of two additional parks—namely, Park Site No. 3, which is proposed to be located in the primary environmental corridor along the Root River in the City of Franklin, and Park Site No. 4, which is a high value potential park site in the City of Oak Creek. Implementation of these park proposals will result in the provision of a total of 19 major parks in Milwaukee County by the year 2000. These parks would encompass a total of 5,115 acres, an increase of 835 acres, or 20 percent, over the 1973 acreage (see Table 170).

<sup>11</sup> Includes Lake Park, McKinley Park, Juneau Park, Bradford Beach, McKinley Marina, and McKinley Beach.

<sup>12</sup> Includes Sheridan Park, Warnimont Park, and Grant Park.

Under the recommended plan, most additional public intensive resource-oriented outdoor recreation facilities to be provided in Milwaukee County would be developed at existing or proposed major park sites in the southern portion of the County in the Cities of Franklin and Oak Creek. Under the recommended plan, a single additional public campground would be provided in Milwaukee County at Park Site No. 3. One additional public 18-hole regulation golf course would be provided in the County at Bender Park. Additional resource-oriented picnic facilities would be provided at Bender Park, at the Franklin, Grobschmidt, and North Lake Park sites, and at Park Sites No. 3 and No. 4. Finally, an additional public swimming beach would be provided along the Lake Michigan shoreline at Bender Park, and an additional inland public beach would be provided at Park Site No. 3. It should be noted that there are no inland lakes in the vicinity of Park Site No. 3 and the need for a swimming beach in this area would be met through water impoundment. In this regard, a major proposal of the comprehensive plan for the Root River watershed adopted by the Commission in 1966 is the construction of a multi-purpose reservoir in the area around the confluence of the North Branch and the Root River Canal in the City of Franklin. Implementation of this plan recommendation would provide the surface water necessary for an inland swimming beach in southern Milwaukee County if water quality in the Root River can be improved to permit full body contact.

The recreation corridor proposed under the recommended plan within Milwaukee County consists basically of a large loop around the periphery of the County, traversing, in particular, primary environmental corridors along the Milwaukee River, the Menomonee River, the Little Menomonee River, the Root River, Oak Creek, and the Lake Michigan shoreline in Milwaukee County. The proposed recreation corridor would traverse much



Table 173

## EXISTING AND PLANNED TYPE I AND TYPE II PARKS IN MILWAUKEE COUNTY: 2000

Type I and Type II Parks	Acres		Intensive Resource- Oriented Facilities		Remarks
	Existing Acquired	Proposed Additional <sup>a</sup>	Existing	Proposed	
Existing Bender . . . . .	310	--	--	Picnic Area Swimming Beach Golf Course (18)	Lake Michigan frontage Recreation corridor activity node
Brown Deer . . . . .	370	--	Picnic Area Golf Course (18)	--	Recreation corridor activity node
Currie . . . . .	210	--	Golf Course (18) Ski Hill	--	Included in Milwaukee County parkway system
Dretzka . . . . .	330	--	Picnic Area Golf Course (18) Ski Hill	--	--
Estabrook . . . . .	120	--	Picnic Area	--	Included in Milwaukee County parkway system located along the Milwaukee River
Greenfield . . . . .	280	--	Picnic Area Golf Course (18)	--	Included in Milwaukee County parkway system located along the Root River Recreation corridor activity node
Jackson . . . . .	120	--	Picnic Area	--	Included in Milwaukee County parkway system
Kletzsch . . . . .	120	--	Picnic Area	--	Included in Milwaukee County parkway system located along the Milwaukee River Recreation corridor activity node
Lake Michigan North . . .	370	--	Picnic Area Swimming Beach	--	Lake Michigan frontage Recreation corridor activity node
Lake Michigan South . . .	680	--	Picnic Area Swimming Beach Golf Course (18)	--	Lake Michigan frontage Recreation corridor activity node
Lincoln . . . . .	320	--	Picnic Area Golf Course (9)	--	Included in Milwaukee County parkway system located along the Milwaukee River Recreation corridor activity node
Oakwood . . . . .	280	--	Golf Course (18)	--	Included in Milwaukee County parkway system located along the Root River
Washington . . . . .	130	--	Picnic Area	--	--
Whitnall . . . . .	640	--	Picnic Area Golf Course (18) Nature Center Ski Hill	--	Included in Milwaukee County parkway system located along the Root River Recreation corridor activity node Botanical Gardens located within the Park
Undeveloped Park Site Franklin . . . . .	140	--	--	Picnic Area	--
Grobschmidt . . . . .	160	--	--	Picnic Area	--
North Lake . . . . .	210	--	--	Picnic Area	Included in Milwaukee County parkway system Recreation corridor activity node
Proposed New No. 3 <sup>b</sup> . . . . .	100	110	--	Camping Picnic Area Swimming Beach	Included in Milwaukee County parkway system located along the Root River Recreation corridor activity node
No. 4 . . . . .	--	115	--	Picnic Area	--

<sup>a</sup> For proposed new sites, the acreage proposal represents the suggested minimum park acreage.

<sup>b</sup> Part of this site will be located on existing publicly owned undeveloped lands.

Source: SEWRPC.

of the existing Milwaukee County parkway system; in fact, 54 linear miles, or 74 percent of the 73 miles of proposed recreation corridor in the County, traverse lands currently in public ownership. Despite the extensive parkway system in Milwaukee County, however, it will still be necessary to incorporate designated bike routes over existing roads and designated hiking routes over existing walks into the recreation corridor system in order to provide continuous trails through certain fully developed areas.

The entire proposed recreation corridor within Milwaukee County would accommodate trails for hiking and biking activity. In addition, trails marked and maintained for ski touring would be included in segments of the recreation corridor in the northwestern and southwestern portions of the County. A nature study trail would also be developed on the recreation corridor in conjunction with the nature study center at Whitnall Park in the southwestern portion of the County. Finally, a horseback riding trail would be developed in the southern portion of the County.

Reflecting the scarcity of navigable inland surface water within Milwaukee County, only two additional inland boat access points have been proposed under the recommended resource-oriented outdoor recreation plan component. These access points would be developed at Gordon Park and Lincoln Park on the Milwaukee River, primarily to accommodate canoeing activity.

As indicated in Table 174, including land required for new major parks and the proposed public recreation corridor, a total of 505 acres of land would be acquired by the public sector upon full implementation of the recommended resource-oriented outdoor recreation plan component within Milwaukee County. Of this total, 160 acres lying within the primary environmental corridor would be acquired under the open space preservation

plan element at an estimated cost of \$876,000. The balance of 345 acres, including 90 acres lying in the primary environmental corridors and 255 acres lying outside the primary environmental corridors, would be acquired at an estimated cost of \$1,213,000.

Implementation of the recommended resource-oriented outdoor recreation plan component would also require public outlays for the development of facilities at existing and proposed outdoor recreation sites, including \$3,875,000 for the development of major parks; \$2,701,000 for the development of trail facilities within the proposed public recreation corridors; and \$2,400 for the development of the two proposed boat access points on the Milwaukee River. In addition, the development of needed small boat harbors of refuge, boat launch ramps, boat mooring slips, and related parking to facilitate participation in boating activity on Lake Michigan could be expected to cost an additional \$16,000,000.<sup>13</sup> Total development costs under the recommended regional resource-oriented outdoor recreation plan component, including Lake Michigan water access facilities, are estimated at \$22,578,400. Including both land acquisition and facility development costs, the total public outlay associated with implementation of the recommended resource-oriented outdoor recreation plan component within Milwaukee County is estimated at \$24,667,400.

#### Ozaukee County

There were three major parks in Ozaukee County in 1973—namely, Harrington Beach State Park in the Town of Belgium, Hawthorne Hills Park in the Town of Saukville, and Mee-Kwon Park in the City of Mequon—all of which would continue to be maintained under the

<sup>13</sup> Lake Michigan water access facility development costs were estimated under assumptions set forth in footnote 8.

Table 174

### PUBLIC LAND ACQUISITION REQUIREMENTS, ACQUISITION COSTS, AND DEVELOPMENT COSTS UNDER THE RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: MILWAUKEE COUNTY

Resource-Oriented Facility	Proposed Public Land Acquisition Under the Recommended Resource-Oriented Recreation Plan Component										Estimated Facility Development Costs (dollars)	Total Public Outlay for Land Acquisition and Facility Development Under Recommended Resource-Oriented Outdoor Recreation Plan Component (dollars)
	Primary Environmental Corridor Lands Which are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under Recommended Resource-Oriented Outdoor Recreation Plan Component				Total Land Acquisition Under Recommended Resource-Oriented Outdoor Recreation Plan Component					
			Acres		Total	Acquisition Cost (dollars)	Acres		Total	Acquisition Cost (dollars)		
			In Primary Environmental Corridor	Outside Primary Environmental Corridor			In Primary Environmental Corridor	Outside Primary Environmental Corridor				
Acres	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)			
Public Recreation Corridor	160	876,000	90	30	120	762,000	250	30	280	1,638,000	2,701,000	4,339,000
Type I and Type II Parks	--	--	--	225	225	451,000	--	225	225	451,000	3,875,000	4,326,000
Inland Boat Access	--	--	--	--	--	--	--	--	--	--	2,400	2,400
Lake Michigan Boat Access	--	--	--	--	--	--	--	--	--	--	16,000,000	16,000,000
Total	160	876,000	90	255	345	1,213,000	250	255	505	2,089,000	22,578,400	24,667,400

Source: SEWRPC.

recommended resource-oriented outdoor recreation plan component. As indicated in Table 175, the recommended plan proposes the public acquisition and development of two additional major parks in Ozaukee County—Park Site No. 5, which is proposed to be located along the Lake Michigan shoreline in the Town of Grafton, and Park Site No. 6, which is proposed to be located within the primary environmental corridor north of the Village of Newburg. Implementation of these park proposals would result in the provision of a total of five major parks in Ozaukee County by the plan design year. These parks would contain a total of 1,490 acres, representing an increase of 340 acres, or 30 percent, over the 1973 acreage (see Table 170).

Under the recommended plan, most additional public intensive resource-oriented outdoor recreation facilities to be provided in Ozaukee County would be developed at the proposed new major parks. Thus, under the recommended plan, picnic areas would be developed at both Park Sites No. 5 and No. 6. A swimming beach along the Lake Michigan shoreline and a nature study center would also be developed at Park Site No. 5, and a camping area would be developed at Park Site No. 6. In addition to the facilities recommended at the two new major parks, the recommended plan also proposes the development of

a swimming beach along the Lake Michigan shoreline at Virmond Park,<sup>14</sup> an existing Type III park in the City of Mequon.

Under the recommended resource-oriented outdoor recreation plan component, a public recreation corridor would be developed in Ozaukee County along the Milwaukee River, which enters the County from the west, flowing in a southerly direction below the Village of Fredonia. In addition, a smaller segment of public recreation corridor is proposed in Ozaukee County along the Little Menomonee River, providing a connection to the recreation corridor segment proposed on the west side of Milwaukee County. Biking and hiking trails would be developed throughout the entire 39 linear miles of public recreation corridors proposed in Ozaukee County under the recommended plan. In addition, a horseback riding

<sup>14</sup> *High bluffs and erosion problems characterize the Lake Michigan shoreline in southern Ozaukee County, and it should be recognized that the cost of developing a swimming beach at Virmond Park would be high due to these constraints.*

Table 175

EXISTING AND PLANNED TYPE I AND TYPE II PARKS IN OZAUKEE COUNTY: 2000

Type I and Type II Parks	Acres		Intensive Resource- Oriented Facilities		Remarks
	Existing Acquired	Proposed Additional <sup>a</sup>	Existing	Proposed	
Existing Harrington Beach . .	630	--	Picnic Area Swimming Beach	--	Lake Michigan frontage
Hawthorne Hills. . .	280	--	Picnic Area Golf Course (18) Ski Hill	--	Located along the Milwaukee River
Mee-Kwon . . . . .	240	--	Golf Course (18)	--	--
Virmond <sup>b</sup> . . . . .	--	--	--	Swimming Beach	Lake Michigan frontage
Proposed New No. 5. . . . .	--	210	--	Picnic Area Swimming Beach Nature Center	Lake Michigan frontage
No. 6. . . . .	--	130	--	Camping Picnic Area	Located along the Milwaukee River Recreation corridor activity node

<sup>a</sup> For proposed new sites, the acreage proposal represents suggested minimum park acreage.

<sup>b</sup> Existing Type III site with proposed intensive resource-oriented facility development.

Source: SEWRPC.

trail would be developed in the northernmost portion of the recreation corridor in Ozaukee County, extending west into Washington County (see Table 171).

Owing to the scarcity of inland lakes in Ozaukee County, opportunities are limited for extensive water based recreation activities on inland surface waters in Ozaukee County. It should be noted, however, that the Milwaukee River in Ozaukee County can accommodate slow boating activity such as canoeing and fishing. To facilitate participation in such activities, the recommended resource-oriented outdoor recreation plan component proposes a boat access point on publicly owned lands on the Milwaukee River in the Village of Grafton at Lime Kiln Park.

As indicated in Table 176, including land required for new major parks and the proposed public recreation corridor, a total of 760 acres of land would be acquired by the public sector upon full implementation of the recommended resource-oriented outdoor recreation plan element within Ozaukee County. Of this total, 490 acres lying within the primary environmental corridor would be acquired under the open space preservation plan element at an estimated cost of \$568,000. The remainder of 270 acres, including 110 acres lying in the primary environmental corridors and 160 acres lying outside the primary environmental corridors, would be acquired at an estimated cost of \$504,000.

As further indicated in Table 176, implementation of the recommended resource-oriented outdoor recreation plan component in Ozaukee County would also require public outlays for the development of facilities at existing and proposed outdoor recreation sites. Development costs under the recommended plan within Ozaukee County would include \$2,231,000 for park development; \$1,086,000 for the development of trail facilities within the proposed public recreation corridors; and \$1,200 for

the development of the proposed boat access point on the Milwaukee River. In addition, the development of needed boat launch ramps, boat mooring slips, and related parking to facilitate participation in boating activity on Lake Michigan could be expected to cost an additional \$2,300,000.<sup>15</sup> Total development costs under the recommended resource-oriented outdoor recreation plan component, including Lake Michigan water access facilities, are estimated at \$5,618,200. Including both land acquisition and facility development costs, the total public outlay associated with implementation of the recommended resource-oriented recreation plan within Ozaukee County is estimated at \$6,690,200.

#### Racine County

As indicated in Table 177, there were five major parks in Racine County in 1973 encompassing a total of 1,150 acres. The existing major parks in Racine County include Bushnell Park in the Town of Burlington, Cliffside Park in the Town of Caledonia, Ela Park in the Town of Rochester, Ives Groves Park in the Town of Yorkville, and Johnson Park in the Town of Caledonia. The recommended resource-oriented outdoor recreation plan component proposes the continued maintenance of these five parks as well as the development of additional facilities at Cliffside Park, Ela Park, and Ives Groves Park. Moreover, the recommended plan proposes the public acquisition and development of an additional major park, Park Site No. 7, which is proposed to be located in the primary environmental corridor along the Fox River north of the Village of Waterford. Including this proposed new park site, a total of 1,430 acres of major parks would be provided within Racine County by the year 2000.

<sup>15</sup> Lake Michigan water access facility development costs for Ozaukee County were estimated under assumptions set forth in footnote 8.

Table 176

#### PUBLIC LAND ACQUISITION REQUIREMENTS, ACQUISITION COSTS, AND DEVELOPMENT COSTS UNDER THE RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: OZAUKEE COUNTY

Resource-Oriented Facility	Proposed Public Land Acquisition Under the Recommended Resource-Oriented Recreation Plan Component										Estimated Facility Development Costs (dollars)	Total Public Outlay for Land Acquisition and Facility Development Under Recommended Resource-Oriented Outdoor Recreation Plan Component (dollars)
	Primary Environmental Corridor Lands Which are to be Acquired Under the Open Space Preservation Plan Element	Other Land to be Acquired Under Recommended Resource-Oriented Outdoor Recreation Plan Component					Total Land Acquisition Under Recommended Resource-Oriented Outdoor Recreation Plan Component					
		Acres			Total	Acquisition Cost (dollars)	Acres		Total	Acquisition Cost (dollars)		
		In Primary Environmental Corridor	Outside Primary Environmental Corridor	In Primary Environmental Corridor			Outside Primary Environmental Corridor					
								Acres				
Public Recreation Corridor	360	427,000	50	10	60	60,000	410	10	420	487,000	1,086,000	1,573,000
Type I and Type II Parks	130	141,000	60	150	210	444,000	190	150	340	585,000	2,231,000	2,816,000
Inland Boat Access	--	--	--	--	--	--	--	--	--	--	1,200	1,200
Lake Michigan Boat Access	--	--	--	--	--	--	--	--	--	--	2,300,000	2,300,000
Total	490	568,000	110	160	270	504,000	600	160	760	1,072,000	5,618,200	6,690,200

Source: SEWRPC.



Most of the additional public intensive resource-oriented recreation facilities proposed under the recommended plan to be developed within Racine County would be developed at existing major parks. Accordingly, under the recommended plan, camping areas and picnic areas would be developed at Cliffside and Ela Parks, and a swimming beach would be developed at Cliffside Park. In addition, the existing 18-hole regulation golf course at Ives Groves Park would be expanded to a 27-hole course. Under the recommended plan, the proposed new park along the Fox River in Racine County would include an 18-hole regulation golf course and nature study center. Finally, at the suggestion of the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning, the recommended plan includes a proposal for the provision of an additional camping area at Evans Park, a Type III site in the Town of Yorkville.

The recommended resource-oriented outdoor recreation plan component proposes the provision of two recreation corridors within Racine County having a combined length of 44 linear miles. One recreation corridor would traverse the eastern portion of the County, traversing primary environmental corridors along the Root River with a spur from the Root River recreation corridor to Cliffside Park in the north and traversing the abandoned North Shore railroad right-of-way in the south. Under the recom-

mended plan, the entire recreation corridor segment would be developed with hiking and biking trails, while ski touring and horseback riding trails would be provided only in the northern portion.

The second recreation corridor segment proposed in Racine County would traverse primary environmental corridor lands along the main stem of the Fox River, which flows through a gently rolling area in western Racine and Kenosha Counties, an area which was identified as having recreational value of regional significance in the Commission's potential park site inventory. Hiking and biking trails would be developed throughout this recreation corridor segment; in addition, a nature study trail would be developed in the northern portion and a horseback riding trail would be developed in the southern portion (see Table 171).

Under the recommended resource-oriented outdoor recreation plan component, additional inland water access facilities in Racine County would be provided primarily to accommodate slow boating activity such as fishing and canoeing. In this regard, the recommended plan proposes the provision of additional public boat access points on three major inland lakes—Kee Nong Go Mong Lake, Long Lake, and Waubeesee Lake—as well as a public boat access point on the Fox River at Ela Park

Table 177

EXISTING AND PLANNED TYPE I AND TYPE II PARKS IN RACINE COUNTY: 2000

Type I and Type II Parks	Acres		Intensive Resource- Oriented Facilities		Remarks
	Existing Acquired	Proposed Additional <sup>a</sup>	Existing	Proposed	
Existing Bushnell . . . . .	100	--	Picnic Area	--	--
Cliffside . . . . .	250	--	--	Camping Swimming Beach Picnic Area	Lake Michigan frontage Recreation corridor activity node
Ela . . . . .	240	--	--	Camping Picnic Area	Located along the Fox River Recreation corridor activity node
Ives Grove . . .	200	40	Golf Course (18)	Golf Course (9)	--
Johnson . . . . .	360	--	Golf Course (18) Ski Hill Picnic Area	--	Located along the Root River Recreation corridor activity node
Evans <sup>b</sup> . . . . .	--	--	--	Camping	--
Proposed New No. 7 . . . . .	--	240	--	Golf Course (18) Nature Center	Located along the Fox River

<sup>a</sup> For proposed new sites, the acreage proposal represents suggested minimum park acreage.

<sup>b</sup> Existing Type III site with proposed resource-oriented facility development.

Source: SEWRPC.

in order to accommodate slow boating activities. In addition, at the suggestion of the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning, the recommended plan includes a proposal for the provision of an additional public boat access point to accommodate fast boating activities on Wind Lake.

Including land required for the new major park, the proposed public recreation corridor, and the additional inland water access facilities, a total of 726 acres of land would be acquired by the public sector upon full implementation of the recommended resource-oriented outdoor recreation plan component within Racine County. Of this total, 567 acres lying within the primary environmental corridor would be acquired under the open space preservation plan element at an estimated cost of \$671,000. The remainder of 159 acres, including 44 acres lying in the primary environmental corridors and 115 acres lying outside the primary environmental corridors, would be acquired at an estimated cost of \$332,800 (see Table 178).

As further indicated in Table 178, implementation of the recommended resource-oriented outdoor recreation plan component within Racine County would also entail public outlays for the development of facilities at existing and proposed outdoor recreation sites. Development costs under the recommended plan within Racine County would include \$3,891,000 for the development of the proposed new major park and the development of additional facilities at existing parks; \$1,166,000 for the development of trail facilities within the proposed public recreation corridors; and \$10,100 for the development of the proposed inland small boat water access facilities. In addition, the development of needed boat launch ramps and boat mooring slips to facilitate recreational boating activity on Lake Michigan could be expected to cost an additional \$506,500.<sup>16</sup> Total development costs under the recommended resource-oriented outdoor recreation plan element, including Lake Michigan water

access facilities, are estimated at \$5,573,600. Including both land acquisition costs and facility development costs, the total public outlay associated with implementation of the recommended resource-oriented recreation plan component within Racine County is estimated at \$6,577,400.

#### Walworth County

There were two major parks in Walworth County in 1973 having a combined area of 510 acres, namely, Whitewater Lake Recreation Area in the Town of Whitewater and Big Foot Beach State Park in the Town of Linn (see Table 179). Both of these major parks would continue to be maintained under the recommended resource-oriented outdoor recreation plan component. The recommended plan also proposes the public acquisition and development of two additional major parks in Walworth County—Park Site No. 8, which is proposed to be located in the primary environmental corridor along Sugar Creek in the Town of Lafayette, and Park Site No. 9, which is proposed to be located in the primary environmental corridor along Turtle Creek in the Town of Darien. The Sugar Creek area, it should be noted, was identified in the Commission's potential park sites inventory as the outstanding recreational site in the County and was, in addition, designated as one of the eight prime park sites remaining in the Region.

All additional intensive resource-oriented recreation facilities proposed under the recommended plan in Walworth County would be developed at the two new proposed major parks. Specifically, picnic areas would be developed at both Park Sites No. 8 and No. 9. In

<sup>16</sup> Lake Michigan water access facility development costs for Racine County were estimated under assumptions set forth in footnote 8.

Table 178

#### PUBLIC LAND ACQUISITION REQUIREMENTS, ACQUISITION COSTS, AND DEVELOPMENT COSTS UNDER THE RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: RACINE COUNTY

Resource-Oriented Facility	Proposed Public Land Acquisition Under the Recommended Resource-Oriented Recreation Plan Component										Estimated Facility Development Costs (dollars)	Total Public Outlay for Land Acquisition and Facility Development Under Recommended Resource-Oriented Outdoor Recreation Plan Component (dollars)
	Primary Environmental Corridor Lands Which are to be the Open Space Preservation Plan Element		Other Land to be Acquired Under Recommended Resource-Oriented Outdoor Recreation Plan Component				Total Land Acquisition Under Recommended Resource-Oriented Outdoor Recreation Plan Component					
			Acres			Acquisition Cost (dollars)	Acres			Acquisition Cost (dollars)		
			In Primary Environmental Corridor	Outside Primary Environmental Corridor			In Primary Environmental Corridor	Outside Primary Environmental Corridor				
	Acres	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)		
Public Recreation Corridor . .	350	431,000	40	50	90	297,000	390	50	440	728,000	1,166,000	1,894,000
Type I and Type II Parks. . .	215	237,000	--	65	65	32,000	215	65	280	269,000	3,891,000	4,160,000
Inland Boat Access . . . . .	2	3,000	4	--	4	3,800	6	--	6	6,800	10,100	16,900
Lake Michigan Boat Access . .	--	--	--	--	--	--	--	--	--	--	506,500	506,500
Total	567	671,000	44	115	159	332,800	611	115	726	1,003,800	5,573,600	6,577,400

Source: SEWRPC.

addition, an 18-hole regulation golf course, a nature study center, and a downhill ski area would be developed at Park Site No. 8, the proposed Sugar Creek Site.

The recommended resource-oriented outdoor recreation plan component proposes the provision of public recreation corridors along Turtle Creek and Sugar Creek as well as through the Kettle Moraine in Walworth County. Biking and hiking trails would be developed throughout the entire 53 linear miles of public recreation corridors proposed in Walworth County under the recommended plan. In addition, a horseback riding trail would be developed within the recreation corridor segments along Sugar Creek and through the Kettle Moraine. A ski touring trail would also be developed within the recreation corridor through the Kettle Moraine and a nature study trail would be developed within the recreation corridor along Sugar Creek in conjunction with the nature study center proposed at Park Site No. 8.

The analysis of inland recreational water access needs described in Chapter XII of this report indicated that Geneva Lake, which requires 47 additional car and trailer parking spaces, is the only lake in Walworth County which needs additional water access facilities to accommodate fast boating activity. The recommended resource-oriented outdoor recreation plan component proposes that this parking need at Geneva Lake be met by the public sector. In addition, the recommended plan proposes that additional water access facilities be pro-

vided on a total of five major inland lakes in order to accommodate slow boating activity—Booth Lake, Cravath Lake, Loraine Lake, Peters Lake, and Wandawega Lake.

As indicated in Table 180, including land required for new major parks, the proposed public recreation corridor, and the additional inland water access facilities, a total of 1,320 acres would be acquired by the public sector upon full implementation of the recommended resource-oriented outdoor recreation plan element within Walworth County. Of this total, 817 acres lying within the primary environmental corridors would be acquired under the open space preservation plan element at an estimated cost of \$1,093,000. The balance of 503 acres, including 443 acres lying within the primary environmental corridors and 60 acres lying outside the primary environmental corridors, would be acquired at an estimated cost of \$454,800.

As further indicated in Table 180, facility development costs under the recommended plan within Walworth County would total approximately \$3,387,900, including \$2,499,000 for the development of additional major parks; \$870,000 for the development of trail facilities within the proposed public recreation corridor; and \$18,900 for the development of the proposed inland small boat water access facilities. Including both land acquisition and facility development costs, the total

Table 179

EXISTING AND PLANNED TYPE I AND TYPE II PARKS IN WALWORTH COUNTY: 2000

Type I and Type II Parks	Acres		Intensive Resource- Oriented Facilities		Remarks
	Existing Acquired	Proposed Additional <sup>a</sup>	Existing	Proposed	
Existing Bigfoot Beach . . . . .	260	--	Camping Picnic Area Swimming Beach	--	Frontage on Lake Geneva
Whitewater Lake . . . .	250	--	Camping Swimming Beach Picnic Area	--	Located in the Kettle Moraine area Recreation corridor activity node Frontage on Whitewater Lake
Proposed New No. 8. . . . .	--	655	--	Golf Course (18) Picnic Area Nature Center Ski Hill	Located along the Sugar Creek Recreation corridor activity node
No. 9. . . . .	--	115	--	Picnic Area	Located along the Turtle Creek Recreation corridor activity node

<sup>a</sup>For proposed new sites, the acreage proposal represents suggested minimum park acreage.

Source: SEWRPC.

public outlay associated with implementation of the recommended resource-oriented outdoor recreation plan within Walworth County is estimated at \$4,935,700.

#### Washington County

There were two major parks in Washington County in 1973 having a combined area of 810 acres—namely, Pike Lake State Park in the Town of Hartford and Ridge Run Park in the Town of West Bend. Both of the existing major parks would continue to be maintained under the recommended resource-oriented outdoor recreation plan component. In addition, the recommended plan proposes the development as a major park of one existing publicly owned park site, the Sandy Knoll Park Site located in the Town of Trenton (see Table 181). Finally, the recommended plan proposes the public acquisition and development of four additional parks: Park Site No. 10, which is proposed to be located in the primary environmental corridor along the Menomonee River in the Village of Germantown; Park Site No. 11, which is proposed to be located within the Kettle Moraine on Friess Lake in the Town of Richfield; Park Site No. 12, which is proposed to be located on Lucas Lake in the Town of West Bend; and Park Site No. 13, which is proposed to be located in the Town of Wayne. Park Site No. 12, it should be noted, is located within the Paradise Valley area, a high value resource area which was designated in the Commission's potential park sites inventory as one of the eight prime potential park sites remaining in the Region.

Under the recommended resource-oriented outdoor recreation plan component, additional picnic areas are proposed at the Sandy Knoll Park Site and at Park Sites No. 10, No. 11, No. 12, and No. 13. Three additional swimming beaches would be provided under the recommended plan in Washington County, with swimming beaches proposed at the Sandy Knoll Park Site and at Park Sites No. 11 and No. 12. Opportunities for nature study would be expanded in Washington County through the provision of nature study centers at Park Sites No. 11

and No. 12. One additional campground is recommended for development within Washington County to be located at Park Site No. 12. Finally, the recommended plan proposes two additional 18-hole regulation golf courses in Washington County, one to be provided at the Sandy Knoll Park Site and one to be developed at Park Site No. 10 in the Village of Germantown.

Under the recommended plan, a total of 53 linear miles of recreation corridors are proposed within Washington County, with recreation corridor segments proposed along the Milwaukee River in the northern portion of the County and through the Kettle Moraine, which occupies the western portion of the County. Biking and hiking trails are proposed throughout the entire recreation corridor in Washington County; in addition, a horseback riding trail is proposed in the northernmost portion of the recreation corridor, a ski touring trail is proposed in the recreation corridor in the central portion of the County, and a nature study trail would be developed within the recreation corridor in conjunction with the nature study center proposed at Park Site No. 12 (see Table 171).

The recommended plan proposes additional inland water access facilities in Washington County only insofar as they are required to accommodate slow boating activities such as fishing and canoeing. More specifically, the recommended plan proposes the provision of additional access points at five major inland lakes—Little Cedar Lake, Bark Lake, Lucas Lake, Smith Lake, and Wallace Lake. In addition, the recommended plan proposes the provision of two boat access points along the Milwaukee River in Washington County, one to be located near the Village of Newburg and one to be located in the City of West Bend at Riverside Park.

Including lands required for new major parks, the proposed public recreation corridor, and the additional inland water access facilities, a total of 1,572 acres would be acquired by the public sector upon full implementa-

Table 180

#### PUBLIC LAND ACQUISITION REQUIREMENTS, ACQUISITION COSTS, AND DEVELOPMENT COSTS UNDER THE RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: WALWORTH COUNTY

Resource-Oriented Facility	Proposed Public Land Acquisition Under the Recommended Resource-Oriented Recreation Plan Component										Estimated Facility Development Costs (dollars)	Total Public Outlay for Land Acquisition and Facility Development Under Recommended Resource-Oriented Outdoor Recreation Plan Component (dollars)
	Primary Environmental Corridor Lands Which are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under Recommended Resource-Oriented Outdoor Recreation Plan Component				Total Land Acquisition Under Recommended Resource-Oriented Outdoor Recreation Plan Component					
			Acres			Acquisition Cost (dollars)	Acres		Acquisition Cost (dollars)			
	In Primary Environmental Corridor	Outside Primary Environmental Corridor	In Primary Environmental Corridor	Outside Primary Environmental Corridor								
Acres	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)			
Public Recreation Corridor . . . . .	200	200,000	340	0	340	304,000	540	0	540	504,000	870,000	1,374,000
Type I and Type II Parks. . . . .	615	890,000	95	60	155	146,000	710	60	770	1,036,000	2,499,000	3,535,000
Inland Boat Access . . . . .	2	3,000	8	0	8	4,800	10	0	10	7,800	18,900	26,700
Total	817	1,093,000	443	60	503	454,800	1,260	60	1,320	1,547,800	3,387,900	4,935,700

Source: SEWRPC.



Table 181

## EXISTING AND PLANNED TYPE I AND TYPE II PARKS IN WASHINGTON COUNTY: 2000

Type I and Type II Parks	Acres		Intensive Resource- Oriented Facilities		Remarks
	Existing Acquired	Proposed Additional <sup>a</sup>	Existing	Proposed	
Existing Pike Lake . . . . .	670	--	Camping Picnic Area Swimming Beach	--	Located in Kettle Moraine area Recreation corridor activity node Frontage on Pike Lake
Ridge Run . . . . .	140	--	Picnic Area	--	Located in Paradise Valley Recreation corridor activity node
Undeveloped Park Site Leienberger (Sandy Knoll) . . .	260	--	--	Golf Course (18) Swimming Beach Picnic Area	--
Proposed New No. 10 . . . . .	--	205	--	Golf Course (18) Picnic Area	--
No. 11 . . . . .	--	140	--	Picnic Area Swimming Beach Nature Center	Located in Kettle Moraine area Recreation corridor activity node Frontage on Friess Lake
No. 12 . . . . .	--	580	--	Camping Swimming Beach Picnic Area Nature Center	Located in Paradise Valley Recreation corridor activity node Frontage on Lucas Lake
No. 13 . . . . .	--	115	--	Picnic Area	--

<sup>a</sup> For proposed new sites the acreage proposal represents suggested minimum park acreage.

Source: SEWRPC.

tion of the recommended resource-oriented outdoor recreation plan component within Washington County. Of this total, 1,168 acres lying within the primary environmental corridors would be acquired under the open space preservation plan element at an estimated cost of \$2,352,000. The balance of 404 acres, including 224 acres lying within the primary environmental corridors and 180 acres lying outside the primary environmental corridors, would be acquired at an estimated cost of \$501,600 (see Table 182).

In addition to the foregoing land acquisition costs, implementation of the recommended resource-oriented outdoor recreation plan component within Washington County also would entail public outlays for the development of facilities at existing and proposed outdoor recreation sites. Development costs under the recommended plan within Washington County would include \$5,430,000 for the development of additional major

parks; \$1,200,000 for the development of trail facilities within the proposed public recreation corridors; and \$8,400 for the development of the proposed inland small boat water access facilities. Total development costs under the recommended resource-oriented outdoor recreation plan component thus would total approximately \$6,638,400. Including both land acquisition costs and facility development costs, total public outlays associated with implementation of the recommended resource-oriented outdoor recreation plan within Washington County is estimated at \$9,492,000.

#### Waukesha County

There were 11 major parks having a combined area of 2,430 acres in Waukesha County in 1973, including the following: Franklin Wirth, Lapham Peak, Menomonee, Minooka, Monches, Mukwonago, Muskego, Nagawaukee, Ottawa Lake, Resinosa, and Wanaki (see Table 183). The recommended resource-oriented outdoor recreation plan

Table 182

**PUBLIC LAND ACQUISITION REQUIREMENTS, ACQUISITION COSTS, AND DEVELOPMENT COSTS UNDER THE  
RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: WASHINGTON COUNTY**

Resource-Oriented Facility	Proposed Public Land Acquisition Under the Recommended Resource-Oriented Recreation Plan Component										Estimated Facility Development Costs (dollars)	Total Public Outlay for Land Acquisition and Facility Development Under Recommended Resource-Oriented Outdoor Recreation Plan Component (dollars)
	Primary Environmental Corridor Lands Which are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under Recommended Resource-Oriented Outdoor Recreation Plan Component				Total Land Acquisition Under Recommended Resource-Oriented Outdoor Recreation Plan Component					
			Acres		Total	Acquisition Cost (dollars)	Acres		Total	Acquisition Cost (dollars)		
	In Primary Environmental Corridor	Outside Primary Environmental Corridor	In Primary Environmental Corridor	Outside Primary Environmental Corridor								
Acres	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)			
Public Recreation Corridor . . .	320	512,000	140	60	200	257,000	460	60	520	769,000	1,200,000	1,969,000
Type I and Type II Parks. . . . .	840	1,826,000	80	120	200	240,000	920	120	1,040	2,066,000	5,430,000	7,496,000
Inland Boat Access . . . . .	8	14,000	4	--	4	4,600	12	--	12	18,600	8,400	27,000
Total	1,168	2,352,000	224	180	404	501,600	1,392	180	1,572	2,853,600	6,638,400	9,492,000

Source: SEWRPC.

component proposes continued maintenance of these major parks as well as expansion and further development of Monches Park. In addition, the recommended plan proposes expansion of the Retzer Nature Center, an existing Type III general use site located in the Town of Genesee, to the size required for a Type II park. The recommended plan further proposes the development as major parks of two existing publicly owned park sites—namely, the Butler park site in the Town of Genesee and the Nashotah park site in the Town of Merton and Village of Nashotah. The recommended plan also proposes the public acquisition and development of seven new major parks in Waukesha County by the plan design year 2000: Park Site No. 14, which is proposed to be located in the City of Muskego; Park Site No. 15, which is proposed to be located along the Fox River west of the Village of Big Bend; Park Site No. 16, which is proposed to be located in the Town of Mukwonago; Park Site No. 17, which is proposed to be located along the Fox River in the Town of Waukesha; Park Site No. 18, which is proposed to be located in the City of New Berlin; Park Site No. 19, which is proposed to be located in the Town of Pewaukee; and Park Site No. 20, which is proposed to be located in the Town of Oconomowoc.

Under the recommended plan, additional picnic areas would be developed at Monches Park, at the Butler park site, and at Park Sites No. 15, No. 17, and No. 19. One additional nature study center would be provided in Waukesha County and would be located at the Nashotah park site. Four additional 18-hole regulation golf courses are proposed under the recommended plan, with golf courses proposed to be developed at Park Sites No. 14, No. 16, No. 18, and No. 20. The development of golf courses at Park Sites No. 14 and No. 18, in particular, would help to meet the existing and anticipated future demand for public golf facilities within the rapidly urbanizing eastern portion of Waukesha County and, more generally, within the overall Milwaukee urbanized area.

The recreation corridor network proposed in Waukesha County under the recommended plan consists essentially of a long loop traversing the central portion of the County in a northeasterly direction, with additional segments emanating from that loop providing connections to recreation corridors proposed in adjacent counties. Under the recommended plan, hiking and biking trails would be developed throughout the entire 118 linear miles of the proposed recreation corridor in Waukesha County. Smaller segments of the recreation corridor would be developed with nature study trails, ski touring trails, and horseback riding trails.

The recommended plan proposes additional boat access facilities in Waukesha County primarily to accommodate slow boating activities such as fishing and canoeing. Under the recommended plan, additional boat access points to accommodate slow boating activity would be provided on Beaver Lake, Denoon Lake, Hunters Lake, Lower Nashotah Lake, Upper Nashotah Lake, Middle Genesee Lake, North Lake, and Pretty Lake. Furthermore, two boat access points would be provided along the Fox River south of the City of Waukesha in Waukesha County, one at Park Site No. 15 and one at Park Site No. 17, primarily to accommodate canoeing activity. The analysis of water access needs, described in Chapter XII of this report, indicated that only one lake in Waukesha County requires additional access facilities to accommodate fast boating activity—namely, Pine Lake, which requires an access point with 10 car and trailer parking spaces. The recommended plan also proposes that the identified water access needs on Pine Lake be met by the public sector.

Including land required for new major parks, the proposed public recreation corridors, and the additional water access facilities, a total of 2,413 acres would be acquired by the public sector upon full implementation of the recommended resource-oriented outdoor recreation plan component within Waukesha County (see Table 184). Of this total, 1,519 acres lying within the

Table 183

## EXISTING AND PLANNED TYPE I AND TYPE II PARKS IN WAUKESHA COUNTY: 2000

Type I and Type II Parks	Acres		Intensive Resource- Oriented Facilities		Remarks
	Existing Acquired	Proposed Additional <sup>a</sup>	Existing	Proposed	
Existing					
Franklin Wirth . . .	150	--	Picnic Area	--	--
Lapham Peak . . .	120	--	Picnic Area	--	Located in Kettle Moraine area
Menomonee . . . .	390	--	Camping Picnic Area Swimming Beach	--	Recreation corridor activity node
Minooka . . . . .	300	--	Picnic Area Swimming Beach	--	Recreation corridor activity node
Monches . . . . .	200	200 <sup>b</sup>	--	Picnic Area	Located in Kettle Moraine area
Mukwonago . . . .	220	--	Camping Picnic Area Swimming Beach	--	Recreation corridor activity node
Muskego . . . . .	160	--	Camping Picnic Area Swimming Beach	--	State scientific area within the park
Nagawaukee . . . .	420	--	Camping Picnic Area Swimming Beach Golf Course (18)	--	Located in the Kettle Moraine area Recreation corridor activity node Frontage on both Nagawicka and Pewaukee Lakes
Ottawa Lake . . . .	80 <sup>c</sup>	--	Camping Picnic Area Swimming Beach	--	Located in Kettle Moraine area Recreation corridor activity node
Resinosa . . . . .	240	--	Camping	--	Located in Kettle Moraine area
Retzler . . . . .	90	80 <sup>b</sup>	Nature Center	--	--
Wanaki . . . . .	150	--	Golf Course (18)	--	--
Undeveloped Park Sites					
Butler . . . . .	110	--	--	Picnic Area	--
Nashotah . . . . .	440	--	--	Nature Center	Located in Kettle Moraine area
Proposed New					
No. 14. . . . .	--	185	--	Golf Course (18)	--
No. 15. . . . .	--	115	--	Picnic Area	Located along the Fox River Recreation corridor activity node
No. 16. . . . .	--	185	--	Golf Course (18)	--
No. 17. . . . .	--	115	--	Picnic Area	Located along the Fox River Recreation corridor activity node
No. 18. . . . .	--	185	--	Golf Course (18)	--
No. 19. . . . .	--	115	--	Picnic Area	--
No. 20. . . . .	--	185	--	Golf Course (18)	--

<sup>a</sup> For proposed new sites, the acreage proposal represents suggested minimum park acreage.

<sup>b</sup> This acreage will be located adjacent to acreage already acquired.

<sup>c</sup> Ottawa Lake is located adjacent to state forest lands containing 165 acres designated for nature study, and for purposes of this report is considered a Type I site.

Source: SEWRPC.

Table 184

**PUBLIC LAND ACQUISITION REQUIREMENTS, ACQUISITION COSTS, AND DEVELOPMENT COSTS UNDER THE  
RECOMMENDED RESOURCE-ORIENTED OUTDOOR RECREATION PLAN COMPONENT: WAUKESHA COUNTY**

Resource-Oriented Facility	Proposed Public Land Acquisition Under the Recommended Resource-Oriented Recreation Plan Component										Estimated Facility Development Costs (dollars)	Total Public Outlay for Land Acquisition and Facility Development Under Recommended Resource-Oriented Outdoor Recreation Plan Component (dollars)
	Primary Environmental Corridor Lands Which are to be Acquired Under the Open Space Preservation Plan Element		Other Land to be Acquired Under Recommended Resource-Oriented Outdoor Recreation Plan Component				Total Land Acquisition Under Recommended Resource-Oriented Outdoor Recreation Plan Component					
			Acres	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor	Total	Acquisition Cost (dollars)	In Primary Environmental Corridor	Outside Primary Environmental Corridor		
Public Recreation Corridor . . . . .	890	890,000	80	60	140	154,000	970	60	1,030	1,044,000	2,874,500	3,918,500
Type I and Type II Parks. . . . .	625	771,000	--	740	740	1,134,000	625	740	1,365	1,905,000	8,205,000	10,110,000
Inland Boat Access . . . . .	4	6,000	6	8	14	69,000	10	8	18	75,000	17,300	92,300
Total	1,519	1,667,000	86	808	894	1,357,000	1,605	808	2,413	3,024,000	11,096,800	14,120,800

Source: SEWRPC.

primary environmental corridors would be acquired under the open space preservation plan element at an estimated cost of \$1,667,000. The remainder of 894 acres, including 86 acres lying within the primary environmental corridors and 808 acres lying outside the primary environmental corridors, would be acquired at an estimated cost of \$1,357,000.

Development costs under the recommended plan within Waukesha County would include \$8,205,000 for the development of additional park lands; \$2,874,500 for the development of trail facilities within the proposed public recreation corridors; and \$17,300 for the development of the proposed inland small boat water access facilities (see Table 184). Total development costs under the recommended resource-oriented outdoor recreation plan element are estimated at \$11,096,800. Including both land acquisition costs and facility development costs, total capital costs under the recommended resource-oriented outdoor recreation plan element in Waukesha County are estimated at \$14,120,800.

#### Urban Outdoor Recreation Plan Component

The analysis of outdoor recreation needs, described in Chapter XII of this report, indicated that there is a substantial need for additional public general use outdoor recreation sites—including Type III and Type IV parks and Type IV school recreation sites—as well as public nonresource-oriented outdoor recreation facilities—including baseball diamonds, basketball courts, ice skating rinks, playfields, playgrounds, softball diamonds, and tennis courts—within existing urban areas of the Region as well as within areas anticipated to be in urban use by the year 2000. In comparison to the resource-oriented outdoor recreation sites and facilities, these nonresource-oriented outdoor recreation sites and facilities rely less heavily on natural resource amenities; generally meet a greater need in urban than rural areas; and have a relatively small service radius. For these reasons, nonresource-oriented outdoor recreation sites and facilities, as a prac-

tical matter, can be readily provided only in areas of the Region having a significant population concentration.

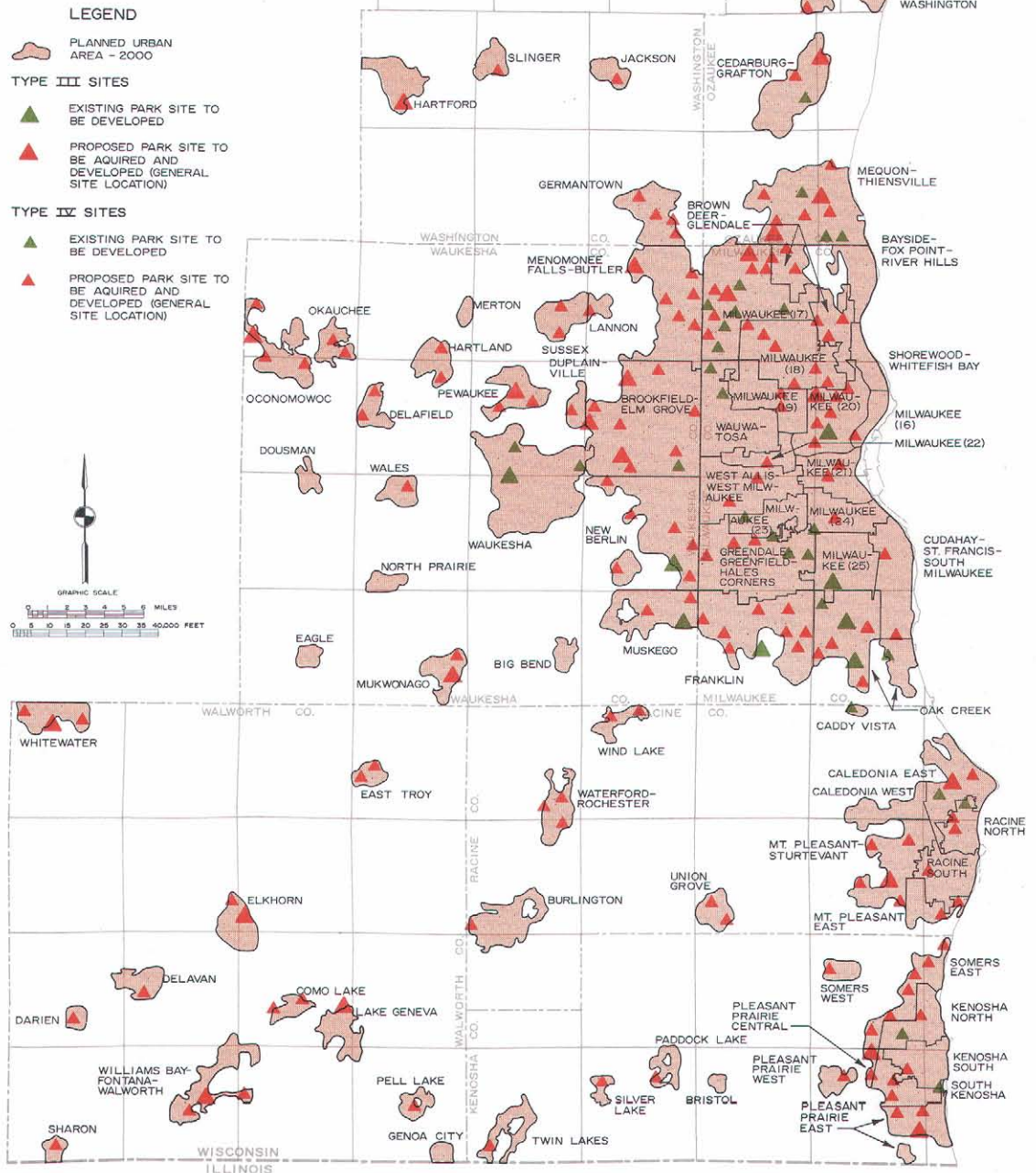
The urban outdoor recreation plan component which is recommended for incorporation in the regional park and open space plan for southeastern Wisconsin consists of a series of recommendations concerning the quantity of urban outdoor recreation sites and facilities which should be provided to meet existing and probable future recreation needs within the urban areas shown on Map 133. The recommended urban outdoor recreation plan component, it should be noted, is essentially the same as the urban recreation plan component presented in Chapter XIII of this report, refined slightly to reflect changes in the acreage requirement for small neighborhood parks in certain subareas of the Region due to the inclusion of two additional Type I and Type II parks in certain urban areas as part of the refined resource-oriented outdoor recreation plan component. In the formulation of the urban outdoor recreation plan component recommendations, consideration was given to the availability of open space lands for park development within each urban area. It should be recognized, however, that the recommendations set forth herein relate to the quantity and general location of needed sites and facilities. The precise location and design of the recommended urban outdoor recreation sites are a matter which can only be properly addressed at the county and local level of planning.

The primary purpose of the urban outdoor recreation plan element is to help guide public sector decisionmaking related to the provision of the additional nonresource-oriented outdoor recreation sites and facilities which would be needed within urban areas of the Region by the plan design year 2000. The site and facility requirements have been determined, in part, on the basis of application of the adopted per capita urban site and facility standards to the forecast year 2000 population of the urban areas shown on Map 133. In addition,



Map 133

**TYPE III AND TYPE IV SITES IN  
URBAN AREAS PROPOSED UNDER  
THE URBAN OUTDOOR RECREATION  
PLAN COMPONENT: 2000**



The urban outdoor recreation plan component seeks to provide the quantity of local recreation sites—sites less than 100 acres in area—and intensive nonresource-oriented recreation facilities including baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, tennis courts, and swimming pools required to meet the need within urban areas of the Region through the plan design year 2000. Under this plan component, an additional 30 Type III parks and 183 additional Type IV parks would be provided within urban areas of the Region by the plan design year 2000. A total of about 3,158 additional acres of local public outdoor recreation land would be provided. About 673 acres, or about 21 percent of the total plan increment, may be expected to be provided through subdivision dedication; about 230 acres, or about 7 percent of the total increment, may be expected to be provided through school expansion; and about 748 acres, or about 24 percent of the total increment, would be provided through the development of existing publicly owned undeveloped park sites. In addition, implementation of the urban outdoor recreation plan component would require public acquisition and development of about 1,333 acres of existing open land and the public acquisition, clearance, and redevelopment for park purposes of about 174 acres of land currently in urban use.

portions of the urban areas not appropriately served by local parks have been identified by application of the adopted accessibility standards for Type III and Type IV parks. It should be recognized that in some situations per capita standards are met, but a need for additional sites still exists because of the inaccessibility of the existing recreation areas while, in other situations, accessibility standards are met but a need for additional acreage still exists.

In general, under the urban outdoor recreation plan component it is recommended that the identified urban outdoor recreation needs within each urban area, as set forth in Chapter XII, be met through public provisions of the required urban outdoor recreation sites and facilities. This general recommendation can be implemented in various ways within most urban areas, including through dedication as a part of the urban land subdivision process, the development of additional school related recreation sites, the development of existing publicly owned undeveloped park sites, or the public purchase and development of other open space lands. It is important to recognize, however, that satisfaction of the identified urban site and facility requirements will be difficult within certain urban areas—particularly in densely populated urban areas in the central part of Milwaukee County—due to the lack of open space lands. Satisfaction of the identified needs within such areas could be accomplished only through a substantial amount of urban demolition, clearance, and redevelopment. Because of the high cost of such redevelopment and the attendant disruption of urban activities, it is recommended that redevelopment for park purposes of land currently in urban use be restricted to amounts required to meet the adopted accessibility standards. This approach seeks to ensure that each resident of an urban area would at least have ready access to a public outdoor recreation site; however, the quantity of outdoor recreation sites and facilities provided under such an approach may be less than that required to fully meet the recreation demand within a densely populated urban area.

In summary, under the recommended urban outdoor recreation plan component, it is proposed that, within each urban area, any additional required recreation land be provided through dedication during land subdivision, normal school expansion, and the development of existing publicly owned undeveloped park sites to the maximum extent possible. Where such possibilities do not exist, it is proposed that the public sector acquire suitable existing open land for local park development. In the absence of suitable open lands, it is recommended that lands currently in urban use be acquired, cleared, and redeveloped as urban parkland. As indicated above, however, it is proposed that such redevelopment activity be undertaken only to the extent necessary to meet the recommended accessibility standards. Within this general framework, specific recommendations were formulated for each urban area according to the four following steps:

1. Type III Park Accessibility Standards—Type III parks are parks of 25 to 99 acres in area which primarily provide opportunities for participation

in nonresource-oriented outdoor recreation activities such as baseball, basketball, ice skating, softball, and tennis. As indicated in the adopted park acquisition and development standards presented in Chapter XI, a Type III park should be provided within two miles of each resident of urban areas of the Region having a population greater than 7,500 persons.<sup>17</sup> Under the urban outdoor recreation plan component, it is recommended that this accessibility standard be met within urban areas of the Region having a year 2000 forecast population of more than 7,500 persons, with the public sector providing any additional required Type III parks, first, by developing any existing publicly owned undeveloped park sites; second, by acquiring open space lands and developing it as a Type III park; and, third, if necessary, by acquiring land currently in urban use, clearing such land, and redeveloping it as a Type III park. It should be noted that, because a Type III park is relatively large, typically consisting of 50 acres or more, it is unlikely that the land required for a new Type III park could be obtained solely through subdivision dedication.

2. Type IV Park Accessibility Standards. Type IV parks are small parks less than 25 acres in area which, like Type III parks, provide facilities for intensive nonresource-oriented outdoor recreation activities but which, in comparison to Type III parks, provide a smaller variety and quantity of such facilities at any one site. As indicated in Chapter XI, the Type IV parks should be provided within 0.5 mile of each resident of a high-density urban area, 0.75 mile of each resident of a medium-density urban area, and 1.0 mile of each resident of a low-density urban area.<sup>18</sup> Under the urban outdoor recreation plan component, it is recommended that these accessibility standards be satisfied within each urban area of the Region, with the public sector providing any additional required parklands, first, by developing land to be acquired through subdivision dedication or by developing existing publicly owned undeveloped park sites; second, by acquiring open space land and developing it as a Type IV park; and, third, in the absence of the foregoing alternatives, by acquiring land currently in urban use, clearing such land, and redeveloping it as a Type IV park.

---

<sup>17</sup> In urban areas, the need for a Type III park may be met by the presence of a Type II park or a Type I park. Thus, each resident of an urban area having a population greater than 7,500 should be within two miles of a Type III, Type II, or Type I park.

<sup>18</sup> In urban areas, the need for a Type IV park is met by the presence of a Type I, Type II, or Type III park.

3. Per Capita Local Recreation Site Acreage Standard. It should be recognized that Type III and Type IV general use sites are of two basic kinds—namely, parks and public school owned recreation sites. Although not generally perceived as parks, school recreation sites do provide areas for the pursuit of intensive nonresource-oriented recreational activities at the neighborhood level, and acreage standards for both park and public school general use sites have been set forth in Chapter XI of this report. In the determination of local outdoor recreation site acreage needs, because of the importance attached to natural areas for passive recreation use usually provided in local parks but not usually provided at school recreation sites, it was assumed that the standard for local parks—3.9 acres per thousand persons—must be met within each urban area, while the remainder of the overall local outdoor recreation site acreage requirement—2.5 acres per thousand persons—may be met either at parks or public school recreation sites. The local recreation site acreage needs, determined based upon the application of these standards to the planned year 2000 population of each urban area of the Region, have been set forth in Chapter XII of this report.

Under the urban outdoor recreation plan component, it is recommended that the per capita local park acreage standard be met to the maximum extent possible through ordinary recreation land acquisition and development efforts. It should be noted that the urban outdoor recreation plan component does not recommend clearing and redevelopment activities in efforts to satisfy the per capita recreation site acreage standard. Thus, the urban outdoor recreation plan component recommends that additional required local recreation land be provided, first, through normal school expansion as well as through the development of land to be acquired through subdivision dedication; secondly, through the development of existing publicly owned undeveloped park sites; and third, through the acquisition of open space land and the development of such land for local park purposes.

4. Per Capita Nonresource-Oriented Outdoor Recreation Facility Standards. The adopted park and open space standards prescribe on a per capita basis the quantity of intensive nonresource-oriented outdoor recreation facilities including baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, softball diamonds, swimming pools, and tennis courts, which are required to meet recreation demands within urban areas. Specific needs for additional intensive nonresource-oriented facilities obtained through the application of these standards to the plan year 2000 population within each urban area have been set forth in Chapter XII. The urban outdoor recreation plan component recommends provision of the required additional facilities to the extent

that they can be accommodated on the additional recreation land recommended under steps 1 through 3 above. Under this general recommendation, all additional required intensive resource-oriented outdoor recreation facilities would be provided within each urban area except those in which the provision of the required recreation site area is not feasible owing to the lack of open space lands.

Urban Outdoor Recreation Sites: Within the framework of recommendations set forth above, detailed recommendations on additional public local recreation lands were formulated for each urban area in the Region after considering the identified recreation site needs; the general availability of open space land suitable for development as local recreation sites; the availability of existing publicly owned undeveloped park sites; and the potential for providing new recreation areas through subdivision dedication and school expansion. Urban outdoor recreation plan component recommendations concerning additional Type III parks and Type IV parks and school recreation sites are presented in Table 185. As indicated in this table, the urban outdoor recreation plan component recommends the provision of 3,158 additional acres of local parkland at a total of 30 Type III parks and 212 Type IV parks and school recreation sites within urban areas of the Region by the plan design year 2000. Under the urban outdoor recreation plan component, 673 acres, or 21 percent of the total planned increment, may be expected to be provided through subdivision dedication; 230 acres, or 7 percent of the total increment, may be expected to be provided through school expansion; and 748 acres, or 24 percent of the total increment, would be provided through the development of the existing publicly owned undeveloped park sites. As further indicated in Table 185, 1,333 acres, or 42 percent of the additional local recreation site area proposed under the urban recreation plan component, would involve the public purchase of suitable existing open land at an estimated acquisition cost of \$7,722,500. In addition, implementation of the urban outdoor recreation plan component would require the acquisition and clearance of 174 acres of land currently in urban use at an estimated cost of \$67,860,000, including relocation assistance. Implementation of the urban outdoor recreation plan component would, thus, require the public outlay of \$75,582,500 for land acquisition and clearance.

Under the urban outdoor recreation plan component, relatively large amounts of additional local parkland would be provided within urban areas which are expected to experience significant population growth between 1975 and the year 2000 and which have sufficient quantities of open space land to accommodate the required park development. Redevelopment activities under the urban outdoor recreation plan element would be undertaken primarily in Milwaukee County—in particular, within the densely populated areas of the central portion of the City of Milwaukee.<sup>19</sup> High acquisition and clearance costs and relocation assistance payments account for the large capital outlays in connection with the redevelopment activities in these areas.

As previously indicated, the additional local public recreation sites proposed under the recommended urban outdoor recreation plan component are required to meet the adopted per capita and accessibility site standards within urban areas through the plan design year 2000. In urban areas, the need for a local Type III or Type IV park, based upon the adopted accessibility standards, may be met by the presence of a major Type I or Type II park; and this fact was taken into account in formulating the urban outdoor recreation plan component, as set forth in Chapter XIII of this report. It should also be noted that the development of major parks proposed under the recommended resource-oriented outdoor recreation plan component would eliminate the "accessibility" need for local parks in certain urban areas and, accordingly, the urban outdoor recreation plan component, as originally set forth in Chapter XIII, has been modified to reflect the proposed additional major parks. In this regard, the proposed acquisition and development of one Type III park in the Oak Creek urban area was eliminated because, under the resource-oriented outdoor recreation plan component, Park Site No. 4 would be acquired and developed in approximately the same location as the originally proposed Type III site. Similarly, the proposed acquisition and development of Park Site No. 10 eliminate the accessibility need for a Type III park in the Village of Germantown. It should be noted, however, that additional local park acreage still is expected to be required in the Village of Germantown because of substantial population growth by the plan design year. Accordingly, under the recommended urban outdoor recreation plan component, four Type IV parks are still proposed in the Village of Germantown to accommodate the anticipated need for local outdoor recreation facilities.

**Urban Outdoor Recreation Facilities:** The urban outdoor recreation plan component recommends the provision of all additional facilities for intensive nonresource-oriented

---

<sup>19</sup> *Local planning efforts which address the urban park and outdoor recreation facility needs in these densely populated urban areas may identify opportunities to reduce the amount of redevelopment activity. An example of such an opportunity is the land which has been cleared for the Park West Freeway in the City of Milwaukee, the construction of which is uncertain at the present time. If it is ultimately determined that this land cannot be used as a transportation corridor, this open land would provide an excellent opportunity for the development of local parks in planning analysis areas 19 and 20, in which a substantial need for local outdoor recreation sites and facilities has been identified. Similarly, other small remnant highway parcels in urban areas may be used for small neighborhood parks or open space areas. In addition, it is important to note that all existing outdoor recreation sites in these densely populated urban areas should be maintained. Thus, careful consideration for the maintenance of school related play areas should be given, even though certain schools may be closed because of a decrease in the population in these central city areas.*

outdoor recreation activities which are expected to be required within urban areas of the Region by the year 2000 and which can be accommodated on the additional local parklands recommended under this plan component as outlined above. More specifically, implementation of the urban outdoor recreation plan component would meet the anticipated need for intensive nonresource-oriented facilities in all urban areas except for the 11 urban areas in which provision of the required recreation site area is not feasible owing to the lack of suitable open space lands. As indicated in Table 186, implementation of the urban outdoor recreation plan component would result in the provision of the following additional facilities within urban areas of the Region by the plan design year: 38 baseball diamonds; 350 basketball goals; 86 playfields; 102 playgrounds; 125 softball diamonds; 251 tennis courts; 91 ice skating rinks; and two swimming pools. Under the recommended urban outdoor recreation plan component, additional intensive non-resource-oriented outdoor recreation facilities would be provided, to a large extent, within urban areas which are expected to have relatively large population increases between 1975 and the year 2000 and within which local recreation sites accommodating these facilities can be readily provided. On the other hand, despite a large existing and anticipated need for additional intensive nonresource-oriented outdoor recreation facilities within the densely populated central portions of the Cities of Kenosha, Milwaukee, and Racine, relatively few additional intensive nonresource-oriented facilities would be provided in these areas because of the lack of available open space lands to accommodate the required facilities.<sup>20</sup>

It should be noted that the urban outdoor recreation plan component, as originally set forth in Chapter XIII, proposed the provision of one additional public swimming pool, which would be located in the southern portion of the Racine urbanized area. Implementation of this proposal would meet the adopted per capita standard for public swimming pools—0.015 swimming pool per thousand persons—in each urban area having a forecast year 2000 population of more than 7,500 persons, as prescribed in Chapter XI of this report. It should also be noted, however, that the accessibility analysis conducted for public swimming pools, described in Chapter XII of this report, indicated that residents of certain urban areas of the Region do not have proper access to public swimming pools. Particularly noteworthy are two large areas which are not properly served, namely, the northwestern and the southern portions of the Milwaukee urbanized area. The accessibility need for a public swimming pool in the southern portion of the Milwaukee urbanized area would be satisfied upon implementation of the proposal included in the recommended resource-oriented outdoor recreation plan component for the

---

<sup>20</sup> *Even though the need for facilities is expected to decline somewhat owing to anticipated population decreases within certain of these urban areas, the anticipated year 2000 need for additional facilities within these urban areas remains substantial.*



Table 185

## ADDITIONAL RECREATION LAND PROPOSED UNDER THE URBAN OUTDOOR RECREATION PLAN ELEMENT

County	Planning Analysis Area (PAA)	Urban Area	Additional Recreation Land Proposed Under the Urban Outdoor Recreation Plan Component																										
			Additional Recreation Land to be Provided Through Subdivision Dedication, School Expansion, and the Development of Existing Publicly Owned Park Sites													Additional Recreation Land to be Acquired Through Fee Simple Purchase													
			Total			Parkland to be Obtained Through Division Dedication			Recreation Land to be Provided Through School Expansion			Parkland to be Developed at Existing Publicly Owned Park Sites			Subtotal			Existing Open Land			Land Presently in Urban Use—to be Cleared			Subtotal					
			Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost (dollars)	Number of Type III Sites	Number of Type IV Sites	Acres	Acquisition Cost (dollars)	Number of Type III Sites	Number of Type IV Sites	Acres	
Ozaukee	1	Belgium	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	0	--	0	0	0	--	
	2	Fredonia	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	0	--	0	0	0	--	
	3	Port Washington	0	1	6	--	1	6	--	--	0	0	0	0	0	1	6	0	0	--	0	0	0	--	0	0	0	--	
	4	Saukville	0	3	29	--	1	11	--	1	12	0	0	0	0	23	0	1	6	15,000	0	0	0	--	0	1	6	15,000	
	5	Cedarburg-Grafton	1	2	80	--	0	0	--	--	0	0	1	29	0	1	29	1	1	51	183,000	0	0	0	--	1	1	51	183,000
	6	Mequon-Thiensville	2	9	195	--	4	24	--	1	4	0	3	71	0	8	99	2	1	96	543,000	0	0	0	--	2	1	96	543,000
		County Total	3	15	310	--	6	41	--	2	16	0	4	100	0	12	157	3	3	153	741,000	0	0	0	--	3	3	153	741,000
Washington	6	Kewaskum	0	1	6	--	1	6	--	--	0	0	0	0	0	1	6	0	0	0	--	0	0	0	--	0	0	0	--
	7	West Bend	0	5	35	--	4	24	--	--	0	0	1	11	0	5	35	0	0	0	--	0	0	0	--	0	0	0	--
	8	Newburg	0	2	16	--	1	12	--	1	4	0	0	0	0	2	16	0	0	0	--	0	0	0	--	0	0	0	--
	9	Allenton	0	1	6	--	1	6	--	--	0	0	0	0	0	1	6	0	0	0	--	0	0	0	--	0	0	0	--
	10	Jackson	0	2	18	--	1	6	--	1	12	0	0	0	0	2	18	0	0	0	--	0	0	0	--	0	0	0	--
	11	Hartford	1	0	45	--	0	0	--	--	0	0	0	0	0	1	0	45	90,000	0	0	0	--	1	0	45	90,000		
	12	Slinger	0	1	6	--	1	6	--	--	0	0	0	0	0	1	6	0	0	0	--	0	0	0	--	0	0	0	--
	13	Germantown	0	4	52	--	4	52	--	--	0	0	0	0	0	4	52	0	0	0	--	0	0	0	--	0	0	0	--
		County Total	1	16	184	--	13	112	--	2	16	0	1	11	0	16	139	1	0	45	90,000	0	0	0	--	1	0	45	90,000
Milwaukee	13	Bayside-Fox Point-River Hills	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	0	--	0	0	0	--	
	14	Brown Deer-Glendale	0	6	83	--	2	24	--	--	0	0	0	0	0	2	24	0	4	59	1,186,000	0	0	0	--	0	4	59	1,186,000
	15	Shorewood-Whitefish Bay	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	0	--	0	0	0	--	
	16	Milwaukee (part)	0	1	6	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	1	6	2,340,000	0	1	6	2,340,000	
	17	Milwaukee (part)	2	13	259	--	5	102	--	2	18	0	6	49	0	13	169	2	0	90	720,000	0	0	0	--	2	0	90	720,000
	18	Milwaukee (part)	0	6	36	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	6	36	14,040,000	0	6	36	14,040,000	
	19	Milwaukee (part)	0	2	12	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	2	12	4,680,000	0	2	12	4,680,000	
	20	Milwaukee (part)	2	5	85	--	0	0	--	--	0	1	0	25	1	0	25	0	0	0	--	1	5	60	23,400,000	1	5	60	23,400,000
	21	Milwaukee (part)	0	2	12	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	2	12	4,680,000	0	2	12	4,680,000	
	22	Milwaukee (part)	0	1	6	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	1	6	2,340,000	0	1	6	2,340,000	
	23	Milwaukee (part)	0	1	11	--	0	0	--	--	0	0	1	11	0	1	11	0	0	0	--	0	0	0	--	0	0	0	--
	24	Milwaukee (part)	0	2	18	--	0	0	--	--	0	0	1	12	0	1	12	0	0	0	--	0	1	6	2,340,000	0	1	6	2,340,000
	25	Milwaukee (part)	1	0	32	--	0	0	--	--	0	1	0	32	1	0	32	0	0	0	--	0	0	0	--	0	0	0	--
	26	Cudahy-St. Francis-South Milwaukee	0	3	19	--	0	0	--	1	7	0	0	0	0	1	7	0	2	12	240,000	0	0	0	--	0	2	12	240,000
	27	Oak Creek	2	6	155	--	2	28	--	--	0	2	2	115	2	4	143	0	2	12	168,000	0	0	0	--	0	2	12	168,000
	28	Franklin	1	8	123	--	4	54	--	--	0	1	0	45	1	4	99	0	4	24	72,000	0	0	0	--	0	4	24	72,000
	29	Greendale-Greenfield-Hales Corners	0	6	75	--	2	12	--	--	0	0	3	57	0	5	69	0	1	6	120,000	0	0	0	--	0	1	6	120,000
	30	West Allis-West Milwaukee	0	2	12	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	2	12	4,680,000	0	2	12	4,680,000	
	31	Wauwatosa	0	2	21	--	0	0	--	--	0	0	2	21	0	2	21	0	0	0	--	0	0	0	--	0	0	0	--
		County Total	8	66	965	--	15	220	--	3	25	5	15	367	5	33	612	2	13	203	2,506,000	1	20	150	58,500,000	3	33	353	61,006,000
Waukesha	32	Menomonee Falls-Butler-Lannon	1	5	75	--	2	12	--	--	0	0	0	0	0	2	12	1	3	63	504,000	0	0	0	--	1	3	63	504,000
	33	Lannon	0	1	6	--	1	6	--	--	0	0	0	0	0	1	6	0	0	0	--	0	0	0	--	0	0	0	--
	34	Brookfield-Elm Grove	3	7	183	--	2	12	--	--	0	0	1	12	0	3	24	3	4	159	822,000	0	0	0	--	3	4	159	822,000
	35	New Berlin	1	9	144	--	3	18	--	3	26	1	0	82	1	6	126	0	3	18	192,000	0	0	0	--	0	3	18	192,000
	36	Muskego	1	2	92	--	1	6	--	--	0	1	0	80	1	1	86	0	1	6	48,000	0	0	0	--	0	1	6	48,000
	37	Duplainville	0	2	12	--	1	6	--	1	6	0	0	0	0	2	12	0	0	0	--	0	0	0	--	0	0	0	--
	38	Sussex	0	2	12	--	1	6	--	--	0	0	0	0	0	1	6	0	1	6	15,000	0	0	0	--	0	1	6	15,000
	39	Pewaukee	1	2	57	--	1	6	--	--	0	0	0	0	0	1	6	1	1	51	408,000	0	0	0	--	1	1	51	408,000
	40	Merton	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	0	--	0	0	0	--	
	41	Delafield	0	3	21	--	2	12	--	1	9	0	0	0	0	3	21	0	0	0	--	0	0	0	--	0	0	0	--
	42	Hartland	0	2	12	--	1	6	--	--	0	0	0	0	0	1	6	0	1	6	15,000	0	0	0	--	0	1	6	15,000
	43	Oconomowoc	1	3	63	--	1	6	--	--	0	0	0	0	0	1	6	1	2	57	120,000	0	0	0	--	1	2	57	120,000
	44	Okauchee	0	3	14	--	1	7	--	1	1	0	0	0	0	2	8	0	1	6	60,000	0	0	0	--	0	1	6	60,000
	45	Waukesha	1	2	65	--	0	0	--	--	0	1	2	65	1	2	65	0	0	0	--	0	0	0	--	0	0	0	--
	46	Dousman	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	0	--	0	0	0	--	
	47	Eagle	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	0	--	0	0	0	--	
	48	North Prairie	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	0	--	0	0	0	--	
	49	Wales	0	1	6	--	1	6	--	--	0	0	0	0	0	1	6	0	0	0	--	0	0	0	--	0	0	0	--
	50	Big Bend	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	0	--	0	0	0	--	
	51	Mukwonago	1	1	51	--	0	0	--	--	0	0	0	0	0	0	1	1	51	127,500	0	0	0	--	1	1	51	127,500	
		County Total	10	45	813	--	18	109	--	6	42	3	3	239	3	27	390	7	18	423	2,311,500	0	0	0	--	7	18	423	2,311,500

Table 185 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Additional Recreation Land Proposed Under the Urban Outdoor Recreation Plan Component																										
			Additional Recreation Land to be Provided Through Subdivision Dedication, School Expansion, and the Development of Existing Publicly Owned Park Sites												Additional Recreation Land to be Acquired Through Fee Simple Purchase														
			Total			Parkland to be Obtained Through Subdivision Dedication			Recreation Land to be Provided Through School Expansion			Parkland to be Developed at Existing Publicly Owned Park Sites			Subtotal			Existing Open Land			Land Presently in Urban Use— to be Cleared			Subtotal					
						Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres	Number of Type III Sites	Number of Type IV Sites	Acres													Number of Type III Sites	Number of Type IV Sites	Acres
Racine	43	Racine-North	0	3	19	--	0	0	--	--	0	0	1	7	0	1	7	0	1	6	120,000	0	1	6	2,340,000	0	2	12	2,460,000
	43	Caledonia-East	1	2	57	--	1	6	--	--	0	0	1	6	0	2	12	1	0	45	360,000	0	0	--	1	0	45	360,000	
	44	Racine-South	0	1	6	--	0	0	--	--	0	0	0	0	0	0	0	0	0	0	--	0	1	6	2,340,000	0	1	6	2,340,000
	44	Mt. Pleasant-East	0	2	12	--	0	0	--	--	0	0	0	0	0	0	0	1	6	120,000	0	1	6	2,340,000	0	2	12	2,460,000	
	45	Caddy Vista	0	1	6	--	0	0	--	--	0	0	1	6	0	1	6	0	0	--	0	0	0	--	0	0	0	--	
	45	Caledonia-West	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	0	--	0	0	0	--	
	46	Mt. Pleasant-Sturtevant	1	7	99	--	2	12	--	3	30	0	0	0	0	5	42	1	2	57	231,000	0	0	--	1	2	57	231,000	
	47	Union Grove	0	2	12	--	1	6	--	--	0	0	0	0	0	1	6	0	1	6	15,000	0	0	--	0	1	6	15,000	
	48	Wind Lake	0	3	30	--	1	14	--	1	10	0	0	0	0	2	24	0	1	6	15,000	0	0	--	0	1	6	15,000	
	48	Waterford-Rochester	0	4	37	--	1	14	--	1	9	0	0	0	0	2	23	0	2	14	35,500	0	0	--	0	2	14	35,500	
	49	Burlington	0	1	6	--	1	6	--	--	0	0	0	0	0	1	6	0	0	0	--	0	0	--	0	0	0	--	
		County Total	2	26	284	--	7	58	--	5	49	0	3	19	0	15	126	2	8	140	896,500	0	3	18	7,020,000	2	11	158	7,916,500
Kenosha	50	Kenosha-North	0	2	12	--	--	0	--	--	0	0	1	6	0	1	6	0	1	6	120,000	0	0	--	0	1	6	120,000	
	51	Kenosha-South	0	1	6	--	0	0	--	--	0	0	0	0	0	0	0	0	0	0	--	0	1	6	2,340,000	0	1	6	2,340,000
	51	South Kenosha	0	2	12	--	0	0	--	--	0	0	0	0	0	0	0	2	12	96,000	0	0	--	0	2	12	96,000		
	52	Somers-East	0	9	101	--	4	61	--	3	28	0	0	0	0	7	89	0	2	12	36,000	0	0	--	0	2	12	36,000	
	52	Somers-West	0	2	24	--	1	12	--	1	12	0	0	0	0	2	24	0	0	0	--	0	0	--	0	0	0	--	
	53	Pleasant Prairie-West	0	2	9	--	0	0	--	1	3	0	0	0	0	1	3	0	1	6	48,000	0	0	--	0	1	6	48,000	
	53	Pleasant Prairie-East	1	5	79	--	2	12	--	2	16	0	1	6	0	5	34	1	0	45	135,000	0	0	--	1	0	45	135,000	
	53	Pleasant Prairie-Central	1	2	55	--	1	6	--	1	4	0	0	0	0	2	10	1	0	45	135,000	0	0	--	1	0	45	135,000	
	54	Bristol	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	--	0	0	0	--		
	55	Paddock Lake	0	1	6	--	0	0	--	--	0	0	0	0	0	0	0	1	6	15,000	0	0	--	0	1	6	15,000		
	55	Silver Lake	0	2	8	--	1	6	--	1	2	0	0	0	0	2	8	0	0	0	--	0	0	--	0	0	0	--	
	55	Twin Lakes	0	1	6	--	0	0	--	--	0	0	0	0	0	0	0	1	6	15,000	0	0	--	0	1	6	15,000		
		County Total	2	29	318	--	9	97	--	9	65	0	2	12	0	20	174	2	8	138	600,000	0	1	6	2,340,000	2	9	144	2,940,000
Walworth	56	East Troy	0	2	21	--	1	12	--	--	0	0	0	0	0	1	12	0	1	9	22,500	0	0	--	0	1	9	22,500	
	57	Whitewater	1	3	70	--	1	6	--	1	13	0	0	0	0	2	19	1	1	51	127,500	0	0	--	1	1	51	127,500	
	58	Elkhorn	1	1	51	--	1	6	--	--	0	0	0	0	0	1	6	1	0	45	112,500	0	0	--	1	0	45	112,500	
	59	Como Lake	0	2	12	--	0	0	--	--	0	0	0	0	0	0	0	2	12	30,000	0	0	--	0	2	12	30,000		
	59	Genoa City	0	0	0	--	0	0	--	--	0	0	0	0	0	0	0	0	0	--	0	0	--	0	0	0	--		
	59	Lake Geneva	1	0	45	--	0	0	--	--	0	0	0	0	0	0	1	0	45	112,500	0	0	--	1	0	45	112,500		
	59	Pell Lake	0	1	6	--	0	0	--	--	0	0	0	0	0	0	0	1	6	15,000	0	0	--	0	1	6	15,000		
	59	Williams Bay-Fontana-Walworth	1	2	57	--	0	0	--	--	0	0	0	0	0	0	1	2	57	142,500	0	0	--	1	2	57	142,500		
	60	Darien	0	1	6	--	0	0	--	--	0	0	0	0	0	0	0	1	6	15,000	0	0	--	0	1	6	15,000		
	60	Delavan	0	1	6	--	1	6	--	--	0	0	0	0	0	1	6	0	0	--	0	0	--	0	0	0	--		
	60	Sharon	0	2	10	--	1	6	--	1	4	0	0	0	0	2	10	0	0	0	--	0	0	--	0	0	0	--	
		County Total	4	15	284	--	5	36	--	2	17	0	0	0	0	7	53	4	8	231	577,500	0	0	--	4	8	231	577,500	
		Region Total	30	212	3,158	--	73	673	--	29	230	8	28	748	8	130	1,651	21	58	1,333	7,722,500	1	24	174	67,860,000	22	82	1,507	75,582,500

Source: SEWRPC.

Table 186

**PROPOSED FACILITIES AND DEVELOPMENT COSTS UNDER THE  
RECOMMENDED URBAN OUTDOOR RECREATION PLAN COMPONENT**

County	Planning Analysis Area (PAA)	Urban Area	Additional Intensive Nonresource-Oriented Facilities Proposed Under Urban Outdoor Recreation Plan Element								Estimated Facility Development Costs (dollars)	Number of Additional Parks		Estimated Additional Park Development Costs (dollars)	Total Estimated Urban Park and Facility Development Costs (dollars)
			Baseball Diamonds	Basketball Goals	Playfields	Playgrounds	Softball Diamonds	Tennis Courts	Swimming Pools	Ice Skating Rinks		Type III	Type IV		
Ozaukee	1	Belgium	--	--	--	--	1	--	--	1	16,375	0	0	--	16,375
	1	Fredonia	--	--	--	--	--	--	--	1	--	0	0	--	--
	2	Port Washington	--	--	--	--	--	1	--	--	12,350	0	1	40,840	53,190
	3	Saukville	--	6	1	2	2	2	--	1	82,520	0	2	81,680	164,200
	4	Cedarburg-Grafton	--	--	--	--	4	3	--	--	102,550	1	2	191,180	293,730
	5	Mequon-Thiensville	1	9	7	5	7	9	--	4	312,300	2	8	545,720	858,020
		County Total	1	15	8	7	14	15	--	7	526,095	3	13	859,420	1,385,515
Washington	6	Kewaskum	--	1	--	--	--	1	--	--	14,475	0	1	40,840	55,315
	7	West Bend	2	15	--	--	5	5	--	--	223,500	0	5	204,200	427,700
	7	Newburg	--	--	--	--	--	--	--	1	--	0	1	40,840	40,840
	8	Allenton	--	--	--	--	--	1	--	1	12,350	0	1	40,840	53,190
	9	Jackson	1	5	--	--	2	4	--	--	116,775	0	1	40,840	157,615
	10	Hartford	--	3	--	--	--	4	--	--	55,775	1	0	109,500	165,275
	10	Slinger	--	3	--	--	--	--	--	1	6,375	0	1	40,840	47,215
	11	Germantown	2	20	7	8	8	5	--	3	340,930	0	4	163,360	504,290
		County Total	5	47	7	8	15	20	--	6	770,180	1	14	681,260	1,451,440
Milwaukee	13	Bayside-Fox Point-River Hills	--	--	--	--	--	--	--	--	--	0	0	--	--
	14	Brown Deer-Glendale	--	12	1	2	--	--	--	--	37,820	0	6	245,040	282,860
	15	Shorewood-Whitefish Bay	--	--	--	--	--	--	--	1	--	0	0	--	--
	16	Milwaukee (part)	--	2	--	--	1	--	--	--	20,825	0	1	40,840	61,465
	17	Milwaukee (part)	--	24	12	13	18	26	--	3	762,330	2	11	668,240	1,430,570
	18	Milwaukee (part)	--	--	--	3	3	5	--	--	125,155	0	6	245,040	370,195
	19	Milwaukee (part)	--	--	--	1	1	4	--	1	70,535	0	2	81,680	152,215
	20	Milwaukee (part)	1	--	1	2	8	6	--	1	241,420	2	5	423,200	664,620
	21	Milwaukee (part)	--	--	--	--	1	--	--	2	16,375	0	2	81,680	98,055
	22	Milwaukee (part)	--	--	--	--	--	--	--	--	--	0	1	40,840	40,840
	23	Milwaukee (part)	--	2	--	2	1	6	--	--	104,245	0	1	40,840	145,085
	24	Milwaukee (part)	2	--	--	--	9	3	--	--	232,425	0	2	81,680	314,105
	25	Milwaukee (part)	1	2	--	--	4	9	--	--	204,900	1	0	109,500	314,400
	26	Cudahy-St. Francis-South Milwaukee	--	--	--	2	--	9	--	5	120,670	0	2	81,680	202,350
	27	Oak Creek	4	21	9	10	7	12	--	3	476,250	2	6	464,040	940,290
	28	Franklin	3	20	4	5	11	18	--	4	551,925	1	8	436,220	988,145
	29	Greendale-Greenfield-Hales Corners	--	14	--	--	--	9	--	6	140,900	0	6	245,040	385,940
	30	West Allis-West Milwaukee	--	--	--	1	--	3	--	--	41,810	0	2	81,680	123,490
	31	Wauwatosa	--	42	1	7	--	4	--	3	174,770	0	2	81,680	256,450
		County Total	11	139	28	48	64	114	--	29	3,322,155	8	63	3,448,920	6,771,075
Waukesha	32	Menomonee Falls-Butler	--	3	11	4	8	7	1	5	946,165	1	5	313,700	1,259,865
	32	Lannon	--	--	--	--	--	--	--	1	--	0	1	40,840	40,840
	33	Brookfield-Elm Grove	1	--	--	--	--	--	--	--	24,000	3	7	614,380	638,380
	34	New Berlin	--	23	9	9	--	16	--	4	314,515	1	6	354,540	669,055
	35	Muskego	--	--	--	--	--	2	--	2	24,700	1	2	191,180	215,880
	36	Duplainville	1	--	1	1	--	2	--	1	56,260	0	1	40,840	97,100
	36	Sussex	--	1	2	1	1	4	--	--	78,260	0	2	81,680	169,940
	36	Pewaukee	--	--	--	--	--	5	--	2	61,750	1	2	191,180	252,930
	37	Merton	--	--	--	--	--	--	--	--	--	0	0	--	--
	38	Delafield	--	--	--	--	--	4	--	1	49,400	0	2	81,680	131,080
	38	Hartland	--	--	--	--	--	--	--	--	--	0	2	81,680	81,680
	39	Oconomowoc	1	6	--	--	--	--	--	--	36,750	1	3	232,020	268,770
	39	Okauchee	1	2	--	--	1	1	--	1	56,975	0	2	81,680	138,655
	40	Waukesha	3	20	--	--	--	6	--	7	188,600	1	2	191,180	379,780
	41	Dousman	--	--	--	--	--	--	--	1	--	0	0	--	--
	41	Eagle	--	1	--	--	--	--	--	--	2,125	0	0	--	2,125
	41	North Prairie	--	1	--	--	--	--	--	1	2,125	0	0	--	2,125
	41	Wales	--	--	--	--	--	--	--	1	--	0	1	40,840	40,840
	42	Big Bend	--	--	--	--	--	--	--	--	--	0	0	--	--
	42	Mukwonago	--	--	--	--	--	2	--	--	24,700	1	1	150,340	175,040
		County Totals	7	57	23	15	10	49	1	27	1,866,325	10	39	2,687,760	4,554,085
Racine	43	Racine-North	1	--	1	--	3	3	--	1	112,975	0	3	122,520	235,495
	43	Caledonia-East	2	1	4	--	--	--	--	--	61,325	1	2	191,180	252,505
	44	Racine-South	4	--	1	--	--	2	--	--	123,500	0	1	40,840	164,340
	44	Mt. Pleasant-East	1	--	--	--	--	7	1	--	782,950	0	2	81,680	864,630
	45	Caddy Vista	--	--	--	--	--	1	--	1	12,350	0	1	40,840	53,190
	45	Caledonia-West	--	--	--	--	--	--	--	--	--	0	0	--	--
	46	Mt. Pleasant-Sturtevant	--	11	2	--	6	6	--	2	201,325	1	4	272,860	474,185
	47	Union Grove	--	--	--	--	--	4	--	--	49,400	0	2	81,680	131,080
	48	Wind Lake	--	4	2	1	--	3	--	1	55,910	0	2	81,680	137,590
	48	Waterford-Rochester	--	--	--	--	--	--	--	--	--	0	3	122,520	122,520
	49	Burlington	--	--	--	--	--	2	--	--	24,700	0	1	40,840	65,540
		County Totals	8	16	10	1	9	28	1	5	1,424,435	2	21	1,076,640	2,501,075

Table 186 (continued)

County	Planning Analysis Area (PAA)	Urban Area	Additional Intensive Nonresource-Oriented Facilities Proposed Under Urban Outdoor Recreation Plan Element								Estimated Facility Development Costs (dollars)	Number of Additional Parks		Estimated Additional Park Development Costs (dollars)	Total Estimated Urban Park and Facility Development Costs (dollars)
			Baseball Diamonds	Basketball Goals	Playfields	Playgrounds	Softball Diamonds	Tennis Courts	Swimming Pools	Ice Skating Rinks		Type III	Type IV		
Kenosha	50	Kenosha-North	--	16	--	2	--	--	--	1	43,520	0	2	81,680	125,200
	51	Kenosha-South	--	4	--	1	--	3	--	--	50,310	0	1	40,840	91,150
	51	South Kenosha	1	--	--	1	--	--	--	1	28,760	0	2	81,680	110,440
	52	Somers-East	--	13	6	8	9	--	--	3	229,880	0	6	245,040	474,920
	52	Somers-West	1	5	1	2	1	3	--	--	100,370	0	1	40,840	141,210
	53	Pleasant Prairie-West	1	1	--	--	--	2	--	--	50,825	0	1	40,840	91,665
	53	Pleasant Prairie-East	2	17	3	5	--	3	--	2	153,375	1	3	232,020	385,395
	53	Pleasant Prairie-Central	--	1	--	1	--	1	--	1	19,235	1	1	150,340	169,575
	54	Bristol	--	2	--	--	--	--	--	1	4,250	0	0	--	4,250
	55	Paddock Lake	--	1	--	--	1	3	--	--	55,550	0	1	40,840	96,390
	55	Silver Lake	--	--	--	--	--	1	--	1	12,350	0	1	40,840	53,190
	55	Twin Lakes	--	--	--	--	--	3	--	--	37,050	0	1	40,840	77,890
		County Total		5	60	10	20	11	19	--	10	785,475	2	20	1,035,800
Walworth	56	East Troy	--	--	--	--	--	1	--	1	12,350	0	2	81,680	94,030
	57	Whitewater	--	7	--	2	2	--	--	--	57,145	1	2	191,180	248,325
	58	Elkhorn	--	3	--	--	--	1	--	--	18,725	1	1	150,340	169,065
	59	Como Lake	--	--	--	--	--	1	--	1	12,350	0	2	81,680	94,030
	59	Genoa City	--	--	--	--	--	1	--	1	12,350	0	0	--	12,350
	59	Lake Geneva	--	4	--	1	--	--	--	1	13,260	1	0	109,500	122,760
	59	Pell Lake	--	--	--	--	--	1	--	1	12,350	0	1	40,840	53,190
	59	Williams Bay-Fontana-													
		Walworth	--	--	--	--	--	--	--	--	--	1	2	191,180	191,180
	60	Darien	--	--	--	--	--	--	--	1	--	0	1	40,840	40,840
	60	Delavan	--	--	--	--	--	--	--	--	--	0	1	40,840	40,840
	60	Sharon	1	2	--	--	--	1	--	1	40,600	0	1	40,840	81,440
	County Total		1	16	--	3	2	6	--	7	179,130	4	13	968,920	1,148,050
		Region Total	38	350	86	102	125	251	2	91	8,873,795	30	183	10,758,720	19,632,515

Source: SEWRPC.

development of a swimming beach at Park Site No. 3. In order to meet the identified accessibility need for public swimming pools in the northwestern portion of the Milwaukee urbanized area, the recommended urban outdoor recreation plan component has been expanded to include a proposal for the provision of a public swimming pool to be located in the Village of Menomonee Falls.<sup>21</sup>

All of the new intensive nonresource-oriented outdoor recreation facilities proposed under the urban outdoor recreation plan component would be developed on existing or proposed Type III and Type IV parklands and school recreation sites. Development cost estimates for local recreation lands within each urban area are presented in Table 186. For each urban area, Table 186 presents an estimate of the cost of developing the specific proposed intensive nonresource-oriented facilities—for example, softball diamonds, tennis courts, and playfields—which are proposed under the recommended urban outdoor recreation plan component. In addition,

<sup>21</sup> It should be noted that the urban outdoor recreation plan component recommendations for the provision of public swimming pools in the southern portion of the Racine urbanized area and the northwestern portion of the Milwaukee urbanized area may be implemented through provision of a public outdoor swimming pool, indoor-outdoor swimming facility, or a man-made swimming pond, as further county or local planning efforts may determine.

for each urban area, Table 186 presents an estimate of general park development costs, including outlays for the development of a shelter building, sanitary facilities, general parking areas, walkways, and other facilities which are not relatable to a specific activity. As indicated in Table 186, the total development cost associated with implementation of the recommended urban outdoor recreation plan component for all urban areas in the Region combined has been estimated at \$19,632,515. As previously indicated, land acquisition and clearance costs for additional Type III and Type IV recreation sites proposed under the recommended urban outdoor recreation plan component have been estimated at \$75,582,500. The total public outlay for local recreation site acquisition and development under the urban outdoor recreation plan component is, therefore, estimated at \$95,215,015.

#### REGIONAL PARK AND OPEN SPACE PLAN: AN OVERVIEW

Preceding sections of this chapter have described the open space preservation plan element—composed of a primary environmental corridor plan component and a prime agricultural land plan component—and an outdoor recreation plan element—composed of a resource-oriented outdoor recreation plan component and an urban outdoor recreation plan component—which are proposed to be adopted together as the recommended park and open space plan for southeastern Wisconsin. Land acquisition and facility development proposals along with the required public outlays have been set



forth for each plan component. This section presents an overview of the park and open space plan, focusing, in particular, on the cost of implementation.<sup>22</sup>

The open space preservation plan element is intended to serve as a guide to the public sector for preservation of the remaining primary environmental corridors and prime agricultural lands in southeastern Wisconsin. The prime agricultural land plan component recommends the preservation through exclusive agricultural zoning of about 396,500 acres of net prime agricultural lands, representing 98 percent of the net prime agricultural acreage remaining in the Region in 1970. Under the prime agricultural land plan component, conversion of prime agricultural lands to urban uses would be confined to a small portion of such agricultural lands as were generally committed to urban development as early as 1970 due to the proximity to existing and expanding concentrations of urban uses and the prior commitment of heavy capital investment in utility extensions (see Table 187).

Preservation of primary environmental corridor lands under the primary environmental corridor plan component would be accomplished through a combination of public acquisition and public land use controls. Thus, the primary environmental corridor plan component proposes the acquisition of about 98,950 acres of net primary environmental corridor lands in the Region by the year 2000 at an estimated cost of \$100.3 million. In addition to the 45,910 acres of net primary environmental corridor lands currently in public ownership, a total of about 144,860 acres of net primary environmental corridor lands, or 52 percent of the existing primary environmental corridor acreage in the Region, would be held in public trust by the plan design year

2000. The balance of the net primary environmental corridor acreage existing in the Region in 1970—about 134,840 acres—would be preserved under the primary environmental corridor plan component through the use of exclusive agricultural, floodland, shoreland, conservancy, or very low-density residential zoning.

The resource-oriented outdoor recreation plan component is intended to guide public sector decisionmaking in the provision of resource-oriented outdoor recreation sites and facilities required in the Region through the plan design year 2000. The resource-oriented outdoor recreation plan component proposes the provision of a total of approximately 17,565 acres of major Type I and Type II parks in the Region by the year 2000 to accommodate intensive resource-oriented facilities, including campgrounds, golf courses, nature study centers, resource-oriented picnicking areas, downhill skiing areas, and swimming beaches. In addition, the resource-oriented outdoor recreation plan component proposes the provision of 405 linear miles of recreation corridors in the Region by the plan design year to accommodate needed facilities for trail activities such as hiking, biking, horseback riding, and ski touring. Finally, the resource-oriented outdoor recreation plan component proposes the provision of additional water access facilities on 28 major inland lakes, a total of nine boat access points on two major rivers, and 19 additional boat launch ramps, and 1,310 additional boat mooring slips along the Lake Michigan shoreline in southeastern Wisconsin.

As indicated in Table 188, including land required for additional major parks, public recreation corridors, and inland water access facilities, a total of about 7,967 acres of land would have to be acquired by the public sector under the resource-oriented outdoor recreation plan component at an estimated cost of \$12.7 million. It is important to recognize, however, that of this total, about 4,996 acres lying within the primary environmental corridor would be acquired under the primary environmental corridor plan component at an estimated cost of \$7.5 million. Remaining land acquisition requirements

<sup>22</sup> An environmental assessment of the recommended regional park and open space plan is provided in Appendix T.

Table 187

OPEN SPACE PRESERVATION AND LAND ACQUISITION COSTS UNDER THE  
RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

Open Space Lands	Existing Net Acres: 1970	Acres in Public Ownership: 1973	Acres to be Converted to Urban Uses by the Year 2000	Acres to be Preserved Through Land Use Controls	Lands Proposed for Public Acquisition	
					Acres	Cost <sup>a</sup> (dollars)
Prime Agricultural Lands . .	404,900	--	8,400	396,500	--	--
Primary Environmental Corridor Lands . . . . .	279,700	45,910	--	134,840	98,950	100,312,000

<sup>a</sup> Assumes lands will be acquired through fee simple purchase.

Source: SEWRPC.

under the resource-oriented outdoor recreation plan component—beyond the land acquisition recommendations of the open space preservation plan element—total about 2,971 acres and would entail the public outlay of approximately \$5.2 million.

Implementation of the resource-oriented outdoor recreation plan component also would require substantial public outlays for the development of the additional proposed Type I and Type II parks, public recreation corridors, and water access facilities. As indicated in Table 188, development costs under the resource-oriented outdoor recreation plan component have been estimated at about \$60.7 million, with the largest outlays required for the development of the proposed major parks and the development of small boat water access facilities along the Lake Michigan shoreline. Including both land acquisition and facility development costs, implementation of the resource-oriented outdoor recreation plan component would require the public outlay of about \$65.9 million, in addition to outlays for land acquisition under the open space preservation plan element.

The urban outdoor recreation plan component represents an attempt to provide a quantity of local recreation sites—including Type III parks and Type IV parks and public general use sites—and intensive nonresource-oriented outdoor recreation facilities—including baseball and softball diamonds, basketball courts, ice skating rinks, playfields, playgrounds, tennis courts, and swimming pools—sufficient to meet the overall demand within most urban areas of the Region through the plan design year. Within most urban areas the required recreation lands would be obtained in various ways including through dedication as part of the urban land subdivision process, the development of additional school related recreation sites, the development of existing publicly owned undeveloped park sites, or the public purchase and development of other open space lands. The satisfaction of all the identified urban site and facility requirements would, however, be difficult within certain urban areas—particularly in densely populated urban areas in the central part of Milwaukee County—due to the lack of open space lands. The satisfaction of the identified needs within such areas could be accomplished only through a substantial amount

Table 188

**RESOURCE-ORIENTED OUTDOOR RECREATION LANDS AND FACILITIES AND ACQUISITION AND DEVELOPMENT COSTS UNDER THE RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN**

Resource-Oriented Outdoor Recreation Lands and Facilities	Existing (1973) Quantity of Facilities	Proposed Additional Facilities	Total (2000) Quantity of Facilities	Acquisition Requirements						Total Development Costs (dollars)	Outlay for Remaining Lands Proposed for Acquisition Only Under Resource-Oriented Outdoor Recreation Plan Component and Total Development Costs (dollars)
				Total Lands Required Under Resource-Oriented Outdoor Recreation Plan Component		Lands Already Proposed for Acquisition Under Primary Environmental Corridor Plan Component		Remaining Lands Proposed for Acquisition Under Resource-Oriented Outdoor Recreation Plan Component			
				Acres	Cost (dollars)	Acres	Cost (dollars)	Acres	Cost (dollars)		
Type I and Type II Parks	11,610 Acres	5,955 Acres	17,565 Acres	4,445	6,931,000	2,510	3,908,000	1,935	3,023,000	30,717,000	33,740,000
Recreation Corridor	132 Linear Miles <sup>a</sup>	273 Linear Miles	405 Linear Miles	3,470 <sup>b</sup>	5,587,000	2,470 <sup>b</sup>	3,562,000	1,000 <sup>b</sup>	2,025,000	10,671,500 <sup>c</sup>	12,696,500
Inland Lake and River Access	155 Access Points <sup>d</sup>	37 Access Points <sup>e</sup>	192 Access Points	52 <sup>f</sup>	115,400	16 <sup>f</sup>	26,000	36 <sup>f</sup>	89,400	64,300 <sup>g</sup>	153,700
Lake Michigan Access	35 Ramps 1,620 Slips	19 Ramps 1,310 Slips	54 Ramps 2,930 Slips	--	--	--	--	--	--	19,280,000 <sup>h</sup>	19,280,000
Totals	--	--	--	7,967	12,630,400	4,996	7,496,000	2,971	5,137,400	60,732,800	65,870,200

<sup>a</sup> Total indicates the quantity of linear miles which are already in public ownership and are proposed for development as a recreation corridor.

<sup>b</sup> Acreage acquisition requirements are based on a recreation corridor width of 200 feet.

<sup>c</sup> Total includes development of the entire length of the recreation corridor.

<sup>d</sup> Total includes both public and nonpublic access points on major inland lakes.

<sup>e</sup> Total includes only public access points on major inland lakes and canoeable rivers.

<sup>f</sup> Total includes only lands which are not already publicly owned and assumes each proposed access point would have an area of two acres.

<sup>g</sup> Total includes development of access facilities both on lands already in public ownership and on lands proposed for acquisition.

<sup>h</sup> Total includes the development of the proposed ramps and slips and two additional harbors of refuge.

Source: SEWRPC.

of urban demolition, clearance, and redevelopment. Under the urban outdoor recreation plan component, such clearance and redevelopment activities would be restricted to amounts required to meet the adopted accessibility standards, thereby ensuring that each resident of an urban area would at least have ready access to a public outdoor recreation site. As indicated in Table 189, the total public outlay required for implementation of the urban outdoor recreation plan component is estimated at about \$95.2 million. It is important to recognize that about \$67.9 million, or about 71 percent of the total outlay, would be required for the acquisition of land currently in urban use, clearance, and relocation assistance payments.

The total public outlay required for implementation of the recommended regional park and open space plan—including the primary environmental corridor plan component, the resource-oriented outdoor recreation plan component, and the urban outdoor recreation plan component is estimated at about \$261.4 million, including about \$181.1 million for land acquisition and any required demolition and clearance as well as about \$80.3 million for site development.

#### PARK AND OPEN SPACE PLAN PRIORITIES

Recognizing that public financial resources available for park development and open space preservation purposes are limited, and that the implementation of the regional park and open space plan will occur gradually over the plan design period, this section establishes priorities among the various recommendations of the park and open space plan, indicating those recommendations which ought to be implemented first.

The overriding consideration in the formulation of priorities among various recommendations of the park and open space plan was to minimize the loss of valuable

open space lands to urban development. Certain primary environmental corridor lands which are proposed to be acquired by the public sector under the primary environmental corridor plan component, certain high value potential recreation areas which are proposed to be acquired and developed for recreation use under the resource-oriented outdoor recreation plan component, and certain open space lands which are required for local parks under the urban outdoor recreation plan component currently are threatened by urban encroachment or will be threatened by urban land development in the near future. Acquisition of such lands before they are forever lost for public use is of utmost importance to the overall park and open space plan. Therefore, among the recommendations of the regional park and open space plan, highest priority has been assigned to recommendations on acquisition and development of open space lands which are presently threatened by urban encroachment. Within this framework, further priority was assigned to recommendations which serve to satisfy existing, rather than anticipated future, outdoor recreation needs; to recommendations which preserve open space lands of regional significance; and to recommendations concerning the provision of parks at high value potential park sites which also meet accessibility needs.

It should be noted that, while the public acquisition and development of land under the regional park and open space plan will be undertaken gradually over the plan design period, the preservation of prime agricultural lands, other agricultural lands surrounding major educational, scientific, and recreation sites, remaining net primary environmental corridor lands, and other lands required for recreation use through exclusive agricultural, floodland, shoreland, conservancy, or other appropriate zoning should be accomplished as soon as possible. Such zoning should include all primary environmental corridor lands and all agricultural lands which are recommended to be preserved through zoning under the open space

Table 189

#### URBAN OUTDOOR RECREATION SITES AND ACQUISITION AND DEVELOPMENT COSTS UNDER THE RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

Urban Outdoor Recreation Sites	Existing Acres 1973	Proposed Additional Acres 1973-2000	Total Acres 2000	Lands Proposed for Acquisition <sup>a</sup>						Total Development Cost <sup>c</sup>	Outlay for Lands Proposed for Acquisition and Total Development Cost
				Open Lands		Lands in Urban Use		Total Lands			
				Acres	Cost	Acres	Cost <sup>b</sup>	Acres	Cost <sup>b</sup>		
Type III and Type IV Sites . . .	10,093	3,158	13,251	1,333	7,722,500	174	67,860,000	1,507	75,582,500	19,632,515	95,215,015

<sup>a</sup> Assumes lands will be acquired through fee simple purchase.

<sup>b</sup> Includes clearance and relocation costs.

<sup>c</sup> Includes development costs for all proposed additional Type III and Type IV site acres and facilities.

Source: SEWRPC.

preservation plan element. In addition, those areas of the primary environmental corridors which are recommended for acquisition under the park and open space plan and other lands which are recommended for acquisition for development as local or major parks should also be initially zoned utilizing appropriate zoning districts in order to achieve immediate protection from urban encroachment, pending acquisition.

#### Recommended Priorities

The priorities which have been established among the recommendations of the regional park and open space plan are set forth in summary form in Table 190. As indicated in this table, three levels of public acquisition and development priority have been established for the primary environmental corridor plan component, the resource-oriented outdoor recreation plan component, and the urban outdoor recreation plan component of the overall park and open space plan.<sup>23</sup> It is intended that the same importance be attached to the first level priority acquisition and development recommendations associated with the respective plan components, and similarly for the second and third priority levels. Thus, first level priority recommendations of the primary environmental corridor plan component should be considered as having the same importance as the first level priority recommendations of the resource-oriented outdoor recreation plan component and the urban outdoor recreation plan component. It should be noted, however, that within a given priority level for each plan component, specific recommendations have been listed in order of decreasing importance.

#### Primary Environmental Corridor Plan Component Priorities:

As indicated in Table 190, under the primary environmental corridors plan component, the first level priority recommendation is public acquisition of remaining primary environmental corridor lands which lie within existing 1975 urban areas and which are, therefore, currently threatened by urban encroachment. There are two second level priority recommendations under the primary environmental corridor plan component—namely, the public acquisition of primary environmental corridor lands in areas which are expected to be developed for urban use by the year 2000 and the public acquisition of any primary environmental corridor lands which are recommended to be acquired by the public sector and which are located in areas of the Region identified in the Commission's potential park sites inventory as having recreation resource amenities of regional significance, such as the Lake Michigan shoreline, the Kettle Moraine, and the Milwaukee River, Fox River, Root River, Sugar Creek, and Turtle Creek corridors. The third level priority recommendation of the primary environmental corridor plan component is

the public acquisition of remaining primary environmental corridor lands which are proposed to be in public ownership by the plan design year 2000.

As previously indicated, an overriding objective of the open space preservation plan element is preservation of the total remaining net primary environmental corridor lands in the Region as well as preservation of virtually all of the prime agricultural lands in the Region. Under the primary environmental corridor plan component, 144,860 acres, or 52 percent of the 279,700 acres of remaining net primary environmental corridor lands, would be placed in public ownership by the plan design year 2000. The remainder, 134,840 acres, or 48 percent of the total, would be preserved through zoning. It should be recognized, however, that preservation of the latter primary environmental corridor lands through public acquisition rather than through land use controls would be in conformance with the primary environmental corridor plan component. It should also be recognized, however, that, given the limited public financial resources available for open space preservation purposes, the public acquisition of primary environmental corridor lands which are recommended under the primary environmental corridor plan component to be preserved through zoning should be considered as having a lower priority than the public acquisition of primary environmental corridor lands which have been proposed for public ownership under the primary environmental corridor plan component. It should be noted that, under the prime agricultural land plan component, about 423,100 acres of agricultural land would be preserved through exclusive agricultural zoning.

#### Resource-Oriented Outdoor Recreation Plan Component

Priorities: There are three first level priority recommendations under the resource-oriented outdoor recreation plan component, namely, the provision of recreation corridors and major Type I and Type II parks which are proposed to be located within existing urban areas; provision of recreation corridor segments which are necessary to complete existing components of a regional recreation corridor, such as Kettle Moraine State Forest or the Milwaukee County parkway system; and provision of inland water access facilities and water access facilities along the Lake Michigan shoreline.

As further indicated in Table 190, there are two second level priority recommendations under the resource-oriented outdoor recreation plan component, the provision of recreation corridors and major parks in areas expected to be in urban use by the plan design year 2000, and the provision of recreation corridors and major parks in areas of the Region identified in the Commission's potential park sites inventory as possessing high value resource amenities of regional significance. Third level priority recommendations under the resource-oriented outdoor recreation plan component, in order of importance, are the provision of other proposed recreation corridor segments and major parks in the primary environmental corridor, and the provision of other recreation corridor segments and major parks outside of the primary environmental corridor.

<sup>23</sup> There are no recommendations for the public acquisition or development of lands under the prime agricultural land plan component of the regional park and open space plan.



Table 190

**PUBLIC ACQUISITION AND DEVELOPMENT IMPLEMENTATION PRIORITIES  
UNDER THE REGIONAL PARK AND OPEN SPACE PLAN: 2000**

Primary Level	Open Space Preservation Plan Element <sup>a</sup>	Outdoor Recreation Plan Component	
	Primary Environmental Corridor Plan Component	Resource-Oriented Outdoor Recreation Plan Component	Urban Outdoor Recreation Plan Component
First Priority	Acquisition of Primary Environmental Corridors Within Existing Urban Areas	Provision of Recreation Corridors and Type I and Type II Parks Within Existing Urban Areas Provision of Recreation Corridor Segments Necessary to Complete Existing Components of a Regional Recreation Corridor System Provision of Inland Water Access Facilities and Small Boat Water Access Facilities Along Lake Michigan	Provision of Type III and Type IV Parks to Meet Existing Per Capita and Accessibility Needs Through Ordinary Park Acquisition and Development Activities
Second Priority	Acquisition of Primary Environmental Corridors Within Planned Year 2000 Urban Areas Acquisition of Primary Environmental Corridors Located in Areas of the Region Containing Natural Resource Amenities of Regional Significance	Provision of Recreation Corridors and Type I and Type II Parks to be Located Within Planned Year 2000 Urban Areas Provision of Recreation Corridors and Type I and Type II Parks to be Located Within Primary Environmental Corridors Having Natural Resource Amenities of Regional Significance	Provision of Type III and Type IV Parks to Meet Existing Accessibility Needs Through Clearance and Redevelopment Activities Provision of Type III Parks to Meet Anticipated Year 2000 Accessibility Needs Through Ordinary Park Acquisition and Development Activities
Third Priority	Acquisition of Remaining Primary Environmental Corridor Segments Which Are Proposed for Public Acquisition	Provision of Recreation Corridors and Type I and Type II Parks in Remaining Primary Environmental Corridors Provision of Recreation Corridors and Type I and Type II Parks to be Located Outside the Primary Environmental Corridors	Provision of Type IV Parks to Meet Anticipated Year 2000 Per Capita and Accessibility Needs

<sup>a</sup>The prime agricultural land plan component does not recommend public land acquisition and development.

Source: SEWRPC.

As indicated in Chapter XIII, the basic park planning problem in southeastern Wisconsin centers on the disparity between the location of the best remaining recreational resource amenities and the location of the major population concentrations in the Region. The two resource-oriented outdoor recreation component alternative plans which were prepared under the regional park and open space planning program differ primarily in the manner in which they approach the basic park planning problem. Thus, the accessibility based alternative plan represents an effort to meet existing and anticipated future resource-

oriented outdoor recreation requirements by locating future recreation sites and facilities in areas which are readily accessible to the population centers of the Region. In contrast, the resource based alternative plan—which was recommended to be incorporated into the overall regional park and open space plan—represents an effort to meet existing and anticipated future outdoor recreation requirements by developing the required facilities at the best remaining potential recreation sites in the Region. It should be noted that the concepts embodied in these two plans are not mutually exclusive but that,

within each alternative plan, an attempt was made to utilize good sites and provide good accessibility—the difference being primarily one of degree of emphasis. In fact, as indicated in Chapter XIII, there are many proposals concerning public recreation corridors and major parks which are common to both alternatives. Conceptually, those major parks and recreation corridor segments which are proposed under both alternative plans would provide high quality sites in areas readily accessible to large segments of the regional population. Therefore, any of the recommendations included in the recommended resource-oriented outdoor recreation plan component which were contained in both alternative plans may take on an increased priority beyond that which is indicated in Table 190. For example, a higher priority would be given to the purchase of a Type I site which was common to both the resource based and the accessibility based alternative than if such a site were only recommended on one of the aforementioned alternative plans.

#### Urban Outdoor Recreation Plan Component Priorities:

The primary purpose of the urban outdoor recreation plan component is to guide public sector decisionmaking in provision of the additional nonresource-oriented outdoor recreation sites and facilities which will be needed within urban areas of the Region by the plan design year 2000. Urban outdoor recreation requirements were determined on the basis of the application of both per capita and accessibility standards. In some cases, per capita standards are met, but the need for additional recreation sites still exists because of the inaccessibility of the existing recreation area while, in other cases, accessibility standards are met but a need for additional acreage still exists.

As indicated in Table 190, the first level priority recommendation under the urban outdoor recreation plan component is the provision of local Type III and Type IV parks required to meet existing per capita and accessibility needs insofar as that may be accomplished through normal park acquisition and development efforts. Two second level priority recommendations under the urban outdoor recreation plan component are, in order, the provision of Type III and Type IV parks to meet identified existing accessibility needs insofar as this requires clearance and redevelopment activities, and the provision of Type III parks through ordinary park acquisition and development efforts to meet anticipated year 2000 accessibility needs. The third level priority recommendation under the urban outdoor recreation plan component is the provision of Type IV parks anticipated to be needed to meet per capita and accessibility standards in the plan design year 2000, primarily through the development of land dedicated during land subdivision.

#### **SUMMARY**

This chapter has described an open space preservation plan element, which sets forth recommended means for achieving regional open space preservation objectives, and an outdoor recreation plan element, which sets forth recommended means for meeting existing and anticipated

future needs for outdoor recreation sites and facilities. The open space preservation plan element and the outdoor recreation plan element are proposed to be adopted together as the regional park and open space plan for southeastern Wisconsin. The most important aspects of the open space preservation plan elements—composed of a primary environmental corridors plan component and a prime agricultural lands plan component—and the outdoor recreation plan element—composed of a resource-oriented outdoor recreation plan component and an urban outdoor recreation plan component—are summarized here.

#### Primary Environmental Corridor Plan Component

The primary environmental corridor plan component consists of recommendations on the appropriate means of preserving specific segments of the primary environmental corridors of the Region. Currently, about 72 square miles, or about 16 percent of the net primary environmental corridor lands in the Region, are in public ownership. The primary environmental corridor plan component recommends the public acquisition of selected additional reaches of the primary environmental corridors encompassing an additional total of about 155 square miles, or about an additional 36 percent of the remaining net corridor land. Including the 72 square miles of net primary environmental corridor lands which are presently in public ownership, a total of about 227 square miles of corridor land, or about 52 percent of the total corridor area and about 8 percent of the total area of the Region, would be permanently held in public trust upon full implementation of the primary environmental corridor plan component. In general, the reaches of the primary environmental corridors recommended for public acquisition are those which have been previously recommended for acquisition under the four watershed plans completed by the Commission to date as well as corridor reaches which lie in existing urban areas or areas expected to be in urban use by the year 2000 but outside those watersheds. In addition, at the request of the Waukesha County representative on the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning, and with the concurrence of that Committee, the primary environmental corridor plan component also includes the acquisition of certain additional reaches of the primary environmental corridor in Waukesha County.

Under the primary environmental corridor plan component, those areas of the primary environmental corridors which are not actually acquired by the public sector, including existing private outdoor recreation areas, would be kept in compatible, essentially natural, open space uses through the use of exclusive agricultural, floodland, shoreland, parkland, conservancy, and very low-density residential zoning. In this regard, it is recommended that about 210 square miles, or about 48 percent of the net primary environmental corridor lands within the Region, be zoned in a manner appropriate to the preservation of the corridors.

#### Prime Agricultural Land Plan Component

The prime agricultural land plan component reaffirms the recommendations of the proposed new regional land use

plan for the year 2000 for the preservation of the prime agricultural lands and other agricultural lands surrounding major sites having scientific, educational, and recreational value. In this regard, the prime agricultural land plan component recommends the preservation through exclusive agricultural zoning of 620 square miles of prime agricultural land, or about 98 percent of the existing prime agricultural acreage in the Region, as well as about 41 square miles of agricultural land which were considered as providing a desirable open space setting around major scientific, educational, and recreational sites. Thus, in all, a total of about 661 square miles of agricultural land, or 41 percent of the total agricultural land and 25 percent of the total area of the Region, would be preserved in agricultural use. Under the prime agricultural land plan component, the conversion of prime agricultural land to urban use would be restricted to those lands which were generally committed to urban development by 1970 due to the proximity to existing and expanding concentrations of urban uses and the prior commitment of heavy capital investment in utility extensions.

#### Resource-Oriented Outdoor Recreation Plan Component

Two resource-oriented outdoor recreation component alternative plans were prepared under the regional park and open space planning program—namely, an accessibility based alternative plan and a resource based alternative plan—each of which addresses existing and anticipated future needs for resource-oriented outdoor recreation sites and facilities through a basically different design. A comparative evaluation of the ability of each alternative plan to meet the agreed-upon objectives and standards, summarized in Chapter XIII, indicated that the two plans do not differ significantly in their ability to meet existing and probable future recreation demand in terms of the number, size, and type of parks included at approximately the same cost. However, because the resource based plan would provide a higher quality of recreation experience than the accessibility based plan because it incorporates the highest quality potential recreation areas and would also contribute significantly to the protection and wise use of valuable natural resource amenities within the Region, the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning recommended that the resource based plan be selected for incorporation into the recommended park and open space plan for southeastern Wisconsin.

In general, the recommended resource-oriented outdoor recreation plan component—that is, the resource based plan alternative—proposes to meet existing and anticipated future resource-oriented outdoor recreation requirements by developing the needed facilities at the best remaining potential recreation areas within the Region. Under the recommended resource-oriented outdoor recreation plan component, public recreation corridors would be located to the maximum extent practicable in primary environmental corridors situated within areas of the Region possessing recreational values of regional significance. Moreover, many of the new major Type I and

Type II parks proposed under the recommended resource-oriented outdoor recreation plan component would be situated in outlying portions of the Region, where natural resource amenities with high recreational value of regional significance are relatively abundant. Indeed, because of the outlying location of many of the proposed parks and recreation corridor segments, the recommended resource-oriented outdoor recreation plan component includes proposals for the provision of mass transit service—on a trial basis—between densely populated large urban areas, where concentrations of households with no personal means of transportation exist, and certain major recreational sites.

Under the resource-oriented outdoor recreation plan component, Type I and Type II park acreage in the Region would increase from about 11,610 acres in 1973 to about 17,565 acres in the year 2000. Specifically, the resource-oriented outdoor recreation plan component proposes the continued maintenance of the 42 Type I and Type II parks existing in the Region in 1973 as well as the development of additional facilities at certain of these sites. In addition, the resource-oriented outdoor recreation plan component proposes the expansion of one existing Type I park and one existing Type II park as well as the expansion of one existing Type III park to the size required for a Type II park; thereby adding about 410 acres to the existing Type I and Type II park acreage; the development as major parks of six undeveloped park sites which are currently in public ownership and which have a combined area of about 1,320 acres; and, finally, the public acquisition and development of 20 new major parks having a combined area of 4,225 acres. Implementation of the resource-oriented outdoor recreation plan component may be expected to meet the per capita major park acreage standard within the Region in the plan design year.

Under the resource-oriented outdoor recreation plan component, virtually all additional intensive resource-oriented outdoor recreation facilities would be developed at existing or proposed Type I and Type II parks. The resource-oriented outdoor recreation plan component proposes the development of a total of 219 additional public campsites at seven parks in the Region by the plan design year 2000. The resource-oriented outdoor recreation plan component further proposes the provision of additional public golf facilities at 12 existing or proposed major parks, including the development of ten 18-hole regulation golf courses and one 9-hole regulation golf course as well as the expansion of an existing 18-hole regulation golf course to a 27-hole course. Under the resource-oriented outdoor recreation plan component, a total of 2,155 additional picnic tables would be provided to accommodate resource-oriented picnicking activities within 25 existing and proposed major parks. Public downhill skiing facilities in the Region would be increased under the plan component, with skiing areas proposed to be developed at one existing and one proposed major park. Opportunities for beach swimming would be also expanded through the development of five additional

public swimming beaches along the Lake Michigan shoreline in southeastern Wisconsin and the development of five additional inland swimming beaches. Finally, the resource-oriented outdoor recreation plan component proposes the development of eight additional public nature study centers within the Region.

In addition to the foregoing park development recommendations, the resource-oriented outdoor recreation plan component also proposes the development of a recreation corridor network having a total length of about 405 linear miles which would accommodate trails for extensive recreation activities such as biking, hiking, horseback riding, and ski touring and which would connect many of the existing and proposed major parks, thereby enhancing the integrity of the regional park and open space system. Under the resource-oriented outdoor recreation plan component, recreation corridors would, to a large extent, traverse primary environmental corridors situated within areas of the Region identified in the Commission's potential park sites inventory as possessing recreational resource values of regional significance, including the Kettle Moraine, the Lake Michigan shoreline, and the Fox River, Milwaukee River, Root River, Sugar Creek, and Turtle Creek corridors. Biking and hiking trails would be developed throughout the entire proposed recreation corridor network. In addition, the proposed recreation corridor network would also accommodate about 113 linear miles of horseback riding trails, about 45 linear miles of nature study trails, and about 48 linear miles of ski touring trails.

Opportunities for participation in extensive water based recreation activities would be increased under the resource-oriented outdoor recreation plan component through the provision of additional small boat water access facilities on rivers and major inland lakes of the Region and on Lake Michigan. In this regard, the plan component proposes the provision of additional small boat water access facilities on 28 major inland lakes in southeastern Wisconsin as well as the provision of five boat access points on the Milwaukee River and four access points on the Fox River. Inland water access facilities, it should be noted, would be provided primarily to accommodate slow boating activities such as fishing and canoeing.

The resource-oriented outdoor recreation plan component also proposes the provision of 1,310 additional boat mooring slips and 19 additional boat launch ramps along the Lake Michigan shoreline in southeastern Wisconsin to meet the existing and anticipated future need for recreational water access facilities on Lake Michigan. It is further proposed that, to the extent practicable, the additional Lake Michigan water access facilities be located in such a manner as to eliminate existing "voids" with respect to boat launch ramps between the harbors of the City of Milwaukee and the City of Port Washington and between the harbor of the City of Racine and the boat launch site at the mouth of Oak Creek in the City of South Milwaukee.

#### Urban Outdoor Recreation Plan Component

The urban outdoor recreation plan component represents an attempt to provide a quantity of local recreation sites—including Type III and Type IV parks and public general use sites—and intensive nonresource-oriented outdoor recreation facilities—including baseball and softball diamonds, basketball courts, ice skating rinks, playfields, playgrounds, tennis courts, and swimming pools—sufficient to meet the overall demand in most urban areas of the Region through the plan design year. Within most urban areas, the required recreation lands would be obtained by a variety of means, including through dedication as part of the urban land subdivision process, development of additional school related recreation sites, development of existing publicly owned undeveloped park sites, or the public purchase and development of other open space lands. Satisfaction of all the identified urban site and facility requirements would be difficult, however, within certain urban areas—particularly in densely populated urban areas in the central part of Milwaukee County—due to the lack of open space lands. Satisfaction of the identified need within such areas could be accomplished only through a substantial amount of urban demolition, clearance, and redevelopment. Under the urban outdoor recreation plan component, such clearance and redevelopment activities would be restricted to amounts required to meet the adopted accessibility standards, thereby ensuring that each resident of an urban area would at least have ready access to a public outdoor recreation site. It should be noted, however, that the quantity of outdoor recreation sites and facilities provided under such an approach may be less than that required to fully meet the recreation demand within a densely populated urban area. The plan recommendations in this respect should not be construed as precluding local units of government from meeting the acreage as well as the accessibility standards should such governments determine to undertake major urban redevelopment and renewal programs in the future.

The urban outdoor recreation plan component recommends the provision of a total of about 3,158 additional acres of local public recreation land at a total of 30 Type III parks and 212 Type IV parks and school recreation sites within the urban areas of the Region by the plan design year 2000. Under the urban outdoor recreation plan component, about 673 acres, or about 21 percent of the total plan increment, may be expected to be provided through subdivision dedication; about 230 acres, or about 7 percent of the total increment, may be expected to be provided through school expansion; and about 748 acres, or about 24 percent of the total increment would be provided through the development of existing publicly owned undeveloped park sites. In addition, implementation of the urban outdoor recreation plan component would require the public acquisition and development of about 1,333 acres of existing open land and the public acquisition, clearance, and redevelopment for park purposes of about 174 acres of land currently in urban use.



#### Regional Park and Open Space Plan Priorities

Recognizing that public financial resources available for park development and open space preservation purposes are limited and that implementation of the regional park and open space plan will have to occur gradually over a relatively long plan implementation period, general priorities are recommended for consideration in implementation of the park and open space plan. The overriding consideration in the formulation of priorities among the various recommendations of the park and open space plan was to minimize the loss of valuable open space lands to urban development. Certain lands proposed for park and open space purposes are currently threatened by urban encroachment or can be expected to be threatened by urban land development in the near future. Acquisition of such lands before they are forever lost for public use is of utmost importance to the overall park and open space plan. Therefore, among the recommendations of the regional park and open space plan, highest priority has been assigned to recommendations on acquisition and development of open space lands which are presently threatened by urban encroachment. Within this framework, further priority was assigned to recommendations which serve to satisfy existing, rather than anticipated future outdoor recreation needs; to recommendations which preserve open space lands of regional significance; and to recommendations for the provision of parks at high value potential park sites which also meet accessibility needs.

#### Capital Costs of the Regional Park and Open Space Plan

As previously indicated, the primary environmental corridor plan component proposes public acquisition of selected reaches of primary environmental corridors encompassing a total of about 155 square miles. Implementation of the open space preservation plan would require an estimated public outlay of about \$100.3 million for the recommended land acquisition.

Implementation of the resource-oriented outdoor recreation plan component would require public acquisition of

about 7,970 acres of land including land for additional major parks, public recreation corridors, and inland water access facilities. Of this total, about 5,000 acres lying within the primary environmental corridor would be acquired under the primary environmental corridor plan component at an estimated cost of about \$7.5 million. Remaining land acquisition requirements under the resource-oriented outdoor recreation plan component—beyond the land acquisition requirements of the open space preservation plan element—total about 2,970 acres and entail the public outlay of about \$5.2 million. In addition to these land acquisition costs, development costs under the resource-oriented outdoor recreation plan component would entail the public outlay of about \$60.7 million, with the largest outlays—about \$50.0 million—required for development of the proposed major parks and development of small boat water access facilities along the Lake Michigan shoreline. Total public outlays for land acquisition and development under the resource-oriented outdoor recreation plan component are estimated at about \$65.9 million.

Implementation of the urban outdoor recreation plan component would entail the public outlay of about \$95.2 million, including about \$75.6 million for the acquisition of existing open lands as well as the acquisition and clearance of land currently in urban use and about \$19.6 million for recreation site development. About \$67.9 million, or about 71 percent of the total estimated outlay for implementation of the urban outdoor recreation plan component, would be required for the acquisition of land currently in urban use, clearance, and relocation assistance payments in order to meet local park accessibility needs within certain densely populated urban areas of the Region.

The total public outlay required for implementation of the recommended regional park and open space plan—including the open space preservation plan element and the outdoor recreation plan element—is estimated at about \$261.4 million.

### PLAN IMPLEMENTATION

#### INTRODUCTION

The recommended regional park and open space plan for the year 2000, described in Chapter XIV of this report, provides a design for attainment of the specific regional park acquisition and development objectives and open space preservation objectives formulated under the regional park and open space study in cooperation with the local and state units and agencies of government and private interests concerned. The recommended regional park and open space plan consists of two major plan elements, an open space preservation plan element and an outdoor recreation plan element. The open space preservation plan element sets forth recommendations concerning appropriate means of preserving the most valuable open space lands remaining in southeastern Wisconsin, namely, the regional primary environmental corridors and prime agricultural lands. The outdoor recreation plan element addresses anticipated future needs for public outdoor recreation sites and facilities in the Region through the plan design year 2000. In a practical sense, the recommended regional park and open space plan is not complete, however, until the steps required to implement the plan—that is, to convert the plan into action policies and programs—are specified.

This chapter accordingly is intended as a guide for use in the implementation of the recommended regional park and open space plan for southeastern Wisconsin. Basically, the chapter outlines the activities which must be taken by the various levels and agencies of government concerned if the recommended park and open space plan, utilizing an incremental approach, is to be fully carried out by the plan design year 2000. Those units and agencies of government which have plan adoption and plan implementation powers applicable to the recommended regional park and open space plan are identified; necessary formal plan adoption actions are specified; and specific implementation activities are recommended for the open space preservation and outdoor recreation elements for each of the units and agencies of government concerned.

To the maximum extent possible, the plan implementation recommendations are based upon, and related to, existing governmental programs and are predicated upon existing enabling legislation. Because of the ever present possibility of unforeseen changes in economic conditions, state and federal legislation, case law decisions, governmental organizations, and fiscal policies, however, it is not possible to precisely predict the exact manner in which the regional park and open space planning implementation process will be administered and financed. Consequently, changes over time in the means of implementation may be expected.

While the recommendations set forth in this chapter are addressed exclusively to the public sector, it is fully recognized that nonpublic outdoor recreation development has been and will continue to play an important role in meeting outdoor recreation demands within the Region. As indicated in Chapter V, nonpublic outdoor recreation sites—including sites under the jurisdiction of various quasipublic civic, charitable, or religious organizations, along with commercial enterprises or private interest groups—satisfy a significant portion of the overall demand for outdoor recreation facilities in the Region. This is especially true for camping, golf, and downhill skiing activity, with a majority of participants in these activities utilizing nonpublic facilities. In addition to meeting recreational needs, nonpublic outdoor recreation sites generally contribute to the preservation of the natural resource base. A basic assumption in the design of the regional park and open space plan is that, throughout the plan design period, the rate of provision of nonpublic outdoor recreation facilities—on a per capita basis—would not change substantially from the existing rate. Additional nonpublic outdoor recreational facilities deemed necessary within the Region through the plan design year have been set forth in Chapter XII. Failure on the part of the nonpublic sector to provide the anticipated additional facilities or to maintain existing nonpublic outdoor recreation areas may require a corresponding increase in acquisition and development activities by the public sector beyond the planned levels.

#### PLAN IMPLEMENTATION ORGANIZATIONS

Although the Regional Planning Commission can promote and encourage park and open space plan implementation in various ways, the completely advisory role of the Commission makes actual implementation of the recommended regional park and open space plan entirely dependent upon action by certain local, state, and federal agencies of government. Examination of the various agencies that are available under existing enabling legislation to implement the recommended park and open space plan reveals an array of departments, commissions, committees, boards, and districts at all levels of government. These agencies include general purpose local units of government, such as cities, villages, towns, and counties; state agencies responsible for the acquisition and development of park and open space facilities, such as the Wisconsin Department of Natural Resources; and federal agencies that provide financial and technical assistance for plan implementation, such as the U. S. Department of Interior, Bureau of Outdoor Recreation.

Because of the many and varied agencies in existence, it becomes exceedingly important to identify those agencies

having the legal authority and financial capability to most effectively implement the recommended park and open space plan. Accordingly, those agencies whose action will have significant effect either directly or indirectly upon the successful implementation of the recommended regional park and open space plan and whose full cooperation in plan implementation will be essential are listed and discussed below. The agencies, for convenience, are discussed by level of government; however, the interdependence among the various levels, as well as among agencies, of government and the need for close intergovernmental cooperation cannot be overemphasized. Most of the agencies needed for implementation of the recommended regional park and open space plan are already in existence. The creation of new agencies for park and open space plan implementation should be considered, therefore, only if such agencies are absolutely essential; and, if essential, the creation of new agencies should be in such form as to complement and supplement most effectively the plan implementation activities of the agencies already in existence.

#### Regional Park and Open Space Planning Committee

Since planning at its best is a continuing function, a public body should remain on the scene to coordinate and advise on the execution of the regional park and open space plan and to undertake plan updating and renovation as necessitated by changing events. Although the Regional Planning Commission is charged with and will perform this continuing areawide planning function, it cannot do so properly without the active participation and support of citizens and local governmental officials through an appropriate advisory committee structure. It is, therefore, recommended that the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning be reconstituted as a continuing intergovernmental advisory committee to provide a focus for the coordination of all levels of government in the execution of the regional park and open space plan. This committee would best continue to be a creature of the Southeastern Wisconsin Regional Planning Commission, pursuant to Section 66.945(7) of the Wisconsin Statutes, and would report directly to the Commission. It is recommended that all agency representatives and individuals currently serving on the Technical and Citizen Advisory Committee remain as members of the continuing committee, but that the question of committee membership be left open so that additional members can be added to the committee as appropriate. This reconstituted Committee should, among other things, periodically prepare a report on the status of plan implementation for consideration by the Commission.

#### Local Level Agencies

Statutory provisions exist for the creation at the county and municipal level of the following agencies having planning and plan implementation powers important to park and open space plan implementation, including police power and acquisition, condemnation (eminent domain), and tax appropriation powers.

County Park and Planning Agencies: County units of government have considerable flexibility available to establish agencies to perform the park and outdoor

recreation and zoning and planning functions within the county. Counties may create park commissions or park and planning commissions pursuant to Section 27.02 of the Wisconsin Statutes. In addition, counties also may elect to utilize committees of the county board to perform the park and outdoor recreation and zoning and planning functions. No matter how an individual county chooses to organize the park and planning functions, the basic plan implementation powers available are essentially the same. If, however, a county elects to establish a county park or county park and planning commission, these commissions have the obligation to prepare a county park system plan and a county street and highway system plan. There is no similar mandate when a county elects to handle these functions through committees of the county board.

All seven counties which comprise the Southeastern Wisconsin Region have created some type of county park agency. Three of the seven counties—Walworth, Washington, and Waukesha Counties—have chosen to combine the park and outdoor recreation and planning and zoning functions within a county park and planning commission having full zoning, subdivision plat review, and park functions. In Milwaukee County, there is a County Park Commission with full authority and responsibility for park and parkway acquisition, development, operation, and maintenance. Because Milwaukee County contains no unincorporated area, there is no county zoning authority. The Milwaukee County Park Commission, however, does perform a limited subdivision review function for subdivision plats lying in, or adjacent to, proposed park and parkway development. Milwaukee County also has established a County Planning Commission to perform, essentially, a capital budgeting and programming function. This Planning Commission reviews all requests for capital improvements by Milwaukee County agencies, including those of the Park Commission.

In Racine County, responsibility for park and parkway acquisition and development is assigned to the Racine County Highway and Parks Committee, which has a separate staff with sole responsibility for park and parkway acquisition, development, operation, and maintenance. The zoning and subdivision plat review functions in Racine County are assigned to the County Land Use and Zoning Committee which also retains a professional staff. Close cooperation between the parks department and the planning and zoning department, it should be noted, have resulted in the effective coordination of the park and outdoor recreation and planning and zoning functions within Racine County.

In Kenosha County, responsibility for park and parkway acquisition, development, operation, and maintenance rests with the County Park Commission. The zoning and plat review functions in Kenosha County are assigned to the zoning administrator under the supervision of the County Zoning Committee.

Ozaukee County has established a County Park Commission with responsibility for park and parkway acquisition, development, operation, and maintenance. Recently,

Ozaukee County, which has had up to the present a long history of nonparticipation in land use planning and development, preferring instead to leave that function at the municipal level of government, enacted a shoreland and floodland zoning ordinance. This action was required by state legislation enacted in 1965 (Sections 59.971 and 87.30 of the Wisconsin Statutes). Nevertheless, the enactment of this County ordinance may indicate the beginning of a new County attitude toward land use planning. Responsibility for the administration of this ordinance was assigned to a County Zoning Committee, and administration is carried out by a zoning administrator.

The effective implementation of the regional park and open space plan requires a coordinated program of public land use regulation and public land acquisition and development activities in order to achieve the adopted outdoor recreation development and open space preservation objectives. Within each county, land use regulatory and park functions should be closely coordinated. Such coordination may best be achieved by combining the responsibilities for land use regulation and for park functions within a single park and planning commission. In addition to having the obligation to prepare a county park system plan and a county street and highway system plan, county park and planning commission may be used to prepare and administer county shoreland, floodland, and comprehensive land use zoning ordinances and to administer county subdivision plat approval. Such commissions are empowered to acquire, develop, maintain, and operate county parks and other open space land. The existence of a county park and planning commission in each county in the Region is, therefore, highly desirable for proper implementation of the recommended regional park and open space plan.

Accordingly, it is recommended that, within Kenosha, Ozaukee, and Racine Counties, the County Board of Supervisors consider the recreation and reconstitution of existing park and planning agencies, assigning to the reconstituted agencies all of the duties and functions relating to planning, zoning, subdivision plat review, and modified official mapping, as well as to county park acquisition and development. A model ordinance creating a county park and planning commission may be found in SEWRPC Planning Guide No. 4, Organization of Local Planning Agencies, Appendix E. Sections 27.03(2), 27.06, and 59.97 of the Wisconsin Statutes provide for the staffing and financing of such commissions. It should be noted that the recommendation for these three counties to reconstitute the park and planning functions within one department should be flexible, with each county deciding upon the best organizational structures for implementing its park program. In the event that the park and planning functions are not combined, the park function should be assigned to its own separate department.

Municipal Park Agencies: Cities and villages may create a board of park commissioners pursuant to Sections 27.08 and 27.13 of the Wisconsin Statutes. This board of park commissioners is empowered and directed to govern, manage, control, improve, and care for all public parks, parkways, boulevards, and pleasure drives as well as to

acquire property for such purposes. Section 27.11(1) of the Wisconsin Statutes also provides for the creation of a board of public land commissioners having authority to convert streets and highways designated by the general governing body into parks and boulevards. Section 60.181 of the Wisconsin Statutes provides for the creation of a town park commission which is empowered to conduct a survey for the purpose of reserving lands for public purposes, with this commission having charge and supervision of all lands acquired by the town for park purposes. In the absence of any of the aforementioned local park agencies, responsibility for park acquisition, development, operation, and maintenance rests with the local board of public works, if such a board exists, or directly with the local governing bodies themselves.

Under the regional park and open space plan, the provision of local parks accommodating urban outdoor recreation facilities such as baseball diamonds, basketball courts, and tennis courts, is primarily the domain of city, village, and town units of government. It is accordingly recommended that all cities, villages, and towns which contain urban areas requiring local parks and outdoor recreation facilities consider the establishment of local park boards or commissions, pursuant to the statutes referenced above, to administer local park acquisition, development, operation, and maintenance activities. The need for a park board or a commission, it should be noted, is related to a large extent to the size of the population within the municipality. Larger urban municipalities have greater need for a separate park board than do smaller, more rural municipalities.

#### Areawide Agency: Regional Planning Commission

The Regional Planning Commission has no statutory plan implementation powers. In its role as a coordinating agency for planning and development activities within southeastern Wisconsin, however, the Commission may, through community planning assistance services and through the review of federal and state grants-in-aid (using adopted plan elements as a basis for this review), play an important role in plan implementation. In addition, the Commission provides a basis for the continued functioning of the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning. This Committee should remain as an important part of the continuing public park and open space planning organization in the Region. Finally the Commission, through its areawide planning programs, maintains a continued federal and state certification and the attendant continued eligibility of local units of government for various federal and state grants-in-aid.

#### State Level Agencies

In existence at the state level are the following agencies that either have general or specific planning authority and hold certain plan implementation powers important to the adoption and implementation of the regional park and open space plan.

Wisconsin Department of Natural Resources: The Wisconsin Department of Natural Resources (DNR) has authority and responsibility in the areas of park develop-



ment, natural resource protection, water quality control, and water use regulation. As such, it combines the park development and land based natural resource protection functions of the former State Conservation Commission and the water regulatory functions formerly assigned to the State Public Service Commission. With this broad range of authority and responsibilities, certain DNR functions have particular importance to regional park and open space plan implementation. Thus, the Department has the obligation to prepare a comprehensive statewide plan for outdoor recreation and to develop long-range, statewide conservation and water resource plans; the authority to designate such sites, as necessary, to protect, develop, and regulate the use of state parks, forests, fish, game, lakes, streams, certain plant life, and other outdoor resources; the authority to acquire conservation and scenic easements; the authority to administer the federal grant program known as the Land and Water Conservation Fund within the State as well as the park and open space grant funds available under the state Outdoor Recreation Act program. The Department also has the obligation to establish standards for floodplain and shoreland zoning and the authority to adopt, in the absence of satisfactory local action, shoreland and floodplain zoning ordinances.

Department of Local Affairs and Development: The programs of the Wisconsin Department of Local Affairs and Development provide assistance to local units of government for improving the methods, procedures, and programs of local governments. Technical assistance relating to parks and outdoor recreation which the Department offers to local units of government includes assistance in the administration of federal grant programs, serving as an information clearinghouse, and development of model programs including zoning and planning.

The State Historical Society of Wisconsin: The State Historical Society has the authority to operate and maintain outdoor historic sites which relate to the outdoor recreation program of the State. Furthermore, the State Historical Society has the authority to plan, develop, and publicize a uniform official system of marking for state historical, archeological, geological, and legendary sites.

#### Federal Level Agencies

There exist at the federal level the following agencies which acquire, develop, and maintain federal park and open space lands or which administer federal aid and assistance programs that can have important effects upon the implementation of the recommended regional park and open space plan because of the potential impact of the financing of both land acquisition and development of specific facilities.

U. S. Department of Interior, National Park Service: The U. S. Department of Interior, National Park Service, administers 30 million acres of land in 286 parks located in 47 states and the District of Columbia, Puerto Rico, and the Virgin Islands. Although no national parkland is located within the Region, this Region has potential for the creation and development of such park areas. A recent survey by the U. S. Department of Interior recognized the need for more large parks in and near large urban

areas and the need for rapid acquisition and protection of open space in such areas. Recently the National Park Service has expanded its activities to include the provision and management of urban recreation areas, and an increased role of the National Park Service in providing urban park and open space areas is presently under consideration by the U. S. Department of Interior.

U. S. Department of Interior, Fish and Wildlife Service: Major functions of the U. S. Department of Interior, Fish and Wildlife Service, include habitat preservation, enhancement and regulation of wildlife resources, and protection of endangered species. As part of its ongoing work in wildlife resources, the service operates and maintains a system of national wildlife refuges. At the present time, no national wildlife refuges are located within the Region, although the Horicon Marsh Refuge is located in an adjoining county. The U. S. Fish and Wildlife Service under the Endangered Species Act also provides for state grant-in-aid programs to manage and protect certain species through management of unique habitat lands.

U. S. Department of Interior, Bureau of Outdoor Recreation: The U. S. Department of Interior, Bureau of Outdoor Recreation, serves as the focal point in the federal government for outdoor recreation related activities. A major function of the Bureau is providing liaison with state recreational programs. In this regard, the Bureau of Outdoor Recreation administers a program of technical assistance to governmental units assisting state and local governments in identifying recreation and open space potentials; identifying recreation and open space alternatives including consideration of ecological, recreational, and open space values; and coordinating various state, local, and federal funding programs. In addition, the Bureau administers the provisions of the Land and Water Conservation Act of 1965, providing financial assistance to states and their political subdivisions for acquisition and development of public outdoor recreation facilities and open space areas.

Another important role of the Bureau of Outdoor Recreation is that of planning and research. The Bureau is currently compiling data to be included in the 1978 revision of the National Outdoor Recreation Plan which is an assessment of the federal role in meeting recreational needs. In addition, the Bureau focuses its attention on various water and land resource studies. Bureau responsibilities in this area include the study of rivers which are to be included within the Wild and Scenic River system, the study of hiking trail routes for inclusion into the National Trails System as mandated by the National Trails System Act, and the study of potential admissions of land into the National Wilderness System as required by the Wilderness Act.

U. S. Department of Agriculture, Forest Service: The U. S. Department of Agriculture, Forest Service, has responsibility for maintenance of the National Forest System, cooperative state and private forest programs, and various forestry research programs. Although there are no lands within the Region designated as national forests, state and local forests within the Region are

eligible for federal assistance provided by the Forest Service. In addition, the U. S. Forest Service provides technical forestry assistance for direct improvement of environmental conditions in urban and rural areas.

U. S. Department of Agriculture, Soil Conservation Service: The U. S. Department of Agriculture provides technical and financial assistance to resource conservation and development project areas which are organized and sponsored by units of state and local governments. Project area sponsors initiate and direct a continuing planning process, develop and maintain an overall project plan for the area, and implement planned measures. The objective of the program termed the Resource, Conservation and Development (RC&D) program is to expand economic opportunities for the people of an area by assisting them in preparing and carrying out plans of action for the orderly conservation, improvement, development, and wise use of natural resources. The agencies of the U. S. Department of Agriculture, under program leadership of the Soil Conservation Service, provide technical and financial assistance to local sponsors. Technical and financial assistance is provided only to those project sponsors whose projects have been approved and authorized by the U. S. Secretary of Agriculture.

In 1973 the Soil and Water Conservation Districts of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties formed the board called the Southeastern Wisconsin RC&D sponsors and submitted an application to the U. S. Secretary of Agriculture for designation of the seven-county area as the resource conservation and development project area. Such designation is awaiting approval of the Secretary of Agriculture. In 1975 the Southeastern Wisconsin Regional Planning Commission and the Southeastern Wisconsin RC&D sponsors entered into an agreement under which the Regional Planning Commission acts as the planning arm of the RC&D project sponsors. Among the project measures recommended by the seven-county area sponsors for park and open space lands are the following: 1) purchase of lands for floodplains, urban parkway, and outdoor recreation use; 2) development of urban environmental corridors along rivers in the project area; 3) shoreline erosion abatement on Lake Michigan in conjunction with public recreation areas; and 4) water quality improvement and erosion control.

U. S. Department of the Army, Corps of Engineers: Traditionally, one of the duties of the U. S. Army Corps of Engineers has been the construction of facilities related to flood control and inland navigation. Projects of the Corps of Engineers in these two areas include channel, dam, dike, levee, and floodwall construction; breakwater and pier construction and channel and harbor dredging; land extensions as a result of dredge and fill material placement; and shoreline protection. Although projects undertaken by the Corps of Engineers often have flood control or navigation improvement as their main purpose, enhancement of recreational activities has also become highly important. Harbor construction and improvement through dredging and breakwater construction along the

Lake Michigan shoreline offer an important means of providing additional recreational opportunities for residents of the Region.

U. S. Department of Housing and Urban Development: Within the broad range of authority and responsibility delegated to the U. S. Department of Housing and Urban Development, the administration of the Community Development Block Grant Program is most important to the implementation of the regional park and open space plan. The community development block grants are available as entitlement grants to cities of over 50,000 persons and are available as discretionary grants to communities of under 50,000 persons. Community development block grants, it should be noted, may partially offset the cost of providing local outdoor recreation sites and facilities required in the large urban centers of the Region.

## PLAN ADOPTION AND INTEGRATION

Upon adoption of the regional park and open space plan by formal resolution of the Southeastern Wisconsin Regional Planning Commission, in accordance with Section 66.945(10) of the Wisconsin Statutes, the Commission will transmit a certified copy of the resolution adopting the plan, together with the plan itself, to all local legislative bodies within the Region and to all of the aforesaid existing state, local, and federal agencies that have potential plan implementation functions.

Adoption, endorsement, or formal acknowledgement of the regional park and open space plan by the local legislative bodies in the existing local, state, and federal level agencies concerned is highly desirable to assure a common understanding among the several governmental levels and to enable their staffs to program the necessary implementation work. In addition, in some cases, the aforementioned adoption, endorsement, or acknowledgement of the plan is required by the Wisconsin Statutes before planning actions for park and open space can proceed as in the case of city, village, and town plan commissions created pursuant to Section 62.23 of the Wisconsin Statutes.

In order to be eligible for assistance under the state Outdoor Recreation Act Program and federal assistance under the federal Land and Water Conservation Act, all counties, cities, villages, and towns are required to submit a comprehensive outdoor recreation plan to the Wisconsin Department of Natural Resources. Such a comprehensive plan should include an inventory of outdoor recreation sites and facilities; a set of outdoor recreation standards; an analysis of new recreation demands and needs; and a program of action which addresses the identified need. The regional park and open space plan conforms to the established state park planning guidelines. Adoption of the regional park and open space plan by local units of government in the Region should serve to meet existing park aid planning eligibility requirements, insofar as such aids would be utilized to meet the need for those park and open space lands and outdoor recreation facilities which are identified in the regional park and open space plan.

It should be noted that adoption of a recommended regional park and open space plan by any unit or agency of government pertains only to the statutory duties and functions of the adopting agencies, and such adoption does not and cannot in any way preempt or commit action by another unit or agency of government acting within its own area of functional and geographic jurisdiction. Thus, adoption of the regional park and open space plan by a county would make the plan applicable as a guide, for example, to county park system development but not to any municipal park development within the county. To make the plan applicable as a guide to municipal park development would require its adoption by the municipality concerned. The following sections recommend positive actions which should be taken by the respective levels and agencies of government in order to facilitate plan implementation. It is also important to note that any action inconsistent with the objectives and recommendations of the plan should not be taken.

#### Local Agencies

1. It is recommended that the seven county boards formally adopt the recommended regional park and open space plan, as authorized by Section 66.945(12) of the Wisconsin Statutes, as a guide to future open space preservation and park acquisition and development in their area of jurisdiction, after consideration by the respective county park and planning agencies. It is also suggested that their respective local park agencies refine the recommended regional plan as this plan affects their area of jurisdiction and integrate the regional plan into any existing local park and open space plan.

#### State Level Agencies

1. It is recommended that the Wisconsin Natural Resources Board endorse the regional park and open space plan and direct its staff in the Wisconsin Department of Natural Resources to integrate the recommended plan elements into its broad range of agency responsibilities, as well as to assist in coordinating plan implementation activities through the year 2000. In particular, it is recommended that the Natural Resources Board endorse the recommended open space preservation and outdoor recreation elements and direct its staff to integrate these plan elements into the long-range conservation and comprehensive outdoor recreation plans authorized by Section 23.09(7) of the Wisconsin Statutes and required by the federal Land and Water Conservation Act. It is further recommended that the Board, through its staff, coordinate the recommended regional park and open space plan with its activities relating to floodland and shoreland zoning.
2. It is recommended that the Wisconsin Department of Local Affairs and Development endorse the recommended regional park and open space plan and integrate the plan into its activities with respect to the provision of technical assistance to

local units of government and with respect to reviewing subdivision plans.

3. It is recommended that the State Historical Society of Wisconsin endorse the regional park and open space plan and integrate the inventory of unmarked historic sites into the State's program of marking historical, archeological, geological, and legendary sites in the Region.

#### Federal Level Agencies

1. It is recommended that the U. S. Department of Housing and Urban Development formally acknowledge the regional park and open space plan and utilize this plan in its administration and granting of federal community development aids.
2. It is recommended that the U. S. Department of the Interior, Bureau of Outdoor Recreation, formally acknowledge the regional park and open space plan and utilize the plan recommendations in its administration and granting of federal aids under the Land and Water Conservation Act fund.
3. It is recommended that the U. S. Department of the Army, Corps of Engineers, formally acknowledge the regional park and open space plan. It is further recommended that the Corps of Engineers cooperate with any local units and agencies of government in any requests for assistance for the provision of small boat harbors of refuge and recreation water access facilities along the Lake Michigan shoreline in southeastern Wisconsin.

#### SUBSEQUENT ADJUSTMENT OF THE PLAN

No plan can be permanent in all of its aspects or precise in all of its elements. The very definition and characteristics of areawide planning suggest that an areawide plan, such as a regional park and open space plan be continually adjusted through formal amendments, extensions, additions, and refinements to reflect changing conditions to be viable and of use to local, state, and federal units and agencies of government. The Wisconsin Legislature clearly foresaw this when it gave to regional planning commissions the power to ". . . amend, extend, or add to the master plan or carry any part or subject matter into greater detail . . ." in Section 66.945(9) of the Wisconsin Statutes.

Amendments, extensions, and additions to the regional park and open space plan will be forthcoming not only from the work of the Commission under various continuing regional planning programs but also from state agencies as they adjust and refine statewide plans and from federal agencies as national policies are established or modified or as new programs are created or as existing programs are expanded or curtailed. Adjustments also must come from local planning programs which, of necessity, must be prepared in greater detail and result in greater refinement of the regional park and open space plan.

All of these adjustments and refinements will require the utmost cooperation by the local, areawide, state, and federal agencies of government, as well as coordination by the Southeastern Wisconsin Regional Planning Commission, which has been empowered under Section 66.945(8) of the Wisconsin Statutes to act as a coordination agency for programs and activities of the local units of government. To achieve this coordination among local, state, and federal programs most effectively and efficiently, it is recommended that all the aforesaid state, areawide, and local agencies having various plan and plan implementation powers advise and transmit all subsequent planning studies, plan proposals and amendments, and plan implementation devices to the Southeastern Wisconsin Regional Planning Commission for consideration of integration into, and adjustment of, the regional park and open space plan.

## REGIONAL PARK AND OPEN SPACE PLAN IMPLEMENTATION

Full implementation of the regional park and open space plan requires coordinated application of a complex array of implementation devices and the utmost in cooperation among the local units of government in the areawide, state, and federal agencies involved. It also requires careful detailing and refining of the plan by the Regional Planning Commission and the county and local units of government working in close cooperation so as to insure proper integration of the regional and local plans and proper relationship of the local implementation devices to the plans. Although the plan implementation recommendations are closely interrelated, this section has been divided for convenience in presentation and use into the following five major subareas: zoning, official mapping, subdivision control ordinances, land acquisition for open space preservation, and land acquisition and development for park and outdoor recreation.

### Zoning Ordinances

Of all the land use plan implementation devices presently available, the most readily available, most important, and most versatile is the regulation of land use development founded in the local police power and implemented by adoption of appropriate zoning ordinances, including zoning district regulations and zoning district delineations. It should be noted, that, while the public acquisition and development of land under the regional park and open space plan is envisioned to occur gradually over the plan design period, the preservation of prime agricultural lands, remaining net primary environmental corridor lands, and other lands required for recreation use through exclusive agricultural, floodland, shoreland, conservancy, parkland, or other appropriate zoning should be accomplished as soon as possible. Such zoning should include all primary environmental corridor lands and all agricultural lands which are recommended to be preserved through zoning under the open space preservation plan element. In addition, those areas of the primary environmental corridors which are recommended for acquisition under the park and open space plan and other lands which are recommended for acquisition and development

as local or major parks should also be initially zoned utilizing appropriate zoning districts in order to achieve immediate protection from urban encroachment, pending acquisition. The following zoning ordinances or amendments to existing zoning ordinances should be adopted by the appropriate county and local units of government within the Region to provide a clear indication of the intent to implement the regional park and open space plan and thereby to provide a framework for other planning and plan implementation efforts. It should be noted that Milwaukee County has no zoning powers within the County because the total land area of the County lies within incorporated municipalities.

It is recommended that the plan commissions of all cities and villages and those towns which have not filed approval of the county zoning ordinance formulate and recommend to their respective governing bodies new zoning ordinances or amendments to existing zoning ordinances in accordance with Section 60.74 or 62.23(7) of the Wisconsin Statutes, as necessary. These new zoning measures would serve to provide district regulations, including the exclusive use districts and floodland and shoreland regulations similar to those provided in the SEWRPC model zoning ordinance, together with appropriate zoning district map changes, to reflect the recommended open space preservation plan element and to reserve land required for outdoor recreation purposes.

It is recommended that the respective municipal governing bodies then adopt such zoning ordinances, or amendments thereto, including such zoning district map changes, pursuant to Section 60.74 or 62.23(7) of the Wisconsin Statutes. Zoning of land in certain unincorporated areas should, as a last resort, be supplemented by the joint exercise of the extraterritorial zoning powers of the cities and villages with the towns, pursuant to Section 62.23(7)(a) of the Wisconsin Statutes. It should be noted that certain problems may arise with the exercise of extraterritorial zoning powers. Since extraterritorial zoning powers must be exercised jointly by cities and villages with the town, a joint committee on which the town board and the city common council or village board is represented must be created to form the zoning committee. That joint committee then exercises the extraterritorial zoning powers. In practice, this type of zoning is generally exercised in order to prevent certain land developments rather than to actively pursue a planning process. Further, if the county park and planning commission is functioning properly and there is substantial agreement on the adopted regional plan, exercise of such extraterritorial zoning powers should not be necessary.

Proper delineation of the boundaries of the various zoning districts to achieve the open space preservation and outdoor recreation recommendations of the regional park and open space plan requires careful study and a thorough understanding not only of the local community plan recommendations by the local zoning agencies but also of the regional park and open space plan recommendations and their relationship to the local



plans. In this process, primary environmental corridors and prime agricultural lands must be broken down into several zoning districts as necessitated by the various types of natural resources found in the corridors. The following recommendations are made to all zoning agencies within the Region to assist them in the task of zoning ordinance preparation, including zoning district delineation.

**Residential Areas:** The proper delineation of residential zoning districts contributes significantly to the preservation of open space lands and the reservation of lands required for future outdoor recreation sites. The adopted regional land use plan, it should be noted, proposes a spatial distribution of residential land consistent with the protection and wise use of the natural resource base of the Region. Not all of the areas shown as devoted to residential land use in the recommended regional land use plan should be initially placed in residential use districts. Only existing and platted, but not yet fully developed, residential areas and those areas that have immediate development potential and can be economically served by municipal utilities and facilities, such as sanitary sewer, public water supply, and schools, should be placed in exclusive residential districts related to the development densities indicated on the recommended regional land use plan. The remainder of proposed residential land use areas should be placed in exclusive agricultural districts so as to act as a holding zone for future development. The use of such holding districts is discussed in SEWRPC Planning Guide No. 3, Zoning Guide. Such holding districts should be rezoned into the appropriate residential zoning district or supporting land use district only when the community can economically and efficiently accommodate the proposed development. All residential zoning should be properly related to the inherent suitabilities of the underlying soil resource base. Residential zoning within general agricultural lands and primary environmental corridors should be restricted to very low density country estate districts having minimum lot areas of not less than five acres. Residential zoning should not be applied within prime agricultural areas that are to be permanently preserved in agricultural use.

**Agricultural Areas:** Areas which have been designated as prime agricultural lands and agricultural areas surrounding major scientific, educational, and recreation sites should be placed in exclusive agricultural use districts which essentially permit only agricultural uses. In such areas, dwellings should be permitted only as accessory to the basic agricultural uses. Significant wetlands, woodlands, floodlands, and wildlife habitat areas that lie outside the delineated primary environmental corridor but within the agricultural use areas should be placed in the conservancy districts. In addition to prime agricultural lands, the preservation of other general agricultural lands in the Region also is important to the economic well being, natural beauty, and quality of life within southeastern Wisconsin. While such general agricultural lands may serve as a land reserve for urban expansion necessitated by growth in the regional population, these general agricultural lands should also be preserved insofar as possible

and the extent of conversion of general agricultural lands to urban land use should be confined to that proposed under the adopted regional land use plan. The preservation of general agricultural land should be accomplished through the use of agricultural and very low density residential zoning districts which are designed to reflect community needs, the pattern of land ownership, and the suitability of land for farming.

**Primary Environmental Corridors:** The regional primary environmental corridors should be placed immediately in one of several zoning districts, as dictated by consideration of existing development; the character of the specific resource values to be protected within the corridor; and the attainment of the outdoor recreation and open space preservation objectives of the regional park and open space plan. Prime wildlife habitat areas, wetlands, woodlands, and undeveloped floodlands lying in the corridors should be placed in conservancy and floodland protection districts. Existing and potential park sites lying in the corridor should be placed in park districts which permit the development of appropriate private and public recreational facilities. The remaining area lying in the corridors may then be placed in exclusive agricultural use districts or in large estate-type residential use districts.

**Other Outdoor Recreation Sites:** Those proposed major parks and segments of the recreation corridor located outside the primary environmental corridors should be placed in exclusive agricultural, conservancy, or park districts to ensure preservation and availability for both public and private recreational use. It should be noted that, with the exception of the proposed Sugar Creek and Paradise Valley park sites, rather than proposing specific sites for development as new major parks or as recreation corridors, the recommended park and open space plan identifies general areas in which a major park or recreation corridor should be developed. Frequently, these areas contain several high value potential recreation sites which could be developed to accommodate the required facilities. Local planning activities which refine the regional park and open space plan and which identify specific future major park sites and recreation corridor segments are a necessary step preceding the delineation of park or recreation zoning districts.

Potential local park sites required within urban areas of the Region should also be appropriately zoned to ensure their availability for future public use. It should also be noted that recommendations of the regional park and open space plan for local parks and related recreation facilities specify the number of local parks and attendant facilities which ought to be provided within the urban areas of the Region to meet the adopted urban park site and facility standards through the plan design year 2000. The precise location of local parks within the urban areas of the Region is properly a matter for local park planning. As soon as the boundaries of future local parks have been determined through the local planning process, the future recreation areas should be appropriately zoned to ensure their preservation and availability for public acquisition.

Floodlands: It is recommended that all cities, villages, and towns within the Region amend, as appropriate, their zoning ordinances to include special floodland regulations similar to those set forth in Appendix I of SEWRPC Planning Guide No. 5, Floodland and Shoreland Development Guide, as amended and improved through application and practice throughout the Southeastern Wisconsin Region. Such regulations, if properly adopted and endorsed, will ensure the substantial maintenance in open uses of all undeveloped floodlands in the Region. It should also be noted that such floodland regulations are required in addition to any basic zoning district regulations, such as agricultural districts, estate type residential districts, park districts, and conservancy districts. Each county, city, and village in the Region must, pursuant to Section 87.30 of the Wisconsin Statutes, formulate and adopt an effective and reasonable floodland zoning ordinance as soon as the necessary flood hazard data become available. Failure to do so may result in the Wisconsin Department of Natural Resources acting to exercise state floodplain zoning powers, pursuant to Section 87.30 of the Wisconsin Statutes.

Shorelands: It is recommended that Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties carefully review their respective shoreland zoning regulations adopted pursuant to Section 69.971 of the Wisconsin Statutes. These regulations apply in unincorporated areas to all land lying within 1,000 feet of a lake, pond, or flowage and 300 feet from the bank of a river or stream or to the landward side of the floodplain, whichever is greater. The recommended county reviews would seek to determine if changes are necessary to meet the land use development objectives contained in the regional land use plan. It is also recommended that those municipalities with lakes, ponds, or flowages review their respective shoreland zoning regulations. A model of such special shoreland regulations has been set forth in Appendix I of SEWRPC Planning Guide No. 5, as amended and improved through application and practice throughout the Southeastern Wisconsin Region.

Property Tax Policies: One of the criticisms often leveled against the use of exclusive agricultural and conservancy districts, as well as of restrictive floodland regulations, is that, in an urbanizing area, the assessed valuation of the restrictively zoned land may be so high as to reasonably preclude maintenance of the land in predominantly rural uses. In addition, the mill rate applied to the assessed valuation is often rising rapidly in developing communities due to increased demands for urban services, in particular for school services. This is particularly true where communities have allowed substantially unregulated land development to occur, resulting in extensive urban sprawl.

Section 70.32 of the Wisconsin Statutes directs local assessors to assess real estate at the full market value which could ordinarily be obtained at a private sale. Where such open lands are adjacent to, or within, a rapidly urbanizing area, and particularly where poor land use regulations have permitted highly dispersed urban development, property tax assessments may reflect the public's

sometimes exaggerated estimate of development potential. Even if the land is zoned for exclusive agricultural or conservancy use, the local assessor is allowed to consider the establishment of the market value of real property based on the reasonable probability of rezoning to permit more intensive use. Some lands zoned for agricultural or conservancy use realistically leave no potential for more intensive development, so that the market value and assessed value both should reflect that fact. Under present Wisconsin constitutional and statutory law, the most satisfactory way to relieve the owner of lands zoned for exclusive agricultural or conservancy use or for floodland use from the possibility of unrealistically high property assessment and resultant taxation where it exists is to remove the development potential. This may be accomplished in one of five ways:

1. The property owner may voluntarily grant to a governmental unit an easement for value that would prohibit development for a period of at least 20 years.
2. The property owner may voluntarily place restrictive covenants which would prohibit development and would be enforceable by a governmental unit in perpetuity or for some substantial time.
3. A governmental unit may purchase the development rights.
4. The land may be taxed as agricultural or other open space land so long as it remains in such use.
5. The owner of agricultural or open space lands may be granted an income tax deduction.<sup>1</sup>

All of these private or governmental actions will directly enhance the income of the individual land owner. Under points number 1, 2, and 4 the local assessor would assess lands at their fair market value for agricultural, conservancy, and floodland uses rather than for development potential urban uses, and the landowner would realize value through a reduced assessment of his property. Under point number 3, each individual landowner would realize additional value through the sale of development rights. Finally under point number 5, each individual landowner would realize value through a reduction in his income tax. It is recommended that all cities, villages, and towns instruct their assessors that, where the possibility of rezoning and development exists, such potential tax relief exists for individual property owners upon their voluntary sale or relinquishment of development rights. It is further recommended that the Wisconsin Department of Revenue develop guidelines on the extent to which assessments should be reduced if development potential is effectively removed in fact.

---

<sup>1</sup>Enabling legislation for this method is contained in the recently adopted Farmland Preservation Act, Wis. Stats. Chapter 91 (1977).

It is recognized that all five above methods of compensating the landowner for preserving open space lands represent techniques largely untried in the Southeastern Wisconsin Region. At the present time, however, they represent the only satisfactory ways in which the inconsistencies between the Wisconsin taxing, land development, and open space reservation policies can at least partially be overcome.

#### Official Mapping

In addition to zoning regulations, the official mapping powers possessed by local units of government may also be utilized to ensure the availability of primary environmental corridors and potential recreation lands outside the primary environmental corridors which are eventually to be acquired by the public sector. Such powers as well as recommended mapping survey procedures, are set forth in SEWRPC Planning Guide No. 2, Official Mapping Guide, 1964. It is recommended that all affected cities, villages, and towns in the Region prepare and adopt, pursuant to Section 62.23(6) of the Wisconsin Statutes, official maps showing as parkways all primary environmental corridors recommended for acquisition under the regional park and open space plan and as parks all park sites identified in the local refinement of the regional park and open space plan. Such official maps should be prepared for both the area encompassed within the corporate limits of the municipalities and the area within the extraterritorial subdivision plat approval jurisdictional area and should be adopted by an ordinance similar to that set forth in Appendix A of SEWRPC Planning Guide No. 2.

#### Subdivision Control Ordinances

Any city, village, town, or county which has established a planning agency may adopt ordinances controlling the subdivision of land. Subdivision control ordinances may control lot sizes, street width, and street and other improvements. Moreover, subdivision control ordinances may require parkland dedication and/or fee in lieu of dedication during the land subdivision process. Subdivision control ordinances, thus, may become very important techniques enabling local units of government to preserve areas for recreation and open space preservation purposes without incurring land acquisition costs. Accordingly, it is recommended that all affected cities, villages, and towns in the Region, as well as counties having unincorporated area, prepare and adopt pursuant to Section 236.45(1) of the Wisconsin Statutes subdivision control ordinances requiring a parkland dedication or fee in lieu of dedication requirement.

#### Land Acquisition—Open Space Preservation

The primary environmental corridor plan component of the open space preservation plan element of the recommended regional park and open space plan emphasizes preservation and protection of the best remaining elements of the natural resource base by preserving the regional primary environmental corridors. Implementation of the recommended primary environmental corridor plan component would serve to protect all of the net primary environmental corridor lands in the Region through a combination of public acquisition and

public land use regulation. In general, the plan component recommends public acquisition of the following types of primary environmental lands: undeveloped primary environmental corridor lands lying in urban areas or areas expected to be in urban use by the plan design year; high value wetland and woodland areas located in the primary environmental corridor adjacent to existing publicly owned woodlands, wetlands, and wildlife areas; other undeveloped primary environmental corridor lands along the main stems of the major rivers of the Region; and selected additional segments of the primary environmental corridor, the preservation of which is important to the social and economic well being and environmental quality of the Region.

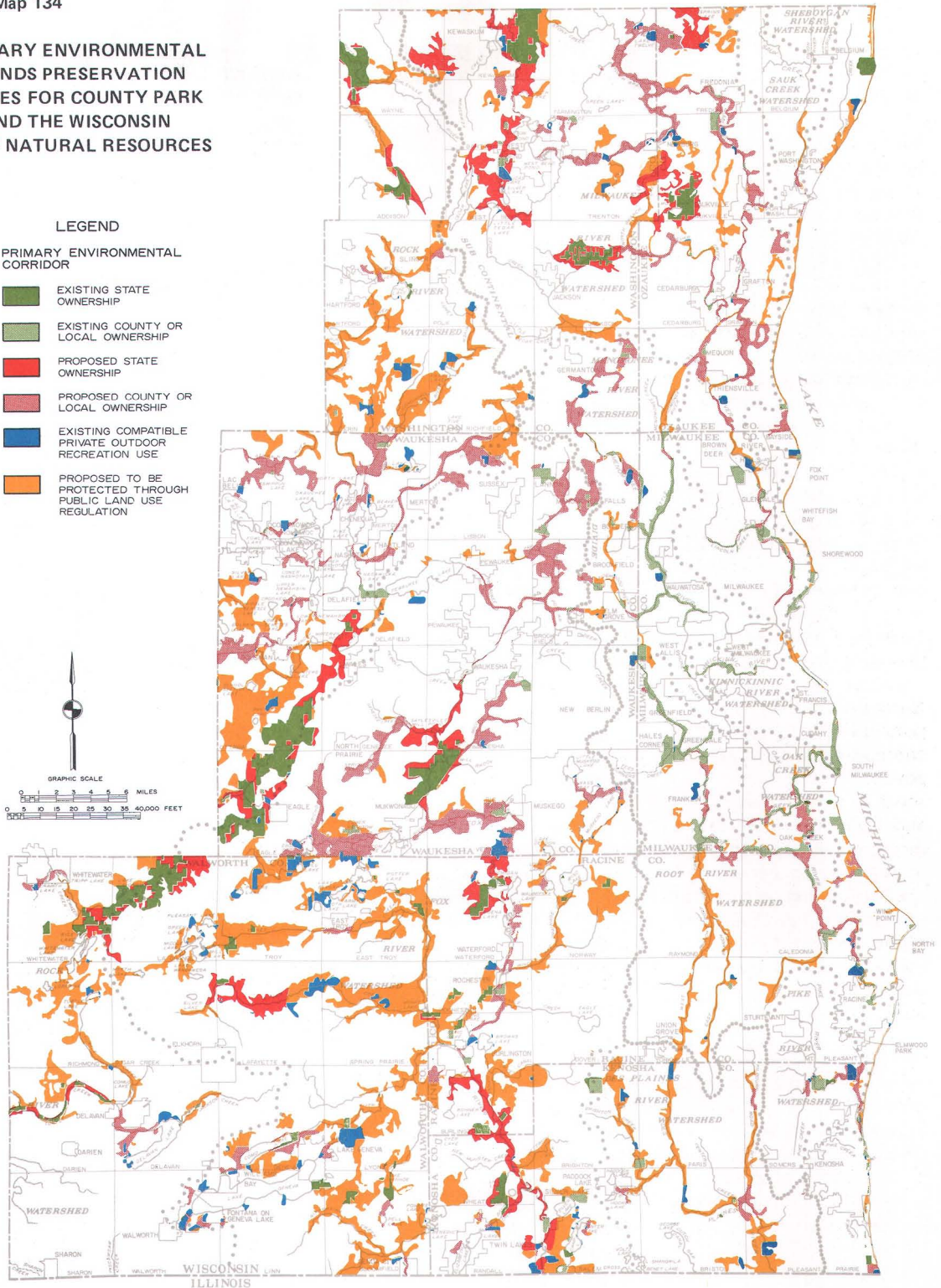
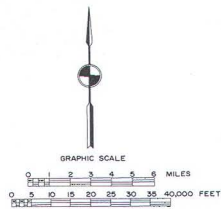
Under the primary environmental corridor plan component, up to 144,860 acres of primary environmental corridor lands would eventually be placed in public ownership, an increase of 98,950 acres over the 45,910 acres of net primary environmental corridor lands in public ownership in the Region in 1973. The planned increase of 98,950 acres in public environmental corridor lands, it should be noted, represents a maximum figure which includes all net primary environmental corridor lands within the configuration of environmental corridors which are designated for public acquisition on Map 134. Local studies which refine the primary environmental corridors plan component may determine that certain areas within these corridor configurations may be effectively preserved through zoning and that public acquisition is not required to maintain such lands in their natural state. Such zoning may significantly reduce the amount of public acquisition which is required to achieve the recommended open space preservation objectives.

It is important to recognize, however, that, while zoning is an extremely important open space preservation tool, the use of the police power to achieve plan implementation has some significant limitations. Questions relating to the confiscatory nature of the use of the police power inevitably rise when such powers are extensively used for natural resource preservation objectives. Time and again attempts will be made by private landowners to convert their land to another use, often through the filling of significant wetland areas and the clearing of significant woodland areas. Filling and clearing usually destroy the primary natural resource value of the land. Such attempts at land use conversion inevitably arise, particularly in areas undergoing rapid urbanization. Thus, local plan commissions and governing bodies are constantly faced with applications to convert land uses; to fill low-lying wetland areas; and, in effect, to destroy the natural resource base. It will, therefore, be desirable in plan implementation to purchase for permanent preservation many segments of the primary environmental corridor, particularly those which lie in or adjacent to existing urban areas or areas which may be expected to be in urban use by the plan design year. Such public acquisition serves to assure the permanent preservation and protection of these important remaining elements of the natural resource base and to lend equity to the situation in which landowners are faced with no real alternative



**PROPOSED PRIMARY ENVIRONMENTAL  
CORRIDOR LANDS PRESERVATION  
RESPONSIBILITIES FOR COUNTY PARK  
AGENCIES AND THE WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES**

- LEGEND**
- PRIMARY ENVIRONMENTAL  
CORRIDOR**
- EXISTING STATE OWNERSHIP
  - EXISTING COUNTY OR LOCAL OWNERSHIP
  - PROPOSED STATE OWNERSHIP
  - PROPOSED COUNTY OR LOCAL OWNERSHIP
  - EXISTING COMPATIBLE PRIVATE OUTDOOR RECREATION USE
  - PROPOSED TO BE PROTECTED THROUGH PUBLIC LAND USE REGULATION



Primary environmental corridor lands excluding the 66 square miles of surface water area of lakes and streams totaled 437 square miles within the Region in 1970. About 72 square miles, or 16 percent of this area, are presently in public ownership. The open space preservation plan element recommends public acquisition of an additional 155 square miles, or an additional 36 percent, of these primary environmental corridor lands. About 62 square miles, or 40 percent of the 155 square miles of corridor lands proposed for acquisition under the plan, are recommended to be purchased by the Wisconsin Department of Natural Resources (DNR). The plan recommends that the DNR purchase the remaining environmental corridor lands within Department project boundaries such as the Kettle Moraine State Forest and acquire additional segments of primary environmental corridor, primarily along the main stem of the Fox River in Kenosha and Racine Counties south of the City of Burlington, along Sugar Creek in the Towns of Lafayette and Sugar Creek in Walworth County, immediately south and west of West Bend in Washington County, in the Huiras Lake area in Ozaukee County, and in the eastern portion of the Town of Wayne in Washington County. About 93 square miles, or 60 percent of the 155 square miles of primary environmental corridor lands proposed for acquisition under the plan, would be the responsibility of county governments. Those areas of primary environmental corridors which are not actually acquired by the public sector, including existing private outdoor recreation areas, would be kept in compatible essentially open and natural uses through the use of exclusive agricultural, floodland, shoreland, conservancy and very low density residential zoning of five-acre lot size minimum. A total of about 210 square miles, or 48 percent of the primary environmental corridor lands in the Region, would be zoned in such a manner.

Source: SEWRPC.



uses for significant parcels of land, parcels that, properly or improperly, may be increasing in assessed valuation as development proceeds in the surrounding area.

Where public acquisition rather than zoning is required to assure the permanent preservation of the primary environmental corridor, the public ownership could be acquired in fee simple or in less than fee simple as more detailed studies looking to plan implementation might indicate was most cost-effective. Purchase of less than fee simple of such corridor lands may be cheaper than outright purchase and may result in more rapid preservation of the primary environmental corridors. Such acquisition of less than fee simple may be in the form of a scenic or conservation easement or may involve the conveyance of development rights to assure continuance of very low-density residential, private park, and related open space uses as noted above. Purchase of less than fee simple also offers potential long-run savings to the extent that public maintenance costs can be avoided. It should be noted, however, that recent experience in the purchase of less than fee simple interest has indicated that such purchase in the Region may be as expensive as the outright purchase in fee simple interest. In such situations a more cost-effective method of preserving open space lands might be through an outright purchase and return lease arrangement.

Responsibility for implementation of the land acquisition portion of the primary environmental corridor plan component rests largely with the State and with county governments in the Region. Recommendations concerning specific corridor segments to be acquired by the State and by county governments are set forth below. It is recommended, however, that cities, villages, and towns in the Region cooperate with the various county park agencies in the acquisition of corridor lands through preservation in open use by appropriate zoning and official mapping measures, pending acquisition. In the interest of implementing the primary environmental corridor plan component, it may also be feasible to involve cities, villages, and towns in the actual acquisition of primary environmental corridor lands. Several communities have initiated corridor acquisition programs and already own segments of the primary environmental corridor. Those communities may wish to continue their acquisition program separately or with financial assistance from their respective counties, or they may desire to donate their holdings to the county as was done in Milwaukee County in 1937.

Open Space Preservation—State Acquisition: During the past several decades, the State has acquired some of the most significant natural resource areas in the Region, maintaining them in their open, natural state. State-owned natural areas in the Region range in size from the Kettle Moraine State Forest which is located in the western portion of the Region to small wetland areas scattered throughout southeastern Wisconsin. It is recommended that the Wisconsin Department of Natural Resources continue to acquire primary environmental corridor lands in southeastern Wisconsin having high

value resource amenities of statewide or regional significance. The specific segments of the primary environmental corridor which are recommended for acquisition by the Department of Natural Resources are shown on Map 134. It is recommended that the Department of Natural Resources purchase the remaining environmental corridor lands within the existing Department project boundaries and certain additional environmental corridor lands adjacent to the Department project boundaries of the following projects: the Karcher Marsh Wildlife Area and the New Munster Wildlife Area in Kenosha County; the Cedarburg Bog Scientific Area in Ozaukee County; the Tichigan Wildlife Area, the Honey Creek Wildlife Area, and the Karcher Marsh Wildlife Area in Racine County; the Kettle Moraine State Forest-Southern Unit, the Honey Creek Wildlife Area, and the Turtle Creek Wildlife Area in Walworth County; the Jackson Marsh Wildlife Area, the Allenton Wildlife Area, the Theresa Wildlife Area, and the Kettle Moraine State Forest-Northern Unit in Washington County; and the Vernon Wildlife Area, the Scuppernong Wildlife Area, and the Kettle Moraine State Forest-Southern Unit in Waukesha County.

In addition to the completion or expansion of the aforementioned projects, it is recommended that the Department of Natural Resources acquire the following additional segments of the primary environmental corridor: the segment of environmental corridor along the main stem of the Fox River in Kenosha and Racine Counties south of the City of Burlington; the segment of primary environmental corridor in the Huiras Lake area in Ozaukee County; the segment of environmental corridor along Sugar Creek in the Towns of Lafayette and Sugar Creek in Walworth County; the segment of primary environmental corridor situated immediately south and west of the City of West Bend in Washington County; and the segment of primary environmental corridor in the eastern portion of the Town of Wayne in Washington County.

The State would acquire up to a total of 39,710 additional acres of primary environmental corridor lands under the open space preservation plan element.<sup>2</sup> About 12,230 acres, or about 31 percent of the total lands proposed for acquisition, are located within existing state project acquisition boundaries and thus have been proposed for acquisition by the DNR under current DNR plans. In addition, under the open space preservation plan element, about 27,480 acres of primary environmental corridor lands located outside of the existing state project

---

<sup>2</sup>It should be noted that certain revisions to the recommended park and open space system plan, including acres to be acquired by the State, were made based upon public testimony received at the informational meetings and hearing. A description of these revisions is presented in Chapter XVI of the report, and summary tables pertaining to the revised park and open space system plan are contained in Appendix S.

acquisition boundaries would be acquired by the Wisconsin DNR (see Table 191). Of the 39,710 acres proposed for acquisition, 11,810, or almost 30 percent, are located in Washington County while no primary environmental corridor lands in Milwaukee County are proposed for DNR acquisition. It should be noted that, in addition to permanently preserving in a natural state many of the most significant remaining resource areas in the Region, state acquisition of the recommended segments of the primary environmental corridor also would provide land required for park and recreation corridor development. In particular, the expansion of the northern and southern units of the Kettle Moraine State Forest, acquisition of primary environmental corridor lands along the Fox River and Sugar Creek, and the acquisition of primary environmental corridor lands south and west of the City of West Bend would provide the "backbone" for a continuous state recreation corridor accommodating trails for extensive activities such as biking and hiking in the western portion of the Region. The Sugar Creek primary environmental corridor and the primary environmental corridor south and west of the City of West Bend, it should also be noted, include two of the eight prime potential park sites remaining in the Region which warrant consideration as possible state parks, according to the Commission's potential park sites inventory.

**Open Space Preservation—County Acquisition:** It is recommended that the county park agencies of each of the seven counties in the Region acquire the remaining undeveloped land within the primary environmental corridor configurations designated on Map 134 for acquisition by the respective counties. Maximum net primary environmental corridor acreages which would be acquired with full implementation of the open space preservation

plan element are as follows: Kenosha County—3,200 acres; Milwaukee County—2,270 acres; Ozaukee County—7,810 acres; Racine County—3,960 acres; Walworth County—4,320 acres; Washington County—8,480 acres; and Waukesha County—29,200 acres. Many reaches of the primary environmental corridor which are recommended for county acquisition lie in or adjacent to existing urban areas or areas which may be expected to be in urban use by the plan design year. Because of the considerable pressure to convert open space to urban use, the use of zoning to achieve open space preservation is most subject to challenge within such developing areas, making public acquisition—either a fee simple or less than fee simple—the only effective means to prevent urban encroachment.

#### Land Acquisition and Development—Outdoor Recreation

While the emphasis of the open space preservation element of the regional park and open space plan is the preservation through public regulation and acquisition of primary environmental corridor lands and prime agricultural lands in the Region, the emphasis of the outdoor recreation plan element is the provision of public outdoor recreation sites and facilities to meet the recreational demand of the regional population through the plan design year 2000. As noted above, many of the proposed recreation sites lie within the primary environmental corridors recommended for acquisition under the open space preservation plan element. Implementation of the open space preservation plan element would, therefore, provide for the acquisition of certain lands required as future outdoor recreation sites.

The outdoor recreation plan element of the regional park and open space plan addresses a broad range of outdoor recreation needs in southeastern Wisconsin. The main aspects of the outdoor recreation plan element are a system of major parks which would accommodate such resource-oriented activities as camping, golf, picnicking, and beach swimming; a system of recreation corridors which would connect many of the existing and proposed major parks and which would accommodate trails for such activities as hiking, biking, horseback riding, and ski touring; recommendations on local parks which would accommodate nonresource-oriented activities such as baseball and tennis; and recommendations on the provision of water access facilities on the rivers and inland lakes of the Region and along the Lake Michigan shoreline in southeastern Wisconsin.

**Major Parks:** Under the outdoor recreation plan element, the number of major parks in the Region would increase from 42 in 1973 to 69 by the year 2000. Specifically, the outdoor recreation plan element recommends the acquisition and development of 20 new major parks, the development of six existing publicly owned undeveloped park sites, and the expansion of one Type III park to the size required for a major park. The outdoor recreation plan element, it should be noted, also proposes the expansion of two existing major parks and the development of additional facilities at certain existing major parks. Under the outdoor recreation plan element, major park acreage in the Region would increase by 5,955 acres,

Table 191

#### **PROPOSED PRIMARY ENVIRONMENTAL CORRIDOR LAND ACQUISITION RESPONSIBILITIES FOR THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES BY COUNTY**

County	Primary Environmental Corridor Lands Proposed for Acquisition		
	Acres Within Existing Project Acquisition Boundaries	Acres Outside of Existing Project Acquisition Boundaries	Total Acres
Kenosha . . . .	450	2,730	3,180
Milwaukee . . .	0	0	0
Ozaukee . . . .	340	3,600	3,940
Racine. . . . .	1,890	3,340	5,230
Walworth. . . .	3,170	4,090	7,260
Washington . .	2,850	8,960	11,810
Waukesha. . . .	3,530	4,760	8,290
<b>Total</b>	<b>12,230</b>	<b>27,480</b>	<b>39,710</b>

Source: Wisconsin Department of Natural Resources and SEWRPC.

from 11,610 acres in 1973 to 17,565 acres in the year 2000. Of the planned increase in major park acreage, 1,510 acres are already in public ownership while 4,445 acres have yet to be acquired. Of the total acreage to be acquired, 2,510 acres are located in primary environmental corridors recommended for acquisition under the open space preservation plan element and would be acquired if that element were fully implemented.

Under the outdoor recreation plan element, the major parks in the Region would accommodate virtually all additional intensive resource-oriented recreation facilities required in the Region through the plan design year. In this regard, the outdoor recreation plan element proposes the development of 219 additional campsites at seven parks; public golf facilities at 12 existing or proposed major parks, including the development of ten 18-hole regulation golf courses, one 9-hole regulation golf course, and the expansion of an existing 18-hole regulation golf course to a 27-hole course; the provision of 2,155 additional picnic tables to accommodate resource-oriented picnicking at 25 existing or proposed major parks; the development of downhill skiing facilities at one existing and one proposed major park; the development of five additional public swimming beaches along the Lake Michigan shoreline in southeastern Wisconsin and the development of five additional inland swimming beaches; and the development of eight additional public nature study centers.

Under the regional park and open space plan, responsibility for major park acquisition and development rests with the state and county units of government in the Region. In particular, it is recommended that the Wisconsin Department of Natural Resources provide two additional state parks in the Region, one to be located in the Sugar Creek corridor in the Town of Lafayette in Walworth County and the other to be located on Lucas Lake in the Paradise Valley area in Washington County. These sites, it should be noted, represent two of the eight potential park sites designated in the Commission's 1963 potential park sites inventory as possessing such size and recreational resource values as to warrant consideration as possible state parks.

For the Sugar Creek site, it is recommended that the Wisconsin Department of Natural Resources acquire a minimum of 655 acres of land for development as a state park and include within the park facilities for picnicking, nature study, golf, and downhill skiing. It is further recommended that the State consider the development of a multipurpose reservoir in conjunction with this park through the construction of an earth embankment across Sugar Creek in Section 15, Town 3 North, Range 17 East; this reservoir proposal was incorporated into the comprehensive plan for the Fox River watershed adopted by the Commission in 1970. Such a reservoir would enhance the recreational value of the site by providing opportunities for beach swimming, motor boating, sailing, and fishing. It should be noted that the minimum acreage recommended for the park itself and the additional acreage which would be required

for the Sugar Creek reservoir would be acquired by the State with implementation of the open space preservation plan element.

For the Lucas Lake-Paradise Valley park site, it is recommended that the Wisconsin Department of Natural Resources develop a minimum of 580 acres of land surrounding Lucas Lake as a state park and include in the park facilities for camping, picnicking, beach swimming, and nature study. It should be noted that under the open space preservation plan element, it has already been recommended that the State acquire undeveloped land in the primary environmental corridor immediately south and west of the City of West Bend. Implementation of the open space preservation plan element would not only provide the land required for intensive recreational development within the state park but would also provide backup lands offering a desirable setting for the park itself.

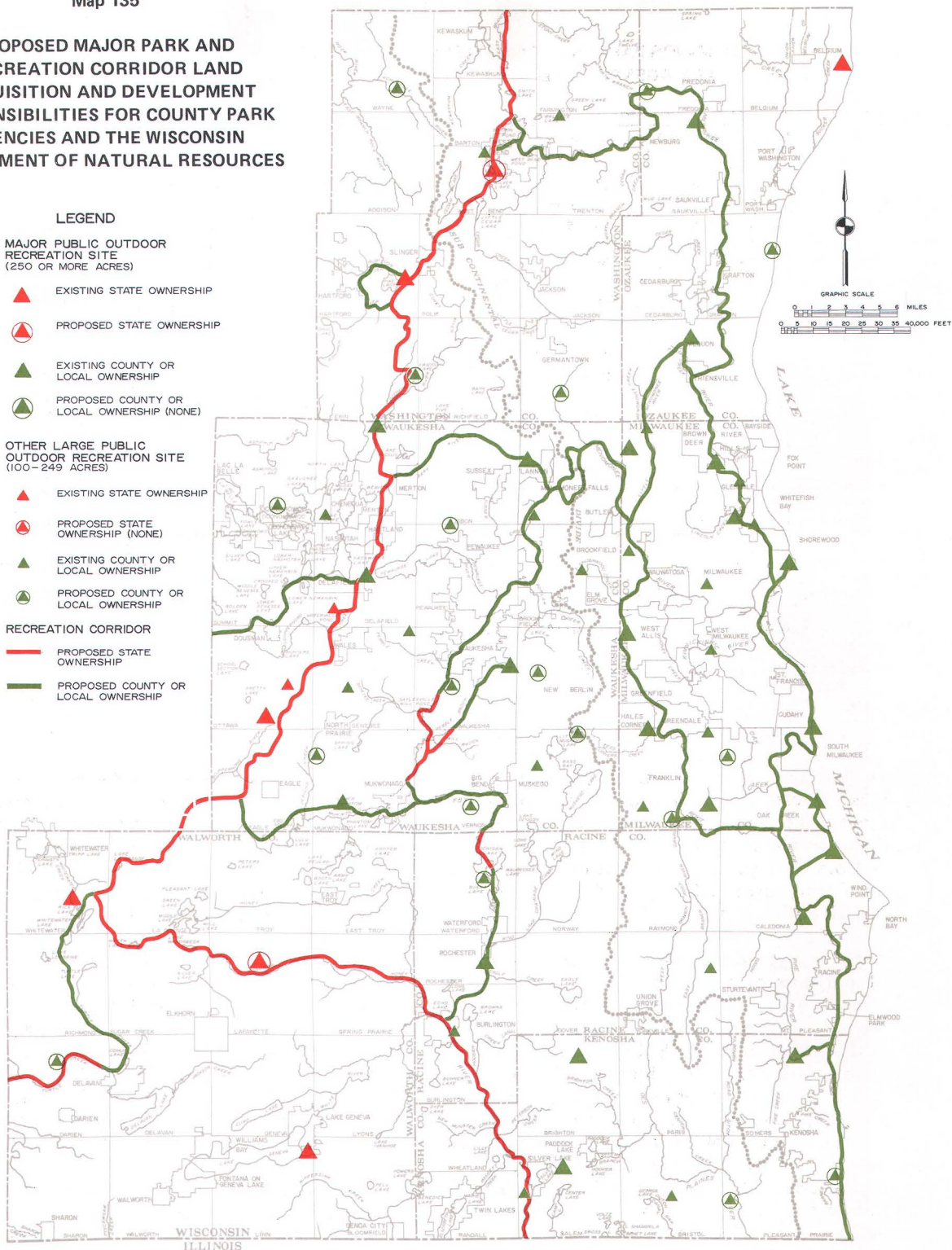
It is recommended that land acquisition and development responsibilities for other major parks be assumed by the county park agencies within the seven-county Region (see Map 135). Implementation of the major park recommendations of the outdoor recreation plan element would require county acquisition of a minimum of 3,210 acres of land. Of this total, 1,435 acres lying within the primary environmental corridor would be acquired by counties in the Region under the open space preservation plan element. Minimum land acquisition requirements and recommended facility development activities for each of the seven counties in the Region are set forth in Table 192.

While the outdoor recreation plan element places a high priority on the development of high value potential recreation areas which are accessible to population concentrations within the Region, many of the major parks and recreation corridor segments are proposed in outlying areas of the Region where resource amenities having recreational value of regional significance exist. As a result, many of the best public recreation sites in the Region may be inaccessible to those segments of the population that do not have a personal means of transportation. In view of the outlying locations at many of the proposed parks and recreation corridor segments, mass transit service should be provided on a trial basis between densely populated urban areas, where concentrations of households with no personal means of transportation exist, and certain recreational sites of regional significance. Specifically, it is recommended that the Milwaukee County transit authority undertake a demonstration project providing bus service from the central portion of Milwaukee County to two outlying state parks—namely, Harrington Beach State Park in Ozaukee County and Pike Lake State Park in Washington County—as well as to Whitnall Park in the southwestern portion of Milwaukee County. The Milwaukee County transit authority should determine the precise route configurations and the frequency of service over these generalized routes; establish fares; and, in conjunction with the Wisconsin Department of Natural Resources, determine

Map 135

**PROPOSED MAJOR PARK AND  
RECREATION CORRIDOR LAND  
ACQUISITION AND DEVELOPMENT  
RESPONSIBILITIES FOR COUNTY PARK  
AGENCIES AND THE WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES**

- LEGEND**
- MAJOR PUBLIC OUTDOOR  
RECREATION SITE  
(250 OR MORE ACRES)**
- ▲ EXISTING STATE OWNERSHIP
  - ◐ PROPOSED STATE OWNERSHIP
  - ▲ EXISTING COUNTY OR  
LOCAL OWNERSHIP
  - ◐ PROPOSED COUNTY OR  
LOCAL OWNERSHIP (NONE)
- OTHER LARGE PUBLIC  
OUTDOOR RECREATION SITE  
(100-249 ACRES)**
- ▲ EXISTING STATE OWNERSHIP
  - ◐ PROPOSED STATE OWNERSHIP (NONE)
  - ▲ EXISTING COUNTY OR  
LOCAL OWNERSHIP
  - ◐ PROPOSED COUNTY OR  
LOCAL OWNERSHIP
- RECREATION CORRIDOR**
- PROPOSED STATE OWNERSHIP
  - PROPOSED COUNTY OR  
LOCAL OWNERSHIP



The plan proposes the public acquisition and development of 20 new large—greater than 100-acre—parks. Two of the recommended parks are to be provided by the Wisconsin Department of Natural Resources (DNR), one to be located in the Sugar Creek corridor in the Town of Lafayette, and the other to be located on Lucas Lake in Paradise Valley in Washington County. The remaining 18 parks would be provided by the counties. It is also recommended that the DNR acquire lands as necessary and develop recreation trails within a continuous recreation corridor traversing the western portion of the Region through parts of Kenosha, Racine, Walworth, Washington, and Waukesha Counties. The State would, thus, be responsible for acquisition of lands and development of 107 miles, or about 26 percent, of the 405 miles of recreation trail facilities proposed under the plan. Counties would be responsible for the acquisition of lands and development of almost 300 miles, or about 74 percent of the 405 mile recreation trail facility proposed under the plan. It is also recommended that the county units of government provide additional boat access facilities to selected major inland lakes and rivers within the Region and cooperate with the U. S. Department of Army, Corps of Engineers, in selecting sites and identifying locations for access facilities to Lake Michigan in the Region.

Source: SEWRPC.



Table 192

**PROPOSED MAJOR PARKLAND ACQUISITION AND DEVELOPMENT RESPONSIBILITIES FOR  
COUNTY PARK AGENCIES AND THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES**

Governmental Agency	Proposed Land Acquisition for Major Parks									
	Lands Recommended to be Acquired Under the Open Space Preservation Plan Element (acres)	Additional Lands to be Acquired Under the Outdoor Recreation Plan Element (acres)	Total (acres)							
				Proposed Facility Development Within Major Parks						
				Campgrounds	Golf Courses <sup>a</sup>	Lake Michigan Swimming Beaches	Inland Lake Swimming Beaches	Picnic Areas	Downhill Ski Areas	Nature Study Centers
County Park Agency										
Kenosha . . . . .	85	340	425	1	2 <sup>b</sup>	1	1	3	1	2
Milwaukee . . . . .	0	225	225	1	1	1	1	6	--	--
Ozaukee . . . . .	130	210	340	1	--	2	--	2	--	1
Racine . . . . .	215	65	280	3	2 <sup>c</sup>	1	--	2	--	1
Walworth . . . . .	0	115	115	--	--	--	--	1	--	--
Washington . . . . .	380	80	460	0	2	--	2	4	--	1
Waukesha . . . . .	625	740	1,365	--	4	--	--	5	--	1
Wisconsin Department of Natural Resources	1,075	160	1,235	1	1	--	1	2	1	2
Total	2,510	1,935	4,445	7	12	5	5	25	2	8

<sup>a</sup> All 18-hole regulation golf courses unless otherwise noted.

<sup>b</sup> One 9-hole regulation golf course and one 18-hole regulation golf course.

<sup>c</sup> One 18-hole regulation golf course and the expansion of an existing 18-hole course to a 27-hole course.

Source: SEWRPC.

appropriate state park entrance fees. If these recreation related transit efforts are successful, similar endeavors should be undertaken by the Racine Transit Commission and the Kenosha Transit-Parking Commission, providing bus service from the central portions of the Racine and Kenosha urbanizing areas to Petrifying Springs Park and Silver Lake Park in Kenosha County.

**Recreation Corridors:** Recreation corridors have been defined for purposes of this report as publicly owned ribbons of land at least 15 miles in length located through areas of scenic, scientific, historic, or other cultural interest which contain trails marked and maintained for such activities as hiking, biking, horseback riding, and ski touring. The outdoor recreation plan element recommends the development of a recreation corridor network having an overall length of 405 linear miles which would, to a large extent, traverse primary environmental corridors situated within areas of the Region identified in the Commission's potential parksite inventory as possessing recreational resource values of regional significance, including the Kettle Moraine, the Lake Michigan shoreline, and the Fox River, Milwaukee River, Root River, Turtle Creek, and Sugar Creek corridors. Hiking and biking trails would be developed throughout the entire proposed public recreation corridor. The recreation corridor network would also accommodate 113 linear miles of horseback riding trails, 45 linear miles of nature study trails, and 48 miles of ski touring trails.

The recreation corridor network proposed under the outdoor recreation plan element traverses much of the Milwaukee County parkway system and virtually the entire length of the Kettle Moraine State Forest within southeastern Wisconsin. Including these lands and other smaller expanses of publicly owned lands, the proposed recreation corridor network includes 132 linear miles of corridors on lands currently in public ownership. The remaining segments of the proposed recreation corridor system, including 273 linear miles, or 67 percent of the proposed recreation corridor mileage, traverse lands currently in nonpublic ownership. Provision of recreation corridors through such nonpublic lands would require the public acquisition of a minimum of 3,470 acres of land. Of this total, 2,470 acres lying within the primary environmental corridor would be acquired under the open space preservation plan element.

Responsibility for implementation of the recreation corridor recommendations of the outdoor recreation plan element rests largely with the state and county governments in the Region. It is recommended that the Wisconsin Department of Natural Resources acquire lands as necessary and develop recreation trails within a continuous 107 linear mile recreation corridor traversing the western portion of the Region through parts of Kenosha, Racine, Walworth, Washington, and Waukesha Counties (see Map 135). The proposed state recreation corridor traverses some of the outstanding

natural resource amenities of the Region including the Fox River and Sugar Creek corridors, the Kettle Moraine, and the Paradise Valley area. The proposed state recreation corridor, it should be noted, traverses the Kettle Moraine State Forest and smaller expanses of open space land in state and local public ownership; in fact, approximately 28 linear miles, or 26 percent of the overall length of the proposed continuous state recreation corridor, traverse lands currently in public ownership. The remaining segments of the proposed state recreation corridor, including 79 linear miles, or 74 percent of the total, traverse lands currently in nonpublic ownership. The provision of a state recreation corridor through such nonpublic lands would require the state acquisition of a minimum of 1,040 acres of land (see Table 193). It should be recognized that, of this total, 680 acres lying within the primary environmental corridor would be acquired by the State under the open space preservation plan element.

In addition to the continuous state recreation corridor described above, it is recommended that the Wisconsin Department of Natural Resources develop recreation trails within other state-owned open space lands as necessary, to provide continuity throughout the overall regional recreation corridor system. In particular, it is recommended that the Department of Natural Resources develop recreation trails through the state-owned lands along the Turtle Creek corridor in Walworth County and through the Vernon Marsh in Waukesha County. The outdoor recreation plan element envisions the provision of 15 linear miles of trails within such scattered state-owned lands.

It is recommended that the county park agency of each of the seven counties within the Region acquire land as necessary and develop recreation trails along the recreation corridor segments designated on Map 135 for acquisition and development by the respective counties. County park agencies in the Region would provide a total of 283 linear miles of recreation corridors, of which 93 linear miles traverse lands which are currently in public ownership. The remaining 190 linear miles traverse lands which are presently in nonpublic ownership. The provision of recreation corridors through such lands would require county acquisition of a minimum of 2,430 acres of land. Of this total, 1,790 acres lying within the primary environmental corridor would be acquired by the counties in the Region under the open space preservation plan element. The length of the recreation corridor segment and the related land acquisition requirements for each of the seven county park agencies in the Region are set forth in Table 193.

It should be noted that, where lands required for the recreation corridor are already in city, village, or town ownership—for example, in the Village of Menomonee Falls and the City of Racine—responsibility for trail development rests with a county park agency, thereby ensuring trail system continuity. Such situations call for close cooperation between the county park agency and the local unit of government concerned, both in the initial development of trail facilities and in their continued operation and maintenance. Ultimately, the city, village, or town concerned may wish to transfer ownership of the land to the county park agency.

Table 193

**PROPOSED RECREATION CORRIDOR LAND ACQUISITION AND DEVELOPMENT RESPONSIBILITIES  
FOR COUNTY PARK AGENCIES AND THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES**

Governmental Agency	Proposed Recreation Corridors					
	Linear Mileage			Land Acquisition Requirements		
	Through Lands in Public Ownership 1973	Through Lands in Nonpublic Ownership 1973	Total	Lands Recommended to be Acquired Under Open Space Preservation Plan Element (acres)	Additional Lands to be Acquired Under the Outdoor Recreation Plan Element (acres)	Total (acres)
County Park Agency						
Kenosha . . . . .	7	8	15	70	50	120
Milwaukee . . . . .	54	19	73	160	120	280
Ozaukee . . . . .	4	35	39	360	60	420
Racine . . . . .	6	29	35	280	70	350
Walworth . . . . .	2	14	16	100	160	260
Washington . . . . .	4	19	23	140	80	220
Waukesha . . . . .	16	66	82	680	100	780
Wisconsin Department of Natural Resources	39	83	122 <sup>a</sup>	680	360	1,040
Total	132	273	405	2,470	1,000	3,470

<sup>a</sup> Includes the proposed 107 linear mile continuous recreation corridor in the western portion of the Region and 15 linear miles of trails within other state open space lands, such as the Vernon Wildlife Area and the Turtle Creek Wildlife Area.

Source: SEWRPC.

It should be noted that the proposed regional recreation corridor network includes segments which traverse intensively developed portions of the Kenosha, Milwaukee, and Racine urbanized areas as well as fully developed areas within certain outlying urban centers of the Region. Because of the density of existing urban development and the attendant lack of open space lands, it would be extremely difficult to develop a continuous public recreation corridor through such areas. Implementation of the recreation corridor proposals by the State and by county park agencies within such urbanized areas would rely heavily, therefore, on the use of such public open space lands as already exist and would, in addition, rely on the use of designated bike routes over existing roads and designated hiking routes over existing walks in order to provide the desired continuity.

**Local Parks:** The outdoor recreation plan element envisions the provision of approximately 3,158 additional acres of local park land within the urban area of the Region by the plan design year 2000. In this regard, the outdoor recreation plan element recommends the provision of a total of 30 additional Type III parks—that is, local parks between 25 and 99 acres in size—and 212 additional Type IV parks and school recreation sites of less than 25 acres in size. Under the outdoor recreation plan element, 673 acres, or 21 percent of the total planned increment in local parkland, may be expected to be provided through subdivision dedication; 230 acres, or 7 percent of the total increment, may be expected to be provided through school expansion; 748 acres, or 24 percent of the total increment, would be provided through the development of existing publicly owned undeveloped park sites; 1,333 acres, or 42 percent of the total increment, would be provided through the public acquisition and development as local parks of existing open lands; and 174 acres, or 6 percent of the total planned increment, would be provided through the acquisition, clearance, and redevelopment as local parkland of land currently in urban use in the Cities of Kenosha, Milwaukee, and Racine.

Under the outdoor recreation plan element, local parks would accommodate virtually all additional intensive nonresource-oriented outdoor recreation facilities to be provided in the Region through the plan design year. Implementation of the outdoor recreation plan element would result in the provision of the following additional intensive nonresource-oriented recreational facilities within urban areas of the Region by the year 2000: 39 baseball diamonds, 350 basketball goals, 86 playfields, 103 playgrounds, 125 softball diamonds, 251 tennis courts, 91 ice skating rinks, and two swimming pools. Specific recommendations on both the amount of local parkland and the quantity of urban outdoor recreation facilities which should be provided within each urban area through the plan design year are set forth in Tables 185 and 186 in Chapter XIV of this report.

Within each county of the Region except Milwaukee County, it is recommended that responsibility for the provision of the planned additional local parks and

related urban outdoor recreation facilities be assumed by the city, village, or town unit of government in which the need exists. City, village, and town jurisdiction over local parks and related recreation facilities is recommended because such parks and recreation facilities typically have a relatively small service radius and serve residents of a single community. In Milwaukee County, it is recommended that the County Park Commission, which has traditionally been active in the provision of local parks as well as major parks and parkways, continue to acquire and develop local parks in conjunction with the cities and villages in the county. Milwaukee County Park Commission involvement will be particularly important to the implementation of plan recommendations concerning urban redevelopment to provide much needed local parks in the City of Milwaukee; these recommendations are beyond the fiscal capability of the City of Milwaukee alone.

**Boat Access—Rivers and Inland Lakes:** The number of public lake access facilities provided should serve not only to meet the demand for such access but should be consistent with safe and enjoyable participation in various extensive water based recreation activities. Most of the major inland lakes of the Region are already heavily utilized for fast boating activities, and the number of access facilities for fast boating activities consistent with safe and enjoyable lake use is generally exceeded. The outdoor recreation plan element recommends the provision of additional access facilities to accommodate fast boating activities at only three of the 100 major inland lakes in the Region. In this regard, it is recommended that the City of Lake Geneva provide approximately 50 additional car and trailer parking spaces to accommodate fast boating activity on Geneva Lake in Walworth County; it is recommended that the Waukesha County Park and Planning Commission provide an access point to accommodate fast boating activity on Pine Lake in Waukesha County; and it is recommended that the Racine County Highway and Parks Committee provide a boat access point to accommodate fast boating activity on Wind Lake in Racine County.

While there is little need for additional access facilities to accommodate fast boating activities, many inland lakes require additional access facilities to facilitate participation in slow boating activities such as fishing and canoeing. A boat access point designed to accommodate slow boating activities, it should be noted, differs from an access point accommodating fast boating activities in that an access point for slow boating does not require a launch ramp and the related parking may be smaller because of the reliance on cartop carriers rather than trailers. The outdoor recreation plan element proposes the public provision of 25 additional slow boating access points on 25 major inland lakes in the Region. In this regard, it is recommended that the Kenosha County Park Commission provide additional public access points on Cross Lake, Dyer Lake, George Lake, and Voltz Lake; it is recommended that Racine County provide additional boat access points on Kee Nong Go Mong Lake, Long Lake, and Waubeesee Lake;

it is recommended that the Walworth County Park and Planning Commission provide additional water access points on Booth Lake, Cravath Lake, Loraine Lake, Peters Lake, and Wandawega Lake; it is recommended that the Washington County Park and Planning Commission provide additional boat access points on Bark Lake, Little Cedar Lake, Lucas Lake, Smith Lake, and Wallace Lake; and it is recommended that the Waukesha County Park and Planning Commission provide additional boat access points on Beaver Lake, Denoon Lake, Hunters Lake, Lower Nashotah Lake, Upper Nashotah Lake, North Lake, Pretty Lake, and Middle Genesee Lake.

In addition to access facilities on the major inland lakes of the Region, the outdoor recreation plan element also proposes the provision of additional water access facilities along the main stems of the Milwaukee River and the Fox River in the Region in order to accommodate slow boating activities. Specifically, it is recommended that the Milwaukee County Park Commission provide additional boat access points on the Milwaukee River at Gordon Park and at Lincoln Park; it is recommended that the Village of Grafton provide a boat access point along the Milwaukee River at Lime Kiln Park; it is recommended that the Washington County Park and Planning Commission provide a boat access point along the Milwaukee River at or in the vicinity of the Village of Newburg; it is recommended that the City of West Bend provide a boat access point along the Milwaukee River at Riverside Park; it is recommended that the Racine County Highway and Parks Committee provide a boat access point along the Fox River at Ela Park; it is recommended that the Kenosha County Park Commission provide a boat access point along the Fox River at Fox River Park; and it is recommended that the Waukesha County Park and Planning Commission include boat access points in the development of park sites No. 15 and No. 17. These parks are proposed for county development along the Fox River south of the City of Waukesha.

**Boat Access—Lake Michigan:** In contrast with the situation pertaining to the inland lakes of the Region where the number of access facilities must be properly related to the capacity of each lake to accommodate water based recreation activities, access facilities on Lake Michigan can be provided in quantities sufficient to fully meet existing and probable future demands. Based upon the application of the recommended per capita standard for boat launch ramps and boat slips to the forecast regional population, an additional 19 launch ramps and an additional 1,310 boat slips would be required by the year 2000. Moreover, the recommended maximum distance between boat access points within harbors of refuge along Lake Michigan is 15 miles and, based upon that standard, "voids" in the location of access points exist between the harbors of the City of Milwaukee and the City of Port Washington and between the harbor of the City of Racine and the boat launching site located at the mouth of Oak Creek in the City of South Milwaukee.

The location and design of facilities to provide safe harbor for recreational boats must be based upon detailed planning and engineering studies which include applica-

tion of sophisticated modeling techniques to simulate the effect of wind direction and velocity as well as wave action on alternative harbor designs; detailed environmental studies including evaluation of the potentially adverse impact that construction of a given facility may have on water quality, fish life, and shoreline erosion; detailed economic analysis including the evaluation of benefits and costs that are involved; detailed social analysis including evaluation of the safety and aesthetic as well as expanded recreation opportunities involved; and, finally, detailed land use analyses including analysis of the potential effects on existing surface traffic patterns, automobile parking, and potential displacement of homes and businesses. The U. S. Department of the Army, Corps of Engineers, has initiated a study of small boat harbors of refuge along the Lake Michigan shoreline between Kenosha and Kewaunee, Wisconsin, and, having completed preliminary feasibility analyses for seven potential small boat harbors of refuge in southeastern Wisconsin, has developed a schedule for the detailed investigation of six of these sites which warrant further consideration.<sup>3</sup> It is recommended that the Corps of Engineers continue its program of detailed study of potential recreation harbors and ultimately construct small boat harbors of refuge which serve to maximize recreation opportunities on Lake Michigan. It is recommended that, in its detailed planning and engineering studies and actual harbor construction, the Corps seek to satisfy the recommended Lake Michigan water access facility standards to the maximum extent practicable.

The Corps of Engineers can undertake detailed planning and engineering studies and actual construction of harbors of refuge only with the cooperation of a local governmental agency which provides all lands, easements, and rights-of-way necessary for the construction and maintenance of the project; provides funds equal to 50 percent of the final cost of general navigation facilities including breakwaters, entrance channels, launch ramps, and anchorage and maneuvering areas; and provides and maintains berthing areas, necessary mooring facilities, and support facilities. It is recommended that local units of government along Lake Michigan shoreline in southeastern Wisconsin cooperate to the greatest extent possible with the Corps of Engineers in the provision of the required Lake Michigan water access facilities.

---

<sup>3</sup>In southeastern Wisconsin, the Corps of Engineers completed preliminary feasibility analysis for recreational boat harbors along the Lake Michigan shoreline at Doctors Park, Grant Park, Bender Park, South Shore Park, and Sheridan Park in Milwaukee County as well as for recreational boat harbors in the City of Kenosha and the City of Racine. All but Doctors Park warranted further study by the Corps of Engineers. It should be noted that the construction of a recreational harbor at Port Washington by the Corps of Engineers has already been authorized.



## FINANCIAL CONSIDERATIONS

### Capital Investment Cost

The full capital investment cost of implementing the recommended regional park and open space plan for southeastern Wisconsin is estimated at \$261.4 million (see Table 194). The average annual cost of the total capital investment required for plan implementation would approximate \$10.1 million, or about \$5.05 per capita over the 26-year plan design period. The average annual per capita cost is based upon a regional population of 2.0 million persons, equal to the anticipated average resident population of the Region between the 1975 existing population level of 1.79 million persons and the anticipated year 2000 population level of 2.22 million persons.

Of the total capital investment cost, \$100.3 million, or 38 percent, would be required for implementation of the open space preservation plan element—specifically, for the acquisition of primary environmental corridor lands. The average annual capital cost required for implementation of the open space preservation plan element would approximate \$3.9 million, or almost \$1.95 per capita. This per capita investment cost represents the maximum amount required for purchase of all undeveloped lands within the environmental corridors designated for public acquisition on Map 134. As pre-

viously indicated, local studies which refine the open space preservation plan element may determine that certain areas within these corridors may be effectively preserved through zoning or other land use controls and that public acquisition is not required to insure their preservation, or that acquisition of easements or other less than fee simple title may be adequate. Such zoning or partial acquisition can significantly reduce the amount of public acquisition required to achieve preservation of the primary environmental corridors, thereby substantially decreasing the cost of plan implementation.

Implementation of the outdoor recreation plan element would require a public outlay of \$161.1 million, or 62 percent of the total public capital investment required for implementation of the regional park and open space plan (see Table 194). This amounts to about \$6.2 million, or \$3.10 per capita, on an average annual basis. Of the total capital cost of implementing the outdoor recreation plan element, about \$33.7 million is required for major park acquisition and development; \$12.7 million for recreation corridor acquisition and development; \$0.2 million for inland water access acquisition and development; \$19.3 million for the development of Lake Michigan recreational boat access facilities; and \$95.2 million for local park acquisition and development, including substantial outlays for the acquisition and clearance of developed urban areas for future redevelopment as local

Table 194

### CAPITAL INVESTMENT COSTS UNDER THE REGIONAL PARK AND OPEN SPACE PLAN FOR SOUTHEASTERN WISCONSIN

Plan Element	Total Outlays				Average Annual Outlay	
	Acquisition (dollars)	Development (dollars)	Total		Total (dollars)	Per Capita (dollars)
			Dollars	Percent of Total		
Open Space Preservation Plan Element Primary Environmental Corridor Acquisition. .	100,312,000	—	100,312,000	38.4	3,858,000	1.93
Outdoor Recreation Plan Element						
Major Parks . . . . .	3,023,000 <sup>a</sup>	30,717,000	33,740,000	12.9	1,298,000	0.65
Recreation Corridors . . . . .	2,025,000 <sup>b</sup>	10,671,500	12,696,500	4.8	488,000	0.25
Inland Lake and River Access . . . . .	89,400 <sup>c</sup>	64,300	153,700	0.1	6,000	— <sup>d</sup>
Lake Michigan Access . . . . .	—	19,280,000	19,280,000	7.4	742,000	0.37
Local Parks . . . . .	75,582,500	19,632,515	95,215,015	36.4	3,662,000	1.83
Subtotal	80,719,900	80,365,315	161,085,215	61.6	6,196,000	3.10
Total	181,031,900	80,365,315	261,397,215	100.0	10,054,000	5.03

<sup>a</sup> An additional \$3,908,000 required for the purchase of the major parks has already been included in the cost of primary environmental corridor acquisition under the open space preservation plan element.

<sup>b</sup> An additional \$3,562,000 required for the purchase of recreation corridors has already been included in the cost of primary environmental corridor acquisition under the open space preservation plan element.

<sup>c</sup> An additional \$26,000 required for the purchase of inland lake and river access points has already been included in the cost of primary environmental corridor acquisition under the open space preservation plan element.

<sup>d</sup> Less than \$0.005.

Source: SEWRPC.

parks. It is important to recognize that the outdoor recreation plan element envisions the development as parks and recreation corridors of substantial tracts of primary environmental corridor lands which would be publicly purchased under the open space preservation plan element. More specifically, about 5,000 acres of land acquired under the open space preservation plan element at an estimated \$7.5 million would be developed for recreational use under the outdoor recreation plan element.

#### Schedule of Plan Implementation Costs

In order to assist the responsible public officials in the implementation of the recommended regional park and open space plan, a preliminary capital improvement program was prepared which, if followed, would result in total park and open space plan implementation by the year 2000. This preliminary capital improvement plan includes the staging of the necessary land acquisition and facility development and the distribution of the attendant cost over the 26-year plan implementation period. This program is presented in summary form for the Region as a whole in Table 195 and is presented by county in a series of tables in Appendix Q. These tables set forth land acquisition and development costs and the estimated operation and maintenance costs associated with implementation of the park and open space plan by year for the levels of government concerned. The ultimate adoption of capital improvement programs for implementation of the regional park and open space plan will require determination by responsible public officials of not only those plan elements which are to be implemented and the timing of such implementation but also of the principal beneficiaries and the available means of financing.

As indicated in Table 195, outlays for park and open space acquisition and development under the regional park and open space plan for all counties in the Region combined are estimated at \$188.0 million over the plan design period, or \$7.3 million per year. Outlays for all cities, villages, towns, and school districts combined are estimated at \$30.7 million over the plan design period, or \$1.2 million per year. State outlays for park acquisition and development under the regional park and open space plan total \$42.7 million over the plan design period, or \$1.6 million per year. It should be noted that virtually all outlays for park and open space acquisition and development are eligible for up to 50 percent matching funds, primarily through the LAWCON and ORAP funding programs as described in Chapter VII of this report.

In addition to the capital investment cost associated with implementation of the recommended regional park and open space plan, substantial public expenses will be incurred in efforts to operate and maintain the resulting park and open space system. Estimated total annual operation and maintenance costs—including the cost of maintaining existing parks and open space lands and the incremental maintenance cost associated with additional recreation and open space lands recommended under the park and open space plan—are set forth in Table 195. These operation and maintenance costs exclude expenditures for the operation of recreation programs.

As indicated in Table 195, public expenditures for operation of the regional park and open space system throughout the 26-year plan design period may be expected to total \$714.5 million. Average annual operation and maintenance costs would be approximately \$27.5 million, including \$18.0 million for county governments in the Region; \$8.6 million for cities, villages, towns, and school districts in the Region; and \$0.9 million for the State. It should be noted that the foregoing operation and maintenance costs for counties in the Region and for the State include costs for the maintenance of undeveloped open space lands which have been recommended for public acquisition under the open space preservation plan element. As previously indicated, local planning efforts which refine the open space preservation plan element may determine that zoning may be effectively utilized to preserve undeveloped lands within many of the primary environmental corridors which have been recommended for public acquisition. To the extent that zoning rather than public acquisition can be utilized to permanently preserve primary environmental corridor lands, county and state acquisition of primary environmental corridor lands may be substantially reduced resulting in not only lower capital but in lower operation and maintenance costs.

#### Financial Feasibility

In order to assess the possible impact of implementation of the regional park and open space plan on the public financial resources of the local units of government in the Region and the State, a comparison was made between the estimated plan costs, as set forth above, and the level of expenditures for parks and open space which may be expected based upon a continuation of past expenditure patterns. The fiscal feasibility of the regional park and open space plan for local units of government in the Region and for the State are considered below.

Local Financial Feasibility: Information has been set forth in Chapter VIII of this report on the level of outlays for park and open space acquisition and development as well as expenses for park and open space operation and maintenance by cities, villages, towns, and counties in the Region for the period from 1964 through 1974. Two alternative projections of total local outlays for park and open space acquisition and development and two alternative projections of total local expenses for park and open space operation and maintenance were prepared on the basis of the historic local park expenditure trends for the 1964-1974 period (see Figure 72).

The first projection assumes 1) that total annual receipts by local units of government in the Region would increase to the year 2000 at the same average annual rate which occurred over the 1964-1974 period; 2) that monies expended for park and open space will constitute a constant proportion of the total receipts over the projection period; and 3) that this constant proportion would be equal to the average annual proportion which occurred over the 1964-1974 period. As indicated in Table 196 and Figure 72, under this set of assumptions, total local outlays for park and open space acquisition and development by all cities, villages, towns, and counties in the Region combined are projected to increase to an annual

Table 195

**SCHEDULE OF CAPITAL AND OPERATION AND MAINTENANCE COSTS OF THE RECOMMENDED REGIONAL  
PARK AND OPEN SPACE PLAN BY LEVEL OF GOVERNMENT WITHIN THE REGION BY YEAR: 1975-2000**

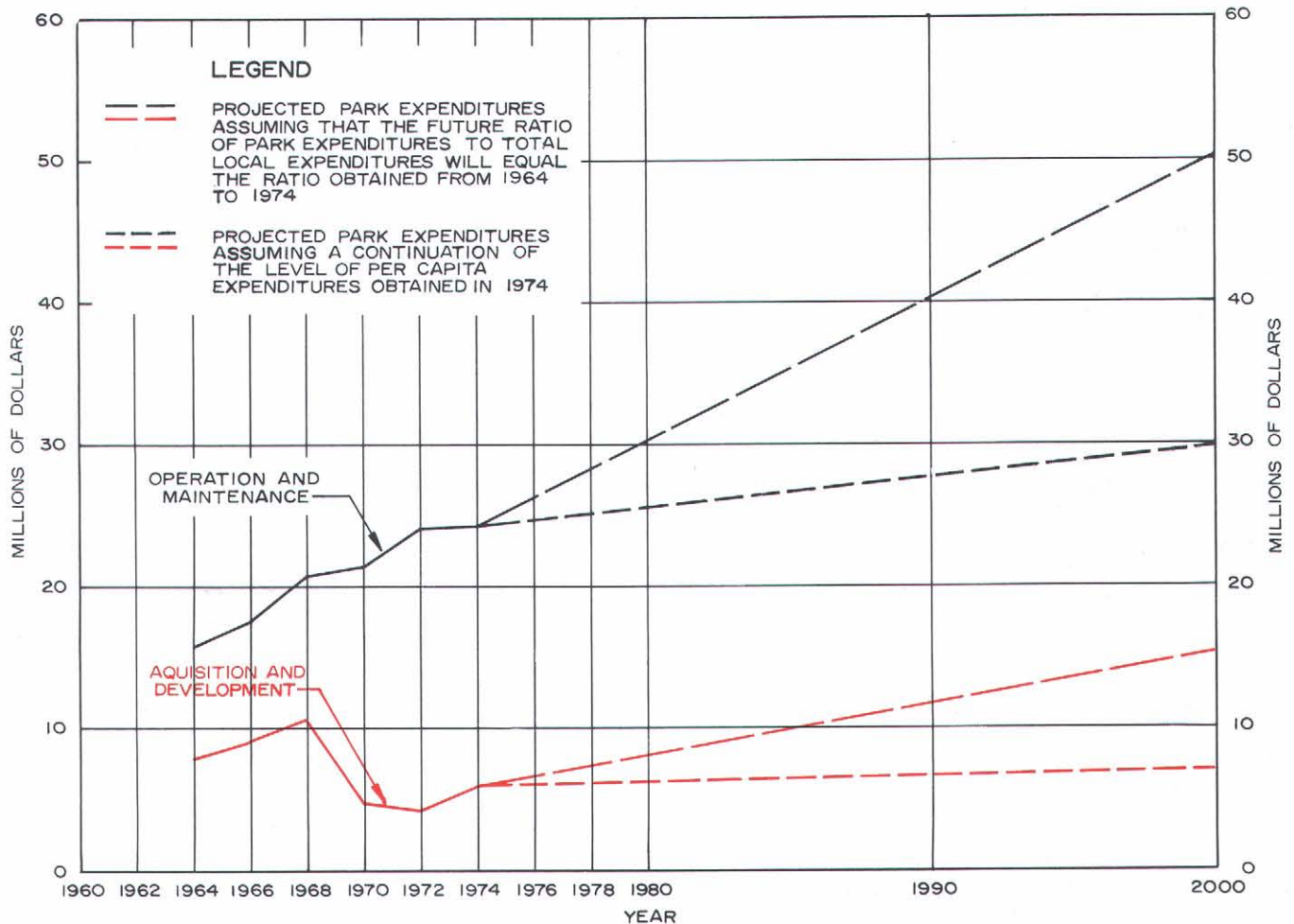
Calendar Year	Project Year	County					Cities, Villages, Towns, School Districts					State									
		Major Parks Recreation Corridors Water Access Facilities Environmental Corridor Preservation					Local Parks Water Access Facilities					Major Parks Recreation Corridor Environmental Corridor Preservation					All Public Agencies				
		Acquisition	Development	Total Outlay	Operation and Maintenance <sup>a</sup>	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance <sup>a</sup>	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance <sup>a</sup>	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance <sup>a</sup>	Total
1975	1	5,563,218	1,665,649	7,228,867	16,349,961	23,578,828	560,634	620,869	1,181,503	8,060,940	9,242,443	1,432,155	211,211	1,643,366	475,788	2,119,154	7,556,007	2,497,729	10,053,736	24,886,689	34,940,425
1976	2	5,563,221	1,665,645	7,228,866	16,484,122	23,712,988	560,633	620,871	1,181,504	8,104,381	9,285,885	1,432,152	211,213	1,643,365	505,676	2,149,041	7,556,006	2,497,729	10,053,735	25,094,179	35,147,814
1977	3	5,563,218	1,665,649	7,228,867	16,618,283	23,847,150	560,634	620,871	1,181,505	8,147,821	9,329,326	1,432,156	211,211	1,643,366	535,562	2,178,928	7,556,007	2,497,731	10,053,738	25,301,866	35,355,404
1978	4	5,563,220	1,665,647	7,228,867	16,752,445	23,981,312	560,634	620,869	1,181,503	8,191,262	9,372,765	1,432,152	211,212	1,643,364	565,450	2,208,814	7,556,006	2,497,728	10,053,734	25,509,157	35,562,891
1979	5	5,563,219	1,665,648	7,228,867	16,886,607	24,115,474	560,634	620,871	1,181,505	8,234,701	9,416,206	1,432,155	211,211	1,643,366	595,338	2,238,704	7,556,008	2,497,730	10,053,738	25,716,646	35,770,384
1980	6	5,563,220	1,665,647	7,228,867	17,020,769	24,249,636	560,633	620,871	1,181,504	8,278,142	9,459,646	1,432,152	211,212	1,643,364	625,224	2,268,588	7,556,005	2,497,730	10,053,735	25,924,135	35,977,870
1981	7	5,563,219	1,665,649	7,228,868	17,154,931	24,383,799	560,635	620,869	1,181,504	8,321,582	9,503,086	1,432,155	211,211	1,643,366	655,112	2,298,478	7,556,009	2,497,729	10,053,738	26,131,625	36,185,363
1982	8	5,563,221	1,665,647	7,228,868	17,289,093	24,517,961	560,635	620,871	1,181,506	8,365,023	9,546,529	1,432,154	211,211	1,643,365	685,001	2,328,366	7,556,008	2,497,731	10,053,740	26,339,117	36,392,856
1983	9	5,563,219	1,665,649	7,228,868	17,423,255	24,652,123	560,635	620,871	1,181,506	8,408,463	9,589,969	1,432,155	211,211	1,643,366	714,889	2,358,255	7,556,008	2,497,729	10,053,737	26,546,607	36,600,347
1984	10	5,563,220	1,665,648	7,228,868	17,557,417	24,786,285	560,635	620,869	1,181,504	8,451,904	9,633,408	1,432,153	211,212	1,643,365	744,779	2,388,144	7,556,010	2,497,730	10,053,740	26,754,100	36,807,837
1985	11	5,563,220	1,665,648	7,228,868	17,691,579	24,920,447	560,635	620,871	1,181,506	8,495,344	9,676,850	1,432,155	211,211	1,643,366	774,669	2,418,035	7,556,010	2,497,730	10,053,740	26,961,592	37,015,332
1986	12	5,563,220	1,665,648	7,228,868	17,825,742	25,054,610	560,634	620,872	1,181,506	8,538,785	9,720,291	1,432,154	211,211	1,643,366	804,557	2,447,922	7,556,008	2,497,731	10,053,739	27,169,084	37,222,823
1987	13	5,563,219	1,665,650	7,228,869	17,959,805	25,188,774	560,635	620,871	1,181,506	8,582,228	9,763,734	1,432,154	211,211	1,643,365	834,447	2,477,812	7,556,008	2,497,732	10,053,740	27,376,580	37,430,320
1988	14	5,563,220	1,665,648	7,228,868	18,094,068	25,322,936	560,635	620,872	1,181,507	8,625,672	9,807,179	1,432,152	211,213	1,643,365	864,337	2,507,702	7,556,007	2,497,733	10,053,740	27,584,077	37,637,817
1989	15	5,563,219	1,665,650	7,228,869	18,228,231	25,457,100	560,635	620,871	1,181,506	8,669,114	9,850,620	1,432,155	211,211	1,643,366	894,225	2,537,591	7,556,009	2,497,732	10,053,741	27,791,570	37,845,311
1990	16	5,563,221	1,665,647	7,228,868	18,362,395	25,591,263	560,634	620,871	1,181,505	8,712,558	9,894,063	1,432,154	211,211	1,643,365	924,115	2,567,480	7,556,009	2,497,729	10,053,738	27,999,068	38,052,806
1991	17	4,020,788	3,208,080	7,228,868	18,496,559	25,725,427	560,635	620,871	1,181,506	8,756,002	9,937,508	1,432,154	211,212	1,643,366	954,006	2,597,372	6,013,577	4,040,163	10,053,740	28,206,567	38,260,307
1992	18	4,020,789	3,208,079	7,228,868	18,630,723	25,859,591	560,635	620,871	1,181,506	8,799,447	9,980,953	1,432,154	211,211	1,643,365	983,895	2,627,260	6,013,578	4,040,161	10,053,739	28,414,065	38,467,804
1993	19	4,020,788	3,208,082	7,228,870	18,764,887	25,993,757	560,635	620,870	1,181,505	8,842,891	10,024,396	1,432,153	211,213	1,643,366	1,013,786	2,657,152	6,013,576	4,040,165	10,053,741	28,621,564	38,675,305
1994	20	4,020,790	3,208,079	7,228,869	18,899,051	26,127,920	560,635	620,872	1,181,507	8,886,335	10,067,842	1,432,155	211,211	1,643,366	1,043,678	2,687,044	6,013,580	4,040,162	10,053,742	28,829,064	38,882,806
1995	21	4,020,788	3,208,082	7,228,870	19,033,215	26,262,085	560,635	620,871	1,181,506	8,929,779	10,111,285	1,432,154	211,212	1,643,366	1,073,568	2,716,934	6,013,577	4,040,165	10,053,742	29,036,562	39,090,304
1996	22	4,020,790	3,208,079	7,228,869	19,167,380	26,396,249	560,635	620,871	1,181,506	8,973,224	10,154,730	1,432,153	211,211	1,643,364	1,103,460	2,746,824	6,013,578	4,040,161	10,053,739	29,244,064	39,297,803
1997	23	4,020,786	3,208,083	7,228,869	19,301,546	26,530,415	560,635	620,871	1,181,506	9,016,668	10,198,174	1,432,154	211,212	1,643,366	1,133,352	2,776,718	6,013,575	4,040,166	10,053,741	29,451,566	39,505,307
1998	24	4,020,792	3,208,078	7,228,870	19,435,713	26,664,583	560,635	620,871	1,181,506	9,060,113	10,241,619	1,432,154	211,211	1,643,365	1,163,242	2,806,607	6,013,581	4,040,160	10,053,741	29,659,068	39,712,809
1999	25	4,020,786	3,208,083	7,228,869	19,569,881	26,798,750	560,635	620,871	1,181,506	9,103,557	10,285,063	1,432,153	211,212	1,643,365	1,193,133	2,836,498	6,013,574	4,040,166	10,053,740	29,866,571	39,920,311
2000	26	4,020,789	3,208,081	7,228,870	19,704,050	26,932,920	560,635	620,871	1,181,506	9,147,000	10,328,506	1,432,154	211,212	1,643,366	1,223,025	2,866,391	6,013,578	4,040,164	10,053,742	30,074,075	40,127,817
Total		129,219,400	58,731,175	187,950,575	468,701,808	656,652,383	14,576,500	16,142,640	30,719,140	223,702,936	254,422,076	37,236,000	5,491,500	42,727,500	22,084,314	64,811,814	181,031,900	80,365,315	261,397,215	714,489,058	975,886,273
Annual Average		4,969,977	2,258,891	7,228,868	18,026,993	25,265,861	560,634	620,871	1,181,505	8,603,959	9,785,464	1,432,154	211,212	1,643,366	849,397	2,492,763	6,962,765	3,090,974	10,053,739	27,480,348	37,534,088

<sup>a</sup> Incremental maintenance and operation costs are based on an estimated average cost of \$300 per acre for major parks in rural areas, \$400 per acre for major parks in urban areas, \$500 per acre for local parks, \$75 per linear mile for recreation corridor segments in rural areas, \$150 per linear mile for recreation corridor segments in urban areas, \$10 per acre for primary environmental corridor lands in rural areas, and \$50 per acre for primary environmental corridor lands in urban areas.

Source: SEWRPC.

Figure 72

LOCAL PUBLIC EXPENDITURE TRENDS AND ALTERNATIVE PROJECTIONS OF LOCAL  
PUBLIC EXPENDITURES FOR PARKS AND OPEN SPACE IN THE REGION: 1964-2000



Source: SEWRPC.

rate of \$15.4 million by the year 2000.<sup>4</sup> On a cumulative basis, a total of \$275.5 million would be invested by local units of government in the Region for park and open space acquisition and development over the entire plan design period. Similarly, under this set of assumptions, total local expenses for park and open space operation and maintenance for all cities, villages, towns, and counties in the Region combined are projected to increase to an annual rate of \$50.1 million by the year 2000. Cumulatively, expenses by local units of government in the

Region for park and open space operation and maintenance may be expected to total \$966.7 million over the plan design period (see Table 196).

The second projection assumes that the per capita park and open space expenditure which occurred in 1974 would remain constant to the year 2000. Under this assumption, total local outlays for park and open space acquisition and development for all cities, villages, towns, and counties in the Region combined are projected to increase to an annual rate of \$7.1 million by the year 2000 and to total \$166.8 million over the plan design period. Furthermore, under this assumption, total local expenses for park and open space operation and maintenance for all local units of government in the Region are

<sup>4</sup>All monetary amounts presented in this section are expressed in constant 1974 dollars.



Table 196

**ALTERNATIVE PROJECTIONS OF LOCAL OUTLAYS FOR PARK AND OPEN SPACE ACQUISITION AND DEVELOPMENT AND  
LOCAL EXPENSES FOR PARK AND OPEN SPACE OPERATION AND MAINTENANCE IN SOUTHEASTERN WISCONSIN: 1975-2000**

Area of Expenditure	Actual Expenditure 1974 (dollars)	Alternative Projection 1 (in 1974 dollars)		Alternative Projection 2 (in 1974 dollars)		Average of Projection 1 and Projection 2 (in 1974 dollars)	
		Year 2000	Total Over Entire Plan Design Period 1975-2000	Year 2000	Total Over Entire Plan Design Period 1975-2000	Year 2000	Total Over Entire Plan Design Period 1975-2000
Local Outlays for Park and Open Space Acquisition and Development . . . . .	5,770,369	15,424,800	275,537,210	7,101,760	166,781,550	11,263,280	221,159,380
Local Expenses for Park and Open Space Operation and Maintenance. . . . .	24,233,190	50,130,600	966,729,270	29,893,971	702,046,098	40,012,286	834,387,684

Source: SEWRPC.

projected to increase to an annual rate of \$29.9 million by the year 2000 and to total \$702.0 million over the plan design period (see Table 196).

A review of past expenditure patterns along with the range of possible future expenditure levels, thus, indicates that between \$166.8 million and \$275.5 million may be expected to be expended by local units of government in the Region for park and open space acquisition and development and that between \$702.0 million and \$996.7 million may be expected to be expended for park and open space operation and maintenance. These projections do not represent any major departures from past expenditure levels and, therefore, may be considered conservative in nature.

The estimated capital cost to local units of government in the Region for implementation of the regional park and open space plan is \$218.7 million. This amount can be compared on a gross basis with the possible expenditure of \$221.2 million, the average of the two alternative projections of local outlays for park and open space acquisition and development throughout the plan design period. Conversely, local public expenditures for operation and maintenance of the regional park and open space system throughout the plan design year is estimated at \$692.4 million. This amount can, in turn, be compared on a gross basis with a possible expenditure of \$834.4 million, the average of the two alternative projections of local spending for park and open space operation and maintenance throughout the plan design period. The foregoing comparisons indicate that, with respect to local units of government, more money would be available to implement the plan than would be needed.

While a continuation of the recent trend of overall expenditures for parks and open space by local units of government in the Region would provide sufficient funds to meet overall local plan implementation costs, a shift in the distribution of park expenditures among local units of government would be required to achieve full plan implementation. As indicated in Chapter VIII, Milwaukee

County historically has accounted for a large proportion of all local park and open space expenditures in the Region. Milwaukee County traditionally has assigned a high priority to parks and recreation, and the operation of the Milwaukee County park system is closely scaled to, and coordinated with, the changing needs of the metropolitan area. The current decentralization of population to the adjacent counties, however, has created more pressure for similar facilities in the suburban and outlying areas of the Region. While considerable public expenditures for parks and open space acquisition, development, operation, and maintenance are required in Milwaukee under the regional park and open space plan, an increased level of expenditure for parks and open space is required for counties and many communities in the outlying areas of the Region in order to meet growing recreation demands and open space needs.

In order to illustrate the shift in spending which is required if the regional park and open space plan is to be implemented, annual park and open space expenditures under the regional park and open space plan are presented for Milwaukee County and for the remaining six counties in the Region combined in Table 197. These cost figures, it should be noted, include expenditures by the county units of government as well as by city, village, and town units of government in their respective counties. As indicated in Table 197, while the level of annual outlays for park and open space acquisition and development would have to increase slightly over the 1974 level for local units of government in Milwaukee County, the level of outlays for acquisition and development would more than double for local units of government in the remainder of the Region, rising from \$2.3 million in 1974 to an annual average of \$4.6 million over the plan design period—a proportionate increase of 100 percent. Because of the substantial population growth in the outlying areas of the Region, however, the average annual outlay on a per capita basis would increase from \$2.97 in 1974 to an annual average of \$4.74 over the plan design period, a relative increase of 60 percent. Similarly, while the level of annual expenses for park and open

Table 197

**PARK AND OPEN SPACE OUTLAYS AND EXPENSES FOR LOCAL UNITS OF GOVERNMENT  
IN MILWAUKEE COUNTY AND THE REMAINDER OF THE REGION: ACTUAL 1974 AND PLANNED 1975-2000**

Government Units		Outlays for Park and Open Space Acquisition and Development			Expenses for Park and Open Space Operation and Maintenance		
		Actual 1974 (dollars)	Planned: 1975-2000 (dollars)		Actual 1974 (dollars)	Planned: 1975-2000 (dollars)	
			Average Per Year	Total Over Plan Design Period		Average Per Year	Total Over Plan Design Period
Milwaukee County <sup>a</sup>	Total	3,495,187	3,800,749	98,819,475	18,926,165	19,386,219	504,041,700
	Per Capita	3.38	3.69	--	18.33	18.80	--
Balance of Region <sup>b</sup>	Total	2,275,087	4,609,624	119,850,240	5,307,025	7,244,732	188,363,044
	Per Capita	2.97	4.74	--	6.93	7.44	--

<sup>a</sup> Includes county government and city and village units of government in Milwaukee County.

<sup>b</sup> Includes county units of government and city, village, and town units of government in Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties.

Source: SEWRPC.

space operation and maintenance would increase slightly—by 2 percent—over the 1974 level for local units of government in Milwaukee County, operation and maintenance expenses for parks and open space would increase considerably—by 36 percent—for local units of government in the balance of the Region, rising from \$5.3 million in 1974 to an annual average of \$7.2 million over the plan design period. Again, because of the anticipated substantial population increase, the average annual level of expenses for park and open space operation and maintenance is expected to increase by only 7 percent, from \$6.93 per person in 1974 to an annual average of \$7.44 per person over the plan design period.

Table 198 provides a further indication of the geographic shift in spending patterns required for implementation of the regional park and open space plan. This Table indicates the level of per capita spending proposed under the regional plan for county and local units of government within each of the seven counties in the Region. Total per capita spending in Milwaukee and Racine Counties would not change significantly from current (1974) levels. Conversely, per capita spending would increase significantly—by 30 percent or more—in Walworth, Washington, and Waukesha Counties. Despite the planned increase in park and open space expenditures, the level of per capita spending for parks and open space purposes in the outlying counties will remain substantially lower than the level of per capita spending in Milwaukee County.

It is important to recognize that state and federal aids have offset a considerable portion of local investment in parks and open space land in the recent past, and it is reasonable to assume that greater amounts of state and federal aids for park and open space acquisition and development will be made available in future years. In this regard, for example, additional federal money has

been appropriated to the Federal Land and Water Conservation (LAWCON) fund, the effect being essentially a tripling of the amount of aids available under LAWCON through the 1980's. Such increases in park and open space aids would significantly soften the impact of increased spending for park and open space acquisition and development in outlying areas of the Region.

**State Financial Feasibility:** The estimated capital cost to the State for its role in implementation of the regional park and open space plan is approximately \$42.7 million. A large share of the total outlay—\$37.2 million, or 87 percent—is required for land acquisition, including acquisition required for major parks and recreation corridors as well as acquisition for open space preservation purposes.

Between 1964 and 1974, state spending for park and open space land acquisition within the Region totaled \$6.1 million, or an annual average of \$0.6 million during that 10-year period. State outlays for land acquisition alone, excluding expenditures for facility development and operation and maintenance, would have to average \$1.6 million per year for full implementation of the regional park and open space plan. It is important to recognize, however, that the foregoing state land acquisition cost is a maximum cost which includes amounts for the purchase of all undeveloped lands within the configuration of environmental corridors which are recommended to be considered for state acquisition under the open space preservation plan element and which are designated for state acquisition on Map 134. As previously noted, further refinement of the open space preservation plan element may determine that certain areas within those corridor configurations may be effectively preserved through zoning and that state acquisition is not necessary to ensure permanent protection.

Table 198

## ACTUAL (1974) AND PLANNED LOCAL PUBLIC PER CAPITA EXPENDITURES FOR PARKS AND OPEN SPACE

County	Agency of Government	Per Capita Expenses for Operation and Maintenance			Per Capita Outlay for Acquisition and Development			Total Per Capita Park and Open Space Expenditure		
		Actual 1974	Annual Average Under Plan	Percent Difference	Actual 1974	Annual Average Under Plan	Percent Difference	Actual 1974	Annual Average Under Plan	Percent Difference
Kenosha	City, Village, Town, School County	3.38 3.09	3.38 3.83	-- 24	1.63 1.38	1.34 2.37	- 18 72	5.01 4.47	4.72 6.20	- 6 39
	Total	6.47	7.21	11	3.01	3.71	23	9.48	10.92	15
Milwaukee	City, Village County	4.43 13.90	4.44 14.36	0 3	0.55 2.83	0.00 3.69	- 100 30	4.98 16.73	4.44 18.05	- 11 8
	Total	18.33	18.80	3	3.38	3.69	9	21.71	22.49	4
Ozaukee	City, Village, Town, School County	4.30 2.55	3.95 3.26	- 8 28	2.32 2.13	1.90 4.81	- 18 126	6.62 4.68	5.85 8.07	- 12 72
	Total	6.85	7.21	5	4.45	6.71	51	11.30	13.92	23
Racine	City, Village, Town, School County	5.65 2.62	5.40 3.19	- 4 22	2.65 2.78	2.12 2.09	- 20 - 25	8.30 5.40	7.52 5.28	- 9 - 2
	Total	8.27	8.59	4	5.43	4.21	- 22	13.70	12.80	- 7
Walworth	City, Village, Town, School County	4.06 0.02	4.19 0.86	3 -- <sup>a</sup>	1.40 0.05	0.79 3.57	- 44 -- <sup>a</sup>	5.46 0.07	4.98 4.43	- 9 -- <sup>a</sup>
	Total	4.08	5.05	24	1.45	4.36	201	5.53	9.41	70
Washington	City, Village, Town, School County	4.31 0.44	3.39 2.27	- 21 416	1.28 0.62	0.54 4.15	- 58 569	5.59 1.06	3.93 6.42	- 30 506
	Total	4.75	5.66	19	1.90	4.69	147	6.65	10.35	56
Waukesha	City, Village, Town, School County	4.47 3.18	4.02 4.08	- 10 28	1.70 0.79	0.77 4.31	- 55 446	6.17 3.97	4.79 8.39	- 22 111
	Total	7.65	8.10	6	2.49	5.08	104	10.14	13.18	30
Region		13.47	13.29	- 1	3.21	4.20	31	16.68	17.49	5

<sup>a</sup> Consideration of percent change is not meaningful, owing to very low base year expenditure.

Source: Wisconsin Department of Revenue, Bureau of Municipal Audit; Milwaukee County Park Commission; Milwaukee Public Schools, Division of Municipal Recreation and Adult Education; and SEWRPC.

A reduction in the amount of land acquisition by the State under the open space preservation plan element notwithstanding, it remains apparent that implementation of the regional park and open space plan will require an increased level of state expenditure in southeastern Wisconsin. Increasing federal park and open space aids to the State, it should be noted, may partially offset the increased level of state spending in the Region. Regardless of the source of funds, however, the increased level of state spending is reasonable in view of the fact that the Southeastern Wisconsin Region contains approximately 40 percent of the state population but only 4 percent of the state park and open space land. It may reasonably

be argued that, within the State, the greatest need for recreation land is in southeastern Wisconsin where the largest concentration of population exists. It may further be argued that, within the State, the greatest need for open space acquisition is also in southeastern Wisconsin because of the rapid urbanization of the Region and the attendant danger of losing valuable open space lands.

#### SUMMARY

This chapter has described the various means available and has recommended specific procedures for implementation of the recommended regional park and open space

plan. The most important recommended plan implementation actions are summarized in the following paragraphs by level of government, responsible agency or unit of government, and plan element.

#### Federal Level

U. S. Department of Housing and Urban Development: It is recommended that the U. S. Department of Housing and Urban Development:

1. Formally acknowledge the regional park and open space plan and utilize this plan in its administration and granting of federal community development block grants.

U. S. Department of Interior, Bureau of Outdoor Recreation: It is recommended that the U. S. Department of Interior, Bureau of Outdoor Recreation:

1. Formally acknowledge the regional park and open space plan and utilize this plan in the administration and granting of federal aids under the Land and Water Conservation Act.

U. S. Department of the Army, Corps of Engineers: It is recommended that the U. S. Department of the Army, Corps of Engineers:

1. Formally acknowledge the recommended regional park and open space plan.
2. Continue its program of detailed study of potential recreational harbors and ultimately construct small boat harbors of refuge which serve to maximize recreational opportunities on Lake Michigan.

#### State Level

Wisconsin Department of Natural Resources: It is recommended that the State Natural Resources Board and the Department of Natural Resources:

1. Endorse the regional park and open space plan and integrate that plan into the long-range state conservation and comprehensive outdoor recreation plans.
2. Coordinate the recommended regional park and open space plan with its activities relating to floodland and shoreland zoning.
3. Adopt the recommended schedule of capital and operation and maintenance costs set forth in this chapter for plan implementation and allocate annually the monies so scheduled.
4. Acquire up to 39,700 acres of primary environmental corridor lands recommended for acquisition by the State under the open space preservation plan element. Specifically, purchase the remaining primary environmental corridor lands within the existing Department project boundaries and certain additional environmental corridor lands adjacent to the Department bound-

daries of the following projects: the Karcher Marsh Wildlife Area and the New Munster Wildlife Area in Kenosha County; the Cedarburg Bog Scientific Area in Ozaukee County; the Tichigan Wildlife Area, Honey Creek Wildlife Area, and Karcher Marsh Wildlife Area in Racine County; the Kettle Moraine State Forest-Southern Unit, Honey Creek Wildlife Area, and Turtle Creek Wildlife Area in Walworth County; the Jackson Marsh Wildlife Area, Allenton Wildlife Area, Theresa Wildlife Area, and Kettle Moraine State Forest-Northern Unit in Washington County; and the Vernon Wildlife Area, Scuppernong Wildlife Area, and Kettle Moraine State Forest-Southern Unit in Waukesha County. In addition to the completion or expansion of the aforementioned projects, acquire the following additional segments of the primary environmental corridor: the segment of environmental corridor along the main stem of the Fox River in Kenosha and Racine Counties south of the City of Burlington; the segment of environmental corridor along Sugar Creek in the Towns of Lafayette and Sugar Creek in Walworth County; the segment of primary environmental corridor situated immediately south and west of the City of West Bend in Washington County; the segment of primary environmental corridor in the Huiras Lake area in Ozaukee County; and the segment of primary environmental corridor in the eastern portion of the Town of Wayne in Washington County.

5. Develop a minimum of 580 acres of land surrounding Lucas Lake in Paradise Valley, Washington County, as a new state park, utilizing lands purchased under the foregoing primary environmental corridor acquisition recommendations.
6. Develop a minimum of 655 acres of land as a new state park at the Sugar Creek park site in the Town of Lafayette, Walworth County, utilizing lands purchased under the foregoing primary environmental corridor acquisition recommendations.
7. Acquire lands as necessary and develop recreation trails within a continuous 107-linear-mile recreation corridor traversing the western portion of the Region through parts of Kenosha, Racine, Walworth, Washington, and Waukesha Counties, maximizing the use of existing state-owned land, such as the Kettle Moraine State Forest, and lands purchased under the foregoing primary environmental corridor acquisition recommendations.

Wisconsin Department of Local Affairs and Development: It is recommended that the Wisconsin Department of Local Affairs and Development:

1. Endorse the recommended regional park and open space plan and integrate the plan into its activities with respect to the provision of technical assistance to local units of government and with respect to reviewing subdivision plans.



State Historical Society of Wisconsin: It is recommended that the State Historical Society of Wisconsin:

1. Endorse the recommended regional park and open space plan and integrate the inventory of unmarked historic sites into the state's program of marking historic, archeological, geological, and legendary sites in the Region.

Wisconsin Department of Revenue: It is recommended that the Wisconsin Department of Revenue:

1. Develop property assessment guidelines for use in the removal of the development of rights of lands zoned for exclusive agricultural or conservancy use, focusing on the extent to which assessments should be reduced if development potential is effectively removed in fact.

#### Local Level

County Boards of Supervisors: It is recommended that the county boards of supervisors of the seven constituent counties of the Region, upon the recommendation of the appropriate agencies and committees:

1. Adopt the recommended regional park and open space plan, as it applies to each county, as a guide to future open space preservation and park acquisition and development.
2. Support the continued operation of the Technical and Citizens Advisory Committee on Regional Park and Open Space Planning as a continuing intergovernmental advisory body concerned with regional park and open space plan adjustment and implementation.
3. Consider the establishment of a county park and planning commission and reassign, as appropriate, all county zoning, subdivision plat review, and park and recreation functions (Kenosha, Ozaukee, and Racine Counties).
4. Amend the county zoning ordinance to provide for the recommended exclusive residential, agricultural, conservancy, floodland, shoreland, and park districts to provide for the protection and preservation of the natural resource base and the reservation of lands for outdoor recreation purposes (counties having unincorporated area).
5. Adopt or amend subdivision control ordinances to require a parkland dedication or fee in lieu of dedication requirement (counties having unincorporated area).
6. Adopt the recommended schedules of capital outlay and operation and maintenance costs set forth in this chapter for plan implementation and allocate annually the monies as so scheduled, including amounts for primary environmental corridor preservation, major parks, recreation corridors, and water access facilities.

County Park and Planning Agencies: It is recommended that the park and planning agencies of the seven counties of the Region:

1. Recommend to the county board adoption of the recommended regional park and open space plan, as it applies to each county, as a guide to future open space preservation and park acquisition and development.
2. Refine the recommended regional park and open space plan and integrate the plan into any existing county park plans.
3. Formulate and petition the county board to adopt appropriate amendments to the existing county zoning ordinance to effectuate the open space preservation and the outdoor recreation plan elements.
4. Acquire undeveloped land within the primary environmental corridor configurations recommended for county acquisition under the open space preservation plan element.
5. Acquire and develop all additional major parks, with the exception of the proposed Sugar Creek and Paradise Valley park sites, as set forth in the recommended outdoor recreation plan element.
6. Acquire lands as necessary and develop recreation trails within those segments of the proposed recreation corridor which have been recommended for county jurisdiction under the outdoor recreation plan element.
7. Acquire lands as necessary and develop river and inland lake small boat water access facilities, providing boat access points which have been recommended for county jurisdiction under the outdoor recreation plan element; cooperate with the U. S. Department of the Army, Corps of Engineers, in the provision of required Lake Michigan water access facilities (Kenosha, Racine, Milwaukee, and Ozaukee Counties).
8. Assist in urban redevelopment activities to provide much needed parks in certain fully developed areas (Milwaukee County).

Milwaukee County Transit Board: It is recommended that the Milwaukee County Transit Board:

1. Undertake a demonstration project providing bus service from the central portion of Milwaukee County to two outlying state parks—namely, Harrington Beach State Park in Ozaukee County and Pike Lake State Park in Washington County—as well as to Whitnall Park in the southwestern portion of Milwaukee County; determine the precise route configurations and the frequency of service over these generalized routes; establish

fares; and, in conjunction with the Department of Natural Resources, determine appropriate state park entrance fees.

Common Councils, Village Boards, and Town Boards: It is recommended that, upon the recommendation of the local planning commission, each common council, village board, and town board within the Region:

1. Adopt the recommended regional park and open space plan, as it applies to each community, as a guide to future open space preservation and park acquisition and development.
2. Support the continued operation of the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning as a continuing intergovernmental advisory body concerned with regional park and open space plan adjustment and implementation.
3. Consider the establishment of local park boards or commissions to administer local park acquisition, development, operation, and maintenance activities (all cities, villages, and towns which contain urban areas requiring local parks and outdoor recreation facilities as indicated in the outdoor recreation plan element).
4. Adopt new zoning ordinances or amend existing zoning ordinances, as necessary, to provide district regulations, including the exclusive use districts and floodland and shoreland regulations similar to those provided in the SEWRPC Model Zoning Ordinance, together with appropriate zoning district map changes, to reflect the recommended open space preservation plan element as well as to reserve land required for outdoor recreation purposes.

5. Instruct local assessors of potential tax relief for individual property owners of land zoned for agricultural and conservancy use upon their voluntary sale or relinquishment of development rights.

6. Prepare and adopt official maps that show as parkways all primary environmental corridors recommended for acquisition under the regional park and open space plan and as parks all park sites identified in the local refinement of the regional park and open space plan.

7. Prepare and adopt subdivision control ordinances requiring a parkland dedication or fee in lieu of dedication requirement.

City, Village, and Town Park Boards and Commissions: It is recommended that the park agencies of all cities, villages, and towns within the Region:

1. Refine the recommended regional plan as this plan affects their area of jurisdiction and integrate the regional plan into an existing local park and open space plan.
2. Acquire land as necessary and develop local parks as recommended under the outdoor recreation plan element.
3. Acquire lands as necessary and develop river and inland lake small boat water access facilities providing boat access points which have been recommended for city or village jurisdiction under the outdoor recreation plan element; cooperate with the U. S. Department of the Army, Corps of Engineers, in the provision of required Lake Michigan water access facilities (cities, villages, and towns along the Lake Michigan shoreline in southeastern Wisconsin).

(This page intentionally left blank)

## SUMMARY AND CONCLUSIONS

## INTRODUCTION

The Commission, since its inception, has placed great emphasis on the importance of the development of a comprehensive plan for the physical development of the Region. One of the most important elements of such a comprehensive plan is a regional park and open space plan. Park and open space facilities not only meet certain very basic human needs for outdoor recreation, but also can contribute directly to the preservation and protection of the natural resource base and thereby to the preservation and enhancement of the overall quality of the environment within the Region.

Accordingly, the Commission on October 9, 1972, created a Technical and Citizen Advisory Committee on Regional Park and Open Space Planning to assist the Commission and its staff in the design and conduct of a regional park and open space planning program. The Committee was formed in response to specific requests from the Common Council of the City of Racine and the Milwaukee County Park Commission that the Commission undertake an areawide park planning program. The U. S. Department of Housing and Urban Development also indicated that an areawide park plan was required for continued federal certification of the regional planning program. The Committee membership included, in addition to public officials responsible for park acquisition and development within the Region, citizen leaders drawn from a broad cross section of the community. The citizen leaders included representatives of natural resource, conservation, and environmental preservation groups; representatives of recreation and recreation related business and industries; and representatives from low income and minority groups from core areas of the larger central cities of the Region. A prospectus which documented the need for the program and outlined the desirable scope and content of the program was completed by the Committee in January 1973, and work on the regional park and open space study, as outlined in the prospectus, began in July 1973. Two-thirds of the funding for the \$180,000 study was provided by the U. S. Department of Housing and Urban Development while the Wisconsin Department of Natural Resources provided one-sixth of the needed funds and the seven counties provided the remaining one-sixth.

The primary purpose of the regional park and open space planning program was the development of a sound and workable plan to guide the staged acquisition and development of lands needed within the Region for outdoor recreation and natural resource protection purposes. More specifically, the regional park and open space plan was to identify the need for, and recommend the general location, size, and character of, those park and open

space sites needed within the Southeastern Wisconsin Region to the year 2000; to provide data which could contribute to sound county and local park and open space planning and development; to qualify units and agencies of government within the Region for state and federal grant-in-aid programs for public park and open space facility acquisition and development; and to provide a basis for Commission review of federal and state grant applications for park and open space facility acquisition and development. The plan also was intended to assure coordination of public park and open space acquisition and development with private outdoor recreation facility development. The major findings and recommendations of the regional park and open space planning effort are documented and presented in this report.

## INVENTORY FINDINGS

Socioeconomic Base

An understanding of the size, distribution, and composition of the regional population is essential to sound areawide park and open space planning. The size of the population is directly related to the total demand for recreation lands and facilities. The distribution of the population affects the location of both existing and needed recreational lands and facilities. The composition of the population, especially the age composition, directly affects the type of recreational facilities required.

In 1970 the population of the Region totaled about 1.76 million persons. The rate of population growth from 1960 to 1970 approximated 18,000 persons per year, considerably lower than the approximately 33,000-persons-per-year growth rate experienced within the Region from 1950 to 1960.

Population growth rates are expected to decline even further with the Region entering a period of very modest growth approximating that experienced in the 1930's and 1940's. The regional population is becoming increasingly decentralized, however, spreading out across established city and county boundaries. The most dramatic distributional changes over the 40-year period from 1930 to 1970 occurred in Waukesha and Milwaukee Counties. Milwaukee County's population, as a proportion of the regional population, decreased by over 12 percent over this time period, while Waukesha County's proportion of the regional population increased by about 8 percent over this time period. The most striking changes in age composition are an increase in the proportion of persons between the ages of 10 and 24 years and age 70 and over and decreases in the proportion of children under five years and adults between 30 and 39. The average per capita income in the Region increased considerably from about \$1,340 in 1949 to about \$3,430 in 1969, expressed



in actual dollars, a relative increase of 157 percent. Similarly, the average per household income in the Region grew from about \$4,680 to \$11,240, or by 140 percent over this 20-year period.

Population densities within the Region, which peaked in 1920 at a level of about 11,000 persons per square mile of developed area, have been steadily declining since then to a level of about 4,300 persons per square mile of urban area in 1970. The newer, diffused urban development is being attracted to the prime recreational resources of the Region, intruding into riverine areas, clustering around the many inland lakes, spreading out along the Lake Michigan shoreline and spreading into the Kettle Moraine forest areas. This dispersion of urban development is threatening the destruction of not only potential park and recreation sites but also of the related open space required to maintain good outdoor recreation opportunities within the Region and to preserve the overall quality of the environment.

The Region is served by a well developed street and highway system. Freeways and expressways which total about 305 miles, or about 3 percent of the total arterial street and highway system within the Region, form the backbone of that system. In 1963 freeways and expressways carried about 11 percent of the total vehicle miles of arterial travel within the Region. By 1972 this percentage increased to slightly over 33 percent.

Over 700 miles of existing streets and highways have been identified and recommended for marking as scenic drives and rustic roads as part of Commission-adopted jurisdictional highway and watershed planning programs. In addition, the Milwaukee County Park Commission has recommended the development of a network of about 85 miles of parkway and pleasure drives. Almost 35 miles, or 40 percent of the recommended total length of such drives, have already been constructed. Mass transit facilities complement and supplement the transportation service provided by the regional arterial street and highway network. Over 84 percent of the resident population of the Milwaukee, Racine, and Kenosha urbanized areas live within a quarter mile of a transit line. About 40 percent of the park and outdoor recreation sites and about 18 percent of the park and recreation land acreage of the Region are accessible by the existing mass transit systems serving the Milwaukee, Racine, and Kenosha areas.

#### Natural Resource Base

Elements of the natural resource base having particular significance to the regional park and open space planning program include climate, land forms and topography, lakes and streams, floodlands, woodlands, water and wetlands, fish and wildlife habitat areas, and agricultural lands. Extreme variations in temperature, precipitation, and snow cover directly influence the diversity, intensity, and seasonal nature of outdoor recreational activities within the Region. Summer temperatures reflected by monthly means for July and August range between 68 and 73 degrees Fahrenheit and allow for a variety of outdoor recreational activities including swimming, boating, and picnicking. Winter monthly mean tempera-

tures which range between 18 and 26 degrees Fahrenheit allow for such activities as skiing, snowmobiling, and ice skating.

Glaciation has endowed the Region with a particularly attractive and varied landscape. The dominant feature is the Kettle Moraine, an interlobate deposit formed by the Green Bay and Lake Michigan lobes of the continental glacier. Effects of the glaciation are shown in the poorly developed but highly diverse surface drainage pattern in the Region which includes 11 major watersheds and numerous small catchment areas which drain directly to Lake Michigan.

Inland lakes are focal points for water related recreation activities and are intensively used for recreational purposes by both residents and nonresidents of the Region. There are 100 major inland lakes of 50 acres or more in area in the Region having a combined surface water area of 57 square miles, or 2 percent of the total area of the Region. There are 228 lakes in the Region of less than 50 acres having a combined surface water area of four square miles, or about 0.15 percent of the area of the Region. In addition, the Region abuts Lake Michigan which constitutes a unique recreational asset as well as an important source of water supply and an important transportation artery.

The Region is drained by a network of 1,148 miles of perennial streams which constitute another valuable recreational resource. The floodlands of these streams, which comprise about 7 percent of the total area of the Region, contain important concentrations of high value woodlands, wetlands, and wildlife habitat. Indiscriminate development of these floodland areas for incompatible urban uses should be discouraged, while compatible park and open space uses should be encouraged.

Woodlands contribute to the maintenance of a diversity of plant and animal life and provide important recreation opportunities. Woodlands in 1970 covered a combined area of about 196 square miles, or about 7 percent of the total area of the Region. Over 143 square miles, or 73 percent of this total, were located in Walworth, Washington, and Waukesha Counties. Between 1963 and 1970 the Region experienced a net loss of almost eight square miles, or 4 percent, of its woodlands. Nearly 37 percent of this loss of the woodlands occurred in Waukesha County.

Water and wetlands contribute to flood control, to the maintenance of good water quality, and provide valuable wildlife habitat. Such areas covered 283 square miles, or about 10 percent of the area of the Region in 1970. This represented a net decrease of approximately 2.5 square miles of water and wetlands since 1963.

Fish and wildlife provide numerous forms of recreational pursuits for fishermen, hunters, and nature enthusiasts as well as contributing to the regional economy. Wildlife habitat areas covered approximately 406 square miles, or 15 percent of the total area of the Region, in 1970. About 40 percent of this total was classified as high value, 36 percent as medium value, and 24 percent as low value

wildlife habitat area. Approximately two square miles of the wildlife habitat area were lost within the Region from 1963 to 1970.

The most important elements of the regional resource base including the best remaining woodlands, wetlands, wildlife habitat areas, major bodies of surface water and related undeveloped floodlands and shorelands, ground water recharge and discharge areas, and sites having historic, scenic, and recreational value occur within the Region in linear areas termed by the Commission environmental corridors. There were 503 square miles of net primary environmental corridor within the Region in 1970, a decrease of about six square miles from 1963. Much of this loss occurred as a result of residential development in the corridors. Park and open space land acquisition and floodland, conservancy, recreational, exclusive agricultural, and very low-density country estate zoning have been applied to date to preserve a total of 51 percent of the total primary environmental corridor area of the Region.

Prime agricultural lands covered over 630 square miles, or almost 25 percent of the total area of the Region, in 1970. Between 1960 and 1970 13 square miles of prime agricultural lands were lost, primarily to urban development. As of 1972, almost 9.5 square miles, or about 14 percent of the total prime agricultural lands within the Region, have been protected through locally enacted exclusive agricultural zoning districts.

Primary environmental corridors and prime agricultural lands are the two main components of open space lands in southeastern Wisconsin. These areas are important to the economic as well as environmental health of the Region and constitute important recreational resources in their own right.

#### Existing Outdoor Recreation and Open Space Sites

There were 1,773 general use outdoor recreation sites totaling about 49,200 acres in area within the Region in 1973. About 23,600 acres, or 48 percent of this acreage, was in public ownership. Approximately 11,400 acres, or half of the publicly owned acreage, was under county jurisdiction. Milwaukee County with about 6,000 acres had the largest county-owned acreage. There were 138 major—100 acres or more in area—outdoor recreation sites which together totaled over 31,800 acres, or about 64 percent of the general use outdoor recreation site acreage in the Region in 1973. Sites less than 100 acres in area accounted for 92 percent of the total number of recreation sites but only 36 percent of the total site acreage in the Region.

Of the 1,773 outdoor recreation sites within the Region, 218 sites, totaling about 19,000 acres in area, were classified as single use sites providing facilities for essentially a single recreation activity such as camping, nature study, golfing, boating, or downhill skiing, while 1,555 sites, totaling about 30,000 acres, were classified as multiuse sites providing facilities for a variety of recreational activities. Ninety sites, totaling over 14,000 acres, pro-

vided a variety of extensively utilized recreation facilities reliant on natural resource amenities. The remaining 1,465 multiuse sites, totaling about 16,000 acres, providing a variety of intensively utilized recreation facilities reliant on man-made amenities.

About 27,100 acres, or 55 percent, of the 49,200 acres of existing general use outdoor recreation site acreage were located within the Region's primary environmental corridors. Almost 21,200 acres, or 51 percent of all publicly owned outdoor recreation site acreage, and about 15,000 acres, or 58 percent of all privately owned recreation site acreage, were located within the corridors.

There were over 49,300 acres of natural area sites in the Region in 1973, with 99 percent, or 48,900 acres, in public ownership. Almost 37,700 acres, or 77 percent, of such lands were in state ownership, while about 8,900 acres, or 18 percent, were in county ownership. Publicly owned natural areas consisted of wetlands, 15,800 acres; woodlands, 15,300 acres; scientific or nature areas, 8,700 acres; parkways, 6,900 acres; and other open lands, 2,600 acres. Almost 35,700 acres of these natural area sites were located within the primary environmental corridors, with the most significant proportion of this acreage represented by wetlands, 13,000 acres, and woodlands, 13,500 acres.

There were 166 special use recreation sites totaling over 4,900 acres in the Region in 1973, with 56 sites, totaling 900 acres, in public ownership, and 110 sites, totaling 4,000 acres, in private ownership. A total of 781 sites of historic significance also were identified in the Region in 1973. Of this total, 235, or 30 percent, were cultural sites related to American Indian or early European settlements; 84 sites, or 11 percent, related to natural features such as woodlands or wetland areas which support plant and animal communities of scientific importance; and 462 sites, or 59 percent, related to historic structures such as homes, churches, inns, or schools. Of the 187 marked historic sites, 74 sites, or 40 percent, were located in Milwaukee County.

In total there were over 103,000 acres of outdoor recreation and open space land in the Region in 1973, or approximately 58 acres per thousand residents. Over 73,000 acres, or 41 acres per thousand residents, were provided by the public sector while almost 30,000 acres, or 17 acres per thousand residents, were provided by the private sector. The 103,000 acres of outdoor recreation and open space represent about 6 percent of the total area of the Region.

Existing Outdoor Recreation Activities, Facilities, and Use Surveys undertaken as a part of the regional park planning program indicated that intensive resource-oriented activities—particularly camping, golf, picnicking, downhill skiing, and beach swimming—were highly popular with most age groups of both sexes. Such activities are reliant on, or significantly enhanced by, natural resource amenities. Participants in such activities were willing to travel relatively long distances from their homes—25 miles or

more; and about two out of the 10 participants in such activities in the Region were non-Wisconsin residents. The majority of facilities for beach swimming and picnicking were provided by the public sector, while the majority of facilities for camping, golf, and downhill skiing were provided by the private sector. There were 204 swimming beaches with a total of about 60,320 linear feet of beach; 429 sites with picnic areas supplying a total of 15,590 picnic tables; 47 sites with camping areas providing 3,176 camp sites; 80 sites with 9- to 36-hole regulation golf courses providing a total of 1,350 regulation golf holes; and 21 ski hills providing 182 acres of developed ski slopes in the Region in 1973.

The surveys further indicated that intensive nonresource-oriented activities—softball, pool swimming, ice skating, tennis, basketball, and playfield and playground activities—generally were popular with school age children and young adults. These activities are reliant on a man-made facility rather than natural resource amenities and participants usually traveled less than three miles to sites providing such facilities. Intensive nonresource-oriented facilities consisting of 1,278 softball diamonds; 292 ice skating rinks; 1,175 playfields; 1,023 tennis courts; 2,277 basketball goals; 945 playgrounds; and 216 baseball diamonds were provided in the Region in 1973.

The surveys indicated that extensive land based activities—pleasure driving, snowmobiling, bicycling, hiking, horseback riding, nature study, and ski touring—also were popular with most age groups of both sexes. Participation in extensive land based activities is most satisfying on exclusive linear or trail facilities through scenic areas with points of historical or cultural interest and unique topographical features. At the time of the surveys, there were 73 miles of scenic drives; 133 miles of snowmobile trails; 38 miles of bike trails and 339 miles of bike routes; 104 miles of backpack hiking trails and 90 miles of horseback riding trails; nine nature study areas; and 48 miles of ski touring trails within the Region.

Extensive water based activities—fishing, ice fishing, motor boating, water skiing, sailing, and canoeing—were highly popular with most age groups of both sexes. Participation in such activities occurred primarily on the 100 major inland lakes in the Region. Lakes having a surface area of greater than 200 acres were best suited and most often utilized for motor boating and water skiing as well as sailing, while fishing and ice fishing commonly occurred on lakes of all sizes that were capable of maintaining a sport fishery.

The surveys indicated widespread use of outdoor recreation sites within the Region. On a typical summer Sunday the surveys found that there are 266,800 persons participating in various outdoor recreation activities in the Region, with 185,000 persons, or about 70 percent of this total, utilizing public parks.

#### Financial Resources

Trends in local park and recreation revenues and disbursements provide one basis for the evaluation of the fiscal feasibility of future park and open space plans. Expressed

in actual dollars, total disbursements by local units of government within the Region for park and recreation purposes increased by 101 percent, from \$17.9 million in 1964 to \$36.1 million in 1974. This increase in park and recreation expenditures represented an 84 percent increase in the per capita expenditures for park and recreation purposes from a level of \$10.90 per person in 1964 to a level of \$20.05 per person in 1974. Expenses for park and recreation operation and maintenance represented the largest proportion, 84 percent, of all park and recreation expenditures in 1974 with the balance of expenditures consisting of outlays for park acquisition and development. Expressed in actual dollars, park and recreation expenses for operation and maintenance increased from \$12.8 million in 1964 to \$30.3 million in 1974, an increase of 137 percent. On a per capita basis, these expenses increased from \$7.77 in 1964 to \$16.84 in 1974.

Expressed in actual dollars, park and recreation department earnings for all local units of government in the Region including admission charges, rental fees, permits, and other miscellaneous fees and sales increased 263 percent from \$1.5 million in 1964 to \$5.5 million in 1974. State and federal aids for park and recreation purposes to local units of government in the Region totaled \$10.5 million between 1964 and 1974, with \$8.5 million, or 81 percent of this total, granted under federal aid programs and the balance consisting of state aids. Locally appropriated funds for park and recreation purposes derived from the local property tax, debt receipts, or other general revenue sources averaged \$24.7 million for the years 1970 to 1974, an increase of \$5.7 million, or 30 percent, from the average annual appropriation of \$19 million for the years 1964 to 1968.

A special study was conducted to identify the impact of various types of public park and open space lands on adjacent residential property values at the request of the Milwaukee County Planning Commission. The study indicated that most public open space lands have a positive impact on the value of adjacent residential property, but the magnitude of the value increment depends to a great extent on the character of the adjacent park or open space lands. Public park and open space lands which preserve and enhance attractive elements of the natural resource base—such as the parks along the Lake Michigan shoreline or parkways along water courses—increase adjacent residential property values by an average of 30 percent. Large parks which enhance the beauty of the area, in addition to providing the space and facilities for recreation pursuits, increased adjacent residential property values by an average of 16 percent, while small local neighborhood parks had a negligible impact on the adjacent residential property values increasing such values by approximately 3 percent.

#### Park and Open Space Laws, Regulations, Plans, and Administration

The seven counties in southeastern Wisconsin have selected different organizational approaches to providing needed public park and open space. Ozaukee, Milwaukee, and Kenosha Counties utilize park commissions while

Walworth, Washington, and Waukesha Counties utilize park and planning commissions. Racine County utilizes a county board committee. Of the 147 local units of government in the Region, 81, or 55 percent, have created a local park agency. All seven counties and 29 of 147 local units of government in the Region have fulltime county park staffs. Six of the seven counties, and 63 of 147 local governmental units, have completed and adopted either a park and outdoor recreation plan or a comprehensive community development plan which includes a park and outdoor recreation element. Three of the seven counties in the Region—Milwaukee, Racine, and Waukesha, and 25 of the local communities currently have state certified plans. A total of 25 local units of government have special park and recreation zoning districts to protect potential park sites from incompatible development. A total of 31 incorporated communities and all six counties with unincorporated areas have adopted floodland zoning ordinances which serve to preserve and protect potential park and open space land. In addition, 70 of the 147 communities have conservancy districts in their zoning ordinance; 40 communities have exclusive agricultural zoning districts; and eight communities have country estate zoning districts, all of which can be appropriately utilized to protect and preserve open space lands. Three of the six counties and 111 communities in the Region have subdivision control ordinances which require consideration to be given in the platting process to the reservation of park lands identified in adopted plans. Forty communities have also adopted an official map which can be used to protect potential park, parkway, and playground sites, as well as proposed future street rights-of-way, from incompatible development.

#### Potential Park Sites

The Southeastern Wisconsin Region contains many potential park sites that can be utilized to meet existing and future demand for recreational activities. A total of 751 potential park sites totaling 140,000 acres have been identified by the Commission. Between 1963 and 1975, 30 potential park sites were entirely committed, while an additional 158 potential park sites were partially committed to recreational or open space use. Over 12,800 acres, or 9 percent of the potential park site acreage, were actually committed to recreation or open space use, with about 7,700 acres, or 60 percent of this total, acquired by the public sector. Of the original 751 potential park sites, 21 were lost in their entirety as a result of urban development, while portions of an additional 249 sites were lost as a result of urban encroachment. Over 9,100 acres, or almost 7 percent of the original potential park site acreages, were lost to urbanization between 1963 and 1975.

Six hundred eighty-two potential park sites totaling 116,000 acres remained in the Region in 1975. Of these sites, 420, or 62 percent, were located in part or in whole within the primary environmental corridors. One hundred eighty-three, or 87 percent of the remaining 211 high value potential park sites in the Region, were located partially or entirely within the corridors

while a total of 132 medium value potential park sites and 105 low value sites were situated in part or in whole within the primary environmental corridor.

#### REGIONAL PARK AND OPEN SPACE OBJECTIVES

The task of formulating objectives to be used in plan design and evaluation is a difficult but necessary part of the planning process. Seven regional park and open space preservation, acquisition, and development objectives were formulated under the regional park and open space planning program:

1. The provision of an integrated system of public general use outdoor recreation sites and related open space areas which will allow the resident population of the Region adequate opportunity to participate in a wide range of outdoor recreation activities.
2. The provision of sufficient outdoor recreation facilities to allow the resident population of the Region adequate opportunity to participate in intensive nonresource-oriented outdoor recreation activities.
3. The provision of sufficient outdoor recreation facilities to allow the resident population of the Region adequate opportunity to participate in intensive resource-oriented outdoor recreation activities.
4. The provision of sufficient outdoor recreation facilities to allow the resident population of the Region adequate opportunity to participate in extensive land based outdoor recreation activities.
5. The provision of opportunities for participation by the resident population of the Region in extensive water based outdoor recreation activities on the major inland lakes and rivers and on Lake Michigan, consistent with safe and enjoyable lake use and maintenance of good water quality.
6. The preservation of sufficient high quality open space lands for the protection of the underlying and sustaining natural resource base and the enhancement of the social and economic well being and environmental quality of the Region.
7. The efficient and economical satisfaction of outdoor recreation and related open space needs meeting all other objectives at the lowest possible cost.

Together with the land use, watershed, and sanitary sewerage development objectives previously established under related Commission work programs, these new development objectives and the supporting principles and standards provided the basic framework within which alternative regional park and open space plans could be designed and evaluated.



## OUTDOOR RECREATION SITE AND FACILITY NEEDS

Existing and probable future needs for outdoor recreation sites and facilities were determined by comparing the existing supply of sites and facilities to the existing and anticipated demand for such sites and facilities. The demand for recreation sites and facilities was determined by applying the recommended regional park and open space acquisition and development standards to the existing and probable future resident population levels of the Region.

### Major Public Parks

Major public parks are defined as large—100 acres or more in area—public general use outdoor recreation sites which provide opportunities for such activities as camping, golfing, picnicking, and swimming and have large areas containing significant natural resource amenities. Application of the appropriate per capita acreage standards indicated a need for 2,300 additional acres of major park lands to meet the recreation site demands of the existing 1975 population in the Region. The analysis further indicated that an additional 3,400 acres above the 1975 need, or a total of 5,700 acres, were required to meet the demand for major park sites by the year 2000. Application of service area standards indicated those areas of the Region which were not adequately served by major parks.

### Local Parks

Local parks are defined as public general use outdoor recreation sites less than 100 acres in area which generally provide opportunities for intensive nonresource-oriented recreation activities such as baseball, basketball, ice skating, softball, and tennis. Such parks are provided primarily to meet the outdoor recreation demands of residents of urban areas. Application of per capita standards for local parks, including public school recreation sites, indicated a need for about 3,020 additional acres of local parks to meet the needs of the existing population. The analysis further indicated that an additional 960 acres above the 1975 need, or a total of 3,980 acres, would be required to meet the need for local park sites by the year 2000. Application of service area standards indicated those portions of urban areas in the Region which were not adequately served by urban parks.

### Recreation Corridors

Recreation corridors are defined as publicly owned, continuous linear expanses of land at least 15 miles in length which are located within scenic areas or areas of natural, cultural, or historic interest and which provide opportunities for participation in extensive land based recreation activities such as hiking, biking, horseback riding, and ski touring. Application of the appropriate per capita standards for recreation corridors indicated a need for approximately 280 linear miles of recreation corridors in the Region in 1975. The analysis further indicated that an additional 70 lineal miles above the 1975 need, or a total of 350 lineal miles of recreation corridor, were required to meet the demand for such corridors by the year 2000.

### Intensive Resource-Oriented Outdoor Recreation Facilities

Intensive resource-oriented outdoor recreation facilities include camp sites, golf courses, picnic areas, skiing areas, and swimming beaches. Application of the recommended per capita standard for intensive resource-oriented recreation facilities indicated a need for 71 additional public camp sites in the Region in 1975 and an additional 148 public camp sites above the 1975 need for a total of 219 new public camp sites in the Region by the plan design year 2000; the need for five additional public golf courses in the Region in 1975 and an additional six public golf courses above the 1975 need for a total of 11 new public golf courses in the Region by the plan design year 2000; the need for 425 additional picnic tables to accommodate public resource-oriented picnicking needs in the Region in 1975 and an additional 1,615 picnic tables above the 1975 need for a total of 2,040 new picnic tables by the year 2000. Application of the per capita standard for public ski hills indicated that both the existing and year 2000 needs would be met with the current public ski hill facilities. Application of the appropriate per capita standard for public swimming beaches at both inland lakes and on Lake Michigan indicated that, while there was no existing need for additional public beaches, by the plan design year 2000 a total of 2,200 additional lineal feet of public swimming beaches would be required at inland lakes and almost 6,600 additional lineal feet of public swimming beaches would be required along the Lake Michigan shoreline.

### Extensive Land Based Recreation Facilities

Extensive land based recreation facilities include trail facilities for hiking, biking, horseback riding, ski touring, nature study, and snowmobiling. Application of the appropriate per capita linear mileage standards, which relate to trail facilities within public recreation corridors, indicated a need for 280 additional miles of hiking and biking trails in the Region in 1975 and an additional 70 miles above the 1975 need for a total of 350 miles of new hiking and biking trails by the plan design year 2000; a need for 35 additional miles of nature study and ski touring trails in the year 1975 and an additional nine miles above the 1975 need for a total of 44 lineal miles of new nature study and ski touring trails in the Region by the plan design year 2000; the need for 88 additional miles of horseback riding trails in 1975 and an additional 22 miles above the 1975 need for a total of 110 miles of new horseback riding trails in the Region by the plan design year 2000; the need for 195 additional miles of snowmobile trails in the Region in 1975 and an additional 46 miles of snowmobile trails above the need for a total of 241 lineal miles of snowmobile trails in the Region by the plan design year 2000.

### Intensive Nonresource-Oriented Recreation Facilities

Intensive nonresource-oriented outdoor recreation facilities include baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, softball diamonds, swimming pools, and tennis courts. Application of the appropriate per capita standard for facilities for intensive nonresource-oriented outdoor recreation facilities indicated a need for 43 additional public baseball diamonds

in the Region in 1975 and an additional 15 public baseball diamonds above the 1975 need for a total of 58 new public baseball diamonds in the Region by the plan design year 2000; a need for 179 additional public basketball goals in the Region in 1975 and an additional 219 public basketball goals above the 1975 need for a total of 398 new public basketball goals in the Region in the plan design year 2000; a need for 64 additional public ice skating rinks in the Region in 1975 and an additional 32 public ice skating rinks above the 1975 need for a total of 96 new public ice skating rinks in the Region by the plan design year 2000; a need for 78 additional public playfields in the Region in 1975 and an additional 53 public playfields above the 1975 need for a total of 131 new public playfields in the Region by the plan design year; a need for 120 additional public playgrounds in the Region in 1975 and an additional 54 public playgrounds above the 1975 need for a total of 174 new public playgrounds in the Region by the plan design year; a need for 194 additional public softball diamonds in the Region in 1975 and an additional 59 public softball diamonds above the 1975 need for a total of 253 new public softball diamonds in the Region by the plan design year; a need for 313 additional public tennis courts in the Region in 1975 and an additional 99 public tennis courts above the 1975 need for a total of 412 new public tennis courts in the Region by the plan design year. In addition, one public swimming pool is currently needed to meet the existing and year 2000 standard for swimming pools in the Region.

#### Extensive Water Based Outdoor Recreation Facilities

Extensive water based outdoor recreation facilities include access points to accommodate water based activities such as fishing, motor boating, sailing, canoeing, and water skiing for individuals who do not own land contiguous to a body of water. Based upon the applicable per capita and design standards to accommodate safe and enjoyable participation in extensive water based activities, it was determined that there was sufficient usable surface water area on inland lakes to accommodate two additional boat access points for fast boating activities, such as water skiing and motor boating. However, 40 boat access points are required to meet the minimum standard for access for slow boating activities, such as fishing and canoeing, on those lakes which currently have no public access facilities.

Based upon the applicable design standard for the provision of facilities for slow boating activities on major streams, it was determined that six access points should be provided along the Milwaukee River and five access points should be provided along the Fox River to accommodate slow boating activity within the Region. Finally, based upon the applicable design and per capita standards to accommodate water access to Lake Michigan, it was determined that nine additional boat launch ramps and 708 additional boat slips were required along the Lake Michigan shoreline within harbors of refuge to meet the existing need in 1975 and an additional 10 launch ramps and 608 boat slips above the 1975 need or a total of 19 new launch ramps and 1,316 new boat slips were required within the Region to meet the water access needs to Lake Michigan by the plan design year 2000.

## ALTERNATIVE PARK AND OPEN SPACE PLANS

Two resource-oriented outdoor recreation alternative plans were prepared and evaluated under the regional park and open space planning program. Each of the alternative plans—an accessibility based alternative plan and a resource based alternative plan—including three major components: proposed major parks—100 acres or larger—which would accommodate needed facilities for intensive resource-oriented activities; proposed recreation corridors which would accommodate needed facilities for trail-oriented activities; and proposed water access facilities which would facilitate use of rivers and major inland lakes of the Region and Lake Michigan for extensive water based recreation activities.

Both alternative plans were designed to meet the identified need for resource-oriented outdoor recreation sites and facilities within the Region through the plan design year 2000. The accessibility based alternative plan seeks to meet existing and anticipated future resource-oriented outdoor recreation requirements by locating future recreation sites in areas which are readily accessible to the population centers of the Region. Under this alternative plan a large portion of the proposed public recreation corridor network would be developed in locations which provide convenient access to residents of the Kenosha, Milwaukee, and Racine urbanized area. In addition, individual recreation corridor segments in the outlying areas of the Region would provide convenient access to residents of the smaller urban centers including White-water, Oconomowoc, Hartford, and West Bend. Under the accessibility based plan the major parks which accommodate the intensive resource-oriented facilities such as camping, golf courses, and swimming beaches would be located as close as possible to the area of the Region in which the facility need exists using high value potential park sites wherever possible and lower value potential park sites when there was no suitable high value park site in the need area. Because of the substantial need for additional resource-oriented facilities to serve residents of the Milwaukee urban area and, in particular, the densely populated central portions of the City of Milwaukee, nine of the 19 new major parks proposed under the accessibility based plan were located within 20 miles of the central business district of the City of Milwaukee. Of the remaining 10 major parks proposed under this alternative plan, two were located in eastern Kenosha County to provide space for resource-oriented facilities to serve residents of the Kenosha urbanized area, and eight were located in outlying portions of the Region to provide the space required to meet resource-oriented facility needs of residents of the rural and outlying urban areas of the Region.

The resource based alternative plan seeks to meet the existing and anticipated future resource-oriented outdoor recreation requirements by utilizing the best remaining potential park sites within the Region. Under this alternative plan many of the proposed major park sites were situated in outlying portions of the Region where natural resource amenities with high recreational value of regional significance were relatively abundant. Only four of the 17 proposed new major parks under this alternative were

located within 20 miles of the central business district of the City of Milwaukee, owing to the relative scarcity of high value potential park sites in this need area.

After detailed review and evaluation of the degree to which the accessibility based alternative plan and the resource based alternative plan meet the established park and open space development standards, the resource based alternative plan was selected for incorporation into the recommended park and open space system plan for southeastern Wisconsin.

## RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

The regional park and open space plan for southeastern Wisconsin consists of two basic elements, an open space preservation plan element and an outdoor recreation plan element.

### Open Space Preservation Plan Element

The open space preservation plan element consists of recommendations for the preservation of primary environmental corridors and prime agricultural lands of the Region. Currently, about 72 square miles, or 16 percent of the net primary environmental corridor lands in the Region, are in public ownership. The open space preservation plan element recommends the public acquisition of selected additional reaches of the primary environmental corridors encompassing an additional 155 square miles, or about an additional 35 percent of the primary environmental corridor lands. Including the 72 square miles of primary environmental corridor lands currently in public ownership, a total of 227 miles of such lands, or about 52 percent of the primary environmental corridors and about 8 percent of the total area of the Region, would be permanently held in public trust with full implementation of the open space preservation plan element. Those areas of the primary environmental corridors which are not actually acquired by the public sector, including existing private outdoor recreation areas, would be kept in compatible, essentially natural open space uses through the use of exclusive agricultural, floodland, shoreland, conservancy, park land, and very low-density residential zoning. In total, about 210 square miles, or about 48 percent of the primary environmental corridor lands in the Region, would be zoned in such a manner.

The open space preservation plan element also recommends the preservation through exclusive agricultural zoning of 620 square miles of prime agricultural land, or about 98 percent of the existing prime agricultural acreage in the Region, as well as about 41 square miles of agricultural land providing a desirable open space setting around major scientific, educational, and recreational sites. A total of 661 square miles of agricultural land, or about 41 percent of the total agricultural land and 25 percent of the total area of the Region, would be preserved in agricultural use.

### Outdoor Recreation Plan Element

The outdoor recreation plan element consists of two components: a resource-oriented outdoor recreation plan component—which includes recommendations for the number and location of major parks, proposed recreation corridors to accommodate trail-oriented activities, and water access facilities to facilitate the use of rivers, inland lakes, and Lake Michigan—and an urban outdoor recreation plan component—which provides recommendations for the number and distribution of local parks and facilities required in urban areas of the Region.

### Resource-Oriented Outdoor Recreation Plan Component:

Under the resource-oriented outdoor recreation plan component, acreage of major parks would increase 50 percent, from 11,610 acres in 1973 to about 17,565 acres by the plan design year 2000. The proposed 5,955-acre increase would result from the expansion of three existing parks adding 410 acres to the major park acreage in the Region; the development as major parks of six undeveloped park areas currently in public ownership having a combined area of 1,320 acres; and the public acquisition and development of 20 new major parks having a combined area of 4,225 acres. Under the resource-oriented outdoor recreation plan component virtually all of the additional intensive resource-oriented recreation facilities would be accommodated at the existing or proposed major park sites. This plan component proposes the development of a total of 219 additional public camp sites at seven parks in the Region by the plan design year and the provision of additional public golf facilities at 12 existing or proposed major parks, including the development of 10 regulation golf courses of 18 holes each and one 9-hole regulation golf course as well as the expansion of an existing 18-hole golf course to a 27-hole course. A total of 2,155 additional picnic tables would be provided to accommodate resource-oriented picnicking within 25 existing and proposed major parks, and public downhill skiing in the Region would be increased with skiing areas proposed to be developed at one existing and one proposed major park. Opportunities for beach swimming would be expanded through development of five additional public swimming beaches along the Lake Michigan shoreline and the development of five additional inland swimming beaches. Finally, the resource-oriented plan component proposes the development of eight additional public nature study areas within the Region by the plan design year 2000.

The resource-oriented recreation plan component proposes the development of the recreation corridor network having a total length of about 405 linear miles which would accommodate trails for biking, hiking, horseback riding, and ski touring and which would connect many of the existing and proposed major parks, thereby enhancing the integrity of the regional park and open space system. Under this plan component, recreation corridors would traverse primary environmental corridors possessing recreational values of regional significance. Biking and hiking trails would be developed throughout the entire 405 miles of the proposed corridor while the corridor

network would accommodate 113 linear miles of horseback riding trails, 45 linear miles of nature study trails, and 48 linear miles of ski touring trails.

The resource-oriented recreation plan component proposes the provision of additional small boat water access facilities on 28 major lakes in the Region, primarily to accommodate slow boating activities such as fishing and canoeing, as well as the provision of five additional access points on the Milwaukee River and four additional access points on the Fox River. This plan component also would propose the provision of 1,320 additional boat mooring slips and 19 additional boat launch ramps along the Lake Michigan shoreline in southeastern Wisconsin to meet the existing and anticipated future need for recreational water access facilities on Lake Michigan.

Urban Outdoor Recreation Plan Component: The urban outdoor recreation plan component seeks to provide the quantity of local recreation sites—sites less than 100 acres in area—and intensive nonresource-oriented outdoor recreation facilities, including baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, tennis courts, and swimming pools sufficient to meet the overall demand within urban areas of the Region through the plan design year 2000. Under the urban outdoor recreation plan component, clearance and redevelopment activities, which would be required to provide urban park sites in densely populated areas of the Cities of Milwaukee, Racine, and Kenosha, would be restricted because of high dollar cost to the amounts required to meet the adopted accessibility standards for park lands. Each resident of an urban area, thus, would at least have ready access to a public outdoor recreation site. Under the urban outdoor recreation plan component about 3,158 acres of additional local public recreation lands within almost 250 park and school recreation sites would be provided by the plan design year 2000. About 673 acres, or 21 percent of the total plan increment, would be provided through subdivision dedication; and about 230 acres, or about 7 percent of the total increment, may be expected to be provided through school expansion; and about 748 acres, or about 24 percent of the increment, would be provided through the development of existing publicly owned undeveloped park sites. In addition, this plan component would require the public acquisition and development of about 1,333 acres of existing open land and the public acquisition, clearance, and redevelopment for park purposes of about 174 acres of land currently in urban use.

#### Plan Cost Analysis

Implementation of the open space preservation plan element would require an estimated public outlay of \$100.3 million. This outlay would be required for the public acquisition of selected reaches of the primary environmental corridors encompassing a total of about 155 square miles. It should be noted the estimated \$100.3 million is an estimated maximum cost assuming such corridor lands would all have to be purchased. To the extent that such lands can be acquired through

dedication or protected through land use controls, this cost could be reduced substantially to an estimated minimum of \$7.5 million.

Implementation of the resource-oriented outdoor recreation plan component would require the public acquisition of about 7,967 acres of land including lands for major parks, public recreation corridors, and water access facilities. Of this total, about 4,996 acres lying within the primary environmental corridors would be acquired under the open space preservation plan element at an estimated cost of \$7.5 million. Remaining land acquisition requirements under the resource-oriented outdoor recreation plan component would total about 2,971 acres and entail the public outlay of about \$5.2 million. In addition to these land acquisition costs, development costs would entail the public outlay of about \$60.7 million with the largest outlays, about \$50.0 million, required for development of proposed major parks and the development of small boat water access facilities along Lake Michigan shoreline. Total outlays for land acquisition and development under the resource-oriented outdoor recreation plan component are estimated, therefore, at about \$65.9 million.

Implementation of the urban outdoor recreation plan component would entail the public outlay of about \$95.2 million including about \$75.6 million for acquisition of open lands, as well as acquisition and clearance of lands currently in urban use, and about \$19.6 million for recreation site development.

The total public outlay required for implementation of the recommended regional park and open space plan, including the open space preservation plan element and both components of the outdoor recreation plan element, is, thus, estimated at about \$261.4 million, of which 38 percent would be for open space preservation, 25 percent for resource-oriented recreation site and facility needs, and 37 percent for urban recreation sites and facilities.

#### PUBLIC REACTION TO RECOMMENDED PLAN

As outlined in Chapter II of this report, the general approach used by the Commission in selecting a recommended plan from among alternatives is to proceed through the use of advisory committees, interagency meetings, public informational meetings, and public hearings to a final decision and plan adoption by the Commission. Because plan selection and adoption necessarily involve both technical and nontechnical policy determinations, such selection and adoption must actively involve the various governmental bodies, technical agencies, and private interest groups concerned. Such active involvement is particularly important in light of the advisory role of the Commission in shaping regional development. The use of advisory committees, public informational meetings, and public hearings appears to be the most practical and effective procedure available for obtaining the necessary involvement of elected and appointed public officials and interested citizens in the



planning process and of eventually arriving at agreement on development plans which can be jointly adopted and cooperatively implemented.

As an integral part of the park and open space planning program, a series of informational meetings and a formal public hearing was held within the Region. The purpose of these meetings and hearing was to more fully inform public officials, owners and operators of private recreation sites, and interested citizens about the findings and preliminary recommendations of the regional park and open space planning program and to obtain public reaction to the regional park and open space plan recommended by the staff and by the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning. The meetings and hearing were widely announced with notices sent to over 2,000 potentially interested individuals and organizations included on the Commission newsletter mailing list. In addition, news releases were issued to all daily and weekly newspaper and radio and television stations serving the Region. A summary of the inventory, analysis, and forecast findings; of the regional park and open space development objectives and supporting standards; of the alternative outdoor recreation plans considered; and of the recommended preliminary regional park and open space plan was presented in SEWRPC Newsletter, Volume 17, No. 3, which was widely disseminated throughout the Region prior to and at the meetings and hearing. An extensive verbal briefing on the findings and preliminary recommendations of the regional park and open space planning program was given at each of the informational meetings, together with data on the costs and means for implementation of the recommended preliminary plan.

The informational meetings and the public hearing were held in accordance with the schedule listed below. Minutes of both the informational meetings and the public hearing, together with documentation of the notification procedures utilized by the Commission, totaling 324 pages in length, were published in October 1977 and transmitted to the Technical and Citizen Advisory Committee and the Commission for review and consideration prior to final adoption of the recommended plan.

One additional informational meeting was held at the request of citizens of the Town of Lafayette in order to provide a more detailed briefing on the recommendation contained in the preliminary regional park and open space plan for the acquisition and development of a large park in the Sugar Creek area of Walworth County and the recommendation contained in the adopted comprehensive plan for the Fox River watershed for the development of a reservoir in that area.

More than 500 persons attended the general public informational meetings, the special informal informational meeting, and the public hearing. The record of the proceedings indicates that local government and public reaction to the plan recommendations, although mixed, was overall quite favorable. A negative reaction was displayed toward only a very few of the recom-

mendations contained in the plan, with either no reaction or a positive reaction to the majority of the plan recommendations. Public reaction to the preliminary regional park and open space plan, including the open space preservation and outdoor recreation plan elements, is more specifically summarized below together with Committee and Commission response thereto.

#### Open Space Preservation Plan Element

Prime Agricultural Lands: The preliminary open space preservation plan element consisted of recommendations for the preservation of prime agricultural lands and the preservation of primary environmental corridor lands in the Region. The preliminary open space preservation plan element proposed to preserve through exclusive agricultural zoning about 619 square miles of prime agricultural land, or about 98 percent of the remaining prime agricultural land area in the Region. The protection of prime agricultural lands through zoning is important to the economic well being of the Region and to the maintenance of its natural beauty and cultural heritage. The preliminary plan also recommended the preservation through exclusive agricultural zoning of an additional 41 square miles of other agricultural lands to provide a desirable open space setting around major scientific, educational, and recreation sites.

As indicated by the record of the proceedings of the public informational meetings and hearing, the public reaction to the proposed preservation of prime agricultural lands in the Region was generally most positive. There was general recognition that, if the regional prime agricultural lands are to be preserved, they must be appropriately zoned soon. The need for prime agricultural zoning was deemed particularly urgent in Washington County, where conversion of agricultural land to urban use is occurring rapidly.

A significant technical point concerning the preliminary open space preservation plan was raised by the Honorable Delmar E. Delong, State Representative from the 44th Assembly District, at the public informational meeting held in Elkhorn. He noted that the prime agricultural lands, as shown on the preliminary open space preservation plan element map, differed somewhat from the prime agricultural lands as delineated on Walworth County's new zoning map. The areas designated as prime agricultural lands on the preliminary plan map were those delineated by the Commission when it adopted the regional land use plan in 1966. The Walworth County Park and Planning Commission, in the development of its new county zoning ordinance, refined and detailed the prime agricultural land delineation and in so doing designated more prime agricultural lands than the Commission did in its 1966 delineation.

The Technical and Citizen Advisory Committee recommended that the more extensive delineation of prime agricultural lands in Walworth County be incorporated into the open space preservation plan element. As a result of this revision, prime agricultural lands in Walworth County would increase from 175 square miles under the preliminary plan to 289 square miles under the final plan.

Prime agricultural lands in the Region would increase from 619 square miles under the preliminary plan to 733 square miles under the final plan. The final delineation of prime agricultural lands in Walworth County is shown on the recommended regional park and open space plan map contained in the packet attached to the back cover of this report. A comparison of the initial and revised delineation of prime agricultural land in Walworth County is shown on Map 136.

The Commission has always maintained that its delineation of prime agricultural lands was intended to be

generalized in nature and has recommended that the actual areas to be protected through zoning be locally delineated, as Walworth County has done. The Commission recommends that the final establishment of boundaries of prime agricultural areas be done at the local level by the local County Park and Planning Agency in conjunction with the local Soil and Water Conservation District. The Commission can assist, however, by providing aerial photographs and soil survey and land use data and by providing technical assistance in delineating the areas more precisely and writing the necessary land use control ordinances.

#### Informational Meetings on the Findings and Recommendations of the Regional Park and Open Space Planning Program

<u>Presiding Agency</u>	<u>Place of Meeting</u>	<u>Date and Time of Meeting</u>
Technical and Citizen Advisory Committee on Regional Park and Open Space Planning	Washington County Courthouse West Bend, Wisconsin	August 22, 1977 7:30 p.m. - 10:00 p.m.
Technical and Citizen Advisory Committee on Regional Park and Open Space Planning	Walworth County Courthouse Elkhorn, Wisconsin	August 23, 1977 7:30 p.m. - 10:15 p.m.
Technical and Citizen Advisory Committee on Regional Park and Open Space Planning	Milwaukee County Courthouse Annex Milwaukee, Wisconsin	August 24, 1977 7:30 p.m. - 9:10 p.m.
Technical and Citizen Advisory Committee on Regional Park and Open Space Planning	Waukesha County Office Building Waukesha, Wisconsin	August 29, 1977 7:30 p.m. - 10:00 p.m.
Technical and Citizen Advisory Committee on Regional Park and Open Space Planning	Racine County Highway and Office Building Racine, Wisconsin	August 30, 1977 7:30 p.m. - 9:30 p.m.

#### Public Hearing

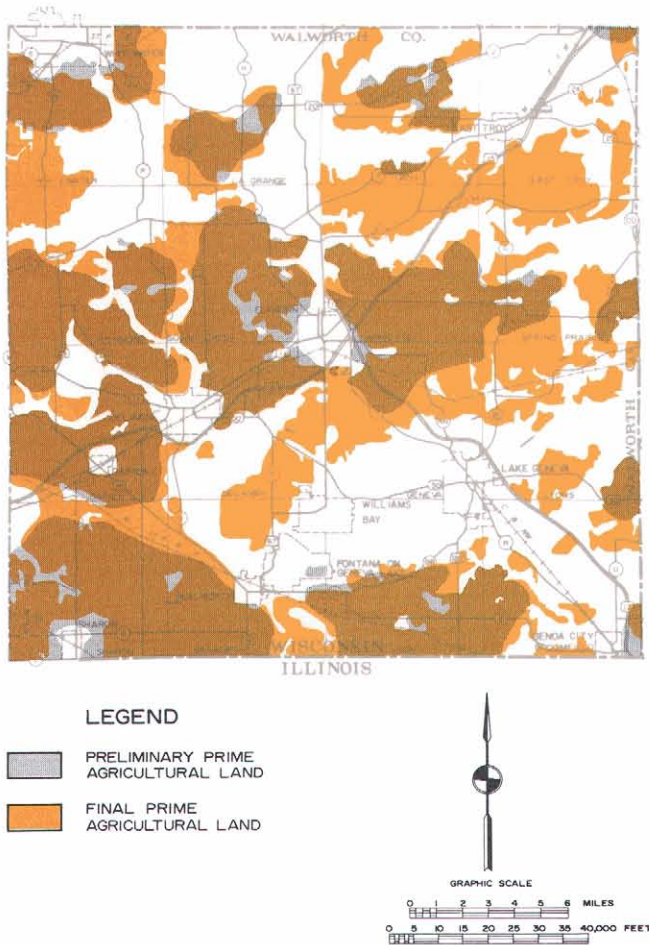
<u>Presiding Agency</u>	<u>Place of Meeting</u>	<u>Date and Time of Meeting</u>
Technical and Citizen Advisory Committee on Regional Park and Open Space Planning	Milwaukee County Courthouse Annex Milwaukee, Wisconsin	August 31, 1977 7:30 p.m. - 9:50 p.m.

#### Informal Informational Meeting on the Proposed Sugar Creek Park Site

<u>Presiding Agency</u>	<u>Place of Meeting</u>	<u>Date and Time of Meeting</u>
Southeastern Wisconsin Regional Planning Commission	Walworth County Courthouse Elkhorn, Wisconsin	August 26, 1977 7:30 p.m. - 10:30 p.m.

Map 136

PRELIMINARY AND FINAL DELINEATIONS OF PRIME AGRICULTURAL LANDS IN WALWORTH COUNTY



The prime agricultural lands shown on the preliminary regional park and open space plan map for Walworth County were taken from the regional land use plan adopted by the Commission in 1966. The Walworth County Park and Planning Commission in the development of a new county zoning ordinance and attendant zoning district maps properly refined and detailed the prime agricultural land delineation and in so doing designated more prime agricultural lands than were indicated in the original land use plan delineations. Based upon comments made at the public hearings on the preliminary regional park and open space plan, the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning recommended that the more extensive delineation of prime agricultural lands in Walworth County be incorporated into the open space preservation plan. As a result of this revision delineated prime agricultural lands in Walworth County were increased from 175 square miles under the preliminary plan to 289 square miles under the final open space plan.

Source: SEWRPC.

In its original delineation of prime agricultural lands, the Commission identified lands which were determined to be highly productive for agricultural purposes on the basis of the soils present, the size of the farms, the size and extent of the area, the demonstrated capability of the farms in the area to consistently produce better than average crop yields, and the capital invested in such improvements as irrigation and drainage systems and soil and water conservation practices. In the local refinement of the Commission's original delineation, it may be desirable to expand the criteria used to identify which agricultural lands ought to be preserved. For example, it may be desirable to preserve through exclusive agricultural zoning general agricultural areas, even where the individual farm units are relatively small, simply to maintain the rural character and heritage of an area.

**Primary Environmental Corridors:** The preliminary open space preservation plan element also recommended the preservation of the remaining primary environmental corridor lands within the Region through a combination of public land use controls and public acquisition. Primary environmental corridor lands, excluding 66 square miles of lake and stream surface water area, totaled 437 square miles in 1970. About 72 square miles, or about 16 percent of this area, are presently in public ownership. The preliminary open space preservation plan element, as presented at the public informational meetings and hearing, recommended the public acquisition of up to an additional 155 square miles, or an additional 36 percent, of the primary environmental corridor lands. The preliminary plan further recommended that those areas of the primary environmental corridors which are not actually acquired by public agencies be kept in compatible, essentially natural open uses through the use of exclusive agricultural, floodland, shoreland, conservancy, or very low-density (minimum lot area five acres per dwelling unit) residential zoning.

The recommendations of the preliminary open space preservation plan element on public acquisition of primary environmental corridors represent a maximum level of acquisition desirable to ensure the permanent preservation of these important resource areas. The preliminary open space preservation plan element, as presented at the informational meetings, accordingly recommended public acquisition of the following types of primary environmental corridor lands: undeveloped primary environmental corridor lands lying in areas of the Region expected to be in urban use by the plan design year; high value wetland and woodland areas located in the primary environmental corridors adjacent to existing publicly owned wetland, woodland, and wildlife habitat areas; other undeveloped primary environmental corridor lands along the main stems of the major rivers in the Region; and corridor lands proposed for public acquisition in local or state open space plans.

The record of the proceedings of the public informational meetings and hearing indicates that, while there was overall agreement with the concept of primary environmental corridor preservation, there was considerable controversy on plan proposals to protect



the corridors through public acquisition. Public officials—particularly town board chairmen—expressed concern that the proposed public land acquisition would remove too much property from local tax rolls. Residents were concerned with the potential loss of private property. Concern was also commonly expressed over the level of acquisition and, particularly, maintenance costs associated with open space preservation plan element implementation.

In considering this matter, the Technical and Citizen Advisory Committee recognized that the removal of property from local tax rolls, land acquisition and maintenance costs, and loss of private property are very important concerns which cannot be overlooked in efforts to permanently preserve primary environmental corridor lands through public acquisition. Accordingly, the Committee recommended recasting the corridor acquisition recommendations of the preliminary open space plan element to indicate a minimum level of public acquisition; namely such acquisition as is recommended in duly adopted state, county, and local land use and park and open space plans and as may be necessary to preserve segments of the primary environmental corridor which are or may be expected to be threatened by urban encroachment. In general, the Committee recommended that environmental corridors be preserved through zoning rather than outright public acquisition wherever zoning may be expected to be effective in maintaining the primary environmental corridors in an essentially open, natural state. In so doing, the Committee recognized that, properly applied and maintained, local land use controls can effectively preserve the corridors and obviate the need for public acquisition. Where zoning cannot be effectively used to preserve the corridor land in its natural, open state, the Committee recommended that the land be acquired.

Segments of the primary environmental corridor recommended for public acquisition under the final open space preservation plan are shown on the plan map contained in the packet attached to the back cover of this report. A comparison of the corridor area proposed to be acquired under the preliminary and final plans is set forth in Table 199. The final plan recommends the public acquisition of 72,220 acres of primary environmental corridor lands compared to 98,950 acres under the preliminary plan. The final plan then recommends the public acquisition of 26 percent of the remaining primary environmental corridor area in the Region, or approximately 27 percent less than the acreage recommended in the preliminary plan. Since 16 percent of the primary environmental corridors is presently in public ownership, a total of 42 percent of the primary environmental corridors would be in the public domain with implementation of the final open space preservation plan. As further indicated in Table 199, under the final plan 52,530 acres are recommended for acquisition by county or local units of government and 19,690 acres by the Wisconsin Department of Natural Resources.

As indicated in Table 199 costs of public acquisition of the primary environmental corridor under the final open

space preservation plan amount to \$69.6 million, which is \$30.7 million, or 31 percent, less than the public acquisition costs for corridor lands under the preliminary plan. About \$49.0 million, or 70 percent, of the total acquisition costs would be borne by county and local park agencies while the remaining \$20.6 million, or 30 percent, would be borne by the Wisconsin Department of Natural Resources.

Primary environmental corridor lands which are not recommended for public acquisition would be preserved in essentially natural open space uses through appropriate zoning—floodland and shoreland, wetland conservancy, upland conservancy, recreational, and very low-density residential (five acres per dwelling unit). Under the final open space preservation plan element, 161,570 acres, or 58 percent of the remaining net primary environmental corridor area, would be preserved in this manner. In comparison, under the preliminary open space plan presented at the public informational meetings, 134,840 acres, or 48 percent of the remaining net primary environmental corridor acreage, would have been preserved through zoning.

While zoning is an important open space preservation tool, the use of the police power to achieve environmental corridor preservation has certain limitations. Questions on the confiscatory nature of zoning inevitably rise when zoning is extensively used for resource based preservation objectives in urbanizing areas. Local planning commissions are constantly faced with applications to convert environmental corridor lands to urban uses; to fill low-lying areas; and, in effect, to destroy the natural resource base. The strongest pressure for the conversion of primary environmental corridor lands occurs in areas undergoing rapid urbanization.

The final open space preservation plan recommends the public acquisition of only those segments of the primary environmental corridor which would be most subject to urban encroachment under development conditions envisioned in the regional land use plan. The continued proliferation of low-density urban development in rural areas of the Region contrary to the recommendations of the regional land use plan may, however, exert pressure for conversion of other corridor segments to urban use, warranting their acquisition by public agencies. To the extent that zoning is ineffective, it may be desirable during the plan implementation period to purchase for permanent preservation additional segments of the primary environmental corridors—beyond the recommendations of the final open space preservation plan. Not only does such public acquisition assure permanent preservation, but it also lends equity in those situations where landowners are faced with no real alternative uses for land which may be increasing in assessed valuation as urban development proceeds in the surrounding area.

#### Outdoor Recreation Plan Element

The outdoor recreation plan element consists of two components: 1) a resource-oriented outdoor recreation plan which includes recommendations for the number and location of large parks, proposed recreation corridors



Table 199

**PRELIMINARY AND FINAL PLAN RECOMMENDATIONS FOR ACQUISITION OF PRIMARY ENVIRONMENTAL  
CORRIDOR LANDS BY COUNTY PARK AGENCIES AND THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES**

County	Governmental Agency	Primary Environmental Corridor Lands Proposed for Acquisition					
		Preliminary Plan Acquisition Recommendations		Final Plan Acquisition Recommendations		Difference Between Preliminary and Final Plan Acquisition Recommendations	
		Acres	Cost (in dollars)	Acres	Cost (in dollars)	Acres	Cost (in dollars)
Kenosha	DNR	- 3,180	- 2,216,000	450	299,000	- 2,730	- 1,917,000
	County	3,200	3,369,000	5,080	4,774,000	1,880	1,405,000
	Total	6,380	5,585,000	5,530	5,073,000	- 850	- 512,000
Milwaukee	DNR	0	0	0	0	0	0
	County	2,270	7,251,000	1,170	1,599,000	- 1,100	- 5,652,000
	Total	2,270	7,251,000	1,170	1,599,000	- 1,100	- 5,652,000
Ozaukee	DNR	3,940	2,463,000	350	196,000	- 3,590	- 2,267,000
	County	7,810	7,372,000	2,980	3,338,000	- 4,830	- 4,034,000
	Total	11,750	9,835,000	3,330	3,534,000	- 8,420	- 6,301,000
Racine	DNR	5,230	3,988,000	1,880	1,058,000	- 3,350	- 2,930,000
	County	3,960	5,587,000	5,470	5,625,000	1,510	38,000
	Total	9,190	9,575,000	7,350	6,683,000	- 1,840	- 2,892,000
Walworth	DNR	7,260	8,106,000	4,000	4,614,000	- 3,260	- 3,492,000
	County	4,320	6,741,000	3,650	4,843,000	- 670	- 1,898,000
	Total	11,580	14,847,000	7,650	9,457,000	- 3,930	- 5,390,000
Washington	DNR	11,810	11,750,000	5,210	6,865,000	- 6,600	- 4,885,000
	County	8,480	6,906,000	4,940	4,559,000	- 3,540	- 2,347,000
	Total	20,290	18,656,000	10,150	11,424,000	- 10,140	- 7,232,000
Waukesha	DNR	8,290	8,133,000	7,800	7,556,000	- 490	- 577,000
	County	29,200	26,430,000	29,240	24,243,000	40	- 2,187,000
	Total	37,490	34,563,000	37,040	31,799,000	- 450	- 2,764,000
Region	DNR	39,710	36,656,000	19,690	20,588,000	- 20,020	- 16,068,000
	County	59,240	63,656,000	52,530	48,981,000	- 6,710	- 14,675,000
	Total	98,950	100,312,000	72,220	69,569,000	- 26,730	- 30,743,000

Source: SEWRPC.

to accommodate trail-oriented activities, and water access facilities to facilitate the use of rivers, inland lakes, and Lake Michigan; and 2) an urban outdoor recreation plan which provides recommendations for the number and distribution of local parks and facilities required in urban areas of the Region. Public reaction to both components of the outdoor recreation plan element are described herein.

**Resource-Oriented Outdoor Recreation Plan Component:**  
**Major Parks:** Under the preliminary resource-oriented outdoor recreation plan component, the acreage of large parks within the Region would be increased 50 percent from about 11,600 acres in 1973 to about 17,500 acres by the plan design year 2000. About 4,100 acres, or 70 percent of the proposed 5,900 acre increase, would result from public acquisition and development of

20 new large—greater than 100 acre—parks. The remaining 1,800 acres would result from the development or expansion of existing parks. Under the preliminary plan, virtually all additional required facilities for intensive resource-oriented activities would be provided within existing and proposed large parks. Specifically, the preliminary plan calls for developing five more public swimming beaches along Lake Michigan and five more inland swimming beaches; adding almost 220 additional public camp sites at seven parks and the equivalent of eleven 18-hole golf facilities at 12 existing or proposed large parks; providing about 2,200 new picnic tables and eight more public nature study areas; and adding public downhill skiing areas in the Region at one existing and one proposed large park site.

Review of the proceedings of the public meetings and hearing indicates that the only negative reactions to the major park proposals set forth in the preliminary plan related to the proposed large park in the Sugar Creek area in Walworth County and the proposed large park south of the City of Kenosha. In addition, public concern was expressed that the plan gave inadequate recognition to the potential role of the Bong Recreation Area located in Kenosha County.

*Proposed Sugar Creek Park Site:* The preliminary park and open space plan proposed the development of a 650-acre state park in the primary environmental corridor along Sugar Creek in the Town of Lafayette in Walworth County. Facilities proposed at this site included an 18-hole regulation golf course, a picnic area, a nature center, and a ski hill to be developed in conjunction with the golf course. The Sugar Creek site was also identified as a potential state park under the Fox River watershed plan, a plan adopted by the Commission, by the Walworth County Board, and by other various federal, state, and local units of government. This plan recommended the development of a multipurpose 1,300 acre reservoir at the proposed Sugar Creek site.<sup>1</sup> Since the adoption of the watershed plan in 1970, there has been no movement to implement the reservoir recommendation by the State or county, or by private investors.

Significant local opposition was expressed to both the development of a reservoir at the Sugar Creek site and to the development of a park at the site. At the general public informational meeting and again at the special informal informational meeting in Elkhorn and at the public hearing in Milwaukee, residents of the Town of Lafayette expressed concern that implementation of the reservoir and park proposals would result in substantial public taking of highly esteemed private property; would cause fiscal problems for the Town of Lafayette by removing valuable property from the local tax rolls; would serve to provide facilities which would primarily

accommodate users from Illinois; would displace wildlife; and would create maintenance and police problems and costs. Five letters were filed with the Commission expressing specific opposition to the Sugar Creek park and reservoir proposals, one of these letters including a petition signed by 12 area residents. In addition, the Town Board of the Town of Lafayette on August 29, 1977, adopted a resolution expressing opposition to the proposed Sugar Creek park, and a petition signed by 149 Town of Lafayette residents opposing the creation of a park and/or reservoir and/or public environmental corridor between Hodunk Road and USH 12 was submitted at the August 31, 1977, hearing. On the other hand, two letters were filed with the Commission in support of the park and reservoir proposals, one from a member of the Village of East Troy Plan Commission; and one letter was filed in support of the Sugar Creek park without the reservoir.

As a result of the local opposition to the proposed Sugar Creek park site, the Technical and Citizen Advisory Committee directed the staff to identify and analyze alternative potential park sites in the vicinity of the Sugar Creek site. The staff subsequently reexamined all potential park sites within 10 miles of the proposed Sugar Creek site which were designated as high value potential parks in the Commission potential park site inventory. These sites, along with specific activities for which the sites were judged suitable, are shown on Map 137.

After reviewing the information on other alternative high value potential park sites, the Committee recommended that the Sugar Creek site be retained as a proposed major park site in the final park plan but that the Fox River watershed plan be amended to eliminate the recommendation to develop a recreational reservoir at that site. The Committee's decision to retain the Sugar Creek park site proposal is based on several important considerations. First, the Sugar Creek primary environmental corridor was identified in the Commission's potential park sites inventory as one of 14 broad areas within the Region possessing recreational values of areawide significance. Moreover, the Sugar Creek potential park site was specifically identified in a 1964 Commission inventory as the best remaining park site in Walworth County and one of the eight best remaining park sites in the Region. The needed recreational facilities should be provided at this site because of the excellent characteristics which the site affords for resource-oriented recreational activities.

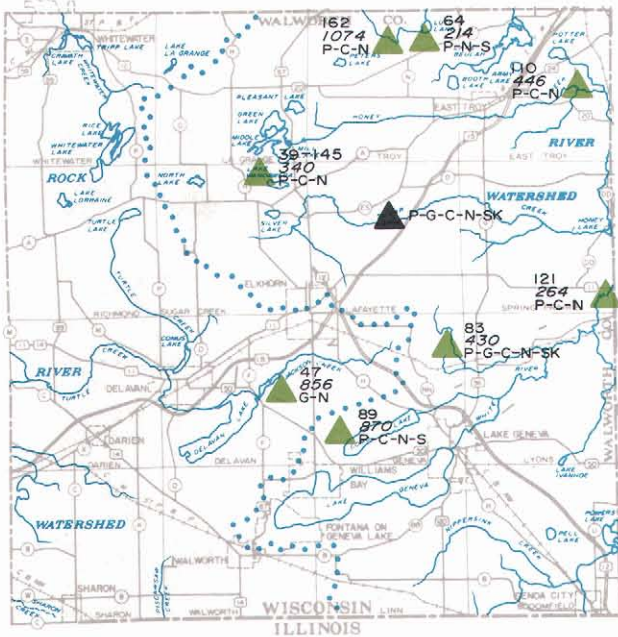
Second, based upon the analyses of recreation facility needs described in Chapter XII of this report, there is a need for a number of public resource oriented outdoor recreation facilities in Walworth County, including facilities for picnicking, golf, nature study, and downhill skiing. As indicated on Map 137, the proposed Sugar Creek site and the potential park site in Section 12 in the Town of Geneva are the only high value potential park sites in the area identified in the Commission's potential park sites inventory as suitable for all of the needed facilities.

---

<sup>1</sup>See SEWRPC Planning Report No. 12, *A Comprehensive Plan for the Fox River Watershed, Volume Two, Alternative Plans and Recommended Plan*, pages 66-68.

Map 137

# HIGH VALUE POTENTIAL PARK SITES WITHIN A 10-MILE RADIUS OF THE PROPOSED SUGAR CREEK PARK SITE

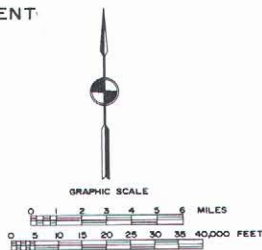


## LEGEND

- ▲ SUGAR CREEK POTENTIAL PARK SITE
- ▲ OTHER HIGH VALUE POTENTIAL PARK SITE
- 64 SITE NUMBER
- 214 ACREAGE

## POTENTIAL PARK SITE DEVELOPMENT POSSIBILITIES

- C CAMPING
- G GOLF
- N NATURE STUDY
- P PICNICKING
- S SWIMMING
- SK SKIING



As a result of opposition to the acquisition and development for public park purposes of the Sugar Creek site in Walworth County—opposition expressed at the public hearings on the preliminary regional park and open space plan—the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning requested the Commission staff to identify and analyze alternative potential sites in the vicinity of the Sugar Creek site. Accordingly, all high value potential park sites within 10 miles of the proposed Sugar Creek site were identified and evaluated, and the resulting information presented to the Committee. Based upon the review of this information, the Committee recommended that the Sugar Creek site be retained as a proposed major park site in the final plan but further recommended that the site be acquired and developed by the County rather than the State and that the total site area be reduced from 650 acres to about 250 acres in area.

Source: SEWRPC.

Third, the Sugar Creek site is well situated in relation to other existing major parks. Thus, the proposed Sugar Creek site is situated in the middle of a large diamond shaped area formed by Mukwonago Park, Ela Park, Big Foot Beach State Park, and the Whitewater Lake Recreation Area. The development of the Sugar Creek site would, more than any of the other potential park sites, eliminate the present void—in terms of large parks—in this area.

Fourth, owing to its location near the Rock Freeway, the proposed Sugar Creek site would be readily accessible to major population concentrations of the Region, as a major park having recreational resource amenities of regional significance ought to be. This site may be expected to serve persons from throughout the Region. The Committee, however, modified the original plan proposal calling for the development of the Sugar Creek site as a state facility and recommended that the site be developed as a county park. In recommending the change in jurisdictional responsibility for the development of the site the Committee noted that the Wisconsin Natural Resources Board had considered the development of the Sugar Creek site as a state park years before and had rejected the proposal. They noted that the State typically does not acquire, develop, and operate a park except for resource-oriented type facilities like swimming and camping and, since the primary facilities at the Sugar Creek site as proposed are golf and skiing, there would be little possibility to develop such a site as a state facility.

The Committee further recommended that the total site area be reduced from 650 acres to about 250 acres and, in the plan implementation, every effort be made to minimize any potentially adverse impacts on local property owners. Most importantly, the site design should preserve the natural resource amenities and minimize disturbance of the existing character of the site, while providing the needed recreational facilities.

In recommending that the reservoir proposal be deleted from the Fox River watershed plan, the Committee recognized the validity of local objections to the reservoir, indicating that the potential adverse local impacts outweigh potential recreation benefits. As described in the Fox River watershed report, the reservoir would generate primarily recreational, rather than flood control, benefits. Park study analyses, however, indicated that a swimming beach is not an essential need in this area. Furthermore, fast boating activities would be inconsistent with the nature of the site. Thus, it was concluded by the Committee that the potential recreation benefits of the reservoir did not justify the potential adverse impacts on the local tax base and on wildlife habitat in the area.

**South Kenosha Park Site:** The preliminary park and open space plan proposes a 210-acre park site on the Lake Michigan shoreline south of the City of Kenosha to accommodate a swimming beach, nature center, and picnic area. At the informational meeting in Racine, a representative of the City of Kenosha Department of Community Development suggested that land south of the City of Kenosha owned by the Wisconsin Electric



Power Company might be acquired to accommodate the site. The power company plans for future use of this site have been uncertain as the company attempts to identify its long-range needs. In spite of this uncertainty, the Wisconsin Electric Power Company filed a letter with the Commission indicating that it planned to reserve this property indefinitely for future company use.

It is important to recognize that site-specific locations are only provided for major park sites 250 acres or greater in area, as in Walworth County.<sup>2</sup> For other large parks, 100 to 249 acres in area, the plan indicates a general location within which a large park is needed and should be developed and within which several high value potential park sites are typically found. In the case of the large park proposed to be developed south of the City of Kenosha, one suitable location would, indeed, be the power company site. The staff recommends that this site be considered for purchase to accommodate a new large park should the site become available. In the meantime, however, other potential park sites along the Lake Michigan shoreline south of the City of Kenosha should be investigated for this purpose. If a satisfactory substitute site is found it should be acquired in place of the power company site.

**Bong Recreation Area:** At the informational meeting held in Racine County, concern was expressed by public officials and representatives of outdoor recreation interest groups that the regional park and open space plan did not adequately treat the Bong Recreation Area in the Town of Brighton, particularly since no additional intensive recreational development was proposed in the plan for this site. It should be noted that, under an amendment to state laws, the Department of Natural Resources has been authorized to provide a wide range of opportunities for active recreation in the Bong Recreation Area.<sup>3</sup> The 4,548-acre Bong Recreation Area is owned by the Wisconsin Department of Natural Resources and represents the largest single remnant of the original Richard I. Bong Air Force Base abandoned by the U. S. Air Force in 1959. In addition to the Bong Recreation Area, the original 5,532-acre Air Force Base has been divided into six park and open space parcels consisting of a 360-acre county park acquired by Kenosha County and named Brightondale Park; a 160-acre school forest granted to the Salem Central Union High School District; a 160-acre school forest granted to the Wilmot Union High School District; a 160-acre school forest granted to the Burlington Area Joint School District No. 1; a 24-acre school forest granted to the Brighton Elementary School District No. 1; and a 120-acre school forest granted to the Kenosha Unified School District No. 1 (see the plan map contained in the pocket attached to the back cover of this report).

---

<sup>2</sup> Possible locations and delineations for the two proposed Type I parks—Sugar Creek in Walworth County and Paradise Valley in Washington County—are identified in Appendix R.

<sup>3</sup> Wis. Stats. sec. 23.09(13), 1975.

As presented at the public informational meetings and the public hearing, the preliminary park and open space plan incorporated the existing Brightondale County Park as a multipurpose Type I resource-oriented park facility. At the present time this park includes a 27-hole regulation golf course and a picnic area. The preliminary plan further incorporated the five school forest areas and the Bong Recreation Area as natural areas to be used for research, wildlife conservation, and limited recreational purposes. Such natural areas often provide certain basic facilities to permit public use of the site, including areas for walking, nature study, and informal picnicking, as well as space for those outdoor recreation activities that are not typically accommodated in public parks, such as hunting. Natural areas are not envisioned in the plan as requiring intensive capital investment for facilities to accommodate activities that normally are carried on in public parks. Thus, the preliminary park and open space plan proposed that the Bong Recreation Area and its satellite school forests be maintained in essentially their current state in order to provide a large natural open area away from the urbanized areas of the Region. Accordingly, the preliminary plan did not recommend that the Bong Recreation Area become a site for intensive capital investment to provide those recreation facilities normally accommodated in public parks. The Bong Recreation Area does not lie within a primary environmental corridor and does not possess the basic high value natural resource amenities desirable for park site development.

The Regional Planning Commission has maintained over the years that the most important aspect of the lands now known as the Bong Recreation Area is the fact that it is the largest single parcel of land in single ownership in the Southeastern Wisconsin Region. As such, the Commission believes that it should be held as a land reserve for possible use as an intensive development site at some future date. The Commission examined the potential for utilization of the Bong Recreation Area as a site for a regional airport, and in particular as a site for a scheduled air carrier airport to replace General Mitchell Field in Milwaukee County. The Commission determined in the regional airport system planning program that the Bong site was not a good location for development of a regional air carrier airport, because the site is not conveniently located to the regional freeway system, lies far removed from the center of the Region-generated air passenger demand, and because air traffic patterns at Bong would interfere with those at Chicago O'Hare Airport.<sup>4</sup> It was further determined in the regional airport system planning program that, if the Wisconsin Department of Natural Resources decided to develop a landing strip on the Bong site to serve air-oriented recreation activities such as sky diving, such a landing strip should

---

<sup>4</sup> For further details concerning analyses of the use of the former Richard I. Bong Air Force Base as a regional air carrier airport, see SEWRPC Planning Report No. 21, *A Regional Airport System Plan for Southeastern Wisconsin*, pages 91 through 94, pages 316 and 317, and pages 346 and 347.



also be considered for use for "touch and go" flight training operations that are now considered to be a nuisance by many residents living in the vicinity of existing airports located in the urban areas of the Region.

In 1976 the Wisconsin Department of Natural Resources prepared a master plan for the development of the Bong Recreation Area. This plan proposed the following major development activities at the Bong site:

1. The establishment of an administrative headquarters area, including the construction of an administration building, service buildings, an environmental education and nature interpretive facility, and related site development.
2. A major picnicking area.
3. A rustic group camping area.
4. A water-oriented activity center.
5. A wetlands-water resources area.
6. A rest area and overlook.
7. A wayside and overlook.
8. The restoration of an upland prairie area.
9. The restoration of a wildlife sanctuary area.
10. The establishment of a specialized uses area, including facilities for dog training, equestrian activities, model airplane flying, snowmobiling, all-terrain vehicle activities, dog sledding, model rocket launching, and sky diving activities.

The estimated total cost of developing the recommended facilities was \$1.9 million.

Many of the development proposals contained in the Bong Recreation Area master plan would be in conformance with and serve to implement the recommendations for that area contained in the preliminary park and open space plan. All of those activities that relate to the sound management of the land, including the establishment of a wildlife sanctuary, the restoration of an upland prairie, the reestablishment of wetlands, and the establishment of rest areas, waysides, and overlooks would implement the plan. In addition, those facilities needed to accommodate special outdoor recreation uses such as dog training, equestrian activities, model airplane flying, snowmobiling, all-terrain vehicle activities, dog sledding, model rocket launching, and sky diving activities would be in conformance with the plan, since those facilities would accommodate recreation activities not specifically provided for elsewhere in public parks. Other development proposals contained in the master plan would conflict, however, with the regional park and open space plan, including day use recreational facilities for picnicking, swimming, and canoeing; the provision of camping

facilities not associated with the specialized recreational uses area; and the provision of an extensive system of recreational trails. The Commission believes that capital investment in these facilities would not be warranted since they could better be provided at those public park areas and along recreation corridors specifically identified in the regional park and open space plan. However, the Advisory Committee recommended that the Bong site be used for wildlife habitat, natural area development, such special purpose outdoor recreation activities as are not appropriately accommodated in public parks elsewhere in the Region, and such other recreation activities as recommended in the Bong Recreation Area master plan as approved by the Wisconsin Department of Natural Resources.

Recreation Corridors: The preliminary resource-oriented outdoor recreation plan component proposed the development of a recreation corridor network with a total length of about 400 linear miles. This network would accommodate trails for biking and hiking, horseback riding, and ski touring and would connect many existing and proposed large parks, thereby enhancing the integrity of the regional park and open space system. Biking and hiking trails would be developed throughout the entire 405 miles of proposed corridor, while the corridor network would accommodate 113 miles of horseback riding trails, 45 linear miles of nature study trails, and 48 linear miles of ski touring trails.

Opposition to the proposed recreational trail network was expressed by property owners at several informational meetings. In addition, three letters in direct opposition to the proposed recreation corridor system were received following the meetings. Strongest opposition was expressed by individuals who perceived that their own property would be affected by the proposed trails. Much of the opposition centered on potential problems of maintaining the trails and policing them to ensure proper use. Another major area of concern was the public taking of private property to accommodate the trail facilities. Citizens were concerned that implementation of the trail proposals could affect a very large number of property owners especially in the more urbanized areas of the Region.

While recognizing the complexity of the problems to be resolved in implementation of the recreation corridor system plan, the Technical and Citizen Advisory Committee determined that only minor modifications should be made to the recreation corridor proposals. The Committee emphasized that the recreation corridor plan as it now exists is a concept. It is not site-specific, and the actual location of trails within the proposed system can only evolve gradually over the course of the plan implementation period. It is intended that efforts to refine and implement recreation corridor proposals would be undertaken locally, primarily by county park and planning agencies. There must be considerable flexibility in such local implementation efforts, and every attempt must be made in the implementation process to minimize adverse impacts on property owners and the local prop-

erty base. In developed urban areas, trails would often of necessity be routed over streets. Arrangements with landowners would range from informal agreements allowing use of property for trail purposes, to purchase of easements, to outright public acquisition. Problems of policing recreation corridors to ensure their proper use should be minimized through appropriate trail design. There are design techniques, for example, that would make it possible for a hiker or bicyclist to enter a trail and yet prohibit a snowmobiler.

In addition to the general reaction to the recreation corridor concept, certain suggestions were made at the informational meetings and hearing concerning the actual location of specific segments of the recreation corridor. At the informational meeting for Waukesha County, the Village Administrator of the Village of Sussex suggested that consideration be given to incorporating the abandoned Milwaukee Road right-of-way through the Village of Sussex and Town of Lisbon into the recreation corridor system. The Committee agreed to using this segment of abandoned Milwaukee Road right-of-way as a replacement for the recreation corridor segment which was originally proposed to be located in the primary environmental corridor along the Bark River in the Town of Lisbon.

Also at the informational meeting for Waukesha County, a representative of the New Berlin Ecology Association, noting the lack of trail facilities planned in the City of New Berlin, urged that a proposal by the Waukesha County Park and Planning Commission for a six-mile bike trail along the abandoned electric interurban railway right-of-way through New Berlin be incorporated into the recreation corridor network. The Committee recommended adding this right-of-way to the proposed corridor system. Although not located in an environmental corridor, the additional trail segment along the interurban right-of-way would serve many residents in a rapidly growing area and would provide a link between the recreation corridor system in Milwaukee County and the spur of the recreation corridor which ends at Minooka Park in Waukesha County.

The original concept of the regional park and open space plan was that trail facilities should be provided in primary environmental corridors, thereby creating the highest quality recreation corridors. Prompted by the public reaction at the public informational meetings and hearing, however, the Committee suggested that certain additional abandoned rights-of-way be incorporated into the recreation corridor system, as indicated below.

*Interurban Right-of-Way in Western Waukesha County:* The Committee modified the recreation corridor plan to include the abandoned interurban railway right-of-way from the City of Waukesha to the City of Oconomowoc. This right-of-way was included because of its availability; because it would serve many residents in the rapidly growing area around the City of Waukesha; and because of the local public support, as demonstrated by its inclusion in the Waukesha County park and open space plan.

This corridor, in conjunction with the segment of the interurban right-of-way through New Berlin, would provide an east-west trail through the center of Waukesha County. The proposed trail would have to be routed through the City of Waukesha over existing streets.

*Abandoned North Shore Railroad Right-of-Way:* The Committee further modified the recreation corridor plan to include the abandoned North Shore Railroad right-of-way from the City of Kenosha south to the State line. This corridor segment is included in Kenosha County plans and, in fact, will soon be open for use as a bicycle trail. Moreover, this corridor segment would provide a link to the trail segment along the North Shore right-of-way proposed in Lake County (Illinois) plans.

*Abandoned Interurban Right-of-Way in Ozaukee County:* The Committee changed the original recreation corridor configuration in southern Ozaukee County to include the abandoned interurban railroad right-of-way from Mee-kwon Park in the City of Mequon to the Village of Grafton. This segment replaces the original recreation corridor segment through the primary environmental corridor along the Milwaukee River from the Village of Thiensville to the Village of Grafton. This modification would maximize use of existing trail segments along the interurban right-of-way through the Villages of Thiensville and Grafton and would circumvent the difficult problem of assembling land for a recreation corridor along the Milwaukee River in a rapidly developing area.

The recreation corridor network recommended under the final outdoor recreation plan element is shown on the plan map contained in the packet attached to the back cover of this report. A comparison of the lineal miles and costs of the recreation corridor network under the preliminary and final plans is set forth in Table 200. A total of 437 miles of recreation corridor would be provided under the final park plan. This represents 32 miles, or 8 percent more mileage than proposed under the preliminary park plan. Costs of acquisition and development of recreation corridors under the final plan amount to \$18.2 million which is \$5.5 million, or 43 percent more than the acquisition and development costs estimated under the preliminary plan. The higher acquisition and development costs under the final plan occur not only as a result of the increased lineal mileage of corridors proposed but also because of the need to acquire more land due to cutbacks in proposed public acquisition of primary environmental corridor lands made under the final open space preservation plan element. Under the preliminary open space preservation plan, significantly greater acreages of primary environmental corridor were proposed for public ownership. Such land being in public ownership could, therefore, have been utilized for recreation corridors without incurring additional public acquisition costs.

Several other concerns raised at the informational meetings and hearing, while not warranting changes in the proposed recreation corridor system, do merit consideration herein.

Table 200

**PRELIMINARY AND FINAL PLAN RECOMMENDATIONS FOR ACQUISITION AND DEVELOPMENT OF  
RECREATION CORRIDORS BY COUNTY PARK AGENCIES AND THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES**

County	Governmental Agency	Recreation Corridor Acquisition and Development					
		Preliminary Plan Acquisition and Development Recommendations		Final Plan Acquisition and Development Recommendations		Difference Between Preliminary and Final Plan Acquisition and Development Recommendations	
		Miles	Cost (in dollars)	Miles	Cost (in dollars)	Miles	Cost <sup>a</sup> (in dollars)
Kenosha	DNR	10	204,000	0	0	- 10	- 204,000
	County	15	761,000	33	2,339,000	18	1,578,000
	Total	25	965,000	33	2,339,000	8	1,374,000
Milwaukee	DNR	0	0	0	0	--	--
	County	73	3,463,000	73	4,140,000	--	677,000
	Total	73	3,463,000	73	4,140,000	--	677,000
Ozaukee	DNR	0	0	0	0	--	--
	County	39	1,146,000	35	1,299,000	- 4	153,000
	Total	39	1,146,000	35	1,299,000	- 4	153,000
Racine	DNR	9	226,000	3	48,000	- 6	- 178,000
	County	35	1,237,000	41	2,025,000	6	788,000
	Total	44	1,463,000	44	2,073,000	--	610,000
Walworth	DNR	37	613,000	28	590,000	- 9	- 23,000
	County	16	561,000	25	675,000	9	114,000
	Total	53	1,174,000	53	1,265,000	--	91,000
Washington	DNR	30	710,000	30	788,000	--	78,000
	County	23	747,000	23	759,000	--	12,000
	Total	53	1,457,000	53	1,547,000	--	90,000
Waukesha	DNR	36	608,500	39	958,000	3	349,500
	County	82	2,420,000	107	4,543,000	25	2,123,000
	Total	118	3,028,500	146	5,501,000	28	2,472,500
Region	DNR	122	2,361,500	100	2,384,000	- 22	22,500
	County	283	10,335,000	337	15,780,000	54	5,445,000
	Total	405	12,696,500	437	18,164,000	32	5,467,500

<sup>a</sup> Cost includes acquisition cost for recreation corridor mileage currently not in, or proposed for, public ownership and development cost for the total recreation corridor mileage. Since the quantity of primary environmental corridor lands proposed for public acquisition under the preliminary plan has been significantly reduced under the final plan, acquisition cost for the recreation corridor may increase even in those cases in which no additional recreation corridor mileage has been proposed.

Source: SEWRPC.

*Recreation Corridor Intersections:* At the informational meeting in West Bend, the president of a Washington County Snowmobile Club, while not objecting to plan proposals to exclude snowmobiles from the recreation corridor system, asked that the plan explicitly accommodate the crossing of recreation corridors and existing snowmobile trails. The problem of intersections between the proposed segments of the recreation corridor and existing snowmobile trails is part of a larger problem of crossings between the recreation corridor and a variety of man-made features including streets and highways and railroad rights-of-way, as well as snowmobile trails. There will be many such crossings because of the linear nature of the proposed recreation corridors. Such crossings should, of course, be accommodated. They represent a design problem which must be addressed in local efforts to refine the generalized recreation corridor proposals and construct trail facilities.

*Chicago and North Western Right-of-Way:* Two resolutions were submitted at the public hearing suggesting that the former Chicago and North Western Railroad right-of-way from Juneau Park north to W. Hampton Avenue in Milwaukee County be utilized for recreation and open space purposes and not for mass transit purposes. One of the resolutions was filed by the Village Board of the Village of Shorewood and the other by the Recreation Committee of the Citizens' Task Force of the University of Wisconsin-Milwaukee East Side/Northshore Transit Improvement Study, a study being conducted by Milwaukee County using federal mass transit planning monies provided through the Regional Planning Commission by the U. S. Department of Transportation, Urban Mass Transportation Administration. Milwaukee County has acquired that segment of the railroad right-of-way from N. Bartlett Avenue to W. Hampton Avenue through condemnation for the express purpose of providing mass transit service. The railroad holds an operating easement over this entire segment and currently is providing freight service over a spur line on this right-of-way. That portion of the right-of-way from N. Bartlett Avenue to Juneau Park had previously been obtained by Milwaukee County using open space acquisition funds provided by the U. S. Department of Housing and Urban Development and intended for the express purpose of providing open space and recreation activities. This segment is currently being maintained by the Milwaukee County Park Commission as park lands. (The railroad right-of-way parallels the Milwaukee River north of E. North Avenue.) Presently, an unpaved bicycle and hiking path runs virtually the entire length of both segments of the right-of-way.

As presented at the public informational meetings and hearing, the preliminary park and open space plan recommends the establishment of a recreation corridor along the Milwaukee River. The plan further recommends that detailed project planning conducted by the Milwaukee County Park Commission establish the precise alignment of the corridor and the types of recreation facilities to be provided in the corridor.

During the time of the public consideration of the preliminary park and open space plan, the Commission also was in the final stages of preparing a new regional transportation plan for the year 2000. Some of the alternatives considered by the Commission in that study include using the subject railroad right-of-way to provide mass transit service. The question of whether or not to so utilize this right-of-way, however, cannot be determined in the regional park and open space planning effort; rather, this issue can only be properly determined in the regional transportation planning effort. If it is determined in the latter effort that the subject right-of-way should not be reserved for mass transit purposes, then certainly that right-of-way should become the alignment of the recommended recreation corridor. Given creative design, it may even be possible to accommodate both the recreation corridor and mass transit on the right-of-way if it is determined in the final regional transportation plan that the right-of-way is necessary for mass transit purposes. Based upon these considerations, the Committee recommended that the final park and open space plan continue to propose the establishment of a recreation corridor along the Milwaukee River in Milwaukee County, but that the precise alignment and recreation facilities to be provided in that corridor be determined by the Milwaukee County Park Commission following completion of both the regional park and open space and regional transportation plans.

*Boat Access:* As presented at the public informational meetings and public hearing, the preliminary regional park and open space plan recommended new or improved existing boat access points on 28 inland lakes, together with the provision of five new canoe access points on the Milwaukee River and four new canoe access points on the Fox River. The plan further recommended the provision of about 1,300 additional boat mooring slips, 19 additional boat launch ramps, and four new harbors of refuge along the Lake Michigan shoreline in the Region. The record of the public hearing reveals both support for and opposition to some of these proposals.

*Inland Water Access—Fast Boating Access Sites:* The preliminary plan proposed that additional boat access facilities designed to accommodate the launching of motorized boats for such activities as water skiing and fast pleasure boating be provided on three of the 100 major lakes in the Region—Pine Lake in Waukesha County, Geneva Lake in Walworth County, and Wind Lake in Racine County. Opposition was expressed at the public hearings to the proposals for Pine and Geneva Lakes, but not to the proposal for Wind Lake.

At the present time, an access point does not exist on Pine Lake where a nonlake resident can launch a motorized boat for such activities as water skiing and fast pleasure boating. There is an existing public access point located on Muscovy Road but this access point has not been designed to permit the launching of fast motor boats, and it does not contain any off-street parking area to permit nonlake residents to launch small boats for fishing, canoeing, and small pleasure boating activities.



The preliminary plan envisioned the provision of a launching facility for heavier, faster motorized craft. Considerable opposition to this preliminary plan recommendation was voiced at the public hearings not only by members of the Pine Lake community but by other Waukesha County residents. The Village of Chenequa submitted a position paper recommending that the boat launch access recommendation be removed from the regional park and open space plan. The opposition to the preliminary plan recommendation centered on the contention that, for many decades, Pine Lake has been recognized for its natural beauty and tranquility; the Lake is presently used primarily for fishing and slow boating activity; and the provision of an access facility to permit the launching of boats to be used for water skiing and fast pleasure boating would damage the careful lake use planning that has been conducted by the Village of Chenequa over a period of many years. Not only would fast motor boating tend to disrupt the present fishing, sailing, and other more passive water-oriented activities, but it would tend to destroy the beauty and tranquility of the Lake.

The Technical and Citizen Advisory Committee carefully considered this matter, noting in its deliberations the inevitable conflict between the rights of the general public and the rights of riparian owners to use lake waters, as well as the often competing rights of those who prefer fast motor boating activities and those who prefer slow, generally nonmotorized, boating activities. The Committee determined that there is a need within the Region for lakes which are relatively free from fast, noisy motorboating activity, and which can accommodate slower, quieter boating activities, such as fishing, canoeing, and sailing, throughout the entire day and not just in the early morning and late evening hours when fast boating activities are normally at low levels. The Committee also recognized that the lake planning efforts by the Village of Chenequa, including protecting the natural shoreline of the Lake through allowing only very low-density development, have contributed to maintaining the natural beauty of Pine Lake and its shorelines, and that, therefore, the Lake is uniquely suitable for smaller, quieter, slower types of boating activities. Accordingly, the Committee recommended that the final regional park and open space plan not contain a proposal for a boat access facility on Pine Lake that would permit the launching of larger, faster motorized boats. It further recommended that, in order to enhance the opportunity for general public use of Pine Lake, the existing access point on Muscovy Road be improved to provide for at least 10 parking places. This would permit members of the general public to bring their canoes and smaller lighter boats to the Lake and launch them by hand. One way to accommodate the required parking would be to provide a parking lane along Muscovy Road in the road right-of-way.

The Southeastern Wisconsin Regional Planning Commission upon careful and extended deliberation acted to reverse the Technical Committee's recommendation to provide access to accommodate only slow boating activities and recommended that full access for all types of

boating activities be provided on Pine Lake as recommended in the preliminary regional park and open space plan. Reversal of the Technical Committee's recommendation was based upon two considerations. First, the Commission noted that application of the inland lake access standard developed by the Technical Committee indicated that additional fast boating could be accommodated on Pine Lake and, thus, the provision of an access facility for such use was warranted and, second, the Commission reasoned that, since Pine Lake is held in the public trust by the State, nonriparians as well as riparian owners should have equal opportunity to participate in similar water related recreation activities. Limiting the access point to accommodate only slow boating activity, as recommended by the Technical Committee, would discriminate against nonriparians who would not be able to utilize the lake for fast boating activities while riparian owners with ready access to the Lake from their properties could continue to utilize the Lake for such activities. The Commission did indicate that if the local community restricted all use to slow boating activities only, then provision of a limited access would be justified.

The public hearing record indicates concern over the preliminary plan recommendation to provide for additional boat access facilities at Lake Geneva that would accommodate the launching of motorized boats for such activities as water skiing and motor boating. Application of the standards developed under the regional park and open space planning program indicated an approximate need for nearly 50 additional parking spaces to accommodate those who wish to undertake fast, motorized boating activities. The Commission 1973 park and open space site inventory indicated that there were four existing sites on Geneva Lake that could accommodate such boat launching and that together these sites provided parking for about 200 automobiles and attendant boat trailers. It was indicated at the hearing that a 1977 inventory by the Wisconsin Department of Natural Resources had indicated a total of about 250 such parking spaces at five boat launch points. In verifying the Wisconsin Department of Natural Resources' inventory, it was determined that one new fast boat launch site had been constructed since completion of the Commission inventory in 1973, together with a parking area for about 30 automobiles and attendant boat trailers, and that a total of about 20 additional parking spaces had been provided at the four sites inventoried in 1973. Thus, the plan recommendations had, in effect, already been implemented. Accordingly, the Committee recommended that the final plan not recommend the provision of any additional fast boat launching facilities at Geneva Lake.

*Inland Water Access—Slow Boating Access Sites:* In making the preliminary park and open space plan, the Commission staff and the Technical and Citizen Advisory Committee applied the park and open space standards for inland water access for slow boating purposes to the 100 major inland lakes in the Region. Data were drawn from the 1973 inventory of park and open space

sites conducted by the Commission staff. That analysis resulted in a preliminary plan recommendation to provide new or improved slow boating access points on 25 of the 100 major inland lakes. The basic purpose of this plan recommendation was to ensure that the general public had adequate access to all of the 100 major lakes in the Region, either through a public access point or a private access point, such as a commercial boat livery.

Information presented at the public informational meetings and public hearings, indicated that there did exist, on some of the 25 identified lakes, existing access points for slow boating purposes that would meet the plan standards. In some cases such slow boat access points had been provided since completion of the 1973 Commission inventory; in other cases access points existed in 1973 but were not reported in the inventory by local public officials and private recreation site operators. In some of these latter instances, the access points are not well known to the general public because no signs or other information existed to bring public notice to the access sites.

Accordingly, the Committee directed that the Commission staff review once again existing slow boat lake access conditions at the 25 major lakes initially found to be deficient. The results of this analysis are as follows:

1. One of the 25 lakes—Booth Lake in Walworth County—was found to have sufficient slow boating access facilities. These facilities are operated by the Village of East Troy and the Towns of East Troy and Troy. Officials of these units of government, however, have officially restricted the use of these facilities through local ordinances to residents in their jurisdictions and to residents of the East Troy school district living outside these local units of governments who may use the facilities upon payment of an annual user fee. Legally, then, the access point is not open to the general public. The Committee determined to recommend that the Village of East Troy and the Towns of East Troy and Troy remove the legal restrictions to the use of the access point by nonresidents, thus making the lake accessible to the general public.
2. Nine of the 25 lakes—Lorraine, Wandewega, and Cravath in Walworth County; Middle Genesee, Pretty, and North Lakes in Waukesha County; and Little Cedar, Wallace, and Bark Lakes in Washington County—were found to have access points for slow boating purposes that meet the park and open space standards. Accordingly, the Committee determined to delete from the final plan additional access recommendations for these lakes. As indicated above, in some of these cases slow boating access points have been provided since the completion of the 1973 Commission recreation site inventory. Access points which existed in 1973 and which were not recorded on the inventory were typically unsigned, not well known to the general public, and not reported by local public officials.

3. Ten of the 25 lakes—Dyer, Cross, and Voltz Lakes in Kenosha County; Long Lake in Racine County; Peters Lake in Walworth County; Lucas Lake in Washington County; and Upper Nashotah, Lower Nashotah, Hunters, and Denoon Lakes in Waukesha County—have no access points at which the general public can either launch a small boat by hand or rent a small boat. Accordingly, the Committee determined to continue to recommend the provision of sufficient slow boat access points at these lakes.

4. At the remaining five lakes—George Lake in Kenosha County; Ke Nong Go Mong and Wau-beesee Lakes in Racine County; Smith Lake in Washington County; and Beaver Lake in Waukesha County—it was determined that, while there were existing points of access, there were insufficient off-street parking spaces associated with such access points to meet the park and open space standards. Accordingly, the Committee determined to continue to recommend improved slow boat access points at these lakes.

Modifications to the inland lake access facility recommendations of the regional park and open space plan would reduce the acquisition and development costs of this component by \$45,700, from \$153,700 under the preliminary plan to \$108,000 under the final plan.

Lake Michigan Water Access: The preliminary regional park and open space study identified a need for certain access points along the Lake Michigan shoreline; one of these access points would be a harbor of refuge to be located between the City of Racine and the boat launch site located in the mouth of Oak Creek in the City of South Milwaukee. The most suitable location for such a site would be the recommended Bender Park site in the City of Oak Creek. The Mayor of the City of Oak Creek's support for a recreational boat harbor of refuge in conjunction with the Bender Park site is particularly noteworthy. While Milwaukee County is expected to be the cooperating local agency for a harbor of refuge at Bender Park, the positive response of the City of Oak Creek would enhance the chances of development of such a facility at Bender Park.

#### Urban Outdoor Recreation Plan Component

The urban outdoor recreation plan component seeks to provide the quantity of local recreation sites—sites less than 100 acres in area—and intensive nonresource-oriented outdoor recreation facilities, including baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, tennis courts, and swimming pools, sufficient to meet the overall demand within urban areas of the Region through the plan design year. Under the urban outdoor recreation plan component, about 3,180 acres of additional local public recreation lands within almost 250 park and school recreation sites would be provided by the plan design year. The plan includes the proposed redevelopment for park purposes of about 170 acres of land currently in urban use to allow each resident of an urban area to have access—within one-half mile—to a public outdoor recreation site.

There was no adverse reaction expressed at the public informational meetings to the proposed urban outdoor recreation plan component. Comments voiced at the informational meetings were largely requests for further description of the plan. The most common inquiry related to whether or not the proposed local parks are intended to be site-specific. It should be stressed here that the urban plan component recommendations are not intended to be site-specific but rather to be indicators of future local recreation site and facility needs under regional land use plan conditions. Under the plan it would be the responsibility of the local park planning agency to refine the regional plan recommendations. The Commission staff and staffs of the county park planning agencies in the Region generally are available to assist local units of government in the identification of potential local parks and other planning required to meet the identified urban recreation needs.

In discussing this matter, some Committee members believed that the plan should provide for a limited number of urban type parks in rural areas of the Region. Such facilities were held necessary to promote a desirable sense of community in the local area as well as meet certain outdoor recreational needs such as for softball and baseball and for special local civic events. They noted that, historically, rural town residents lacking park and recreation facilities generally were permitted use of park sites and recreation facilities in nearby urban villages or cities where they came to sell their products or purchase goods and services. More recently, however, many of the rural town areas have taken on a mixed urban/rural character and, thus, many incorporated communities which previously provided rural residents with park and recreation facilities may take the position that their park sites and recreation facilities are now intended to serve only the local citizenry. Rural town residents, thus, are left with no park or recreation facilities to meet their own recreation needs.

In an effort to accommodate the very basic park and recreation facility needs of town units of government, the Committee recommended that an overriding consideration be made part of the urban plan component. This overriding consideration would allow rural town units of government which currently lack any town-owned park and recreational facilities the opportunity to acquire and develop, with available federal and state grant-in-aid support, one town park and associated recreation facilities to meet the basic local recreation needs of town residents and to promote a desirable local sense of community. This overriding consideration should not be construed as a recreation requirement for towns but rather as an option for towns to provide, with grant-in-aid support, a public park and associated recreation facilities for town residents should the town so desire. As a community facility, a town park should be readily accessible to town residents and, thus, it may be advisable to locate such a town park in conjunction with other community facilities which serve as a focal point for town residents such as a town hall, a school, or a town fire department. This interpretation of the urban plan component is intended to provide a park to accom-

modate the basic recreation and related community needs of town residents. It is not intended that numerous local parks with intensive nonresource-oriented facilities be provided with grant-in-aid support to serve the lower density, existing or future suburban development in many rural areas. Such suburban development would not qualify as an "urban area"<sup>5</sup> and, thus, according to the adopted standards for urban parks, would not be considered eligible for grant-in-aid support of local park and recreational facilities. This would not preclude town units of government, through utilization of subdivision land or fee in lieu of dedication requirements, from providing additional park and recreation facilities for town residents without grant-in-aid support.

## CONCLUDING REMARKS—PUBLIC REACTION

In summary, it may be concluded that public reaction to the preliminary regional park and open space plan recommendations, although mixed, was overall quite favorable. In reviewing all of the comments, opinions, and data presented at all of the meetings and the hearing held concerning the plan recommendations, the Technical and Citizen Advisory Committee determined to change certain recommendations of the open space plan element and of the resource-oriented component of the outdoor recreation plan element. These changes, as indicated in Table 201, would reduce total outlays for acquisition and development from \$261.4 million under the preliminary park and open space plan to \$238.8 million under the final plan.<sup>6</sup> Specifically, the Committee recast the environmental corridor acquisition recommendations of the preliminary open space plan element to indicate a minimum level of public acquisition, namely, that level encompassed in adopted county and local land use and park and open space plans and that level necessary to

---

<sup>5</sup> *Urban areas are defined as areas containing a closely spaced network of minor streets which include concentrations of residential, commercial, industrial, governmental, or institutional land uses that have a minimum total area of 160 acres and a minimum population of 500 persons. Such areas usually are incorporated and are served by sanitary sewerage facilities. These areas have been further classified into the following densities: low-density urban areas, or areas having 0.70 to 2.29 dwelling units per net residential acre; medium-density urban areas, or areas with 2.30 to 6.99 dwelling units per net residential acre; and high-density urban areas, or areas with 7.00 to 17.99 dwelling units per net residential acre.*

<sup>6</sup> *The estimated operation and maintenance expenditures under the final plan are expected to be approximately equal to the estimated operation and maintenance expenditures under the preliminary plan shown in Chapter XV, Table 195 and in Appendix Q. It has been assumed that the reduction in such expenditures achieved through the acquisition of fewer acres of primary environmental corridor lands under the final plan would be offset by the increase in expenditure due to the addition of recreation corridor mileage under the final plan.*

Table 201

**ACQUISITION AND DEVELOPMENT COSTS UNDER THE PRELIMINARY AND  
FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLANS**

County	Governmental Agency	Total Acquisition and Development Cost Under Preliminary Plan (in dollars)	Change in Planned Acquisition and Development Costs Following Public Informational Meetings and Hearing (in dollars)				Total Acquisition and Development Cost Under Final Plan (in dollars)
			Open Space Preservation Plan Element: Primary Environmental Corridor Acquisition	Outdoor Recreation Plan Element			
				Major Parks	Recreation Corridors	Inland Lake Access	
Kenosha	DNR County and Local	2,420,000 14,539,975	- 1,917,000 1,405,000	1,900,000 --	- 204,000 1,578,000	-- 2,400	2,199,000 17,525,375
	Total	16,959,975	- 512,000	1,900,000	1,374,000	2,400	19,724,375
Milwaukee	DNR County and Local	0 98,819,475	-- - 5,652,000	-- --	-- 677,000	-- --	0 93,844,475
	Total	98,819,475	- 5,652,000	--	677,000	--	93,844,475
Ozaukee	DNR County and Local	2,463,000 15,620,715	- 2,267,000 - 4,034,000	-- 141,000	-- 153,000	-- --	196,000 11,880,715
	Total	18,083,715	- 6,301,000	141,000	153,000	--	12,076,715
Racine	DNR County and Local	4,214,000 21,684,975	- 2,930,000 38,000	-- 185,000	- 178,000 788,000	-- 2,400	1,106,000 22,698,375
	Total	25,898,975	- 2,892,000	185,000	610,000	2,400	23,804,375
Walworth	DNR County and Local	10,944,000 9,471,250	- 3,492,000 - 1,898,000	- 2,225,000 2,500,000	- 23,000 114,000	-- - 19,700	5,204,000 10,167,550
	Total	20,415,250	- 5,390,000	275,000	91,000	- 19,700	15,371,550
Washington	DNR County and Local	13,945,000 13,392,440	- 4,885,000 - 2,347,000	-- 228,000	78,000 12,000	-- - 8,200	9,138,000 11,277,240
	Total	27,337,440	- 7,232,000	228,000	90,000	- 8,200	20,415,240
Waukesha	DNR County and Local	8,741,500 45,140,885	- 577,000 - 2,187,000	-- --	349,500 2,123,000	-- - 22,600	8,514,000 45,054,285
	Total	53,882,385	- 2,764,000	--	2,472,500	- 22,600	53,568,285
Region	DNR County and Local	42,727,500 218,669,715	- 16,068,000 - 14,675,000	- 325,000 3,054,000	22,500 5,445,000	0 - 45,700	26,357,000 212,448,015
	Total	261,397,215	- 30,743,000	2,729,000	5,467,500	- 45,700	238,805,015

Source: SEWRPC.

preserve segments of the primary environmental corridors which are or may be expected to be threatened by urban encroachment. The revision in environmental corridor acquisition recommendations results in a reduction of \$30.7 million in corridor land acquisition costs (see Table 199). The Committee also modified the recreation corridor configuration of the preliminary plan to include certain additional abandoned rights-of-way. Final plan

costs for major parks and recreation corridor acquisition and development are higher by \$2.7 million and \$5.5 million, respectively, than initial plan costs. The higher outlays for major parks are a result of the need to acquire more land for parks due to the reductions in proposed public acquisition of primary environmental corridor lands under the final plan as well as the addition of development costs for facilities at the Bong Recreation Area. The



higher outlays for recreation corridors under the final plan occur not only as a result of the increased lineal mileage of corridors proposed but also because of the need to acquire more land due to cutbacks in proposed public acquisition of primary environmental corridor lands made under the final open space preservation plan element. Finally, the Committee changed certain inland water access recommendations of the preliminary plan by removing proposals for slow boating access points on nine major inland lakes and by eliminating proposals for fast boating access facilities on two major lakes. The cost reduction associated with the revised inland lake access recommendations is less than \$0.1 million. The final park and open space plan recommendations, as approved by the Technical and Citizen Advisory Committee on November 1, 1977, and as adopted by the Southeastern Wisconsin Regional Planning Commission on December 1, 1977, are shown on Map 138 and on the final plan map contained in the packet attached to the cover of this report. In addition, a summary of the final park and open space plan recommendations is presented in table form in Appendix S.

## IMPLEMENTATION

The legal and governmental framework existing within the Region is such that the existing state, county, and local units of government can readily implement the major recommendations contained in the regional park and open space plan. These levels, agencies, and units of government include at the local level the governing bodies of the cities, villages, towns, and counties within the Region; at the state level the Wisconsin Department of Natural Resources, the Department of Local Affairs and Development, and the State Historical Society of Wisconsin; and at the federal level the U. S. Department of Interior, National Park Service, the U. S. Department of Interior, Fish and Wildlife Service, the U. S. Department of Interior, Bureau of Outdoor Recreation,<sup>7</sup> the U. S. Department of Agriculture, Forest Service, the U. S. Department of Agriculture, Soil Conservation Service, the U. S. Department of the Army, Corps of Engineers, and the U. S. Department of Housing and Urban Development.

The primary emphasis on implementation of the regional park and open space plan is placed upon actions of the Wisconsin Department of Natural Resources, the seven County Boards of the counties in southeastern Wisconsin, and the individual municipal units of government in the Region. It is recommended that the Department of Natural Resources purchase the remaining environmental corridor lands within the existing Department project

boundaries and certain additional environmental corridor lands adjacent to Department project boundaries for the Vernon Marsh in the Towns of Genesee, Mukwonago, Vernon, and Waukesha in Waukesha County; the Kettle Moraine State Forest—Southern Unit in the Town of LaGrange in Walworth County and in the Towns of Delafield, Genesee, and Ottawa in Waukesha County; and the Allenton Marsh in the Town of Addison in Washington County; acquire additional segments of the primary environmental corridor situated immediately south and west of West Bend in Washington County; provide one additional state park within the Region to be located on Lucas Lake in Paradise Valley in Washington County; acquire lands as necessary and develop recreation trails within the recreation corridors traversing the western portion of the Region through parts of Walworth, Washington, and Waukesha Counties; and develop recreation trails within other state-owned open lands as necessary to provide continuity throughout the overall regional recreation corridor system, all as shown on Map 138 and the final plan map contained in the packet attached to the back cover of this report.

It is recommended that county units of government adopt appropriate zoning ordinances, including exclusive agricultural, floodland, shoreland, conservancy, or other appropriate zoning district regulations and zoning district delineations, to be effective in the unincorporated areas in the counties in order to preserve the prime agricultural lands, remaining net primary environmental corridor lands, and other lands required for recreation use; acquire remaining undeveloped land within designated segments of the primary environmental corridor, especially those areas of the corridor which lie in or adjacent to existing urban areas or areas which may be expected to be in urban use by the plan design year; provide all additional major parks, with the exception of the proposed state park at Paradise Valley, and develop necessary recreation facilities for such parks; acquire lands and develop the necessary recreation trail facilities within selected recreation corridors; and provide additional boat access facilities to selected major inland lakes and rivers within the Region and cooperate with the U. S. Department of the Army, Corps of Engineers, in selecting sites and identifying locations for access facilities to Lake Michigan within the Region, all as shown on Map 138 and the final plan map contained in the packet attached to the back cover of this report.

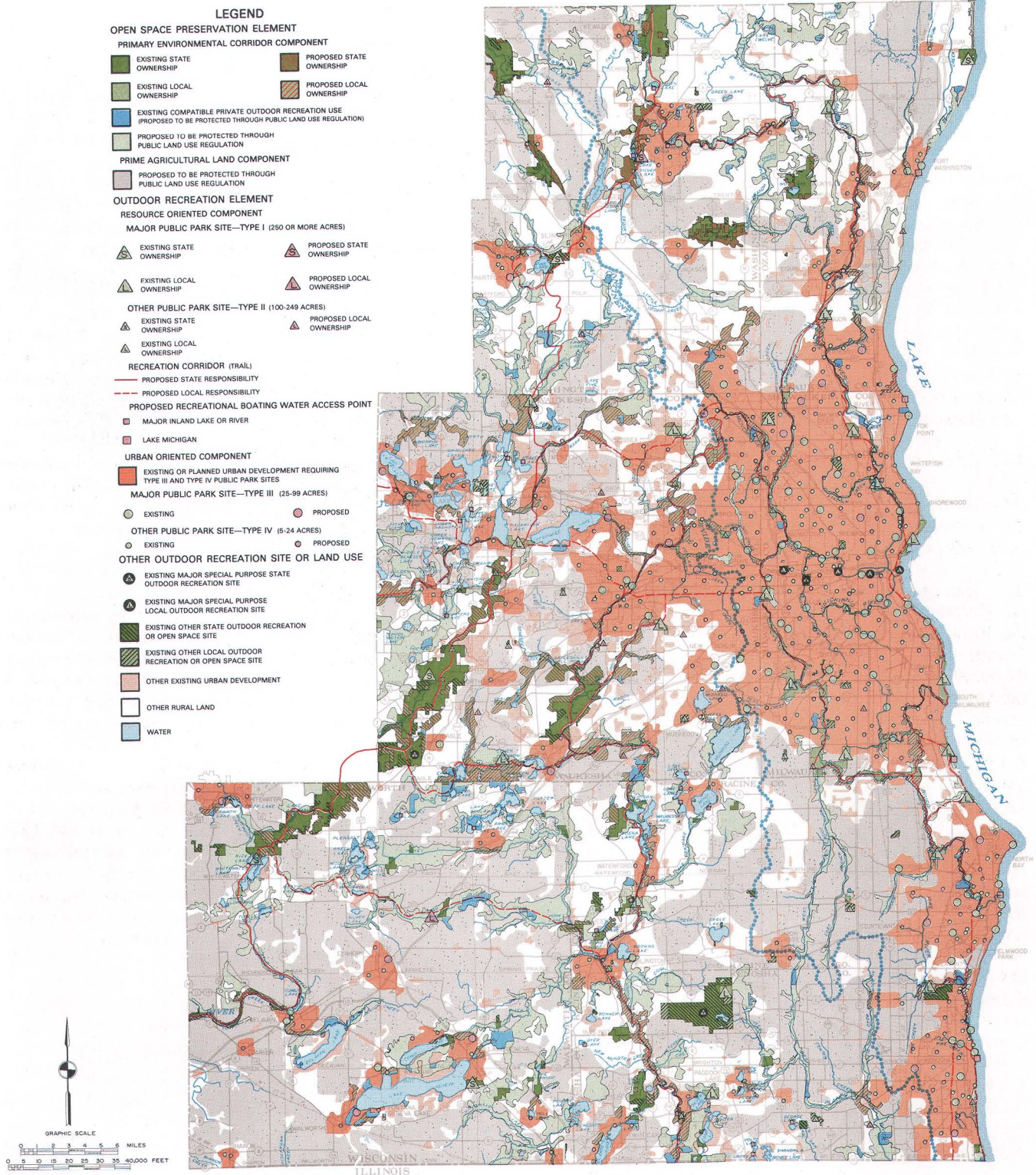
It is recommended that all local units of government adopt appropriate zoning ordinances including zoning district regulations and zoning district boundaries to preserve the prime agricultural lands and remaining net primary environmental corridor lands and other lands required for recreation use within the Region through exclusive agricultural, floodland, shoreland conservancy, or other appropriate zoning districts; prepare and adopt an official map showing as parkways all primary environmental corridors recommended for acquisition under the regional park and open space plan, and as parks all park sites identified in the local refinement of the regional park and open space plan; adopt ordinances controlling

---

<sup>7</sup> The U. S. Department of Interior has dissolved the Bureau of Outdoor Recreation (BOR) in accordance with Secretarial Order 3017 (January 1978) and established in its place a Heritage Conservation and Recreation Service (HCRS), which will assume most responsibilities now exercised by the BOR and certain other responsibilities now exercised by the National Park Service (NPS).



## FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN FOR SOUTHEASTERN WISCONSIN: 2000



The final recommended regional park and open space plan proposed that all of the remaining 437 square miles of net primary environmental corridor lands in the Region be preserved in essentially natural, open uses. Approximately 72 square miles of such corridor lands are already in public ownership. The plan recommends approximately 113 additional square miles be purchased for preservation while the remaining 252 square miles be preserved through appropriate public land use regulations. The plan also recommends that the approximately 733 square miles of prime agricultural lands be protected through appropriate public land use regulation. Twenty large—greater than 100 acres—resource-oriented parks would be provided under the plan for resource-oriented recreation activities like camping, picnicking, and golf and approximately 437 linear miles of recreation corridors for resource-oriented recreation activities like hiking, biking, and cross country skiing would also be provided. The plan also proposes the provision of additional water access facilities on Lake Michigan, on major rivers, and on inland lakes in the Region. Finally, the plan proposes the provision of an additional 240 local parks, each less than 100 acres in area, for intensive nonresource-oriented recreation activities such as baseball, ice skating, and tennis.

Source: SEWRPC.



the subdivision of lands which include a requirement for park land dedication and/or fee in lieu of dedication during the land subdivision process; provide additional local parks and related urban outdoor recreation facilities within their respective communities; provide access facilities to selected inland lakes and rivers within the Region; and cooperate with U. S. Department of Army Corps of Engineers in identifying locations for access facilities to Lake Michigan.

The foregoing enumeration of certain recommended plan implementation activities for summary purposes does not mean that other plan implementation actions recommended in Chapter XV of this report, and not repeated here, may be neglected. In the final analysis, implementation of the final recommended regional park and open space plan must proceed in a comprehensive, fully coordinated fashion with the assistance and cooperation of all affected levels, units, and agencies of government within the Region. For example, in order to provide much needed resource oriented facilities in the Milwaukee area in a timely manner, the Wisconsin Department of Natural Resources may assist Milwaukee County in the development of the proposed Oakwood Reservoir and related park facilities. Further, certain cities, villages, and towns may assist their respective county units of government in the acquisition of primary environmental lands within their jurisdiction.

The full capital investment cost of implementing the final recommended regional park and open space plan for local units of government in southeastern Wisconsin is estimated at \$212.4 million. The average annual cost of total capital investment required for plan implementation would be approximately \$8.2 million, or \$4.08 per capita.<sup>8</sup> In order to assess the possible impact of implementation of the regional park and open space plan on the public financial resources of local units of government within the Region, an analysis was made of the long-term historic public expenditures by the counties, cities, villages, and towns within the Region for park and open space purposes. A forecast of local spending for park and open space acquisition and development based upon the historic trend indicated a possible expenditure of \$221.2 million over the plan design period by all local units of government in the Region combined. A gross comparison of planned capital outlays and anticipated expenditures indicates that a continuation of the recent trend in the overall level of local expenditures for park and open space acquisition and development would provide sufficient funds to meet overall local plan implementation costs. It is important to recognize, however, that there would have to be a shift in the distribution of spending for parks and open space among local units of government in the Region, with many governmental units in the outlying areas of the Region required to substantially increase outlays for park and open space acquisition and

development, while the level of outlays for parks and open space in Milwaukee County would remain substantially unchanged.

The estimated capital cost to the State in its role in implementing the regional park and open space plan is approximately \$26.4 million. A large share of the total outlay—\$21.4 million, or 81 percent—is required for land acquisition, including acquisition for major parks and recreation corridors as well as acquisition for open space preservation purposes. Between 1964 and 1974, state spending for park and open space land acquisition within the Region totaled \$6.1 million, or an annual average of \$0.6 million during the 10-year period. State outlays for land acquisition alone, excluding expenditures for facility development and operation and maintenance, would have to average \$1.0 million per year for full implementation of the regional park and open space plan. It should be noted that state outlays under the regional park and open space plan may be substantially reduced depending on the degree to which zoning is an effective substitute for outright public acquisition to achieve the preservation of primary environmental corridor lands. A reduction in the amount of land acquisition by the State notwithstanding, it is apparent that implementation of the regional park and open space plan will require an increased level of state expenditure in southeastern Wisconsin.

## CONCLUSION

The regional park and open space plan recommended herein provides another important element of the evolving comprehensive plan for the physical development of the seven-county Southeastern Wisconsin Region. The plan is based upon extensive inventories and analyses of the Region's socioeconomic and natural resource base; existing outdoor recreation sites and recreation facilities and their use; existing recreation plans, administration, laws, and regulations; and potential park and open space sites in the Region. The plan has been prepared under the direction of a Committee comprised of knowledgeable and experienced representatives from natural resource, conservation, and environmental preservation interests, and from public park administrations and related businesses and industries, and was subject to public review at a series of public informational meetings and hearings held throughout the Region.

The recommended regional park and open space plan has identified existing and forecast future needs for open space lands, large major parks, recreation corridors, and urban outdoor recreation sites, together with the attendant respective recreation facility requirements. The plan sets forth a recommended spatial arrangement of parks and related open spaces to meet both the existing and probable future recreation demands within the Region in a manner that will provide both good accessibility to the regional population and a high quality recreational setting.

The regional park and open space plan is intended to serve as a guide to federal, state, and local funding agencies which seek a more rational basis for the dis-

---

<sup>8</sup> See Appendix S, Table 7, for annual per capita costs by county.

tribution of limited park and open space acquisition and development funds. It also is intended to serve as a long-range park and open space plan for each of the seven counties in the Region, thereby fulfilling the county eligibility requirement for various federal and state grants-in-aid programs for park and open space acquisition and development. As with most long-range areawide plans, implementation will require a concerted and coordinated effort over many years by both the Commission and the counties, local communities, and funding agencies involved.

Though implementation of the regional park and open space plan may be difficult and sometimes controversial, the potential benefits are great. Implementation of the plan proposals set forth here will result in a truly integrated park and open space system within the Region, a system which can serve the dual purpose of preserving and enhancing the natural resource base while at the same time providing adequate opportunities for the existing population and the future residents of the Region to participate in a wide range of high quality recreational experiences. The importance of the implementation of this park and open space plan to the future overall quality of life within the Region cannot be overemphasized. Although the Southeastern Wisconsin Region is the most heavily urbanized portion of the State, it is blessed with an abundance of high quality resource amenities including Lake Michigan, numerous inland lakes and streams, attentive woodlands and wetlands, good wildlife habitat, rugged terrain, and scenic landscapes. Unfortunately, these resource amenities are all too often taken for granted, or worse, abused and

destroyed. These natural amenities are as irreplaceable as they are invaluable and, once lost, are lost forever. Action taken now will not only preserve these natural resources and, therefore, the unique natural beauty and overall environmental quality of the Region for all time, but will facilitate the provision of a regional park system which provides the resident population with a truly unique opportunity to participate in a variety of recreational experiences close to home.

Residents of this Region were indeed fortunate in the early 1920's—over 50 years ago—to have truly visionary and gifted park planners like Charles B. Whitnall. These men, realizing the importance of resource preservation, originated the concept of the environmental corridor and furthered this concept by recommending such lands be utilized to ring Milwaukee County with a continuum of park and parkway lands located along the major stream valleys and the Lake Michigan shoreline. The far-sighted plans of these men and others who followed are responsible for the truly invaluable Milwaukee County park and parkway system. While men like Charles B. Whitnall have since passed away, their ideas remain, ideas which, to a great extent, are embodied in the regional park and open space plan set forth above. The opportunity is here. The open space needs and recreation demand of the Region have been identified. The natural resources which can serve as a basis for meeting these needs and demands still exist. To achieve an economically feasible, yet outstanding, park and open space system within the Region, not only for the present generation but for generations yet to come, only implementation of this recommended plan is needed.



(This page intentionally left blank)

## **APPENDICES**

(This page intentionally left blank)

## Appendix A

### TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON REGIONAL PARK AND OPEN SPACE PLANNING

Robert J. Mikula . . . . .	General Manager, Milwaukee County Park Commission
Loren R. Anderson . . . . .	President, Geneva Lake Development Corporation, Williams Bay
Anthony S. Bareta . . . . .	Director, Milwaukee County Planning Commission
Donald B. Brick . . . . .	Walworth County Recreation Agent, Courthouse
Frederick H. Chlupp . . . . .	Land Use and Park Administrator, Washington County
Delbert J. Cook . . . . .	Cedar Creek Restoration Council, Cedarburg
Norbert Dettmann . . . . .	Washington County Board Supervisor
Arthur D. Doll . . . . .	Director, Bureau of Planning, Wisconsin Department of Natural Resources
David F. Egelhoff . . . . .	Ozaukee County Board Supervisor
Booker Hamilton . . . . .	Production Supervisor, Rexnord Corporation
Karl B. Holzwarth . . . . .	Park Director, Racine County Park Commission
Charles Q. Kamps . . . . .	Attorney, Quarles and Brady, Milwaukee
Philip H. Lewis . . . . .	Professor, Department of Landscape Architecture, University of Wisconsin-Madison; Director, Environmental Awareness Center, Madison
Richard J. Lindl . . . . .	Director of Parks, Kenosha County Park Commission
John Margis, Jr. . . . .	Racine County Board Supervisor, SEWRPC Commissioner
Kathleen Pfister . . . . .	Cultural Specialist, Milwaukee Department of City Development
Robert D. Ross . . . . .	General Manager, The Journal Times, Racine
Phil Sander . . . . .	Executive Secretary, Southeastern Wisconsin Sportsmen's Federation
George L. Schlitz . . . . .	Chairman, Kenosha County Park Commission
Frederick G. Schmidt . . . . .	Member, Sierra Club
Mrs. John D. Squier . . . . .	Member, Riveredge Nature Center, Inc.
Walter J. Tarmann . . . . .	Director, Waukesha County Park and Planning Commission
Edgar Trecker . . . . .	Supervisor of Forestry, Wildlife and Recreation, Southeast District, Wisconsin Department of Natural Resources
Elwood R. Voigt . . . . .	Ozaukee County Park Manager
Joseph Waters . . . . .	Proprietor, Lazy Day Campgrounds, Town of Farmington
Dr. Harry H. Wilkens . . . . .	Outdoor Sportsman, Milwaukee
Dr. George T. Wilson . . . . .	Visiting Lecturer, Department of Continuing and Vocational Education, University of Wisconsin-Madison
Thomas N. Wright . . . . .	Director of Planning, City of Racine

The Commission also would like to acknowledge the work of former Committee members who assisted in the completion of the study—these former members include the following:

William H. Claflin . . . . .	Former Deputy Commissioner, Department of City Development, Milwaukee
Richard W. Cutler . . . . .	Attorney, Quarles and Brady, Milwaukee; Commissioner, SEWRPC
Howard W. Gregg . . . . .	Former General Manager, Milwaukee County Park Commission
Robert A. Gibson, Jr. . . . .	Former Comptroller, The Abbey Hotel, Fontana
Clinton E. Rose . . . . .	Former Milwaukee County Board Supervisor



(This page intentionally left blank)

## EXISTING PARK AND OPEN SPACE SITE INVENTORY FORM

Site No. 

--	--	--	--

INVENTORY OF EXISTING PUBLIC AND PRIVATE RECREATION AREAS  
SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

-3-

Bicycle Trail . . . . .	<table border="1"><tr><td></td><td>5</td><td>0</td><td>1</td></tr></table>		5	0	1	miles	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	5	0	1								
Horseback Trail . . . . .	<table border="1"><tr><td></td><td>5</td><td>0</td><td>3</td></tr></table>		5	0	3	miles	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	5	0	3								
Motorized Vehicle Trail . . . . .	<table border="1"><tr><td></td><td>5</td><td>0</td><td>4</td></tr></table>		5	0	4	miles	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	5	0	4								
Nature Trail . . . . .	<table border="1"><tr><td></td><td>5</td><td>0</td><td>5</td></tr></table>		5	0	5	miles	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	5	0	5								
Observation Station . . . . .	<table border="1"><tr><td></td><td>5</td><td>0</td><td>6</td></tr></table>		5	0	6	number	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	5	0	6								
Ski-touring Trail . . . . .	<table border="1"><tr><td></td><td>5</td><td>1</td><td>0</td></tr></table>		5	1	0	miles	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	5	1	0								
Other _____	<table border="1"><tr><td></td><td>5</td><td>1</td><td>2</td></tr></table>		5	1	2		<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	5	1	2								

Specify

Air Sportsfield . . . . .	<table border="1"><tr><td></td><td>6</td><td>0</td><td>1</td></tr></table>		6	0	1	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	0	1								
Amusement Park . . . . .	<table border="1"><tr><td></td><td>6</td><td>0</td><td>2</td></tr></table>		6	0	2	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	0	2								
Botanical Gardens . . . . .	<table border="1"><tr><td></td><td>6</td><td>0</td><td>3</td></tr></table>		6	0	3	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	0	3								
Camp . . . . .	<table border="1"><tr><td></td><td>6</td><td>0</td><td>4</td></tr></table>		6	0	4	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	0	4								
County Exposition . . . . .	<table border="1"><tr><td></td><td>6</td><td>0</td><td>5</td></tr></table>		6	0	5	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	0	5								
Cultural Festival . . . . .	<table border="1"><tr><td></td><td>6</td><td>0</td><td>6</td></tr></table>		6	0	6	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	0	6								
Fair Grounds . . . . .	<table border="1"><tr><td></td><td>6</td><td>0</td><td>7</td></tr></table>		6	0	7	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	0	7								
Parade Grounds . . . . .	<table border="1"><tr><td></td><td>6</td><td>0</td><td>8</td></tr></table>		6	0	8	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	0	8								
Stadium . . . . .	<table border="1"><tr><td></td><td>6</td><td>0</td><td>9</td></tr></table>		6	0	9	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	0	9								
Wayside . . . . .	<table border="1"><tr><td></td><td>6</td><td>1</td><td>0</td></tr></table>		6	1	0	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	1	0								
Zoo . . . . .	<table border="1"><tr><td></td><td>6</td><td>1</td><td>1</td></tr></table>		6	1	1	acres	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	1	1								
Other _____	<table border="1"><tr><td></td><td>6</td><td>1</td><td>2</td></tr></table>		6	1	2		<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>				
	6	1	2								

Specify

Remarks: \_\_\_\_\_

-4-

## D. SUPPORTING FACILITIES

## 1. Equipment Rental

	Code		
Bicycles . . . . .	<table border="1"><tr><td>0</td><td>1</td></tr></table>	0	1
0	1		
Boating . . . . .	<table border="1"><tr><td>0</td><td>2</td></tr></table>	0	2
0	2		
Camping . . . . .	<table border="1"><tr><td>0</td><td>3</td></tr></table>	0	3
0	3		
Fishing . . . . .	<table border="1"><tr><td>0</td><td>4</td></tr></table>	0	4
0	4		
Go-Carts . . . . .	<table border="1"><tr><td>0</td><td>5</td></tr></table>	0	5
0	5		
Golfing . . . . .	<table border="1"><tr><td>0</td><td>6</td></tr></table>	0	6
0	6		
Horses . . . . .	<table border="1"><tr><td>0</td><td>7</td></tr></table>	0	7
0	7		
Lockers . . . . .	<table border="1"><tr><td>0</td><td>8</td></tr></table>	0	8
0	8		
Skiing . . . . .	<table border="1"><tr><td>0</td><td>9</td></tr></table>	0	9
0	9		
Snowmobiles . . . . .	<table border="1"><tr><td>1</td><td>0</td></tr></table>	1	0
1	0		
None . . . . .	<table border="1"><tr><td>1</td><td>1</td></tr></table>	1	1
1	1		
Other _____	<table border="1"><tr><td>1</td><td>2</td></tr></table>	1	2
1	2		

Specify

Rental Fees (where available)

## 2. Maintenance area

yes	<table border="1"><tr><td></td></tr></table>	
no	<table border="1"><tr><td></td></tr></table>	

## 3. Other \_\_\_\_\_

Specify

## E. PRINCIPAL ADJACENT LAND USES

	Code	
Residential . . . . .	<table border="1"><tr><td>1</td></tr></table>	1
1		
Retail and Services . . . . .	<table border="1"><tr><td>2</td></tr></table>	2
2		
Wholesale . . . . .	<table border="1"><tr><td>3</td></tr></table>	3
3		
Manufacturing . . . . .	<table border="1"><tr><td>4</td></tr></table>	4
4		
Transportation, Communication, and Utilities . . . . .	<table border="1"><tr><td>5</td></tr></table>	5
5		
Institution & Government Services . . . . .	<table border="1"><tr><td>6</td></tr></table>	6
6		
Recreation . . . . .	<table border="1"><tr><td>7</td></tr></table>	7
7		
Agriculture . . . . .	<table border="1"><tr><td>8</td></tr></table>	8
8		
Open Lands, Swamps, & Water . . . . .	<table border="1"><tr><td>9</td></tr></table>	9
9		

## F. GENERAL EXPANSION POSSIBILITIES

	Code	
Yes . . . . .	<table border="1"><tr><td>1</td></tr></table>	1
1		
Limited . . . . .	<table border="1"><tr><td>2</td></tr></table>	2
2		
No . . . . .	<table border="1"><tr><td>3</td></tr></table>	3
3		

## K. PRESENCE IN PRIMARY ENVIRONMENTAL CORRIDOR

	Code
Partially within corridor . . . . .	1
Completely within corridor . . . . .	2
Outside of corridor . . . . .	3

L. PARK TYPE

Type I greater than 250 acres . . . . .	1
Type II 100-249 acres . . . . .	2
Type III 25-99 acres . . . . .	3
Type IV less than 25 acres . . . . .	4

## M. ACRES WITHIN PRIMARY ENVIRONMENTAL CORRIDOR

PAA		Acres in		Acres out		Total	
PAA		Acres in		Acres out		Total	
PAA		Acres in		Acres out		Total	
PAA		Acres in		Acres out		Total	

N. GENERAL REMARKS: (if any) \_\_\_\_\_

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## 1. TOPOGRAPHY (General Slope)

	Code
0 - 6 percent . . . . .	1
7 - 12 percent . . . . .	2
13 percent and above . . . . .	3

Woodland . . . . .	1	<input type="checkbox"/>	Primary
Scattered Trees . . . . .	2		
Shrubs . . . . .	3	<input type="checkbox"/>	Secondary
Natural Grasses . . . . .	4		
Mowed Lawn . . . . .	5		
		<input type="checkbox"/>	Tertiary

Encroaching Urbanization . . . . .	1	<input type="checkbox"/>	Primary
Traffic . . . . .	2		
Noise . . . . .	3		
Foul Odors . . . . .	4	<input type="checkbox"/>	Secondary
Poor Water Quality . . . . .	5		
Lack of Interest . . . . .	6		
Other _____	7	<input type="checkbox"/>	Tertiary
Specify _____			



## Appendix C

## HISTORIC SITE INVENTORY FORM

Form T4-9A 11/63 Rev. 8/73  
RLF/csv

Form T4-9A  
Revised 8/73

INVENTORY OF HISTORIC AND CULTURAL SITES  
SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

### GENERAL SITE DATA

GENERAL SITE DATA

Interpreter	Date	Site Number
-------------	------	-------------

Site Name \_\_\_\_\_

Owner/Operator \_\_\_\_\_

[illegible]

Civil Division Name      Civil Division Code      Town      Range      Section      1/4 Section

## Type of Site

			Primary
			Secondary
Gen/Specific			

### Site Status

1. Marked ☐

\_\_\_\_ If marked, by whom, date

2. Unmarked ☐

a. Considered for Marking

b. Not Considered for Marking

### 1. Cultural Sites or Features

- |    |                      |
|----|----------------------|
| 01 | Battle Field         |
| 02 | Bridge—Covered       |
| 03 | Bridge—Ford          |
| 04 | Canal                |
| 05 | Cemetery (Historic)  |
| 06 | Dam Site             |
| 07 | Early Road/Trail     |
| 08 | Farm                 |
| 09 | Farmers Market       |
| 10 | Festival Site        |
| 11 | Indian Mound         |
| 12 | Light House          |
| 13 | Mine-Quarry-Diggings |
| 14 | Old Fort Site        |
| 15 | Village Site         |
| 16 | Indian Campsite      |
| 17 | Other                |

**Specify**

Remarks: \_\_\_\_\_

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings on the paper.

## 2. Natural Sites or Features

- |                          |    |                                    |
|--------------------------|----|------------------------------------|
| <input type="checkbox"/> | 01 | Caves                              |
| <input type="checkbox"/> | 02 | Significant Wetlands               |
| <input type="checkbox"/> | 03 | Significant Woodlands              |
| <input type="checkbox"/> | 04 | Fish and Game Habitat              |
| <input type="checkbox"/> | 05 | Significant Glacial Site(s)        |
| <input type="checkbox"/> | 06 | Natural Spring                     |
| <input type="checkbox"/> | 07 | Prairie                            |
| <input type="checkbox"/> | 08 | Scenic Vista                       |
| <input type="checkbox"/> | 09 | Virgin Flora (Outstanding Remnant) |
| <input type="checkbox"/> | 10 | Wild Rice Area                     |
| <input type="checkbox"/> | 11 | Other _____                        |
- Specify**

Remarks: \_\_\_\_\_

[illegible]

### 3. Buildings or Structures

- |  |    |                     |
|--|----|---------------------|
|  | 01 | Barn                |
|  | 02 | Barracks            |
|  | 03 | Blacksmith Shops    |
|  | 04 | Church              |
|  | 05 | Government Building |
|  | 06 | Historic Home       |
|  | 07 | Inn-Hotel           |
|  | 08 | Library             |
|  | 09 | Lumber Camp         |
|  | 10 | Mill, Factory       |
|  | 11 | Museum              |
|  | 12 | Old Fort            |
|  | 13 | Old Mill            |
|  | 14 | Old Mine            |
|  | 15 | Opera House         |
|  | 16 | Pioneer Church      |
|  | 17 | Post Office         |
|  | 18 | Railroad Depot      |
|  | 19 | Restaurant          |
|  | 20 | School              |
|  | 21 | Store               |
|  | 22 | Tavern              |
|  | 23 | Trading Post        |
|  | 24 | Theater             |
|  | 25 | Other               |

### Specify

4. Original Date of Construction \_\_\_\_\_

- Remarks: \_\_\_\_\_

1. State Trunk Highway (Freeway) . . . . .	
2. State Trunk Highway . . . . .	
3. County Trunk Highway . . . . .	
4. Local Streets and Highways . . . . .	
5. Private Road . . . . .	

1. Good . . . . .

2. Fair . . . . .

3. Poor . . . . .

1. Residential  
2. Retail and Services  
3. Wholesale ☐ Primary  
4. Manufacturing  
5. Transportation, Communications, and Utilities  
6. Institution and Government Services  
7. Recreation  
8. Agriculture  
9. Open Lands, Swamps, Water ☐ Secondary

1. Good . . . . .

2. In Need of Repairs . . . . . ☐

3. Deteriorating . . . . .

## Remarks: \_\_\_\_\_

1.	Building	.	.	.	.	.	.	.	.
2.	Person	.	.	.	.	.	.	.	.
3.	Nationality	.	.	.	.	.	.	.	.
4.	Idea/Invention	.	.	.	.	.	.	.	.
5.	Natural Feature	.	.	.	.	.	.	.	.
6.	Event	.	.	.	.	.	.	.	.
7.	Culture	.	.	.	.	.	.	.	.
8.	Other	.	.	.	.	.	.	.	.

--	--	--	--	--	--

14. Fees			
Parking			
Entry (Adult)			
Entry (Child)			

--	--	--	--

16. General Remarks:

## Appendix D

### EXISTING PARK AND OPEN SPACE SITES IN THE REGION BY PLANNING ANALYSIS AREA: 1973

Chapter V, "Existing Outdoor Recreation and Open Space Sites," presented in summary form the findings of the 1973 Commission inventory of existing outdoor recreation and open space sites. Included in Chapter V were data related to the following categories of open space sites: general use outdoor recreation sites, natural area sites, special use outdoor recreation sites, urban open space sites, and historic sites. In support of the summary information presented in Chapter V, this Appendix presents detailed data from the 1973 inventory for all owned public and nonpublic outdoor recreation and open space sites in the Region. The first section of the Appendix presents detailed data for general use outdoor recreation sites, natural area sites, special use outdoor recreation sites, and urban open space sites, including 1) an interpretation of the code letters and numbers used in the detailed description of each site; 2) a base map for each county on which each site is delineated and identified by site number; 3) a site list for each county including the site name, number, and acreage; and 4) a detailed description of each site listed by planning analysis area in each county, including location by U. S. Public Land Survey quarter section. The interpretation of code numbers and code letters used in the detailed description of each site is presented first. A county base map, site list, and the detailed description of each site follow for each county of the Region beginning with Kenosha County on page 560 and followed by the other counties in alphabetical order.

The second section of this Appendix presents detailed data for historic sites, including 1) a base map for each county on which each site is located and identified by site number and type and 2) a site list for each county including the site name and the site number. Each county base map and the corresponding site list is presented by county in alphabetical order, beginning with Kenosha County on page 602.

#### INTERPRETATION OF CODE LETTERS AND NUMBERS USED IN THE DETAILED DESCRIPTION OF GENERAL USE OUTDOOR RECREATION SITES, NATURAL AREA SITES, SPECIAL USE OUTDOOR RECREATION SITES, AND URBAN OPEN SPACE SITES

The detailed descriptions of the sites follow each county map and site list. Sites are listed in numerical order by planning analysis area. A site located in more than one planning analysis area is listed in each planning analysis area in which it is located. Data provided for each site listed under the category "General Site Information" are site number, name, civil division, ownership, location by urban and rural classification for 1975 and anticipated location by urban and rural classification for 2000, and location by U. S. Public Land Survey quarter section.

1. The site number for each site corresponds to the site number listed on the county map and associated site list which precedes the detailed description of each site by planning analysis area. An "S" preceding the site number indicates the site has been classified as a school outdoor recreation area.
2. The civil division code numbers refer to cities, villages, and towns within each county as follows:

#### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION CIVIL DIVISION CODES

<u>Kenosha County</u>	<u>Ozaukee County</u>	<u>Racine County</u>	<u>Milwaukee County</u>
101 Brighton Town	201 Belgium Town	301 Burlington City	401 Bayside Village (part) see 215
102 Bristol Town	202 Belgium Village	302 Burlington Town	402 Brown Deer Village
103 Kenosha City	203 Cedarburg City	303 Caledonia Town	403 Cudahy City
104 Paddock Lake Village	204 Cedarburg Town	304 Dover Town	404 Fox Point Village
105 Paris Town	205 Fredonia Town	305 Elmwood Park Village	405 Franklin City
106 Pleasant Prairie Town	206 Fredonia Village	306 Mt. Pleasant Town	406 Glendale City
107 Randall Town	207 Grafton Town	307 North Bay Village	407 Greendale Village
108 Salem Town	208 Grafton Village	308 Norway Town	408 Greenfield City
109 Silver Lake Village	209 Mequon City	309 Wind Lake (unincorporated)	409 Hales Corners Village
110 Somers Town	210 Port Washington City	310 Racine City	410 Milwaukee City
111 Twin Lakes Village	211 Port Washington Town	311 Raymond Town	411 Oak Creek City
112 Wheatland Town	212 Saukville Town	312 Rochester Town	412 River Hills Village
	213 Saukville Village	313 Rochester Village	413 St. Francis City
	214 Thiensville Village	314 Sturtevant Village	414 Shorewood Village
	215 Bayside Village (part) see 401	315 Union Grove Village	415 South Milwaukee City
	216 Newburg Village (part) see 620	316 Waterford Town	416 Wauwatosa City
		317 Waterford Village	417 West Allis City
		318 Wind Point Village	418 West Milwaukee Village
		319 Yorkville Town	419 Whitefish Bay Village

<u>Walworth County</u>		<u>Washington County</u>		<u>Waukesha County</u>			
501	Bloomfield Town	601	Addison Town	701	Big Bend Village	729	Oconomowoc Lake Village
502	Darien Town	602	Barton Town	702	Brookfield City	730	Ottawa Town
503	Darien Village	603	Erin Town	703	Brookfield Town	731	Pewaukee Town
504	Delavan City	604	Farmington Town	704	Butler Village	732	Pewaukee Village
505	Delavan Town	605	Germantown Town	705	Chenequa Village	733	Summit Town
506	Delavan Lake (unincorporated)	606	Germantown Village	706	Delafield City	734	Sussex Village
507	East Troy Town	607	Hartford City	707	Delafield Town	735	Vernon Town
508	East Troy Village	608	Hartford Town	708	Dousman Village	736	Wales Village
509	Elkhorn City	609	Jackson Town	709	Eagle Town	737	Waukesha City
510	Fontana on Geneva Lake Village	610	Jackson Village	710	Eagle Village	738	Waukesha Town
511	Geneva Town	611	Kewaskum Town	711	Elm Grove Village		
512	Genoa City Village	612	Kewaskum Village	712	Genesee Town		
513	LaFayette Town	613	Polk Town	713	Hartland Village		
514	LaGrange Town	614	Richfield Town	714	Lac La Belle Village		
515	Lake Geneva City	615	Slinger Village	715	Lannon Village		
516	Linn Town	616	Trenton Town	716	Lisbon Town		
517	Lyons Town	617	Wayne Town	717	Menomonee Falls Village		
518	Richmond Town	618	West Bend City	718	Merton Town		
519	Sharon Town	619	West Bend Town	719	Merton Village		
520	Sharon Village	620	Newburg Village (part) see 216	720	Mukwonago Town		
521	Spring Prairie Town			721	Mukwonago Village		
522	Sugar Creek Town			722	Muskego City		
523	Troy Town			723	Nashotah Village		
524	Walworth Town			724	New Berlin City		
525	Walworth Village			725	North Prairie Village		
526	Whitewater City			726	Oconomowoc City		
527	Whitewater Town			727	Oconomowoc Town		
528	Williams Bay Village			728	Okauchee (unincorporated)		

3. The ownership code numbers are divided into public and nonpublic as follows:

<u>Public</u>	<u>Nonpublic</u>
01-Federal	10-Organizational
02-State	11-Commercial
03-County	12-Private
04-City	
05-Village	
06-Town	
08-School District	

4. The urban-rural code letter "U" indicates that the site was considered to be in an urban area, and the code letter "R" indicates that the site was considered to be in a rural area.

5. The U. S. Public Land Survey location numbers include the town, range, section, and quarter section numbers; quarter section number one represents the NE quarter, two the NW quarter, three the SW quarter, and four the SE quarter.

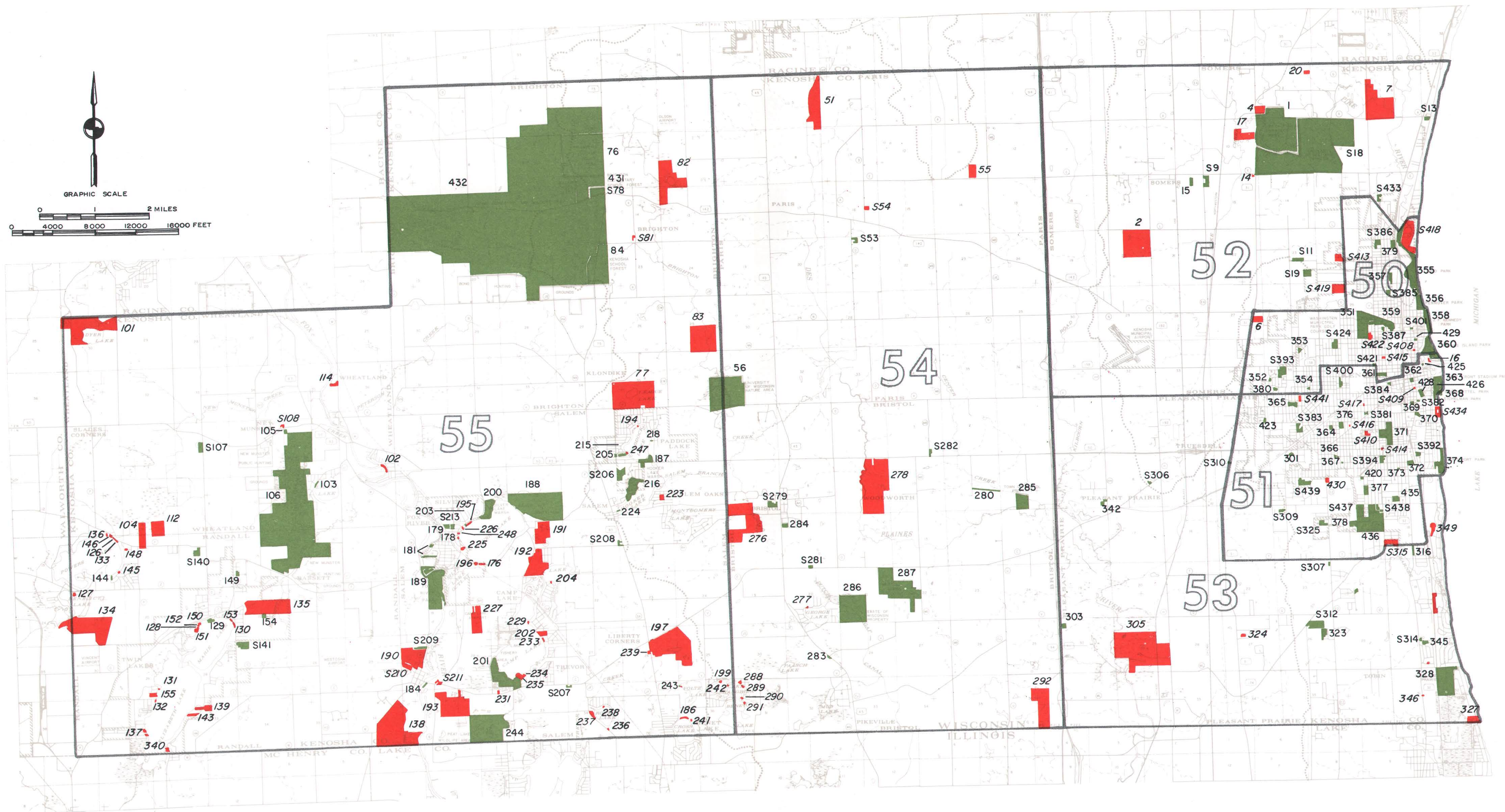
In addition to the general site information presented for each site, for those sites classified as general use outdoor recreation sites, the following data also are tabulated: site type; multiuse or single use classification; acreage within the planning analysis area, including acres inside of and outside of the primary environmental corridors in the Region; winter user, summer user, and site manager survey sites; and selected outdoor recreation facilities provided at the site, including all intensive facilities summarized in Chapter IV of this report. Code letters for single use sites designate the following categories:

<u>Single Use Codes</u>	
E-Nature Center	I-Organizational Camp
F-Regulation Golf Course	J-Ski Hill
G-Par 3 Golf Course	K-Boat Launch
H-Campground	L-Other Single Use

For those sites classified as natural area sites, the data also tabulated are site type and acreage within the planning analysis area, including acres inside and outside of the primary environmental corridors of the Region. For those sites classified as special use outdoor recreation sites, the data also tabulated are site type, with "S" representing a spectator-oriented site and "P" representing a participant-oriented site, and acres within the planning analysis area. Finally for those sites classified as urban open space sites, acres within the planning analysis area also are tabulated.



PARK AND OPEN SPACE SITES IN KENOSHA COUNTY: 1973



LEGEND

- PUBLIC SITE
- NONPUBLIC SITE
- 52 PLANNING ANALYSIS AREA

Source: SEWRPC.

Map D-1 (continued)

KENOSHA COUNTY

SITE NO.	ACRES	SITE NAME
0001	0353	PETRIFYING SPRINGS PARK
0002	0165	MAPLECREST COUNTRY CLUB
0004	0025	JACKSONS PARK INC
0006	0013	MAPLE SPRINGS DRIVING RANGE
0007	0159	KENOSHA COUNTRY CLUB
0009S	0010	SOMERS SCHOOL
0011S	0011	HILLCREST SCHOOL
0013S	0004	BERRYVILLE SCHOOL
0014	0003	SMITTS
0015	0007	SOMERS ATHLETIC FIELD
0016	0001	KENOSHA YACHT CLUB
0017	0038	HAWTHORN HOLLOW
0018S	0747	UW-PARKSIDE
0019S	0013	JOHN RULLEN JR H S
0020	0010	GIRL SCOUT CAMP
0051	0101	VAN'S GREAT LAKES DRAGAWAY
0053S	0007	PARIS SCHOOL
0054S	0008	ST JOHN'S CATHOLIC SCHOOL
0055	0017	SOWERS ROD & GUN CLUB
0056	0224	UNIVERSITY OF WIS NATURE AREA
0076	0358	BRIGHTON DALE PARK
0077	0235	UNION LEAGUE BOYS CLUB CAMP
0078S	0024	BRIGHTON SCHOOL
0081S	0004	BRIGHTON PAROCHIAL SCHOOL
0082	0140	FRIENDSHIP FARM
0083	0108	HAPPY ACRES CAMPGROUND
0084	0097	KENOSHA SCHOOL FOREST
0101	0188	BSA CAMP OH-DA-KO-DA
0102	0004	OAKWOOD SHORES SUBDIV PARK
0103	0001	LILLY LAKE PARK
0104	0037	POWERS LAKE SPORTSMANS CLUB
0105	0004	TOWN OF WHEATLAND BALL PARK
0106	1054	NEWMUNSTER WILDLIFE AREA
0107S	0012	WHEATLAND CENTER SCHOOL
0108S	0002	ST ALPHONSUS SCHOOL
0112	0043	TWIN LAKES SPORTSMANS CLUB
0114	0003	FOX RIVER PINES SUBDIV PARK
0126	0001	OLD MILL BEACH RESORT
0127	0002	CLUB BENEDICT
0128	0001	OAK RIDGE SUBDIV PARK
0129	0010	LANCE PARK
0130	0001	EDGEWATER MOTOR INN BEACH
0131	0001	SUBDIVISION BEACH
0132	0001	PUBLIC BEACH
0133	0001	JIMS BOATS
0134	0138	NIPPERSINK MANOR GOLF COURSE
0135	0127	TWIN LAKES COUNTRY CLUB
0136	0001	WAYSIDE RESORT
0137	0002	ELIZABETH MANOR SUBDIV PARK
0138	0256	WILMOT MOUNTAIN SKI AREA
0139	0015	ROLLIE & JOES RESORT
0140S	0007	RANDALL CONSOLIDATED SCHOOL
0141S	0016	LAKEWOOD SCHOOL
0143	0005	MAD DAN'S RESORT
0144	0001	PUBLIC BOAT ACCESS
0145	0001	LAKESIDE PARK
0146	0001	DICK & RAES RESORT
0148	0001	SUBDIVISION PARK
0149	0001	BEL AIR SUBDIV PARK
0150	0001	PINK HOUSE RESORT
0151	0004	ACKERMANS RESORT
0152	0001	KNOBES SUBDIV PARK
0153	0001	YOUNG'S BOATS
0154	0006	LEGION PARK
0155	0005	ORIOLE CLUB
0176	0001	PUBLIC ACCESS
0178	0001	SILVER LAKE BEACH
0179	0005	SILVER LAKE BALL PARK
0181	0005	MARSH RIVER BOTTOM
0184	0001	WILMOT DAM AREA
0186	0002	CROSS LAKE BEACH
0187	0018	OLD SETTLERS PARK
0188	0243	SILVER LAKE COUNTY PARK
0189	0139	FOX RIVER PARK
0190	0073	KENOSHA COUNTY FAIR GROUNDS
0191	0045	SILVER LAKE SPORTSMANS CLUB
0192	0073	SALVATION ARMY CAMP WONDERLAND
0193	0130	CAMP SOL R CROWN BSA
0194	0001	N SHORE PADDOCK L COMMUNITY C
0195	0002	LAKELAND SUBDIV BEACH NO 2
0196	0001	TERRYS FERRY

KENOSHA COUNTY

SITE NO.	ACRES	SITE NAME
0197	0219	SPRING VALLEY GOLF CLUB
0199	0002	JO-ANNS RESORT
0200	0032	SILVER LAKE MARSH
0201	0121	CAMP LAKE FISHERY AREA
0202	0008	COUNTRY SIDE RESORT
0203	0001	PUBLIC ACCESS
0204	0001	SUBDIVISION BEACH
0205	0001	VILLAGE PARK
0206S	0016	SALEM CENTRAL UNION HS
0207S	0003	TREVOR SCHOOL
0208S	0004	SALEM CONSOLIDATED SCHOOL
0209S	0008	WILMOT SCHOOL
0210S	0010	WILMOT UNION HIGH SCHOOL
0211S	0003	HOLY NAME SCHOOL
0213S	0004	RIVER VIEW SCHOOL
0215	0006	PADDOCK LAKE MARSH
0216	0050	HOOKEE LAKE MARSH
0218	0001	PUBLIC ACCESS
0223	0004	SUBDIVISION PARK
0224	0001	PUBLIC ACCESS
0225	0003	THE COVE
0226	0001	CASON'S BOAT & BAIT
0227	0050	BUCCANEER MENS CLUB
0229	0001	SUBDIVISION PARK & BEACH
0231	0002	NANCY'S REST AWHILE
0233	0001	SUBDIVISION PARK
0234	0001	SANDE'S RESORT
0235	0003	CAMPLAKE GARDENS
0236	0001	SUBDIVISION PARK
0237	0005	ROCK LAKE BEACH
0238	0001	ROCK LAKE HIGHLANDS BEACH
0239	0002	DUGOUT PARK
0241	0001	SUBDIVISION PARK
0242	0001	BOAT ACCESS
0243	0001	COMMUNITY BEACH
0244	0177	PEAT LAKE WILDLIFE AREA
0247	0001	PADDOCK-HOOKEE LAKE ASSOC PARK
0248	0001	THE TACKLE BOX
0276	0180	CONSERVATION CLUB OF KENOSHA
0277	0001	GEORGE LAKE BEACH
0278	0263	BRISTOL OAKS COUNTRY CLUB
0279S	0010	BRISTOL SCHOOL
0280	0008	BENEDICT PRAIRIE
0281S	0002	BRISTOL CONSOLIDATED SCHOOL S
0282S	0003	WOODWORTH SCHOOL
0283	0001	WAYSIDE
0284	0007	RICHARD HANSEN MEMORIAL PARK
0285	0044	TOWN OF BRISTOL-OPEN SPACE
0286	0160	STATE WETLAND AREA
0287	0189	BRISTOL WOODS COUNTRY PARK
0288	0002	LAKE SHANGRILA RESORT
0289	0001	PARK NO 1
0290	0001	PARK NO 2
0291	0001	PARK NO 3
0292	0081	STATE LINE CAMPGROUND
0301	0002	SUBDIVISION PARK
0303	0006	KENOSHA TOURIST INFO CTR
0305	0391	PHEASANT VALLEY HUNTING CLUB
0306S	0004	PLEASANT PRAIRIE SCHOOL
0307S	0002	HIGHLAND SCHOOL
0309S	0003	WHITTER SCHOOL
0310S	0001	LINCOLN SCHOOL
0312S	0020	PRAIRIE LAKE SCHOOL
0314S	0001	SHERIDAN ROAD SCHOOL
0315S	0017	ST THERESE SCHOOL & CHURCH GR
0316	0001	WAYSIDE
0323	0010	PRAIRIE LAKE HEIGHTS PARK
0324	0003	SUBDIVISION BEACH
0325S	0008	JEFFERY SCHOOL
0327	0025	TRIDENT MARINA
0328	0086	CHIWAUKEE PRAIRIE
0340	0002	SNUG HARBOR
0342	0006	PLEASANT PRAIRIE BALL PARK
0345	0002	LOCAL PARK
0346	0001	LAKEVIEW MINI GOLF
0349	0007	KENOSHA TOWN CLUB
0351	0069	WASH MUN PARK GOLF COURSE
0352	0002	KENFAIR PARK
0353	0003	ENDEE SUBDIVISION PARK
0354	0001	DAVIS PARK
0355	0087	ALFORD PARK

KENOSHA COUNTY

SITE NO.	ACRES	SITE NAME
0356	0024	PENNOYER PARK
0357	0008	PETZKE PARK
0358	0024	J F KENNEDY PARK
0359	0030	WASHINGTON PARK
0360	0042	SIMMONS ISLAND PARK
0361	0007	COLUMBUS PARK
0362	0001	CIVIC CENTER PARK
0363	0016	LAKE FRONT STADIUM PARK
0364	0002	BULLAMORE PARK
0365	0007	FOREST PARK
0366	0002	NEWMAN PARK
0367	0001	ELMWOOD MANOR
0368	0010	EICHELMAN PARK
0369	0002	BAIN PARK
0370	0004	BAKER PARK
0371	0044	LINCOLN PARK
0372	0008	SIMMONS ATHLETIC FIELD
0373	0001	TOT PARK
0374	0024	SOUTHPORT PARK
0376	0006	ROOSEVELT PARK
0377	0006	SUNNYSIDE PARK
0378	0006	ISSETTS PARK
0379	0008	PETKETTI PARK
0380	0005	LITTLE LEAGUE PARK
0381S	0001	COLUMBUS SCHOOL
0382S	0001	DURKEE SCHOOL
0383S	0009	FOREST PARK SCHOOL
0384S	0002	FRANK SCHOOL
0385S	0003	GRANT SCHOOL
0386S	0008	CORDELIA HARVEY SCHOOL
0387S	0002	JEFFERSON SCHOOL
0392S	0003	SOUTHPORT SCHOOL
0393S	0010	STRANGE SCHOOL
0394S	0004	SUNNYSIDE SCHOOL
0400S	0004	MCKINLEY ELEM AND JR HS
0401S	0001	WASHINGTON JR HS
0408S	0001	ST GEORGE SCHOOL
0409S	0001	ST JAMES SCHOOL
0410S	0003	ST JOSEPH SCHOOL
0413S	0010	ST PETER SCHOOL
0414S	0001	BETHANY LUTHERAN SCHOOL
0415S	0001	FRIEDENS LUTH SCHOOL
0416S	0001	ST LUKES EVAN LUTH SCHOOL
0417S	0001	ST THOMAS AQUINAS SCHOOL
0418S	0067	CARTHAGE COLLEGE
0419S	0022	GATEWAY TECHNICAL INSTITUTE
0420	0001	CHILDRENS PLAYGROUND
0421S	0001	BAIN SCHOOL
0422S	0007	OUR LADY OF THE ROSARY SCHOOL
0423	0004	TOWER LINE PARK
0424S	0008	WILSON SCHOOL
0425	0001	NAVY MEMORIAL PARK
0426	0007	WOFENBUTTEL PARK
0428	0005	LIBRARY PARK
0429	0001	UNION PARK
0430	0007	GOLF DRIVING RANGE
0431	0160	SALEM SCHOOL FOREST
0432	4567	BONG RECREATION&WILDLIFE AREA
0433S	0008	BOSE SCHOOL
0434S	0010	KEMPER HALL HS
0435	0007	RED ARROW PARK
0436	0096	JAMES ANDERSON PARK
0437S	0031	TREMPER HS
0438S	0005	VERNON SCHOOL
0439S	0017	LANCE JR HIGH SCHOOL
0441S	0002	JOYLAND PLAYGROUND



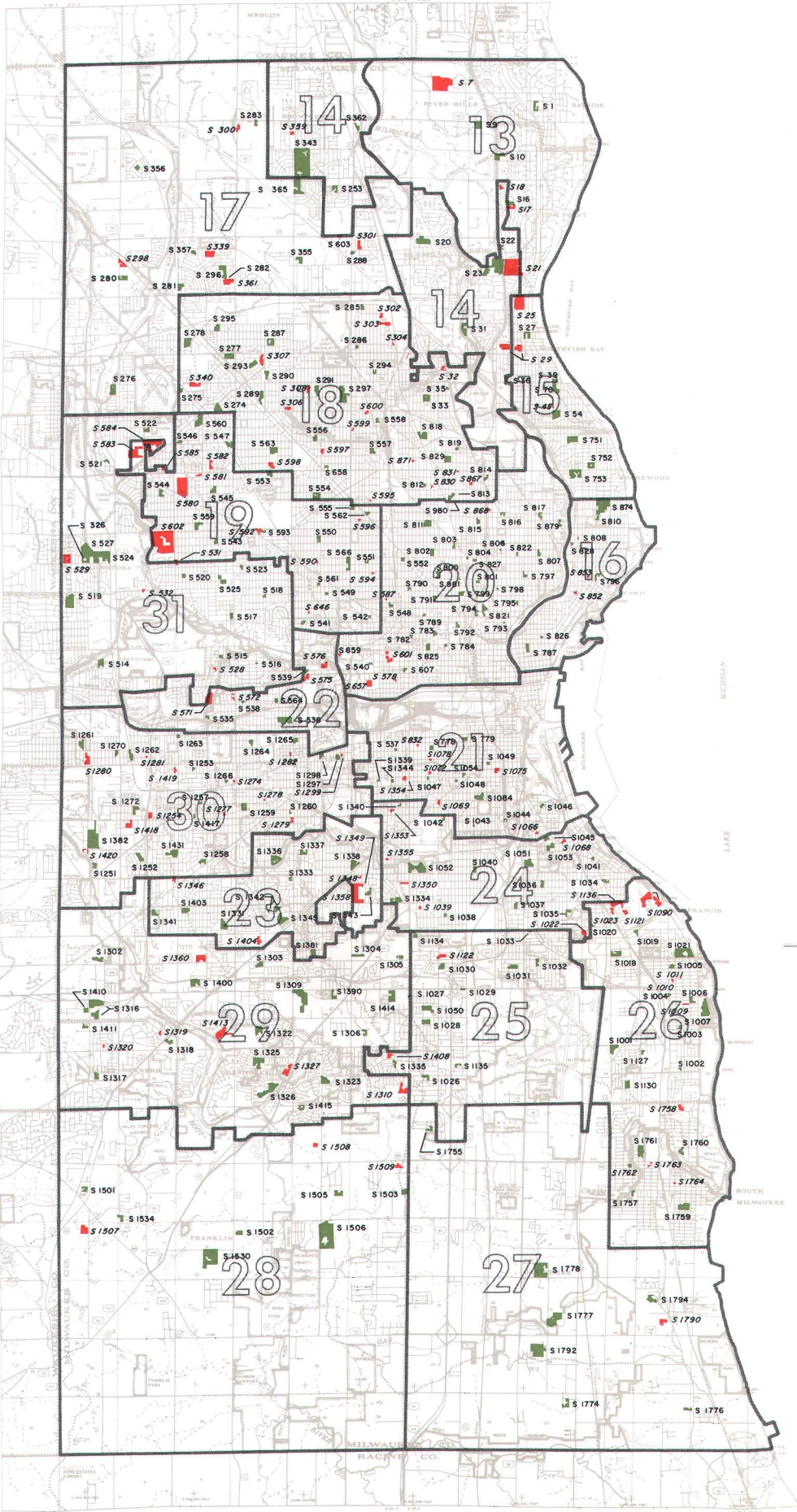
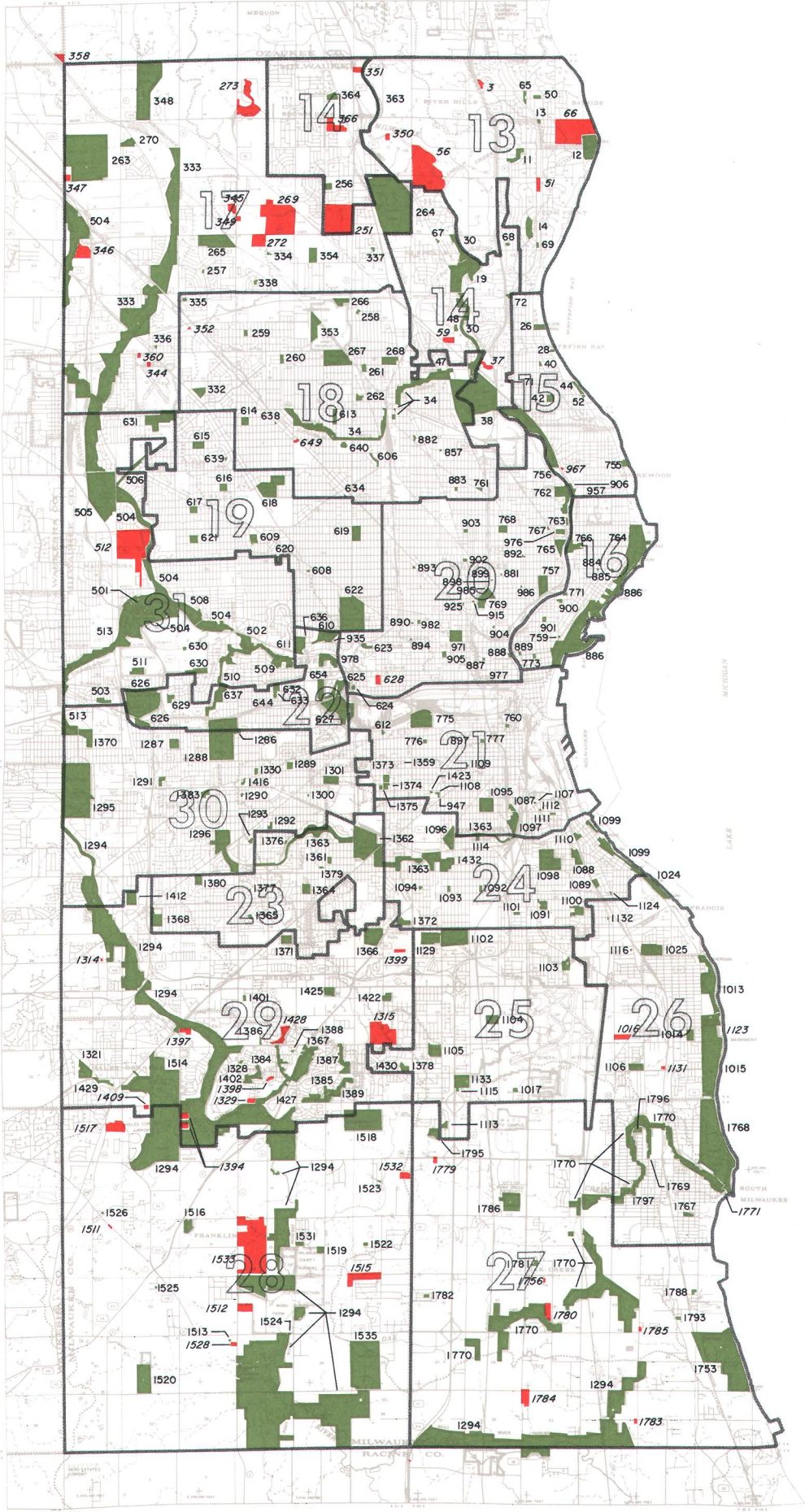
<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

GENERAL SITE INFORMATION										GENERAL USE										SITES										NATURAL AREA				SITES			SPECIAL USE SITES		URBAN OPEN SPACE SITES	
																																					</			



PARK AND OPEN SPACE SITES IN MILWAUKEE COUNTY: 1973



Source: SEWRPC.



## MILWAUKEE COUNTY

SITE NO.	ACRES	SITE NAME
00015	0011	BAYSIDE SCHOOL
00015	0006	LAKEHORE RECREATION CLUB
00015	0003	UNIVERSITY SCHOOL
00095	0008	INDIAN HILL SCHOOL
00105	0008	MAPLEDALE SCHOOL
0011	0010	INDIAN CREEK PARK
0012	0052	DOCTORS PARK
0013	0003	OPEN SPACE
0014	0019	LONGACRE PARK & STORMMOUTH JRHS
00165	0008	DUNWOOD SCHOOL
00175	0005	ST EUGENE SCHOOL
00185	0003	ST JOHNS LUTH SCHOOL
0019	0111	KLETZSCH PARK
00205	0013	GOOD HOPE SCHOOL
00215	0037	CARDINAL STRITCH COLLEGE
00225	0003	GREEN TREE SCHOOL
00235	0027	NICOLET HIGH SCHOOL
00255	0021	UNIVERSITY SCHOOLS OF MILW
0026	0015	KLODE PARK
00275	0004	KITZBERG SCHOOL
0028	0001	SILVER SPRING PARK
00295	0015	ST MONICA SCHOOL DOMINICAN HS
0030	0007	MILWAUKEE RIVER PARKWAY
00315	0009	PARKWAY SCHOOL
00325	0003	ST NICHOLAS SCHOOL
00335	0007	N 24TH ST SCHOOL
0034	0148	LINCOLN CREEK PARKWAY
00355	0002	MILWAUKEE GOLF CENTER
00365	0004	LYDELL SCHOOL
0037	0008	BAVARIAN CLUB GROUNDS
0038	0271	LINCOLN PARK
00395	0002	HENRIK SCHOOL
0040	0001	TRIANGLE PARK
0042	0008	CARILL SQUARE
0044	0007	BIG BAY BEACH
00455	0002	HUTCHINSON SCHOOL
0047	0001	LONG ISLAND DRIVE TOTLOT
0048	0007	CITY HALL PARK
0050	0008	ELLSWORTH PARK
0051	0009	TOUR CLUB
0052	0001	BUCKLEY PARK
00545	0008	CUMBERLAND SCHOOL
0056	0195	MILWAUKEE COUNTRY CLUB
0059	0015	SPRING GREEN GOLF CENTER
0065	0006	MILWAUKEE HALL OPEN SPACE
0066	0164	SCHLITZ AUDUBON CENTER
0067	0001	LE CLUB
0068	0003	GREEN TREE RINK
0069	0008	WILSON SWIMMING POOL
00705	0008	WHITEFISH BAY HIGH SCHOOL
0071	0001	LITTLE LEAGUE FIELD
0072	0006	VILLAGE PARK
0073	0017	TRIPLE COUNTRY CLUB
00735	0005	ALGONQUIN SCHOOL
0076	0011	ALGONQUIN PARK
0077	0001	N 84TH & BURBANK PLAYLOT
0078	0002	BELLY LAKE PLAYGROUND
0079	0004	CARMEN PLAYFIELD
0080	0004	WESTLAWN PARK
0081	0005	CUSTER PLAYFIELD
0082	0006	STAR PARK PLAYFIELD
0083	0036	DKETZKA PARK
0084	0036	BROWN DEER PARK
0085	0080	NOYES PARK
0086	0017	SCHMIDT PARK
0087	0067	MC GOWEN PARK
0088	0020	SMITH PARK
0089	0191	BRYNWOOD GOLF COURSE
0090	0013	GRANVILLE PARK
0091	0043	MILWAUKEE POLIO FIELD
0092	0059	NORTH RIDGE LAKES
0093	0005	GRANTOSA SCHOOL
0094	0002	ENGLEWOOD SCHOOL
0095	0005	PARKVIEW SCHOOL
0096	0005	BROWNING SCHOOL
0097	0011	BRYANT SCHOOL & PLAYFIELD
0098	0008	MADEIRA SCHOOL
0099	0005	BRUCE SCHOOL
0100	0003	IRVING SCHOOL
0101	0005	HAPPY HILL SCHOOL
0102	0002	DOUGLASS SCHOOL
0103	0003	CARLETON SCHOOL
0104	0006	N 66TH ST SCHOOL
0105	0003	HANTHORNE SCHOOL
0106	0003	LANGFESTER SCHOOL
0107	0004	KILBOURN SCHOOL
0108	0010	HAMPTON SCHOOL & PLAYFIELD
0109	0005	MUIR JR HS
0110	0001	EDISON JR HS & 36TH ST SCHOOL
0111	0005	MALDEN HS
0112	0008	HURROUGHS JR HS
0113	0019	CUSTER HS & STADIUM
0114	0002	SALEM LUTH SCHOOL
0115	0004	ST CATHERINE SCHOOL
0116	0004	OUR LADY OF GOOD HOPE SCHOOL
0117	0002	NORTH TRINITY SCHOOL
0118	0005	ST ALBERT SCHOOL
0119	0001	CHRIST MEMORIAL SCHOOL
0120	0002	ST LEBANON SCHOOL
0121	0004	ST PHILIP NERI SCHOOL
0122	0003	MOTHER OF PERPETUAL HELP SCH
0123	0001	VOEGE PARK
0124	0025	LITTLE MEMORIAL RIVER PKWY
0125	0002	N 67TH & SPOKANE PLAYLOT
0126	0003	BENDER PLAYLOT
0127	0003	THURGOOD PLAYLOT
0128	0003	DARIEN & KILEY PLAYLOT
0129	0007	CLOVERNOOK PLAYFIELD
0130	0010	ST BERNADETTE SCHOOL
0131	0008	CORBIN SCHOOL
0132	0074	BROWN DEER PUBLI SCHOOLS
0133	0007	BELT LINE GOLF RANGE
0134	0017	LEGLES GOLF
0135	0030	INDIAN RIDGING CLUB
0136	0010	STARLIGHT GOLF
0137	0010	NORTH LAKE PARK
0138	0003	NORTHSIDE RECREATION CENTER
0139	0005	RIVER TENNIS CLUB
0140	0008	NOKIA RIVER RACQUET CLUB
0141	0001	GO-KART TRACK
0142	0039	ARMY NATURE PRESERVE
0143	0018	PARK SITE 60
0144	0001	EDWARDS JR HS & BARTON SCHOOL
0145	0006	GOODRICH SCHOOL
0146	0003	STUART SCHOOL
0147	0014	CAMBELL'S BLVD TARTAN
0148	0001	ST MARION SCHOOL
0149	0004	NORTHWEST LITTLE LEAGUE
0150	0008	ST PAULS LUTH SCHOOL
0151	0003	DEERWOOD SCHOOL
0152	0003	VILLAGE OPEN SPACE
0153	001	VILLAGE PARK
0154	0012	HENRY DAVID THOREAU SCHOOL
0155	0030	BADGER METER GOLF COURSE
0156	0029	HITASEN GOLF COURSE
0157	0016	HART PARK
0158	0008	CHIPPewa PARK
0159	0019	MENOMONEE R. PKWY & NURSERY
0160	0010	CURRIE PARK
0161	0008	GRANTOSA PARKWAY
0162	0038	HOYT PARK
0163	0031	JACOBUS PARK
0164	0010	HUNTER GREEN PARKWAY
0165	0016	WISCONSIN AVENUE PARK
0166	0193	BLUEMOUND COUNTRY CLUB
0167	0037	UNDERWOOD CREEK PARKWAY
0168	0011	UNDERWOOD SCHOOL
0169	0002	WILSON SCHOOL
0170	0001	JEFFERSON SCHOOL
0171	0001	LINCOLN SCHOOL
0172	0008	WASHINGTON SCHOOL
0173	0015	FISHER SCHOOL & ATHLETIC FIELD
0174	0002	MC KINLEY SCHOOL
0175	0003	WEBSTER SCHOOL
0176	0008	MADISON SCHOOL
0177	0002	RODVELT SCHOOL
0178	0015	WHITMAN JR HS
0179	0006	LONGFELLOW JR HS
0180	0004	EISENHOWER SCHOOL
0181	0018	HAUMATON JR HS
0182	0002	ST JUDES SCHOOL
0183	0008	ST JOSEPHS SCHOOL
0184	0001	CHRIST KING SCHOOL
0185	0001	OUR DEEPEER LUTH SCHOOL
0186	0002	LUDINGTON SCHOOL
0187	0012	BURBANK SCHOOL & PLAYFIELD
0188	0001	DOERFLER SCHOOL
0189	0001	BLAINE SCHOOL
0190	0001	HANLEY SCHOOL
0191	0002	STORY SCHOOL
0192	0003	NEESKARA SCHOOL
0193	0001	N 37TH ST SCHOOL

## MILWAUKEE COUNTY

SITE NO.	ACRES	SITE NAME
05435	0003	N 81ST ST SCHOOL
05445	0004	N 95TH ST SCHOOL
05455	0007	N 22ND ST SCHOOL
05465	0002	EMERSON SCHOOL
05475	0002	CRAIG SCHOOL
05485	0002	N 31ST ST SCHOOL
05495	0002	HI MOUNT SCHOOL
05505	0002	SHERMAN SCHOOL
05515	0001	N 38TH ST SCHOOL
05525	0003	CLARKE ST SCHOOL
05535	0005	N 65TH ST SCHOOL
05545	0002	TOWNSEND SCHOOL
05555	0003	CONGRESS SCHOOL
05565	0004	CLEMENS SCHOOL
05575	0001	N 35TH ST SCHOOL
05585	0005	WRIGHT JR HS
05595	0009	MORSE JR HS
05605	0002	STEBEN JR HS
05615	0003	PECKHAM JR HS
05625	0007	MARSHALL JR & SR HS
05635	0002	JUNEAU JR-SR HS
05645	0005	WASHINGTON HS
05655	0007	WISCONSIN LUTH HIGH SCHOOL
05665	0001	ST ANTHONY OF PADUA SCHOOL
05675	0004	HOLY CROSS SCHOOL
05685	0002	SACRED HEART SCHOOL
05695	0007	ST ROSE SCHOOL
05705	0026	ST MARY'S & MARY SCHOOLS
05715	0001	ST MATTHEW SCHOOL
05725	0004	NORTHWEST LUTH SCHOOL
05735	0016	DIVINE SAVIOR HSHOLY ANGELS
05745	0004	MILWAUKEE LUTH HIGH SCHOOL
05755	0001	GLORIA DEI-BETHESDA SCHOOL
05765	0001	BETHANY LUTH SCHOOL
05775	0001	ST CATHERINE SCHOOL
05785	0003	MOTHER OF GOOD COUNSEL SCHOOL
05795	0001	ROBINSON JR HS
05805	0001	ST ANNE SCHOOL
05815	0001	ST JOHN DE NEPOMUC SCHOOL
05825	0002	ST STEPHEN SCHOOL
05835	0004	OUR LADY OF SORROW SCHOOL
05845	0001	ATONEMENT LUTH SCHOOL
05855	0001	HOLY ANGELS SCHOOL
05865	0005	CONCORDIA COLLEGE
05875	0075	MOUNT MARY COLLEGE
05885	0002	HILLEY ACADEMY
05895	0003	WISCONSIN AVENUE OPEN SPACE
05905	0001	WRIGHT ST PLAYGROUND
05915	0001	ENDERIS PLAYFIELD
05925	0036	WITKAMP PARK
05935	0023	HANTHORNE GLEN PLAYFIELD
05945	0003	S 35TH & PIERCE PLAYLOT
05955	0014	WAHL PARK
05965	0013	COLUMBUS PARK
05975	0014	MINDRAY PARK
05985	0009	NASH PARK
05995	0008	CONCORDIA PARK
06005	0006	DINEEN PARK
06015	0020	SHEPHERD PARK
06025	0005	CENTER STREET PARK
06035	0009	COOPER PARK
06045	0013	WASHINGTON PARK
06055	0001	HIGHLAND PARK
06065	0001	VALLEY PARK
06075	0006	BLUFF PARK
06085	0170	ZOO MILWAUKEE COUNTY
06095	0102	STADION MILWAUKEE COUNTY
06105	0009	MERRILL PARK PLAYFIELD
06115	0008	CANNON PARK
06125	0022	INSTITUTION GROUNDS MILW CO
06135	0009	MADISON PARK
06145	0008	JUNEAU PLAYFIELD
06155	0002	N 65TH & MT VERNON OPEN AREA
06165	0001	N 45TH & W. KEEFE TOTLOT
06175	0001	N 45TH & W. KEEFE TOTLOT
06185	0001	N 57TH & MC KINLEY TOTLOT
06195	0011	DYER PLAYFIELD
06205	0001	N 65TH & MEDFORD PLAYLOT
06215	0002	N 78TH & EBERHARTZ PLAYLOT
06225	0006	PARKLAWN PLAYGROUND
06235	0002	N 65TH & STEVENSON TOTLOT
06245	0001	ST SEBASTIAN SCHOOL
06255	0002	FAIRWAYS MINIATURE GOLF
06265	0016	MILWAUKEE STADIUM
06275	0009	MARQUETTE STADIUM
06285	0001	PLEASANT VIEW SCHOOL
06295	0001	MILWAUKEE MONTESSORI SCHOOL
06305	0010	LAKESHORE SCHOOL
06315	0005	ATWATER SCHOOL
06325	0016	SHOREWOOD JR & SR HIGH SCHOOLS
06335	0002	ATWATER BEACH PARK
06345	0019	ESTABLISHED PARK
06355	0025	KILBOURN PARK
06365	0001	BURNS TRIANGLE
06375	0002	VIEAU PLAYGROUND
06385	0001	ATKINS TRIANGLE
06395	0038	KERN PARK
06405	0001	PLEASANT VALLEY PARK
06415	0018	LAKE PARK
06425	0020	GORDON PARK
06435	0022	RIVERSIDE PARK
06445	0002	BREMEN STREET TOTLOT
06455	0010	GARFIELD PARK
06465	0011	CARLETON PARK
06475	0001	CAESARS POOL
06485	0003	CATHEDRAL SQUARE
06495	0005	MITCHELL PARK
06505	0007	CLARK QUAD
06515	0002	WALKER SQUARE
06525	0003	LONGFELLOW SCHOOL
06535	0003	KAGEL SCHOOL
06545	0003	N 27TH ST SCHOOL
06555	0003	MC KINLEY SCHOOL
06565	0002	MAC DOWELL SCHOOL
06575	0004	JEFFERSON SCHOOL
06585	0001	WALNUT HILL SCHOOL
06595	0001	ELM SCHOOL
06605	0002	BROWN ST SCHOOL
06615	0002	STEFER SCHOOL
06625	0001	N 65TH ST SCHOOL
06635	0003	N 9TH ST SCHOOL
06645	0002	PALMER SCHOOL
06655	0003	MARYLAND SCHOOL
06665	0003	HOLLYWOOD SCHOOL
06675	0001	GARFIELD SCHOOL
06685	0004	LLOYD ST SCHOOL
06695	0002	N 20TH ST SCHOOL
06705	0002	LEE SCHOOL
06715	0003	N 21ST ST SCHOOL
06725	0002	HOPKINS SCHOOL
06735	0001	N 12TH ST SCHOOL
06745	0002	N 5TH ST SCHOOL
06755	0002	PIERCE SCHOOL
06765	0001	BARTLETT SCHOOL
06775	0002	HARTFORD SCHOOL
06785	0009	AUER AV SCHOOL
06795	0001	FRANKLIN SCHOOL
06805	0002	KEEFE SCHOOL
06815	0003	GREEN BAY AV SCHOOL
06825	0003	LA FOLLETTE SCHOOL
06835	0002	BERGER SCHOOL
06845	0002	FRATNEY SCHOOL
06855	0009	GARDEN HOMES SCHOOL
06865	0002	PHILLIP SCHOOL
06875	0007	MADISON JR HS
06885	0002	FIDON JR HS
06895	0002	WEST DIVISION HS
06905	0001	LINCOLN JR-SR HS
06915	0003	NORTH DIVISION HS
06925	0003	RIVERSIDE HS
06935	0008	KING HS & NO STADIUM
06945	0001	SILDAH LUTH SCHOOL
06955	0001	GOSPEL SCHOOL
06965	0001	ST MATTHEWS SCHOOL
06975	0001	HOLY ROSARY SCHOOL
06985	0001	ST PETER & PAUL SCHOOL
06995	0001	N 20TH & OLIVE PLAYLOT
07005	0002	HOLY Y SCHOOL
07015	0001	HOLY GHOST LUTH SCHOOL
07025	0001	ST AGNES SCHOOL
07035	0025	UNIVERSITY OF WISCONSIN-MILW
07045	0001	GABRIEL SCHOOL
07055	0001	N 4TH & MEINECKE TOTLOT
07065	0002	GARDEN HOMES SQUARE
07075	0003	LINDENBERG PARK
07085	0001	PROSPECT TRIANGLE
07095	0001	GILMANS TRIANGLE
07105	0263	LAKE MICHIGAN WATERFRONT NORTH
07115	0001	MAC ARTHUR SQUARE

## MILWAUKEE COUNTY

SITE NO.	ACRES	SITE NAME
0888	0001	PERE MARQUETTE PARK
0889	0002	RED ARROW PARK
0890	0001	N 26TH & CHERRY TOTLOT
0891	0001	RICHARD & CENTER TOTLOT
0892	0001	N 26TH & MEDFORD TOTLOT
0893	0001	N 26TH & JUNEAU TOTLOT
0894	0001	N 26TH & JUNEAU TOTLOT
0895	0001	N 26TH & JUNEAU TOTLOT
0896	0001	N 26TH & JUNEAU TOTLOT
0897	0001	N 26TH & JUNEAU TOTLOT
0898	0001	N 26TH & JUNEAU TOTLOT
0899	0001	N 26TH & JUNEAU TOTLOT

Table D-2

PARK AND OPEN SPACE SITES IN MILWAUKEE COUNTY BY PLANNING ANALYSIS AREA: 1973

		PLANNING		MILWAUKEE ANALYSIS		COUNTY AREA		13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
GENERAL SITE INFORMATION										GENERAL USE										SITES										NATURAL AREA		SITES		SPECIAL USE SITES		URBAN OPEN SPACE SITES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
N	T	M	B	R	SN	TA	FM	EE	D	C	OC	W	V	T	R	L	N	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U	R	U

<sup>b</sup> THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.



MILWAUKEE COUNTY AREA 18  
PLANNING ANALYSIS

GENERAL SITE INFORMATION					GENERAL USE SITES												SITES												NATURAL AREA SITES				SPECIAL USE SITES		URBAN OPEN SPACE SITES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
N U M B E R	S I T E N A M E	O F C I T Y I N C O R P O R A T I O N	U R B A N C O D E	L O C A T I O N	T Y P E	MULTIUSE					ACRES WITHIN PAA		SURVEY SITES		SELECTED				FACILITIES				TYPE				T Y P E	A C R E S W I T H I N P A A	T A C R E S W I T H I N P A A	T A C R E S W I T H I N P A A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
						A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U					V	W	X	Y	Z																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
00300	MILWAUKEE RIVER PARKWAY	406	03	U	0822-30-1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

OTHER SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

OTHER SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

[illegible]

\*THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

[illegible]

THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

a THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

b THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

a THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

b THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

b THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

a THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELW. THIS SITE HAS ACRES IN MORE THAN ONE PLANNING ANALYSIS AREA AND WAS INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

b THIS SITE HAS ACRES IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

a THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND WAS INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

b THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

b7 THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.



[illegible]

\* THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

b THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

[illegible]

<sup>9</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

\*THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

[illegible][illegible]

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

b. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

\*THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

[illegible]

THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

b7 THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

[illegible]

\*THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES									
GENERAL SITE INFORMATION										GENERAL										USE										SITES										NATURAL AREA										SITES										SPECIAL USE SITES																			

\*THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

b THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

[illegible]

THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

b THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

[illegible]

\*THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

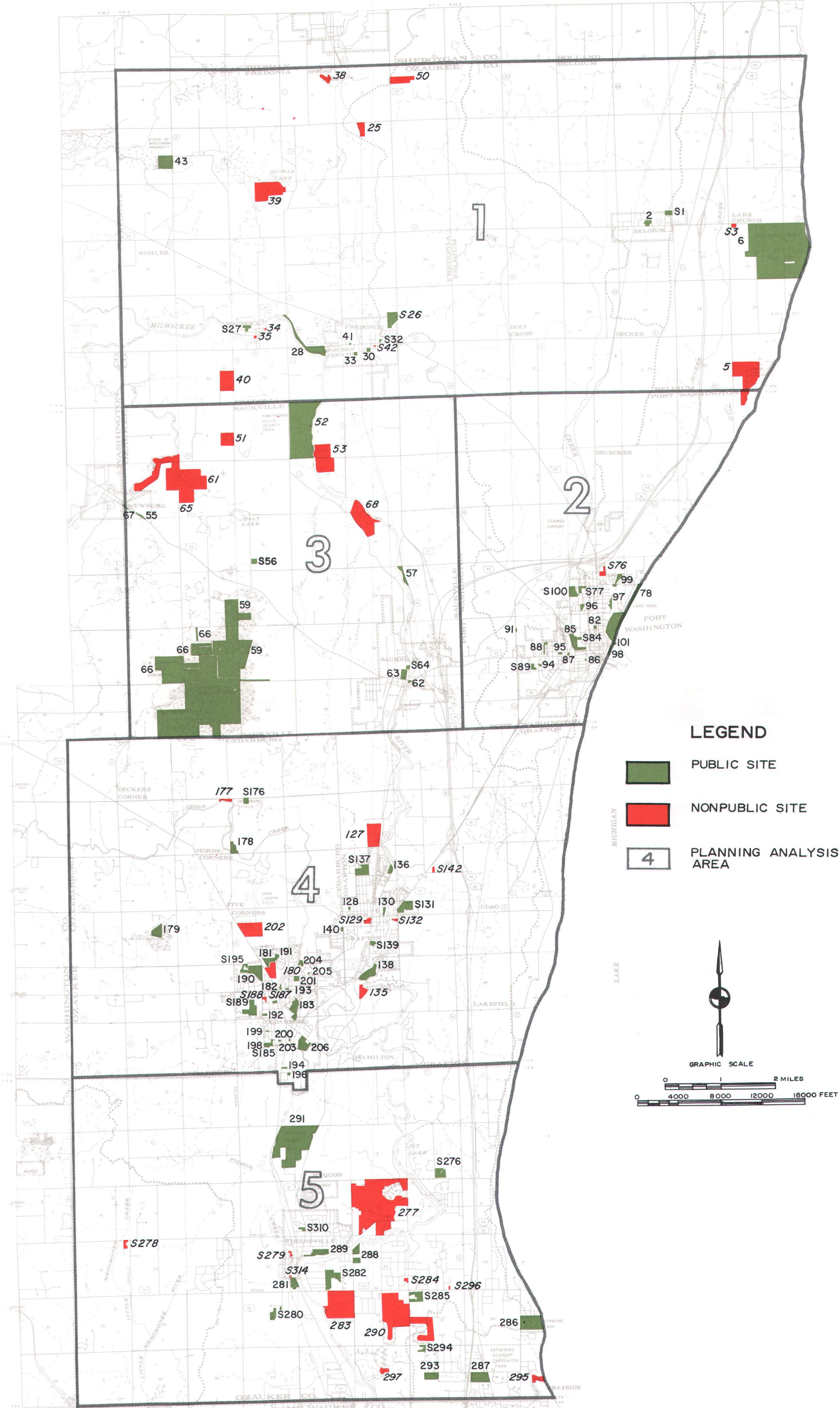
b. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

[illegible]

INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.



PARK AND OPEN SPACE SITES IN OZAUKEE COUNTY: 1973



Source: SEWRPC.

## O Z A U K E E C O U N T Y

SITE NO.	ACRES	SITE NAME
0001S	0009	LINCOLN ELEM SCHOOL
0002S	0008	FIREMANS PARK
0003S	0005	ST MARYS SCHOOL
0005	0144	PORT WASHINGTON COUNTRY CLUB
0006	0632	HARRINGTON BEACH STATE PARK
0025	0012	RANDOM LAKE ROD & GUN CLUB
0026S	0039	OZAUKEE MIDDLE & HIGH SCHOOLS
0027S	0012	GRANDVIEW SCHOOL
0028	0047	WAUBEDONIA PARK
0030	0003	FIREMANS PARK
0032S	0002	MAPLE LAWN SCHOOL
0033	0003	VILLAGE PARK
0034	0001	PEIFFERS PARADISE
0035	0002	VFW PARK
0038	0006	RHINGANS BOAT ACCESS
0039	0096	CAMP JCC
0040	0062	OZAUKEE CTY FISH&GAME REC PRES
0041	0001	PLAYGROUND
0042S	0001	ST ROSE SCHOOL
0043	0040	STATE WETLAND AREA
0050	0053	BADGER CAMP SITE
0051	0040	DUCKS UNLIMITED
0052	0281	HAWTHORNE HILLS COUNTY PARK
0053	0100	CAMP WILL O RILL
0055	0002	WAYSIDE
0056S	0009	LAKELAND SCHOOL
0057	0009	EHLERS PARK
0059	1253	CEDARBURG BOG SCIENTIFIC AREA
0061	0249	RIVEREDGE NATURE CENTER
0062	0001	VILLAGE PARK
0063	0011	FIREMANS PARK
0064S	0002	SAUKVILLE SCHOOL
0065	0040	SAULVILLE RIFLE AND PISTOLS
0066	0221	UW CEDARBURG BOG ARBORETUM
0067	0002	VILLAGE PARK
0068	0089	POLISH NATIONAL PICNIC GROUNDS
0076S	0008	ST PETER SCHOOL
0077S	0006	LINCOLN SCHOOL
0078	0081	LAKE PARK
0082	0001	COLUMBIA PARK
0084S	0002	PORT WASHINGTON HIGH SCHOOL
0085	0027	CITY ATHLETIC FIELD
0086	0001	WEBSTER STREET PARK
0087	0001	WEST SIDE PARK
0088	0003	BOERNER PARK
0089S	0006	DUNWIDDIE SCHOOL
0091	0002	WAYSIDE
0094	0001	SCHANEN ACRES PARK
0095	0001	HILL SCHOOL RECREATION AREA
0096	0003	KOLBACH PARK
0097	0006	WHITEFISH PARK
0098	0004	MOLD CRAFT PENINSULA PARK
0099	0008	NORPORT PARK
0100S	0015	THOMAS JEFFERSON MIDDLE SCHOOL
0101	0001	POLISH PARK
0127	0061	EDGEWATER GOLF CLUB
0128	0001	CEMETERY PARK
0129S	0006	ST PAUL SCHOOL
0130	0003	MILL PCND PARK

## O Z A U K E E C O U N T Y

SITE NO.	ACRES	SITE NAME
0131S	0024	GRAFTON ELEM & HIGH SCHOOLS
0132S	0005	ST JOSEPHS SCHOOL
0135	0014	RIVER PARK
0136	0007	MEADOW BROOK PARK
0137S	0020	WOODVIEW ELEM&JOHNLONG MID SCH
0138	0029	LIME KILN PARK
0139S	0007	KENNEDY SCHOOL
0140	0002	WILLOWOOD PARK
0142S	0004	OUR SAVIOR LUTH SCHOOL
0176S	0007	PLEASANT VALLEY SCHOOL
0177	0006	WILLOW TWIG PARK
0178	0011	COVERED BRIDGE PARK
0179	0021	BAHR BIRD SANCTUARY
0180	0020	FIREMANS PARK
0181	0016	OZAUKEE COUNTY FAIRGROUNDS
0182	0001	BOY SCOUT PARK
0183	0025	CEDAR CREEK PARK
0185S	0004	WESTLAWN SCHOOL
0187S	0003	HACKER SCHOOL
0188S	0003	FIRST IMMANUEL LUTH SCHOOL
0189S	0029	CEDARBURG JR & SENIOR HI SCH
0190	0023	CEDAQUA PARK
0191	0004	CITY PARK SITE NUMBER 1
0192	0003	FOUNDERS PARK
0193	0001	WATERTOWER PARK
0194	0001	CITY PARK SITE NUMBER 5
0195S	0007	PARKVIEW SCHOOL
0196	0002	CITY PARK SITE NUMBER 6
0198	0004	CITY PARK SITE NUMBER 3
0199	0001	WESTLAWN PARK
0200	0001	HILLCREST PARK
0201	0004	WOODLAND PARK
0202	0056	BAEHMANN'S GOLF CENTER
0203	0001	CITY PARK SITE NUMBER 4
0204	0004	CITY PARK SITE NUMBER 2
0205	0001	GEORGE TOWN PARK
0206	0020	QUARRY PARK
0276S	0015	ORIOLE LANE SCHOOL
0277	0376	RIVER OAKS COUNTRY CLUB
0278S	0006	TRINITY SCHOOL
0279S	0002	ST CECILIA SCHOOL
0280S	0014	H C STEFFEN & WILSON AV SCHOOL
0281	0014	MEQUON CITY PARK
0282S	0030	HOMESTEAD HIGH SCHOOL
0283	0155	OZAUKEE COUNTRY CLUB
0284S	0004	ST JAMES SCHOOL
0285S	0022	LAKESHORE & RANGE LINE SCHOOLS
0286	0058	VIRMOND PARK
0287	0035	K KEARNEY CARPENTER PARK
0288	0018	CITY PARK
0289	0021	THIENSVILLE PARK
0290	0225	NORTH SHORE COUNTRY CLUB
0291	0236	MEE-KWON COUNTY PARK
0293	0018	SUBDIVISION PARK
0294S	0004	DONGES BAY SCHOOL
0295	0014	FAIRY CHASM
0296S	0002	ST JOHNS SCHOOL
0297	0007	SUBDIVISION PARK 1
0310S	0004	GRAND AV SCHOOL
0314S	0001	CALVARY LUTHERAN SCHOOL

**PARK AND OPEN SPACE SITES IN OZAUKEE COUNTY BY PLANNING ANALYSIS AREA: 1973**

<sup>b</sup> THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

THIS SITE HAS THE GREATEST NUMBER OF ACRES.

PLANNING OZAUKEE ANALYSIS COUNTY AREA 03

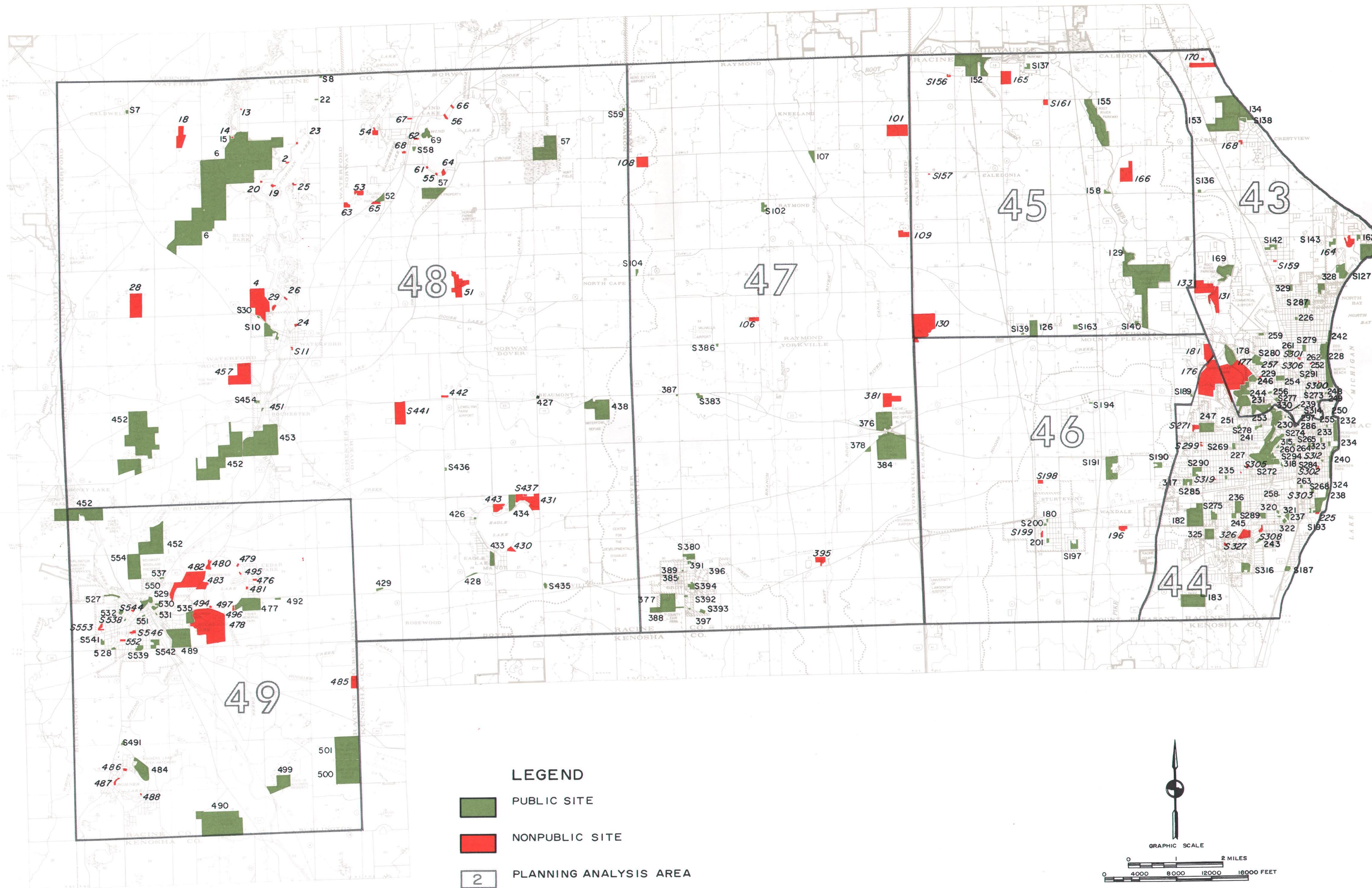
GENERAL SITE INFORMATION						GENERAL USE SITES														NATURAL AREA SITES														SPECIAL USE SITES		URBAN OPEN SPACE SITES																																																																																																																																																																																																																																																														
N U M B E R	S I T E	D I V I S I O N	C O U N T Y	U R B A N C O D E	L O C A T I O N	TYPE				MULTIUSE				ACRES WITHIN PAA				SURVEY SITES				SELECTED FACILITIES										TYPE				ACRES WITHIN PAA				T A C O T R A L	P E R C E N T																																																																																																																																																																																																																																																									
						I	II	III	IV	A	B	C	D	C O P Y	P R O D U C T	C O P Y	P R O D U C T	T A C O T R A L	W A T E R	S U N S H I N E	M A S S I V E	B A D L A N D	R A D I O	L A N D	C S T A N T	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y			C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y	C O U N T Y

PLANNING OZAUKEE ANALYSIS COUNTY AREA 04

GENERAL SITE INFORMATION						GENERAL										USF		SITES														NATURAL AREA SITES				SPECIAL USE SITES		URBAN OPEN SPACE SITES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
						TYPE				MULTIUSE				ACRES WITHIN PAA				SURVEY SITES		SELECTED FACILITIES														TYPE				ACRES WITHIN PAA				TYPE		ACRES WITHIN PAA		ACRES WITHIN PAA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
UN	SN	D	OC	UR	LOC	I	II	III	IV	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	JL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ
0127	EDGEWATER GOLF CLUB	207	12	U	1021-12-4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</																																																				



PARK AND OPEN SPACE SITES IN RACINE COUNTY: 1973





Map D-4 (continued)

RACINE COUNTY

SITE NO.	ACRES	SITE NAME
0002	0001	KIDDO'S BAIT SHOP
0004	0116	RIVERMOOR GOLF COURSE
0006	1198	TICHIGAN WILDLIFE AREA
0007S	0002	CALDWELL SCHOOL
0008S	0001	WASHINGTON SCHOOL
0010S	0032	WATERFORD UNION H S & EL SCH
0011S	0001	ST THOMAS AQUINAS SCHOOL
0013	0001	HIDE-A-WAY RESORT
0014	0001	FOX RIVER LODGE
0015	0002	PUBLIC BOAT ACCESS
0018	0050	WIND LAKE SHOOTING PRESERVE
0019	0003	FOX POINT RESORT
0020	0003	BOB'S RESORT
0022	0002	TICHIGAN FIELD
0023	0001	HERMAN'S RESORT
0024	0001	JIM'S MARINA
0025	0002	CHET & HELEN'S RESORT
0026	0002	PETTIT PARK
0028	0080	GREEN MEADOWS FARMS
0029	0004	SUBDIVISION PARK
0030S	0001	FOX RIVER SCHOOL
0051	0088	HAWTHORNE HOLLOW CAMPING
0052	0011	HEG PARK
0053	0013	TRIGLAR SLOVENIAN PARK
0054	0007	LE MAY'S RESORT
0055	0001	PAT C'S RESORT
0056	0003	HALLS TAP
0057	0187	STATE WETLAND AREAS
0058S	0003	LAKEVIEW SCHOOL
0059S	0003	DROUGHT SCHOOL
0061	0001	HEIDELBERG LAKE RESORT
0062	0002	SCHAD'S RESORT
0063	0006	HIDDEN VALLEY
0064	0003	NEIGHBORHOOD PARK
0065	0006	NORWAY LUTH CHURCH ATHLETIC FL
0066	0001	SPORTSMANS RESORT
0067	0003	VFW FIELD
0068	0002	WAUBESSEE LAKE RESORT
0069	0018	WIND LAKE FISHERY AREA
0101	0071	RAYMOND HEIGHTS COUNTRY CLUB
0102S	0007	RAYMOND CENTER SCHOOL
0104S	0003	NORTH CAPE SCHOOL
0106	0011	FISHERMANS CIRCLE
0107	0010	UNDEVELOPED PARKLAND
0108	0037	WEST ALLIS BOWMANS CLUB
0109	0024	NO SHORE WINCHESTER SHOOTING
0126	0034	MEMORIAL PARK
0127S	0030	THE PRAIRIE SCHOOL
0129	0357	JOHNSON PARK
0130	0131	SOUTH HILLS COUNTRY CLUB
0131	0036	YWCA DAY CAMP
0132	0053	SHOOP PARK
0133	0084	CHARLES A ARMSTRONG PARK
0134	0250	CLIFFSIDE PARK
0136S	0002	BURBANK SCHOOL
0137S	0008	CADDY VISTA SCHOOL
0138S	0004	CRESTVIEW SCHOOL
0139S	0001	FRANKSVILLE SCHOOL
0140S	0004	HOOD SCHOOL
0142S	0008	NORTH PARK SCHOOL
0143S	0006	WIND POINT SCHOOL
0152	0119	ROOT RIVER PARKWAY
0153	0002	WAYSIDE
0155	0118	ROOT RIVER PARKWAY
0156S	0001	ST JOHNS EV LUTH SCHOOL
0157S	0001	ST LOUIS SCHOOL
0158	0003	LINWOOD PARK
0159S	0002	ST RITA SCHOOL
0161S	0007	TRINITY LUTH SCHOOL
0162	0005	THE VILLAGE GREEN
0163S	0011	W ALLEN GIFFORD JR HIGH
0164	0023	WINGSPREAD
0165	0042	YOGI BEAR JELLYSTONE PARK
0166	0052	RENAK-POLAK WOODS
0168	0005	UNDEVELOPED BALL DIAMOND
0169	0051	ROOT RIVER PARKWAY
0170	0002	WIS ELECTRIC POW GUN CLUB
0176	0157	MEADOW BROOK COUNTRY CLUB
0177	0204	RACINE COUNTRY CLUB
0178	0045	QUARRY LAKE PARK
0180	0003	STURTEVANT PARK
0181	0030	BUNKER HILLS GOLF COURSE
0182	0085	PRITCHARD PARK
0183	0080	SANDERS PARK
0187S	0005	HANSCHER SCHOOL
0189S	0002	TRAUTWEIN SCHOOL
0190S	0011	WESTRIDGE SCHOOL
0191S	0051	J I CASE HIGH SCHOOL
0193S	0002	LAKESIDE SCHOOL

RACINE COUNTY

SITE NO.	ACRES	SITE NAME
0194S	0002	BARTLETT SCHOOL
0196	0011	DRIVING RANGE-MINIATURE GOLF
0197S	0010	FREDERICK SCHULTE SCHOOL
0198S	0009	ST. BONNAVENTURE HIGH SCHOOL
0199S	0006	ST SEBASTIAN SCHOOL
0200S	0001	STURTEVANT SCHOOL
0201	0004	95TH ST PARK
0225	0002	CASE EAGLE GUN CLUB
0226	0002	NORTH RACINE PARK
0227	0093	WASHINGTON PARK GOLF COURSE
0228	0025	ZOO PARK
0229	0008	HORLICK ATHLETIC FIELD
0230	0005	HORLICK ISLAND PARK
0231	0031	LINCOLN PARK
0232	0026	PERSHING PARK
0233	0003	WEST PARK
0234	0004	EAST PARK
0235	0003	SULBRAA FIELD
0236	0019	HUMBLE PARK
0237	0004	CASE-HARMON FIELD
0238	0031	ROOSEVELT PARK
0239	0016	LEWIS FIELD
0240	0018	SIMONSEN BEACH
0241	0015	RIVERSIDE PARK
0242	0046	NORTH BEACH
0243	0005	GREENCREST PARK
0244	0063	COLONIAL PARK
0245	0007	PIERCE WOODS
0246	0011	WESTUM PARK & ART MUSEUM
0247	0038	GRACELAND PARK
0248	0001	CASE PLAYGROUND
0249	0001	COLBERT PARK
0250	0001	THEOS PARK
0251	0002	HARVEY PLAYGROUND
0252	0001	HAGERER PARK
0253	0004	LEE PARK
0254	0001	MARQUETTE PARK
0255	0001	MUNUMENT SQUARE
0256	0002	MARINO PLAYGROUND
0257	0001	BELLE CITY
0258	0001	JAY-EYE-SEE PARK
0259	0003	AIRPORT PARK
0260	0001	PARKER PLAYGROUND
0261	0005	DOUGLAS PARK
0262	0005	LAKEVIEW PARK
0263	0001	RACINE ST PARK
0264	0001	JONES PARK
0265S	0002	FRANKLIN SCHOOL
0268S	0002	STEPHEN BULL SCHOOL
0269S	0004	FRATT SCHOOL
0271S	0007	GOODLAND SCHOOL
0272S	0001	HOWEL SCHOOL
0273S	0002	JANES SCHOOL
0274S	0001	JEFFERSON SCHOOL
0275S	0010	JOHNSON SCHOOL
0277S	0002	LINCOLN SCHOOL
0278S	0004	MC KINLEY SCHOOL
0279S	0003	THEODORE ROOSEVELT SCHOOL
0280S	0021	HORLICK HS & WADEWITZ SCHOOL
0284S	0001	H G WINSLOW SCHOOL
0285S	0009	GIESE SCHOOL
0286	0001	GLEN PARK
0287S	0009	JERSTAD AGERHOLM SCHOOL
0289S	0006	MITCHELL SCHOOL
0290S	0013	STARBUCK JR HS
0291S	0001	WASHINGTON JR HS
0294S	0007	WASHINGTON HIGH SCHOOL
0297	0001	RANDOLF PARK
0299S	0002	RACINE CHRISTIAN SCHOOL
0300S	0001	ST JOHNS LUTHERAN SCHOOL
0301S	0002	TRINITY LUTHERAN SCHOOL
0302S	0001	HOLY NAME SCHOOL
0303S	0001	HOLY TRINITY SCHOOL
0305S	0002	ST EDWARD SCHOOL
0306S	0001	ST JOHN NEPOMUC SCHOOL
0308S	0004	ST LUCY SCHOOL
0312S	0001	ST ROSE SCHOOL
0314S	0001	GARFIELD SCHOOL
0315	0003	CEDAR BEND PARK
0316S	0020	JONES SCHOOL
0317	0007	HANTSCHER PARK
0318	0009	WASHINGTON PARK BOWL
0319S	0001	OUR FATHER SCHOOL
0320	0001	FULLER PARK
0321	0001	WALLIS PARK
0322	0002	WELLINGTON PARK
0323	0002	FRANKLIN PARK
0324	0001	DODGE PARK

RACINE COUNTY

SITE NO.	ACRES	SITE NAME
0325	0024	RESERVOIR PARK
0326	0019	TAYLOR HOME ORPHANAGE
0327S	0001	CONCORDIA SCHOOL
0328	0013	CARLSON PARK
0329	0007	VULCAN PARK
0330	0004	BROSE PARK
0376	0065	EVANS PARK
0377	0012	OLD SETTLERS PARK
0378	0004	SKEWES MEMORIAL PARK
0380S	0017	UNION GROVE UNION H S
0381	0039	RACINE INSTINCTIVE BOWMEN CLUB
0383S	0008	YORKVILLE SCHOOL
0384	0199	IVES GROVE GOLF LINKS
0385	0001	WELL NO 3 PARK
0386S	0001	RAYMOND DISTRICT SCHOOL
0387	0002	WAYSIDE
0388	0083	COUNTY FAIR GROUNDS
0389	0001	VILLAGE PARK
0391	0003	LEGION PARK
0392S	0001	SUNNY GROVE SCHOOL
0393S	0006	UNION GROVE MIDDLE SCHOOL
0394S	0005	UNION GROVE GRADE SCHOOL
0395	0019	WI SPORTSMENS ASS'N REC AREA
0396	0001	13TH AV PARK
0397	0001	WELL NO 4 PARK
0426	0001	TOWN PARK
0427	0001	BEAUMONT PARK
0428	0003	WAYSIDE
0429	0002	WAYSIDE
0430	0011	CABIN LANE SPORTSMAN CLUB
0431	0059	MC NAMARA EAGLE LAKE RESORT
0433	0022	EAGLE LAKE FISHERY AREA
0434	0024	EAGLE LAKE PARK
0435S	0002	KANSASVILLE SCHOOL
0436S	0002	SUNNYSIDE SCHOOL
0437S	0001	ST MARY SCHOOL
0438	0080	DOVER WATERFOWL REFUGE
0441S	0073	HOLY REDEEMER COLLEGE
0442	0005	SOFTBALL FIELDS
0443	0022	PAN-YACK PARK
0451	0001	PIONEER MEMORIAL PARK
0452	0938	HONEY CREEK WILDLIFE AREA
0453	0238	ELA PARK
0454S	0003	ROCHESTER SCHOOL
0457	0176	CAMP KA-HA-GON
0476	0003	CEDAR PARK PLAYGROUND
0477	0068	FISCHER MEMORIAL PARK
0478	0245	CAMP MAC LEAH YMCA
0479	0001	FAIRFIELD SUBDIVISION BEACH
0480	0010	BROWNS LAKE RESORT
0481	0002	CEDAR PARK
0482	0111	BROWNS LAKE GOLF CLUB
0483	0018	BURLINGSHIRE RESORT
0484	0049	BOHNERS LAKE FISH REARING POND
0485	0019	MT TOM SKI HILL
0486	0002	GAK HILLS PARK NO 3
0487	0004	CAKWOOD HILLS BEACH
0488	0001	JULIUS AUKES PARK
0489	0102	BUSHNELL PARK
0490	0279	KARCHER MARSH WILDLIFE AREA
0491S	0002	WINKLER SCHOOL
0492	0001	WAYSIDE
0494	0001	CLUB 11 RESORT
0495	0001	HALLS POINT PARK
0496	0001	LAKEVIEW DRIVE-IN
0497	0001	PETRIE'S RESORT
0499	0059	STATE WETLAND AREA
0500	0159	BURLINGTON SCH FOREST
0501	0156	WILMOT HS FOREST
0527	0004	WAGNER PARK
0528	0002	SUNSET PARK
0529	0002	RIVERSIDE PARK
0530	0006	WEHMHOF PARK
0531	0001	MEINHARDT PARK
0532	0007	DEVOR PARK
0535	0024	MC CANNA PARK
0537	0001	UNDEVELOPED PARK SITE
0538S	0001	COOPER SCHOOL
0539S	0007	WALLER SCHOOL
0541S	0007	BURLINGTON JR HIGH
0542S	0012	BURLINGTON HS
0544S	0001	ST CHARLES SCHOOL
0546S	0003	ST MARYS CATHOLIC SCHOOL
0550	0019	ECHO PARK
0551	0001	LIBRARY PARK
0552	0004	LINCOLN ST FIELD
0553S	0004	ST JOHNS LUTH SCHOOL
0554	0087	WEHMHOF WOODLAND PRESERVE

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

\*THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

\* THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

<sup>b</sup> THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

[illegible]

GENERAL SITE INFORMATION				GENERAL										USE										SITES										NATURAL AREA										SITES		SPECIAL USE SITES		URBAN OPEN SPACE SITES																																																																																																																																												
S U B S E C T O R	S I T E	I N F O R M A T I O N	URBAN RURAL CODE	LOCATION	TYPE	MULTIUSE	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E	C O D E O F U S E

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.[illegible]

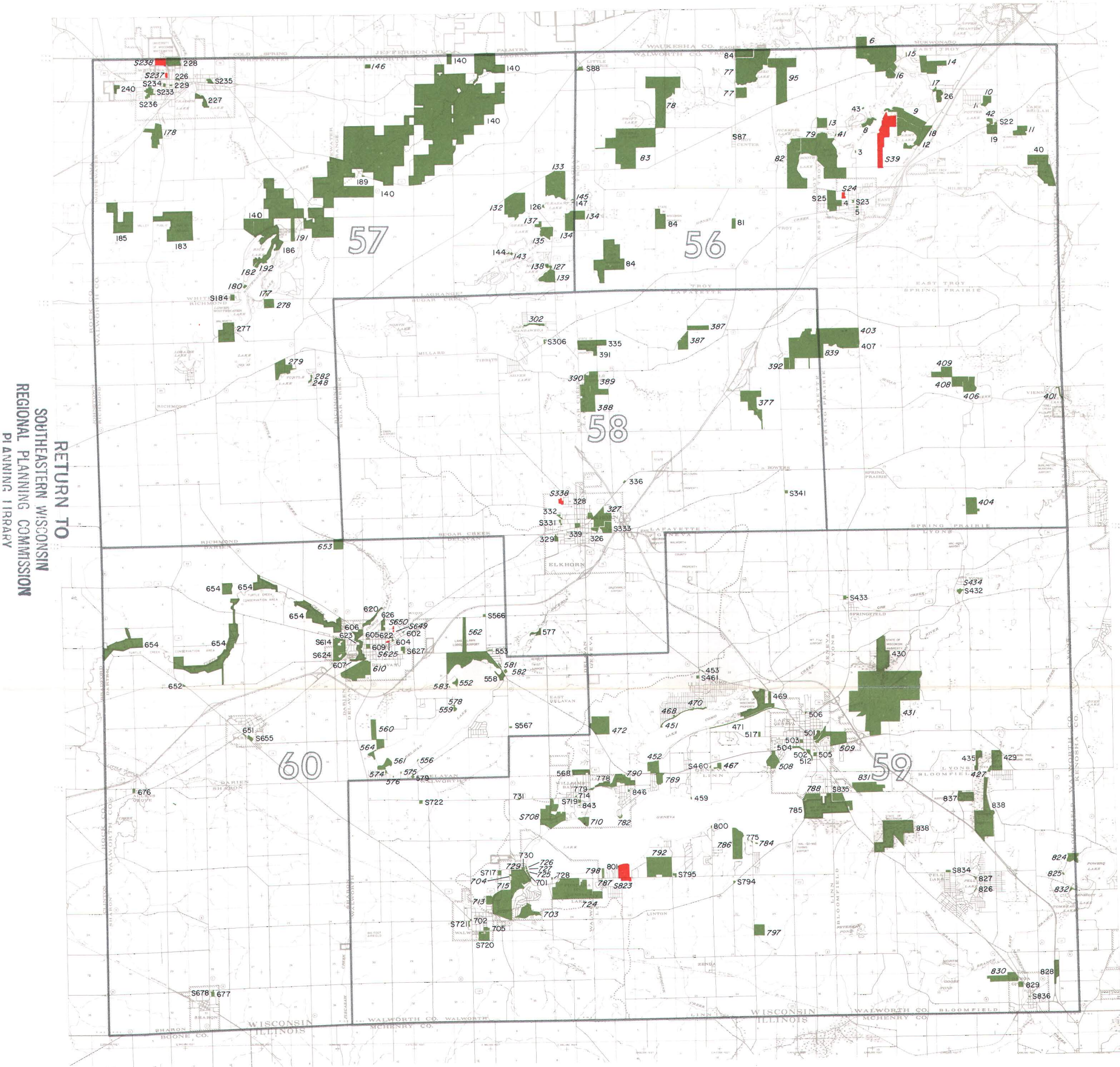
<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

		GENERAL										USE										SITES										NATURAL AREA SITES										SPECIAL USE SITES			URBAN OPEN SPACE SITES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
		TYPE				MULTIUSE						ACRES WITHIN PAA		SURVEY SITES		SELECTED FACILITIES								TYPE		ACRES WITHIN PAA		TYPE	ACRES WITHIN PAA	ACRES WITHIN PAA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
		I	II	III	IV	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	KL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ	
OTHER TOTALS		3	9	25	171	9	8	36	132	23	2184	2248	4432	3	21	17	14	41	21	5	9	37	2	53	129	134	2	0	98	26	4	28	OTHER TOTALS										12	0	0	5	8	2260	1384	3644	OTHER TOTALS		OTHER TOTALS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
NUMBER OF GENERAL USE SITES IN COUNTY		208																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													




<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

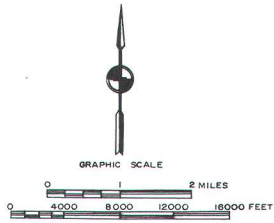


PARK AND OPEN SPACE SITES IN WALWORTH COUNTY: 1973



LEGEND

-  PUBLIC SITE
-  NONPUBLIC SITE
-  PLANNING ANALYSIS AREA



Source: SEWRPC.

## W A L W O R T H   C O U N T Y

SITE NO.	ACRES	SITE NAME
0001	0001	MIRAMAR BEACH
0003	0001	PUBLIC BOAT ACCESS
0004	0013	EAST TROY AMUSEMENT PARK
0005	0001	EAST TROY VILLAGE SQ
0006	0324	BURR OAKS CAMP LTD
0008	0024	CAMP CHARLES ALLIS ASSN
0009	0126	CAMP EDWARDS
0010	0033	SLOVAK SOKAL CAMP
0011	0046	SOUTHEASTERN ROD & GUN CLUB
0012	0039	SALVATION ARMY CAMP
0013	0040	TRIANGLE SPORTSMANS CLUB
0014	0105	LAKE BEULAH COUNTRY CLUB
0015	0002	BEULAH VISTA BEACH
0016	0025	BEULAH BEACH RESORT
0017	0002	RUSSELLS BOATS
0018	0109	VASS'S CAMPGROUND
0019	0033	POTTER L ACCESS & WETLAND AREA
0022S	0004	STONE ELEMENTARY SCHOOL
0023S	0005	EAST TROY ELEMENTARY SCHOOL
0024S	0008	ST PETERS SCHOOL
0025S	0083	EAST TROY HIGH SCHOOL
0026	0026	N PIKE SPAWNING AREA
0039S	0201	SOC OF DIVINE WORD SEMINARY
0040	0172	STATE WETLAND AREA
0041	0001	FRED'S TAP BOAT RENTAL
0042	0011	HEATHS RESORT
0043	0001	NATURE AREA
0077	0328	MILWAUKEE BOYS CLUB
0078	0338	CHAPMAN HILLS CAMP
0079	0442	CAMP ALICE CHESTER
0081	0007	STATE WETLAND AREA
0082	0263	PIC-A-BOO CAMPGROUND
0083	0515	HULL HOUSE ASSOCIATION CAMP
0084	0407	STATE WETLAND AREA
0087S	0003	TROY CENTER SCHOOL
0088S	0006	LITTLE PRAIRIE SCHOOL
0095	0252	TREES AND TRAILS CAMPGROUND
0126	0003	TOWN PARK & LAKE ACCESS
0127	0002	LAUDERDALE MARINA
0132	0166	SINGING HILLS CAMP
0133	0197	JUNIPER KNOLL CAMP
0134	0105	CAMP POTTAWATOMI HILLS
0135	0051	LUTHERDALE CAMP
0137	0010	LUEBKES RESORT
0138	0004	STERLINGWORTH
0139	0056	LAUDERDALE COUNTRY CLUB
0140	4247	KETTLE MORAIN STATE FOREST
0143	0002	KILEY'S KOVE
0144	0002	GREEN LAKE ACCESS
0145	0001	KAMINSKI'S BOAT RENTAL
0146	0010	RAINBOW SPRINGS TROUT FARM
0147	0001	PLEASANT LAKE BOAT ACCESS
0177	0001	WHITEWATER LAKE MARINA
0178	0066	WHITEWATER COUNTRY CLUB
0180	0002	KRAHN'S RESORT
0182	0003	HACKER'S LAST RESORT
0183	0344	CLOVER VALLEY PUB. HUNTING GDS
0184S	0007	LAKEVIEW SCHOOL
0185	0189	CLOVER VALLEY PUB. HUNTING GDS
0186	0247	WHITEWATER L RECREATION AREA
0189	0001	STH 12 WAYSIDE
0191	0046	CAMP JOY BAPTIST CAMP
0192	0001	CRUMMEY'S PARK MARINA
0226	0001	LIBRARY PARK
0227	0012	TRIPP LAKE PARK
0228	0020	STARIN PARK
0229	0001	CENTER STREET PARK
0233S	0001	LINCOLN SCHOOL
0234S	0003	FRANKLIN JR HIGH SCHOOL
0235S	0006	WASHINGTON SCHOOL
0236S	0019	WHITEWATER HIGH SCHOOL
0237S	0004	OLD WHITEWATER STADIUM
0238S	0020	WILLIAMS CENTER ATHLETIC FIELD
0240	0014	EFFIGY MOUNDS PARK
0248	0003	MC INTIRES RESORT
0277	0160	WALWORTH COUNTY PARK
0278	0042	TRAILERS CAMPERS CAMPGROUND
0279	0067	SCHROEDERS RESORT
0282	0001	CRYSTAL BOWL
0302	0019	LAKE WANDAWEGA SUB'D PARK
0306S	0003	TIBBETS COMMUNITY SCHOOL
0326	0010	HARRIS MEMORIAL ATHLETIC FIELD
0327	0097	WALWORTH CO AGRICULTURAL SOC
0328	0001	NORTHSIDE PLAYGROUND
0329	0012	SUNSET PARK
0331S	0004	LAKELAND SPECIAL SCHOOL
0332S	0005	WEST SIDE SCHOOL
0333S	0037	ELKHORN AREA HIGH SCHOOL
0335	0087	STATE WETLAND AREA
0336	0001	WAYSIDE STH 11
0338S	0008	ST PATRICK SCHOOL
0339	0008	WALWORTH CO COURTHOUSE PARK
0341S	0003	EAST AREA ELEMENTARY SCHOOL
0377	0153	TROUT VALLEY RECREATION AREA
0387	0091	CHRISTY LANE RUNS INC
0388	0120	EVERGREEN COUNTRY CLUB
0389	0118	TURTLE PARK
0390	0004	WALWORTH CO MOTORCYCLE CLUB
0391	0013	WAL CO SAFETY TRAINING GRDS
0392	0018	NATURE CONSERVANCY PRESERVE
0401	0005	HONEY LAKE SUBDIVISION PARK
0403	0280	HAPPY HOLLOW GIRL SCOUT CAMP
0404	0064	KOA CAMPGROUNDS
0406	0067	PARADISE VALLEY SKI HILL
0407	0001	WALWORTH CTH G WAYSIDE
0408	0051	N AV BAPT CHURCH CAMPGROUND
0409	0058	SIRESS CAMPGROUNDS
0427	0006	L IVANHOE PROP OWNERS PARK
0429	0072	N PIKE SPAWNING AREA
0430	0135	STATE WETLAND AREA
0431	1182	PLAYBOY PROPERTIES INC
0432S	0007	LYONS SCHOOL
0433S	0005	SPRINGFIELD SCHOOL
0434S	0001	ST JOSEPHS SCHOOL
0435	0027	STATE WETLAND AREA
0451	0005	PROP OWNERS ASSN PARKLANDS
0452	0059	HOLIDAY INN RECREATION AREA
0453	0001	WALWORTH CTH H WAYSIDE
0459	0001	BOAT ACCESS
0460S	0002	WOODS SCHOOL
0461S	0004	COMO SCHOOL

## W A L W O R T H   C O U N T Y

SITE NO.	ACRES	SITE NAME
0467	0017	LAKE GENEVA YMCA CAMP
0468	0001	CONRADS WEST END RESORT
0469	0117	STATEWIDE HABITAT AREA
0470	0001	ROCKY & PATS RESORT
0471	0022	WALCO WARBLER WALKWAY
0472	0111	FOUR WINDS
0501	0013	EASTVIEW PARK
0502	0002	WILLOW PARK (FLAT IRON PARK)
0503	0003	MAPLE PARK
0504	0005	ELM PARK
0505	0003	OAK PARK
0506	0001	OLIVE LONGLAND PARK
0508	0056	CONVANT HARBOR BIBLE CAMP
0509	0111	HILLMOOR GOLF CLUB
0512	0001	BAKER PARK
0517	0004	COBB PARK
0552	0005	DEHAVAN ASSEMBLY GROD PARK
0553	0002	PLAYFIELD
0556	0001	SOUTH SHORE MANOR SUBD PARK
0558	0015	TOWN OF DEHAVAN PARK
0559	0002	DEHAVAN LAKE YACHT CLUB
0560	0079	CAMP DEHAVAN
0561	0029	HOUSE-IN-THE-WOODS CAMP
0562	0250	LAKE LAWN LODGE
0564	0007	SUBDIVISION PARK
0566S	0001	SHADOW LAWN SCHOOL
0567S	0002	BAILEY SCHOOL
0568	0026	WILLIAMS BAY ATHL FIELD
0574	0003	HIGHLANDS SUBDIVISION PARK
0575	0001	COMMERCIAL LAKE ACCESS
0576	0001	COMMERCIAL LAKE ACCESS
0577	0012	REM DEHAVAN LAKE AREA
0578	0001	FLEMMINGS MARINA
0579	0003	KIRKPATRICK MEMORIAL PARK
0581	0003	REED'S MARINA
0582	0001	SPORTSMANS PARK
0583	0001	SUBDIVISION PARK TOT-LOT
0602	0001	DECKERT PARK
0604	0001	LITMER PARK
0605	0001	TOWER PARK
0606	0025	VETERANS MEMORIAL PARK
0607	0036	SPRINGS PARK
0609	0004	PHOENIX PARK
0610	0127	DELBROCK GOLF COURSE
0614S	0050	DELEVAN-DARIEN HIGH SCHOOL
0620	0017	DELEVAN MEMORIAL ARBORETUM
0622	0001	FLAT IRON PARK
0623	0008	BROOKLANE PARK
0624S	0027	PHOENIX SCHOOL
0625S	0002	ST ANDREWS SCHOOL
0626	0011	UNDEVELOPED PARK SITE
0627S	0010	WILEMAN SCHOOL
0649S	0002	DEL CHRISTIAN SCHOOL
0650S	0002	DEL CHRISTIAN REFORMED CHURCH
0651	0002	VILLAGE SQUARE PARK
0652	0002	STH 14 WAYSIDE
0653	0040	DELEVAN SPORTSMANS CLUB
0654	0753	TURTLE CREEK WILDLIFE AREA
0655S	0004	DARIEN ELEMENTARY SCHOOL
0676	0003	UNION PARK
0677	0006	GOODLAND MEMORIAL PARK
0678S	0003	SHARON COMMUNITY SCHOOL
0701	0003	FONTANA BEACH
0702	0001	VILLAGE SQUARE
0703	0057	COUNTRY CLUB ESTS GOLF COURSE
0704	0001	FROG HOLLOW MINIATURE GOLF
0705	0007	VILLAGE ATHLETIC FIELD
0708S	0150	GEORGE WILLIAMS COLLEGE
0710	0021	CONFERENCE POINT CAMP
0713	0014	BIG FOOT GOLF RANGE
0714	0001	FROST PARK
0715	0232	BIGFOOT COUNTRY CLUB
0717S	0005	FONTANA ELEMENTARY SCHOOL
0719S	0002	WILLIAMS BAY SCHOOL
0720S	0040	BIG FOOT HIGH SCHOOL
0721S	0003	WALWORTH SCHOOL
0722S	0004	NORTH WALWORTH SCHOOL
0724	0253	ABBEY SPRINGS CCOUNTRY CLUB
0725	0001	FONTANA MARINE SERVICE
0726	0001	GORDYS SKI BOAT RENTAL
0727	0001	MILLERS MINIATURE GOLF
0728	0001	PUBLIC BOAT ACCESS
0729	0070	THE ABBEY
0730	0003	VILLAGE PARK
0731	0001	WAYSIDE STH 67
0775	0001	HILLSIDE DRIVE BOAT ACCESS
0778	0022	WILLIAMS BAY BEACH
0779	0002	EDGEWATER PARK
0782	0001	COMMUNITY PARK
0784	0001	EMMA FLECK MEMORIAL PARK
0785	0264	BIGFOOT BEACH STATE PARK
0786	0118	LAKE GENEVA COUNTRY CLUB
0787	0003	LAKE GENEVA YACHT CLUB
0788	0022	LAKE GENEVA YOUTH CAMP
0789	0021	CAMP AUGUSTANA
0790	0077	CAMP WILLOBY
0792	0183	MAJESTIC HILLS CORPORATION
0794S	0004	TRAVER SCHOOL
0795S	0004	REEK SCHOOL
0797	0040	BIG FOOT ARCHERS INC
0798	0004	GENEVA LAKE BOAT COMPANY
0800	0001	LINN PIER
0801	0001	SHADOW DRIVE LAKE ACCESS
0823S	0070	NORTHWESTERN MILITARY ACADEMY
0824	0039	HONEY BEAR FARM
0825	0001	FRED & ANNS BOAT RENTAL
0826	0001	SUBDIVISION PARK
0827	0001	SUBDIVISION PARK
0828	0029	STH TOURIST INFO CENTER
0829	0010	GENOA CITY VETERANS MEM PARK
0830	0089	RECREATION CAMP
0831	0115	LAKE GENEVA RACEWAYS
0832	0002	LASCONIAN LODGE
0834S	0004	STAR CENTER SCHOOL
0835S	0040	BADGER HIGH SCHOOL
0836S	0001	BROOKWOOD SCHOOL
0837	0296	STATE WETLAND AREA
0838	0252	STATE WETLAND AREA
0839	0317	ALPINE VALLEY RESORT
0843	0001	NEIGHBORHOOD PARK
0846	0001	UNDEVELOPED VILLAGE PARK



Table D-5

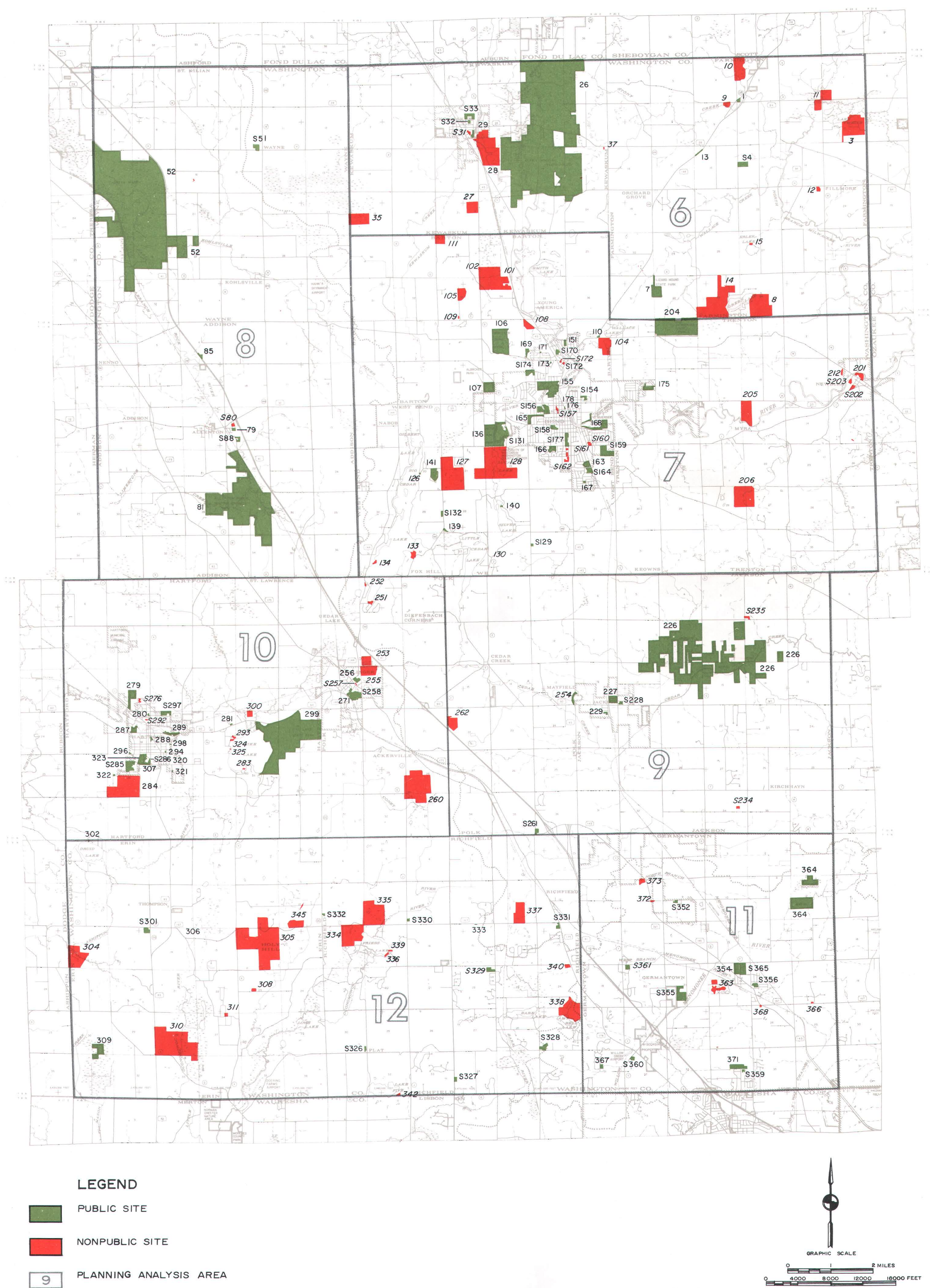
PARK AND OPEN SPACE SITES IN WALWORTH COUNTY BY PLANNING ANALYSIS AREA: 1973

PLANNING		WALWORTH ANALYSIS		COUNTY AREA		56																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
GENERAL SITE INFORMATION										GENERAL USE SITES										NATURAL AREA SITES		SPECIAL USE SITES		URBAN OPEN SPACE SITES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
GENERAL	SITE	INFORMATION	URBAN RURAL CODE	LOCATION	TYPE	MULTIUSE				ACRES WITHIN PAA				SURVEY SITES				SELECTED FACILITIES				TYPE	ACRES WITHIN PAA	ACRES WITHIN PAA	ACRES WITHIN PAA	ACRES WITHIN PAA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
						I	II	III	IV	A	B	C	D	S	U	O	E	S	U	O	E						S	U	O	E	S	P	T	A	O	C	R	A	L	S																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
0001	MIRAMAR BEACH		507	11	0	04-13	-11-3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											





### PARK AND OPEN SPACE SITES IN WASHINGTON COUNTY: 1973





WASHINGTON COUNTY

SITE NO.	ACRES	SITE NAME
0001	0004	FIREMANS PARK
0003	0126	CAMP AWANA
0004S	0020	FARMINGTON SCHOOL
0007	0030	LIZARD MOUND STATE PK
0008	0163	GREEN LAKES CAMPGROUND
0009	0013	BOLTONVILLE SPORTSMENS CLUB PK
0010	0070	WILDLIFE INC
0011	0079	FILLMORE SPORTSMENS CLUB
0012	0003	TURNER PARK
0013	0002	WAYSIDE
0014	0263	LAZY DAYS CAMPGROUND
0015	0002	YAHRS ORCHARD
0026	2820	KETTLE MORaine ST FOR NO UNIT
0027	0044	SUNBURST SKI AREA
0028	0181	HON-E-COV GOLF COURSE
0029	0014	KEWASKUM VILLAGE PARK
0031S	0003	HOLY TRINITY SCHOOL
0032S	0005	KEWASKUM ELEM AND JR HS
0033S	0014	KEWASKUM UNION HIGH SCHOOL
0035	0078	WEST-BAR SPORTING CLUB
0037	0001	ST MICHEALS CHURCH PLAYLOT
0051S	0008	WAYNE SCHOOL
0052	2418	THERESA MARSH WILDLIFE AREA
0079	0005	ALLENTON PARK
0080S	0001	SACRED HEART SCHOOL
0081	0879	ALLENTON WILDLIFE AREA
0085	0003	WAYSIDE
0088S	0009	ALLENTON ELEM SCHOOL
0101	0094	WEST BEND SPORTSMANS CLUB
0102	0089	UNION ROD & GUN CLUB
0104	0054	LAKE LENWOOD RECREATION PARK
0105	0021	TIMBER TRAIL CAMPGROUND
0106	0148	NORTHERN GRAVEL PARK
0107	0040	ALBECKER PARK
0108	0011	HIGHWAY 45 GOLF
0109	0001	WAYSIDE
0110	0001	WAYSIDE
0111	0036	KETTLE CAMPGROUND
0126	0001	PETERS RESORT
0127	0208	WEST BEND COUNTRY CLUB
0128	0332	SILVER BROOK GIRL SCOUT CAMP
0129S	0003	SILVER MAPLE SCHOOL
0130	0006	STEINERS RESORT
0131S	0030	UNIV OF WIS WASH CO CENTER
0132S	0002	OAK KNOLL SCHOOL
0133	0009	TIMMERS RESORT
0134	0003	CEDAR LAKE YACHT CLUB
0136	0140	RIDGE RUN PARK
0139	0005	CEDAR LAKE WAYSIDE
0140	0001	J & C RESORT
0141	0029	STATE WETLAND AREA
0151	0007	BARTON PARK
0154S	0005	FAIR PARK SCHOOL
0155	0079	REGNER PARK
0156S	0009	SILVER BROOK SCHOOL
0157S	0002	HOLY ANGELS SCHOOL
0158S	0008	MC LANE SCHOOL
0159S	0034	WEST BEND HIGH SCHOOLS
0160S	0003	GOOD SHEPARD LUTH SCHOOL
0161S	0004	ST JOHN'S LUTH SCHOOL
0162S	0006	ST FRANCES CABRINI SCHOOL
0163	0012	ZIEGLER PARK
0164S	0008	DECORAH SCHOOL
0165	0016	SILVER BROOK PARKWAY
0166	0014	DECORAH HILLS PARK
0167	0002	MAPLE WYNDE PLAYLOT
0168	0040	RIVERSIDE PARK
0169	0007	SUNSET PARK
0170S	0005	BARTON SCHOOL
0171	0001	MUENK PLAYLOT
0172S	0001	ST MARY I C SCHOOL
0173	0001	GRANT TRIANGLE
0174S	0015	GREENTREE SCHOOL
0175	0011	WINGATE PARK
0176	0001	OLD SETTLERS PARK
0177S	0016	BADGER MIDDLE SCHOOL
0178	0013	SCHOOL SYSTEM PROPERTY
0201	0010	NEWBURG FIREMANS PARK
0202S	0003	HOLY TRINITY CATHOLIC SCHOOL
0203S	0004	ST JOHNS LUTH SCHOOL
0204	0257	LEIENBERGER COUNTY PARK
0205	0084	GOLF COURSE
0206	0157	YMCA DAY CAMP MORaine WOWITAN
0212	0003	NEWBURG SPORTSMENS CLUB
0226	1361	JACKSON MARSH (OWNED)

WASHINGTON COUNTY

SITE NO.	ACRES	SITE NAME
0227	0020	JACKSON PARK
0228S	0003	JACKSON SCHOOL
0229	0002	COMMUNITY PARK
0234S	0004	DAVIDS STAR LUTH SCHOOL
0235S	0003	TRINITY LUTH SCHOOL
0251	0004	CEDAR LAKE HILLS SUBDIV PARK
0252	0002	SANDY BEACH RESORT
0253	0030	SLINGER SPEEDWAY
0254	0008	THE POND
0255	0066	LITTLE SWITZERLAND SKI AREA
0256	0006	FIREMENS PARK
0257S	0001	ST PETER SCHOOL
0258S	0024	SLINGER ELEM JR & HIGH SCHOOLS
0260	0232	SCENIC VIEW COUNTRY CLUB
0261S	0004	HIGHWAY VIEW SCHOOL
0262	0034	OL' MC DONALDS LITTLE FARM
0271	0007	SLINGER COMMUNITY PARK
0276S	0006	PEACE LUTH SCHOOL
0279	0027	WOODLAWN UNION PARK
0280	0001	HARTFORD RECREATION DEPT
0281	0001	WAYSIDE
0283	0001	CASEY'S EAGLE POINT
0284	0197	HARTFORD COUNTRY CLUB
0285S	0028	HARTFORD UNION HIGH SCHOOL
0286S	0003	LINCOLN SCHOOL
0287	0011	WEST SIDE PARK
0288	0001	SAWYER PARK
0289	0010	WILLOW BROOK PARK
0292S	0001	ST KILIAN SCHOOL
0293	0002	PIKE LAKE YACHT CLUB
0294	0001	CANDY CANE CITY
0296	0001	CITY PARK
0297S	0012	RUSSMAN SCHOOL
0298	0001	CITY PARK
0299	0672	PIKE LAKE STATE PARK
0300	0018	HARTFORD COMM CONSERV CLUB
0301S	0006	ERIN SCHOOL
0302	0001	PUBLIC LAKE ACCESS
0304	0086	TGLAND SPRINGS CAMPING RESORT
0305	0427	HOLY HILL
0306	0001	WAYSIDE
0307	0011	VETERANS MEMORIAL PARK
0308	0004	SOFTBALL FIELD
0309	0040	WASHINGTON COUNTY LAND
0310	0308	CAMP JOURNAL
0311	0003	ERIN MEADOWS SUBDIVISION PARK
0320	0001	CITY PARK
0321	0001	CITY PARK
0322	0001	CITY PARK
0323	0013	GIB MAHR FIELD
0324	0002	LENNY & CHERS RESORT
0325	0001	WATERS EDGE
0326S	0002	PLAT SCHOOL
0327S	0005	HILLSIDE SCHOOL
0328S	0007	AMY BELLE SCHOOL
0329S	0008	ST HURBERTUS SCHOOL
0330S	0004	FRIESS LAKE SCHOOL
0331S	0005	RICHFIELD SCHOOL
0332S	0002	ST AUGUSTINE SCHOOL
0333	0001	WAYSIDE
0334	0139	ST AEMILIAN RECREATION CENTER
0335	0152	DAN BOONE CONSERVATION LEAGUE
0336	0002	FRIESS RESORT
0337	0069	ARROWHEAD SPRINGS COUNTRY CLUB
0338	0114	CAMP MINIKANI
0339	0002	RAEBELS DRIVE-IN
0340	0006	FOX'S TAP & TRAP
0342	0003	LAKE FIVE RESORT
0343	0032	HEILEGER HUEGEL SKI CLUB
0352S	0004	ROCKFIELD SCHOOL
0354	0020	FIREMENS PARK
0355S	0041	WASHINGTON HIGH SCHOOL
0356S	0005	MAC ARTHUR SCHOOL
0359S	0002	COUNTY LINE SCHOOL
0360S	0007	WILLOW CREEK SCHOOL
0361S	0006	ST BONIFACE SCHOOL
0363	0204	LAKE PARK HOMES REC. AREA
0364	0121	ROCKFIELD MARSH
0365S	0026	KENNEDY MIDDLE SCHOOL
0366	0001	FOREST HEIGHTS SUBD PARK
0367	0005	WILLOW CREEK POND
0368	0001	RONNIES
0371	0029	COUNTY LINE PARK
0372	0002	SHADY GROVE
0373	0007	GERMANTOWN SPORTSMENS CLUB

<sup>9</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

<sup>9</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

\*INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

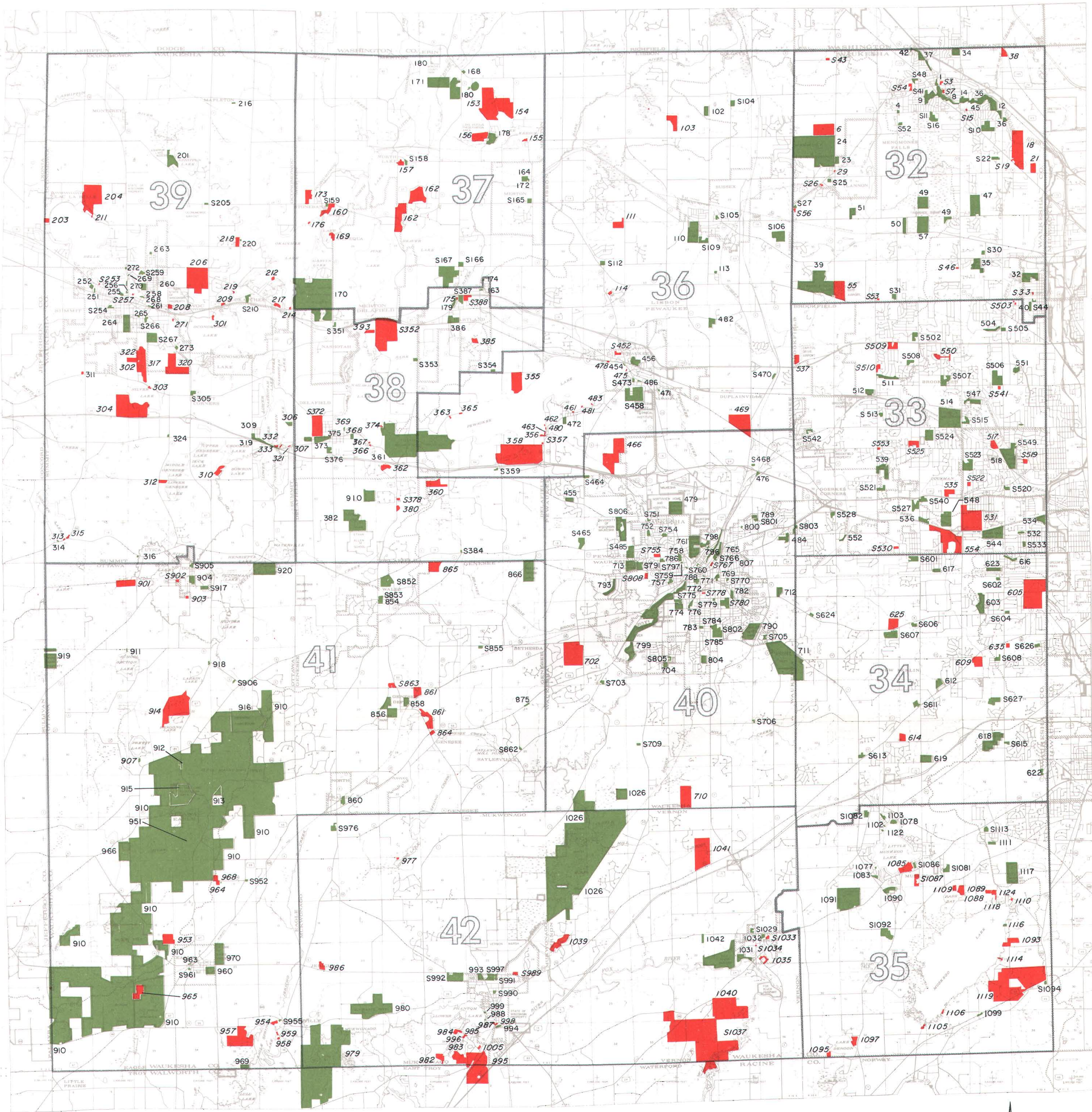
\*INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN

<sup>a</sup> INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

<sup>a</sup> INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

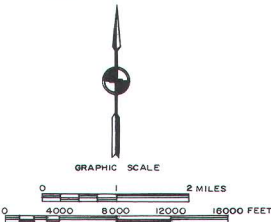


PARK AND OPEN SPACE SITES IN WAUKESHA COUNTY: 1973



LEGEND

- PUBLIC SITE
- NONPUBLIC SITE
- PLANNING ANALYSIS AREA



Source: SEWRPC.



## WAUKESHA COUNTY

SITE NO.	ACRES	SITE NAME
0001	0003	MILL POND PARK
0003S	0002	ST. MARYS SCHOOL
0004	0004	MEND FALLS NEIGHBORHOOD PARK
0006	0082	LANNON FIELD FARM
0007S	0001	GRACE EVANGELICAL LUTH SCH
0008	0022	LIME KILNS PARK
0009	0017	VILLAGE PARK-GARFIELD AV
0010S	0053	MENOMONEE FALLS EAST HS
0011S	0002	HIAWATHA SCHOOL
0012	0018	WALTER DIEHNELT ROTARY PARK
0014	0014	HORACE TRENARY FIELD
0015S	0001	BETHLEHEM EVANGELICAL LUTH SCH
0016S	0014	THOMAS JEFFERSON JR HS
0018	0131	NORTH HILLS GOLF COURSE
0019S	0001	ST ANTHONY SCHOOL
0021	0015	GOOD HOPE DRIVING RANGE
0022S	0006	NORTH HILLS SCHOOL
0023	0008	JOECK'S MEMORIAL PARK
0024	0393	MENOMONEE PARK
0025S	0004	LANNON SCHOOL
0026S	0001	ST JOHNS LUTHERAN SCHOOL
0027S	0004	WILLOW SPRINGS SCHOOL
0029	0001	HWY 74 HORSHOE COURTS
0030S	0004	OAKWOOD SCHOOL
0031S	0009	MARCY SCHOOL
0032	0044	BUTLER VILLAGE PARK
0032S	0001	ST AGNES SCHOOL
0034	0020	MILLER-DAVIDSON HOUSE
0035	0036	WILLOWOOD PARK
0036	0050	MENOMONEE FALLS PARKLANDS
0037	0016	MENOMONEE FALLS PARKLANDS
0038	0013	GREENWOOD GOLF RANGE
0039	0164	WANAKI GOLF COURSE
0040	0008	BUFFER STRIP
0041S	0003	MENOMONEE FALLS NORTH HS
0042	0002	MEND RIVER PKWY SOFTBALL DIA
0043S	0002	MEND FALLS PRE-SCHOOL CO-OP
0044S	0002	BUTLER SCHOOL
0045	0010	MUNICIPAL BLDG SITE & REC AREA
0046S	0001	PILGRIM EVANGELICAL LUTH SCH
0047	0074	SCHOOL DISTRICT NOI OPEN SPACE
0048S	0004	SHADY LANE SCHOOL
0049	0050	TAMARACK BOG-CO LAND
0050	0031	TAMARACK BOG-VILLAGE LAND
0051	0022	TOWER HILL PARK
0052S	0004	VALLEY VIEW SCHOOL
0053S	0001	ZION EVANGELICAL LUTH SCHOOL
0054S	0008	GOOD SHEPHERD SCHOOL
0055	0062	AERO PARK AIRPORT
0056S	0004	JUNEAU ACADEMY
0057	0058	TAMARACK BOG-VILLAGE LAND
0102	0019	STATE WETLAND AREA
0103	0034	MENOMONEE FALLS ROD & GUN CLUB
0104S	0008	WOODSIDE SCHOOL
0105S	0004	SUSSEX ORCHARD SCHOOL
0106S	0041	SUSSEX SCHOOL SYSTEM
0109S	0014	SUSSEX MAPLE SCHOOL
0110	0070	VILLAGE PARK
0111	0022	AUSBLICK SKI HILL
0112S	0007	RICHMOND SCHOOL
0113	0002	NORTHVIEW DRIVE PARK
0114	0005	LYNDALE FARMS SUBDIV PARK
0153	0151	CAMP WHITCOMB
0154	0086	CAMP MASON
0155	0003	BUCCI'S RESORT
0156	0049	VALLEY ROD & GUN CLUB
0157	0009	NORTH LAKE FIELD
0158S	0006	NORTH LAKE SCHOOL
0159S	0003	STONE BANK SCHOOL
0160	0019	CARL SHURZ PARK
0162	0144	CHENEQUA COUNTRY CLUB
0163	0001	SUNNY SCULP PARK
0164	0009	FIREMAN'S PARK
0165S	0010	MERTON SCHOOL
0166S	0010	SWALLOW SCHOOL
0167S	0094	ARROWHEAD UNION HIGH SCHOOL
0168	0004	MUNCHES FIELD
0169	0009	HASSLINGERS RESORT
0170	0437	NASHOTAH PARK
0171	0048	NORMAN CHESTER NATURE AREA
0172	0001	MERTON VILLAGE PARK
0173	0023	LIONS CLUB PARK
0174	0002	HILGER PARK
0175	0002	HARTLAND ATHLETIC ASSOC FIELD
0176	0001	FREEZY POINT RESORT
0173	0035	LAKE KESUS PRESERVATION AREA
0179	0012	BARK RIVER PARKLANDS
0180	0108	MONCHES COUNTY PARK
0201	0035	ASSHIPUN LAKE ACCESS
0203	0010	JEWISH YOUTH CAMP
0204	0135	LAC LA BELLE GOLF COURSE
0205S	0001	BROWN ST SCHOOL
0206	0167	OCONOMOWOC GOLF CLUB
0208	0012	CARPET GREEN GOLF
0209	0003	RAYS SPORTING CLODS
0210S	0007	OKAUCHEE SCHOOL
0211	0002	CLEMENS LAC LABELLE BEACH
0212	0002	EDGEWATER RESORT
0214	0002	TIKI RESORT
0216	0002	MAPLETON COMM CENTER
0217	0007	LIONS CLUB PARK
0218	0018	LAKEVIEW ACRES SUBDIV PK
0219	0001	BILL KAY BOAT LAUNCH
0220	0001	BAUER ST PUBLIC ACCESS
0251	0001	BLAIN STREET PARKS
0252	0004	CHAFFEE RD PARK
0253S	0001	ST MATTHEWS SCHOOL
0254S	0006	PARK LAWN SCHOOL
0255	0003	LAC LA BELLE PARK
0256	0001	MEMORIAL PARK
0257S	0001	ST PAULS EVAN LUTH SCHOOL
0258	0011	FOWLER LAKE PARK
0259S	0005	GREENLAND SCHOOL
0260	0002	RIVERSIDE PARK
0263	0002	EAST HTS AV PARK
0264	0007	GREENLAND MEADOWS PARK
0265	0001	ROOSEVELT FIELD PARK
0266S	0001	WESTOVER PARK
0267S	0005	OCONOMOWOC JR HS
0267S	0033	OCONOMOWOC SRHS
0268	0001	OAKWOOD AV TERRACE
0269	0001	LISBON RD PARK
0270	0001	LAKE RD TERRACE
0271	0001	LAKE EDGE ESTATES SUBDIV PK
0272	0001	BENDER PARK
0273	0004	HERITAGE HEIGHTS PARK
0301	0003	OCONOMOWOC LAKE CLUB
0302	0015	HICKORY GREENS GOLFING RANGE
0303	0002	DECICUS RESORT
0304	0188	INDIAN MOUND BSA RESERVATION
0305S	0009	SUMMIT SCHOOL
0306	0009	CAMP SIDNEY COHEN
0307	0001	ALS BAIT SHOP
0309	0002	ATHLETIC FIELD
0310	0020	CAMP SIDNEY COHEN CROOKED LAKE
0311	0002	HWY B HALL DIAMOND
0312	0008	LAKE GENESEE CAMP
0313	0001	JOYS AND MARTYS RESORT
0314	0001	GOLDEN LAKE BOAT ACCESS
0315	0002	MILLERS SANDY BEACH
0316	0001	WAYSIDE
0317	0102	PAGANICA GOLF CCOURSE
0319	0013	NEMAHBIN CAKE ACCESS
0320	0097	SCOTSLAND
0321	0001	HEINDERS RESORT
0322	0003	YMCA GROUNDS
0324	0001	WAYSIDE
0332	0001	CHANNEL INN
0333	0001	NEMAHBIN LAKE RESORT
0351S	0002	NASHOTAH SCHOOL
0352S	0185	UNIVERSITY LAKE HS

## WAUKESHA COUNTY

SITE NO.	ACRES	SITE NAME
0353S	0004	BARK RIVER SCHOOL
0354S	0003	LAKEVIEW SCHOOL
0355	0068	LAKEVIEW GOLF COURSE
0356	0002	ST ANTHONY YACHT CLUB
0357S	0003	ST ANTHONY AT THE LAKE SCHOOL
0358	0282	TUMBLEBROOK GOLF COURSE
0359S	0003	ZION SCHOOL
0360	0028	HARTLAND SPORTSMENS CLUB INC
0361	0489	NAGAWAUKEE PARK
0362	0014	LITTLE SWISS VALLEY SKI AREA
0363	0001	GOLDEN ANCHORS LAUNCH
0365	0002	JOLLY FISHERMAN
0366	0001	CASEYS BOATS
0367	0001	LIGHTHOUSE INN
0368	0007	FIREMENS PARK
0369	0001	BLEEKER STREET ACCESS
0372S	0080	ST JOHNS MILITARY ACADEMY
0373	0013	CUSHING MEMORIAL PARK
0374	0001	NAGAWICKA YACHT CLUB
0375	0028	DELAFIELD REARING STATION
0376S	0006	CUSHING SCHOOL
0378S	0002	PINEWOOD SCHOOL
0380	0006	TRI-CFE RANCH
0382	0119	LAPHAM PEAK
0384S	0003	BRANDY BROOK SCHOOL
0385	0007	CASTLE PARK
0386	0021	NIXON PARK
0387S	0011	HARTLAND SCHOOL
0388S	0011	ST CHARLES SCHOOL
0393	0007	KARL AND GRETCHENS
0452S	0006	ST MARY SCHOOL
0454	0001	VILLAGE BEACH
0455	0012	SOUTH PARK
0456	0022	PEWAUKEE VILLAGE PARK
0458S	0071	PEWAUKEE HS AND ELEM SCHOOL
0461	0001	KOCH'S BOATS & BAIT
0462	0001	GALETKA BOATS & BAIT
0463	0001	CHATEAU BOATS
0464S	0006	MEADOW BROOK SCHOOL
0465S	0015	TORHORST SCHOOL
0466	0145	SLOCUM GOLF COURSE
0468S	0003	QUARRY SYSTEM
0469	0116	WAUKESHA GUN CLUB
0470S	0003	DUPLAINVILLE SCHOOL
0471	0001	VALLEY FORGE PARK
0472	0012	WEST PARK
0473S	0002	PEWAUKEE MIDDLE SCHOOL
0475	0001	SMOKIES BOATS AND BAIT
0476	0004	FOX RIVER PUBLIC ACCESS
0478	0001	MAXX'S BOATS
0479	0051	EXPOSITION CENTER
0480	0001	COUNSELMAN'S WEST BOAT ACCESS
0481	0001	BOEHM'S BOAT & BAIT
0482	0016	SEA PARK
0483	0001	SEA VIEW BEACH CLUB
0484	0012	NIKE SITE NO 2
0485S	0027	WAUKESHA HS N CAMPUS
0486	0001	PEPPER PARK
0502S	0010	FAIRVIEW NORTH SCHOOL
0503S	0002	IMMANUAL LUTHERAN SCHOOL
0504	0012	LILLY HEIGHTS PARK
0505S	0003	BROOKSIDE SCHOOL
0506S	0047	BROOKFIELD EAST HIGH SCHOOL
0507S	0021	BURLEIGH JR HS
0508S	0007	FAIRVIEW SOUTH SCHOOL
0509S	0016	ST DOMINIC SCHOOL
0510S	0010	ACADEMY OF BASIC EDUCATION
0511	0014	BEVERLY HILLS PARK
0512	0017	MC COY FIELD
0513S	0004	BROOKFIELD SCHOOL
0514	0152	FRANKLIN WIRTH PARK
0515S	0006	NIXON SCHOOL
0517	0013	WESTERN RACQUET CLUB
0518	0077	VILLAGE MUNICIPAL AREA
0519S	0005	ST MARY SCHOOL
0520S	0004	LELAND SCHOOL
0521S	0012	WISCONSIN HILLS JR HS
0522S	0003	ELM GROVE LUTHERAN SCHOOL
0523S	0028	PILGRIM PARK JR HS
0524S	0027	BROOKFIELD CENTRAL HS
0525S	0016	ST JOHN VIANNY SCHOOL
0527S	0018	SWANSON SCHOOL
0528S	0007	PLEASANT HILL SCHOOL
0530S	0003	ST LUKE SCHOOL
0531	0157	WESTMOOR COUNTRY CLUB
0532	0007	KINSEY PARK
0533S	0004	LINFIELD SCHOOL
0534	0017	CARDINAL CREST PARKSITE
0535	0016	STORMS GOLF RANGE
0536	0010	RUBY PARK
0537	0019	TEE-AIRE GOLF RANGE
0539	0040	ROLLING MEADOWS PARK
0540S	0007	COTTAGE SCHOOL
0541S	0002	MILWAUKEE CHRISTIAN SCHOOL
0542S	0002	HILLSIDE SCHOOL
0544	0038	PARK SITE
0547	0022	PUMONA PARK
0548	0056	ELMBROOK SCHOOL NATURE AREA
0549S	0007	TONAWANDA SCHOOL
0550	0015	SUBDIVISION PARK
0551	0010	LAMPLIGHTER PARK
0552	0010	TOWN PARK
0553S	0003	CHRIST THE LORD SCHOOL
0554	0129	BROOKFIELD HILLS GOLF COURSE
0601S	0011	CALHOUN SCHOOL
0602S	0006	ORCHARD LANE SCHOOL
0603	0041	LYONS PARK
0604S	0004	HICKORY GROVE SCHOOL
0605	0181	W A ROBERTS GOLF COURSE
0606S	0004	CLEVELAND HGTS SCHOOL
0607S	0028	NEW BERLIN HS
0608S	0006	GLEN PARK JP HS
0609	0035	DOUBLE R DRIVING RANGE
0611S	0007	NEW BERLIN CENTER SCHOOL
0612	0018	CITY PARK
0613S	0008	PROSPECT HILL SCHOOL
0614	0016	HOEPFNER HORN VFW POST
0615S	0006	ELMWOOD SCHOOL
0616	0008	PROSPECT PARKWAY
0617	0011	NEIGHBORHOOD PARK
0618	0082	UNDEVELOPED PARK SITE
0619	0034	CALHOUN PARK
0622	0005	KELLEY LAKE PARK
0623	0015	GATEWOOD PARK
0624S	0003	SPRINGDALE SCHOOL
0625	0042	MILWAUKEE CASTING CLUB
0626S	0006	HERBERT HOOVER SCHOOL
0627S	0021	EISENHOWER HIGH SCHOOL
0635	0007	MOPSY'S GOLF RANGE
0702	0159	MERRILL HILLS COUNTY CLUB
0703S	0004	LAWRENCE SCHOOL
0704	0012	TOWN HALL PARK
0705S	0003	ECHO GLEN SCHOOL
0706S	0002	LAWNSDALE SCHOOL
0709S	0004	CAMP CHINOOK
0710	0080	CAMP CHINOOK
0711	0308	MINUOK PARK
0712	0016	NIKE SITE NO 1
0713	0036	LOWELL HILL PARK
0751S	0002	NORTHVIEW SCHOOL
0752	0007	GRANDVIEW PARK
0754S	0005	HAWTHORNE SCHOOL
0755S	0006	ST WILLIAMS SCHOOL
0757	0007	DOPP PARK
0758	0010	HOBBS SPRINGS PARK
0759S	0001	BLAIR SCHOOL
0760S	0001	BARSTOW ST SCHOOL
0761	0063	MOOR DOWNS GOLF COURSE
0765	0037	FRAME PARK
0766S	0003	WHITEROCK SCHOOL
0767S	0001	TRINITY LUTH SCHOOL

## WAUKESHA COUNTY

SITE NO.	ACRES	SITE NAME
0769	0005	WAUKESHA SPRINGS PARK
0770S	0002	HADFIELD SCHOOL
0771	0005	CUTLER PARK
0772	0015	BETHESDA PARK
0774	0016	SARATOGA SOFTBALL COMPLEX
0775S	0007	SARATOGA SCHOOL
0776	0005	HAERTEL FIELD
0778S	0002	CARROLL COLLEGE
0779S	0002	RANDALL SCHOOL
0780S	0019	CATHOLIC MEM & ST MARY SCHOOLS
0782	0008	BUCHNER PARK
0783	0004	ROBERTA PARK
0784S	0002	WHITTIER SCHOOL
0785S	0025	SOUTH CAMPUS-WAUKESHA HS
0786	0001	MADISON RANDALL PARK
0788	0001	TRIANGLE PARK
0789	0010	BANTINGS PARK
0790	0052	CHARLES HEYER PARK
0791S	0014	LOWELL SCHOOL PARK
0793	0025	MERRILL CREST PARK
0796	0001	BRICKSONS PARK
0797S	0007	BUTLER MIDDLE SCHOOL
0798	0009	CCURT HOUSE GROUNDS
0799	0172	FOX RIVER SANCTUARY
0800	0001	GREENWAY TERRACE PARK
0801S	0003	HORNING MID & BANTING SCHOOLS
0802S	0004	HEYER SCHOOL
0803S	0010	HILLCREST SCHOOL
0804	0016	MANOR PARK
0805S	0005	PRAIRIE SCHOOL
0806S	0061	UW WAUKESHA
0807	0001	LOPEZ TOT LOT
0808S	0007	MT CALVARY LUTHERAN SCH
0852S	0050	KETTLE MORAINE HIGH SCHOOL
0853S	0004	WALES SCHOOL
0854	0005	WALES FIREMENS PARK
0855S	0002	BETHESDA SCHOOL
0856	0105	RUTLER PARK
0858	0013	GENESSEE BALL PARK
0860	0010	VILLAGE PARK
0861	0064	CARROLL COLLEGE CONSERVANCY
0862S	0001	SAYLESVILLE SCHOOL
0863S	0010	ST PAULS CATHOLIC SCHOOL
0864	0006	TROUT POND
0865	0047	K-Y DAY CAMP
0866	0080	NETZER NATURE AREA
0875	0001	STH 59 WAYSIDE
0901	0038	BADGER KART CLUB
0902S	0007	ST BRUND SCHOOL
0903	0002	DOUSMAN GUN CLUB
0904	0013	VILLAGE PARK
0905S	0005	DOUSMAN SCHOOL
0906S	0002	OTTAWA SCHOOL
0907	0004	PETTY LAKE PARK
0910	6196	KETTLE MORAINE FOREST SU UNIT
0911	0001	SCHOOL SECTION LAKE ACCESS
0912	0005	WAYSIDE
0913	0010	WAYSIDE
0914	0082	KETTLE MORAINE GOLF COURSE
0915	0038	KITTAMA LAKE RECREATION AREA
0916	0238	KESINUSA CAMPGROUND
0917S	0015	KETTLE MOKAINE MIDDLE SCHOOL
0918	0001	WAYSIDE
0919	0054	WAUKESHA COUNTY LAND
0920	0006	WATERVILLE FIELD STATION
0931	0004	WAYSIDE
0932S	0002	PALISTINE SCHOOL
0933	0044	CAMP KESHENA
0934	0006	CLARK'S PARK
0935S	0001	EAGLEVILLE SCHOOL
0937	0138	EAGLE SPRINGS GOLF RESORT
0938	0001	KROLLS RESORT
0939	0001	3-D RESORT
0960	0030	VILLAGE PARK
0961S	0001	EAGLE STATE GRADED SCHOOL
0963	0001	CENTRAL PARK
0964	0009	BIT AND BRIDLE RANCH
0965	0027	KETTLE MORAINE RANCH
0966	0586	SCUPPERNONG WILDLIFE AREA
0963	0006	SWINGING W RANCH
0969	0017	N PIKE SPAWNING AREA
0970	0057	VILLAGE LAND
0976S	0008	PRAIRIE VIEW SCHOOL
0977	0002	BOAT ACCESS
0979	0958	RAINBOW SPRINGS
0980	0232	MUKWONAGO PARK
0982	0024	PHANTOM RANCH
0983	0041	PHANTOM LAKE YMCA CAMP
0984	0008	BUCHERS RESORT
0985	0001	PHANTOM PIT RESORT
0986	0014	EAST OF EAGLE GOLF RANGE
0987	0001	LARRYS RESORT
0988	0001	BOAT ACCESS
0989S	0008	ST JAMES SCHOOL
0990S	0003	WASHINGTON SCHOOL
0991S	0006	CLARENDON SCHOOL
0992S	0052	MUKWONAGO UNION HIGH SCHOOL
0993	0015	FIELD PARK
0994	0002	VILLAGE BEACH
0995	0071	CAT TRACK & TRAILS
0996	0001	OAK VALLEY RESORT
0997S	0017	PARKVIEW SCHOOL
0998	0001	SEIFERT'S TAP
0999	0001	SHORE PARK
1005	0003	MUKWONAGO ROD & GUN CLUB
1026	3104	VERNON MARSH WILDLIFE AREA
1027S	0005	BIG BEND SCHOOL
1031	0021	BIG BEND RIVERSIDE PARK
1032S	0004	HIG BEND VILLAGE PARK
1033S	0004	ST JOSEPHS SCHOOL
1034S	0001	CHRISTIAN HERMAN SCHOOL
1035	0004	LEKFIELDS POND
1037S	0738	NORRIS SCHOOL FOR BOYS
1039	0033	HIDDEN LAKES PARK
1040	0210	EDGEWOOD GOLF COURSE
1041	0094	W ALLIS TRAINING KENNEL CLUB
1042	0166	FOX RIVER PARKWAY LAND
1077	0001	OAK COURT ACCESS
1078	0007	IDLE ISLE BEACH
1081S	0010	BAY LANE MIDDLE SCHOOL
1082S	0010	MILL VALLEY SCHOOL
1083	0003	LIONS CLUB PARK
1085	0031	DANDILION PARK
1086S	0004	MUSKEGO SCHOOL
1087S	0010	ST LEONARD SCHOOL
1088	0005	SCHULTZ ROD & GUN CLUB
1089	0021	AUD-MAR RESORT
1090	0018	HORN FIELD
1091	0162	MUSKEGO PARK
1092S	0025	MUSKEGO HIGH SCHOOL
1093	0036	HIG MUSKEGO GUN CLUB
1094S	0002	DURHAM HILL SCHOOL
1095	0007	AMANN'S ACRES
1097	0013	DENCON BEACH
1099	0003	WAYSIDE
1102	0001	EMERALD DRV ACCESS LOT
1103	0004	JENSEN RECREATION CENTER
1105	0002	CAESARS TAVERN
1106	0003	WALLYS BOAT LIVARY
1109	0006	SANDY BEACH RESORT
1110	0001	BASS BAY SPORTSMANS CLUB
1111	0008	KURTH PARK
1113S	0006	TESS CORNEKS SCHOOL
1114	0001	RUSSELLS BOAT LIVERY
1116	0001	WILLOWS RESORT
1117	0080	CITY OF MUSKEGO LAND
1118	0001	LAKESIDE GUN CLUB
1119	0450	MUSKEGO LAKES COUNTRY CLUB
1122	0001	PEARL DR ACCESS LOT
1124	0004	THE NEST RESORT

<sup>9</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

<sup>9</sup>THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

<sup>b</sup>THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

\* THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

[illegible]

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

\*THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

[illegible]<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

b THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.



[illegible]

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

\*THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

[illegible]

\*THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

b THIS SITE IS NOT INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL BELOW. THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA AND HAS BEEN INCLUDED IN THE PLANNING ANALYSIS AREA TOTAL IN WHICH THE SITE HAS THE GREATEST NUMBER OF ACRES.

GENERAL SITE INFORMATION				GENERAL USE SITES														NATURAL AREA SITES				SPECIAL USE SITES		URBAN OPEN SPACE SITES																																																																																																																																																																																												
N S U M T E R	S I T E N O M E N C L A S S I F I C A T I O N	D I V I S I O N	U R B A N R U R A L C O D E	L O C A T I O N	T Y P E	MULTIUSE				ACRES WITHIN PAA				SURVEY SITES				SELECTED FACILITIES												TYPE				T Y P E	S	P	T A C R A L S	T A C R A L S																																																																																																																																																																														
						G R O U P A	G R O U P B	G R O U P C	G R O U P D	S U N S L E	C P O R T R A C T I O N S	P O O L A U T H I N G	T A C R A L S	U N S M E R	U N S M E R	U N S M E R	U N S M E R	A D J U S T M E N T	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D						B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D	B A S I C L A N D

\*INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.



[illegible]

<sup>a</sup>INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

THIS SITE HAS ACREAGE IN MORE THAN ONE PLANNING ANALYSIS AREA (SEE COUNTY MAP). ONLY ACRES WITHIN THIS PLANNING ANALYSIS AREA ARE TABULATED HERE.

WAUKESHA										COUNTY										TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
GENERAL										USE										SITES										NATURAL										AREA										SITES										SPECIAL USE SITES										URBAN OPEN SPACE SITES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
TYPE										MULTIUSE										ACRES WITHIN PAA										SURVEY SITES										SELECTED FACILITIES										TYPE										ACRES WITHIN PAA										TYPE										ACRES WITHIN PAA										ACRES WITHIN PAA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
I	II	III	IV	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ
NUMBER OF GENERAL USE SITES IN COUNTY										346										OTHER TOTALS										4										21										38										246										70										5										79										202										60										5109										5131										10240										7										38										45										4										5										160										56										11										20										45										1										44										230										205										4										2										178										42										12										65										OTHER TOTALS										9										1										0										8										16										10821										3100										13921										OTHER TOTALS										4										39										950										OTHER TOTALS										11																																																																																																																																																																																												

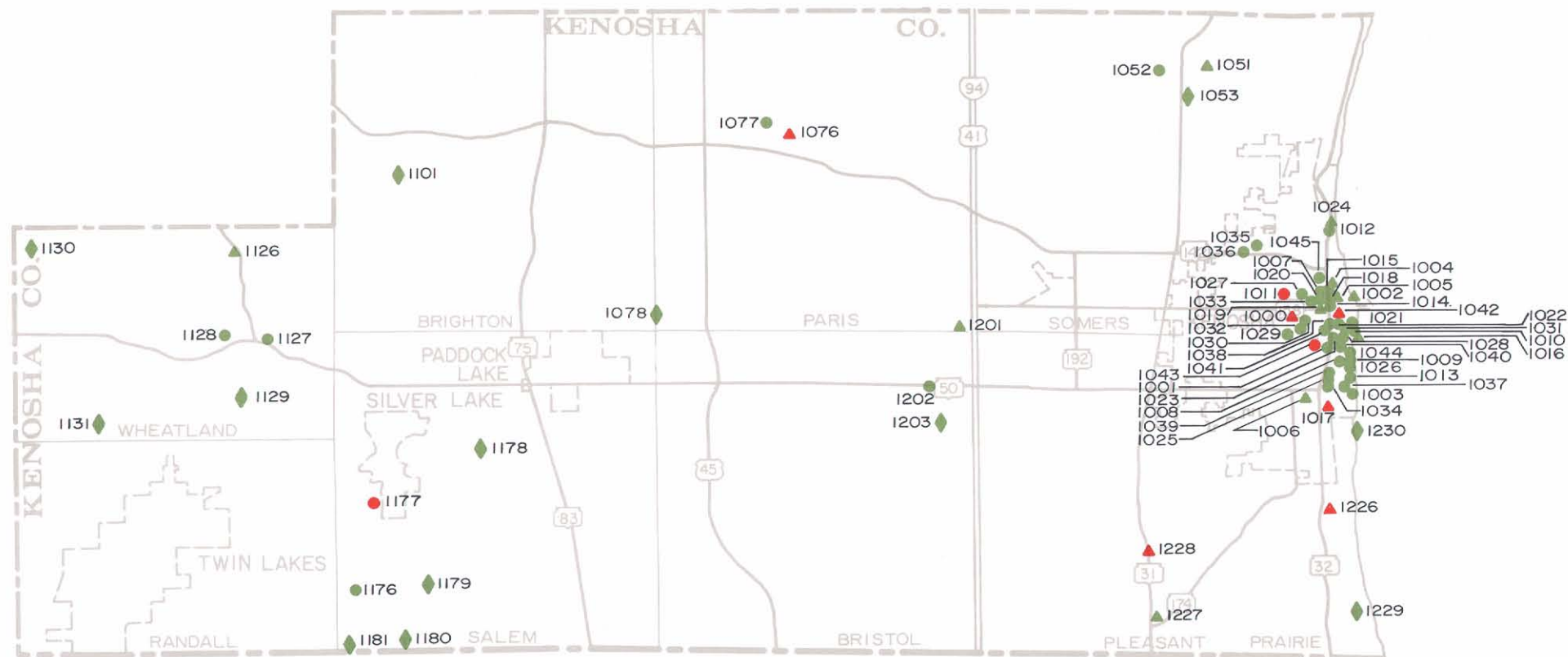
INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

[illegible]

\* INCLUDES ACCESS POINTS ON RIVERS, INLAND LAKES, AND LAKE MICHIGAN.

(This page intentionally left blank)

## HISTORIC SITES IN KENOSHA COUNTY: 1973



## LEGEND

1228 SITE NUMBER

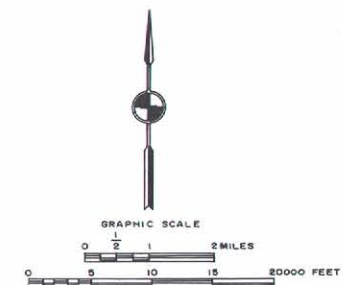
## MARKED

- ▲ CULTURAL
- ◆ NATURAL
- STRUCTURAL

## UNMARKED

- ▲ CULTURAL
- ◆ NATURAL
- STRUCTURAL

Source: SEWRPC.



## Map D-8 (continued)

## KENOSHA COUNTY

SITE NO.	SITE NAME
01000	KENOSHA HIGH SCHOOL SITE
01001	BETH HILLEL TEMPLE
01002	SIMMONS ISLAND LIGHTHOUSE
01003	JAMES R ANDERSON HOUSE
01004	EARLY BUSINESS BLOCK SITE
01005	BLOCK SCHOOL SITE
01006	JOHN MC CAFFARY HANGING SITE
01007	ISERMANN BROTHERS CLOTHING STORE
01008	KENOSHA CO HISTORICAL SOCIETY MUSEUM
01009	W H ALFORD HOUSE
01010	PATRICK ENGLISH HOUSE
01011	SHOLES HOUSE
01012	S Y BRANDE HOUSE
01013	KEMPER HALL
01014	GOTTFREDSON-NICOLL JEWELRY STORE
01015	1ST NATIONAL BANK
01016	EICHELMAN PARK
01017	GREENRIDGE CEMETERY
01018	JARED LAKE STORE
01019	KENOSHA EVENING NEWS
01020	1ST BAPTIST CHURCH
01021	OLDEST FACTORY BUILDING IN KENOSHA
01022	ST MATTHEWS EPISCOPAL CHURCH
01023	LIBRARY PARK
01024	PIKE RIVER SETTLEMENT SITE
01025	FRANK C ISERMANN HOUSE
01026	CHARLES JEFFREY HOUSE
01027	KENOSHA COUNTY COURT HOUSE
01028	URBAN LEWIS HOUSE
01029	MILTON PETIT HOUSE
01030	ST JAMES ROMAN CATHOLIC CHURCH
01031	LUCIEN SCRIBNER HOUSE
01032	SHIRLEY APARTMENTS
01033	U S POST OFFICE
01034	HAROLD WAGNER HOUSE
01035	CEPHAS WEED HOUSE
01036	JUSTIN WEED HOUSE
01037	JAMES G WILSON HOUSE

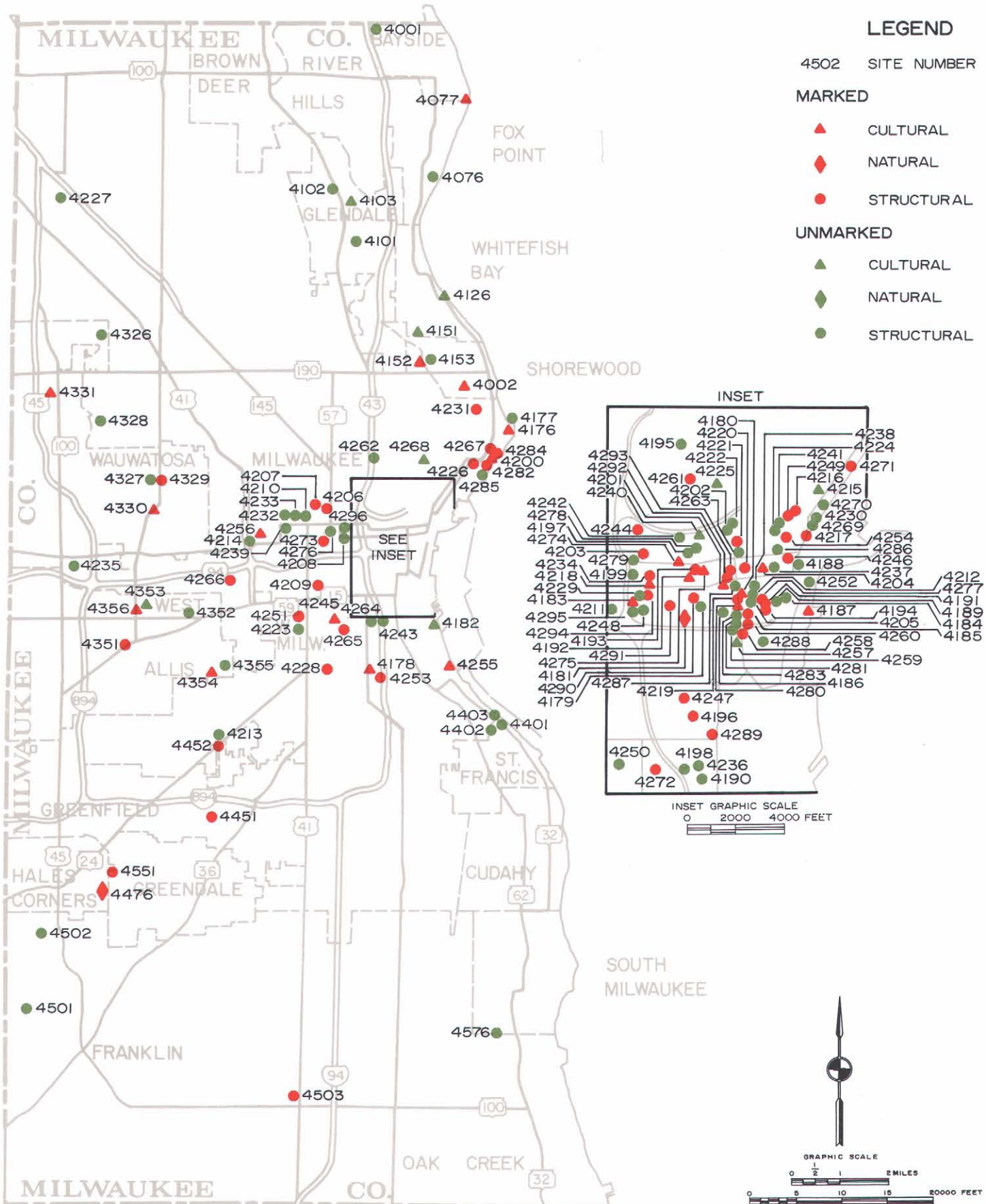
## KENOSHA COUNTY

SITE NO.	SITE NAME
01038	KENOSHA YOUTH FOUNDATION
01039	ANTHONY A ISERMANN HOUSE
01040	JACOB G GOTTFREDSEN HOUSE
01041	1ST CONGREGATIONAL CHURCH
01042	1ST METHODIST CHURCH SITE MARKER
01043	1ST METHODIST CHURCH
01044	CHARLES C ALLEN HOUSE
01045	ST GEORGE'S ROMAN CATHOLIC CHURCH
01051	PETRIFYING SPRINGS PARK
01052	HAWTHORNE HOLLOW
01053	PETRIFYING SPRINGS HARDWOODS
01076	CIVIL WAR SOLDIERS MONUMENT
01077	ST JOHN'S ROMAN CATHOLIC CHURCH
01078	HARRIS TRACT
01101	BONG PRAIRIE REMNANT
01126	PANTHER INDIAN MOUND
01127	PAUL MC FARLANE HOUSE
01128	ST ALPHONSUS CATHOLIC CHURCH
01129	NEW MUNSTER BOG ISLAND
01130	DYER LAKE & MARSH
01131	POWERS LAKE TAMARACK
01176	STAGE STOP INN
01177	CLAIM CABIN
01178	SILVER LAKE SPORTSMAN'S CLUB
01179	CAMP LAKE MARSH
01180	PEAT LAKE
01181	STOPA FEN
01201	PLANK ROAD SITE
01202	CHARLES THOMPSON HOUSE
01203	BENEDICT PRAIRIE
01226	32ND DIVISION MEMORIAL HIGHWAY MARKER
01227	DEXTER FARM
01228	JANBEAU TRAIL
01229	CHIWAUKEE PRAIRIE
01230	KENOSHA SAND DUNES

Source: SEWRPC.



## HISTORIC SITES IN MILWAUKEE COUNTY: 1973



Source: SEWRPC.

## Map D-9 (continued)

## MILWAUKEE COUNTY

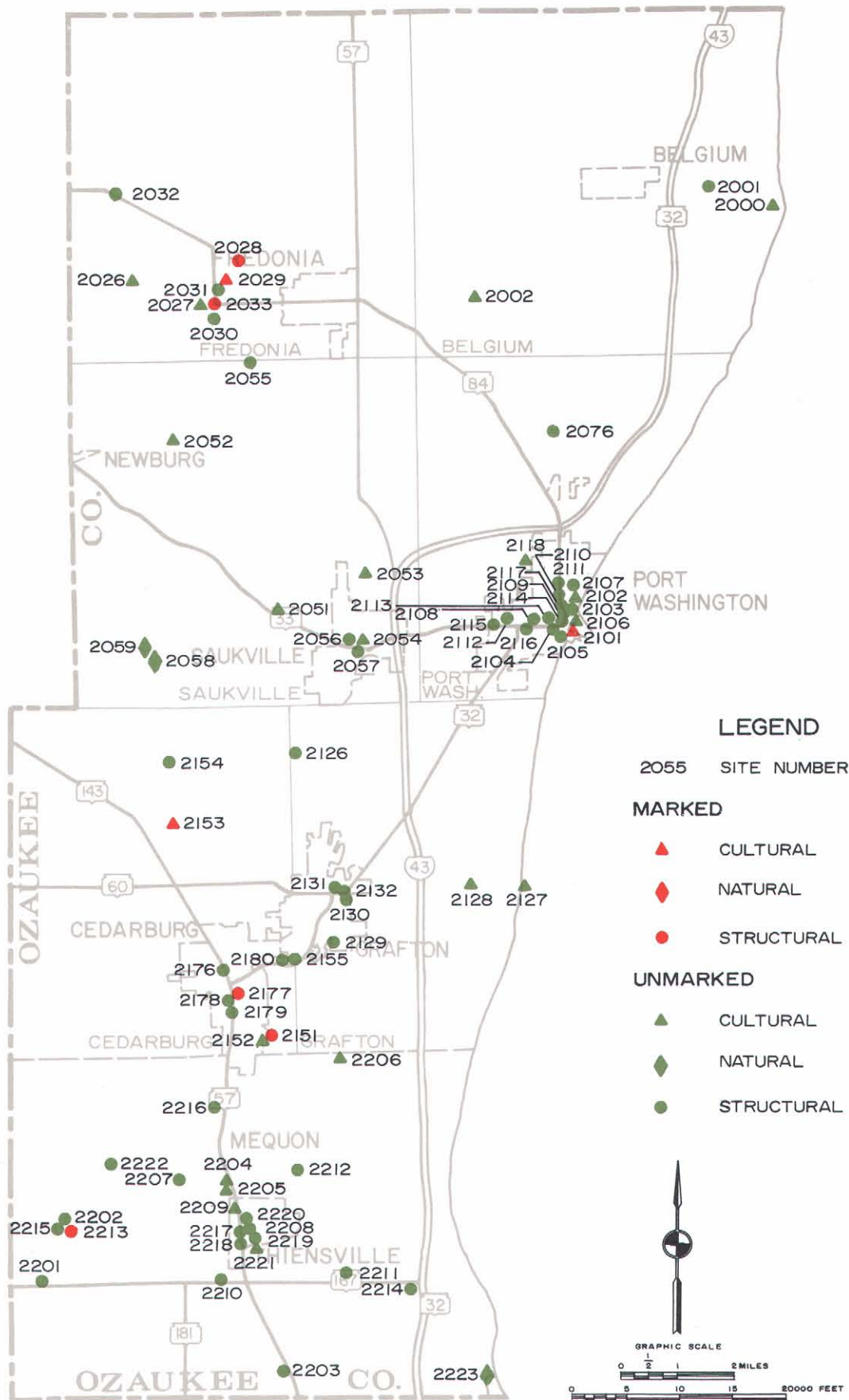
SITE NO.	SITE NAME
04001	ERDMAN PREFAB
04002	GREEN BAY TRAIL
04076	ALBERT ADELMAN HOUSE
04077	DOCTOR'S PARK
04101	TOWN OF MILWAUKEE HALL
04102	CONGREGATION BETH-ISRAEL SYNAGOGUE
04103	INDIAN AGRICULTURAL AREA SITE
04126	HISTORIC RESORT SITE
04151	ESTABROOK PARK
04152	HENRY BERGH STATUE
04153	BENJAMIN CHURCH HOUSE
04176	NORTH POINT LIGHT STATION & LAKE PARK
04177	MYRON T. MAC LAREN HOUSE
04178	KOSCIUSZKO PARK
04179	PLANKINTON ARCADE BUILDING
04180	1ST WHITE BOY PLAQUE
04181	CARL ZEIDLER PARK
04182	KASHUBES COMMUNITY SITE
04183	MONUMENTS IN THE COURT OF HONOR
04184	HOME OFFICE OF NORTHWESTERN MUTUAL LIFE INS CO
04185	IRON BLOCK
04186	GIMBELS DEPARTMENT STORE
04187	1ST CARGO PIER SITE
04188	UNIVERSITY CLUB
04189	WISCONSIN GAS COMPANY BUILDING
04190	ALLEN-BRADLEY COMPANY
04191	NORTHWESTERN NATIONAL INSURANCE COMPANY
04192	GILPATRICK HOTEL SITE
04193	FIRST WARD SAVINGS BANK
04194	FEDERAL BUILDING - US COURTHOUSE
04195	ST FRANCIS OF ASSISI ROMAN CATHOLIC CHURCH
04196	HOLY TRINITY OUR LADY OF GUADALUPE CHURCH COMPLEX
04197	MILWAUKEE TURNERS CLUB
04198	ST STEPHENS EVANGELICAL LUTHERAN CHURCH
04199	MILWAUKEE COUNTY COURTHOUSE
04200	NORTH POINT WATER TOWER
04201	ONEIDA STREET ELECTRIC POWER STATION SITE
04202	BLATZ BREWERY
04203	TRINITY EVANGELICAL LUTHERAN CHURCH
04204	CATHEDRAL SQUARE PARK
04205	STIMSON N. SQUALL BLOCK
04206	ROBERT MACHEN HOUSE
04207	ST MICHAELS ROMAN CATHOLIC CHURCH
04208	MARQUETTE UNIVERSITY
04209	MITCHELL PARK HORTICULTURAL CONSERV & VIEAU CABIN
04210	MUNKWITZ APARTMENTS
04211	GESU CATHOLIC CHURCH
04212	JOHN C. STEVENS BLOCK
04213	ST SAVA SERBIAN ORTHODOX CATHEDRAL
04214	MILLER BREWING CO
04215	CAMP RENO SITE
04216	FIRST UNITARIAN CHURCH
04217	IMMANUEL PRESBYTERIAN CHURCH
04218	TOWER CLOCK
04219	FORMER HOME OFFICE OF NW MUTUAL LIFE INSURANCE CO
04220	ST MARYS ROMAN CATHOLIC CHURCH
04221	GERMAN-ENGLISH ACADEMY
04222	GRACE EVANGELICAL LUTHERAN CHURCH
04223	AMERICAN SYSTEM BUILT HOUSES
04224	JOHN INBUSCH HOUSE
04225	ROCK RIVER CANAL SITE
04226	ORIENTAL THEATER
04227	WEST GRANVILLE PRESBYTERIAN CHURCH
04228	FOREST HOME CEMETERY & CHAPEL
04229	MITCHELL HOUSE
04230	EDWARD DIEDERICH'S HOUSE
04231	FORMER MILWAUKEE-DOWNER COLLEGE BUILDINGS
04232	FRED PABST JR HOUSE
04233	2ND CHURCH OF CHRIST SCIENTIST
04234	MILWAUKEE PUBLIC MUSEUM
04235	MILWAUKEE COUNTY ZOO
04236	SOUTH OFFICE WISCONSIN TELEPHONE CO
04237	ST JOHN ROMAN CATHOLIC CATHEDRAL
04238	MATTHEW KEENAN HOUSE
04239	TRIPOLI TEMPLE
04240	BRIDGE WAR SITE
04241	ALL SAINTS EPISCOPAL CATHEDRAL BUILDINGS
04242	GIPFEL BREWERY

## MILWAUKEE COUNTY

SITE NO.	SITE NAME
04243	PUBLIC NATATORIUM
04244	PABST BREWING COMPANY COMPLEX
04245	WHITEHEAD HORSE WATERING TROUGH
04246	ATHENAEUM
04247	GEORGE ZIEGLER CANDY CO BLDG
04248	ST JAMES EPISCOPAL CHURCH
04249	ST PAULS EPISCOPAL CHURCH
04250	ST MICHAELS UKRAINIAN CATHOLIC CHURCH
04251	ST JOSEPHS CONVENT CHAPEL
04252	MILWAUKEE COUNTY WAR MEMORIAL CENTER
04253	ST JOSAPHAT BASILICA
04254	ROBERT P. FITZGERALD HOUSE
04255	OLD SHOKY TRAIN ENGINE
04256	WATERTOWN PLANK RD MARKER
04257	GOODRICH DOCKS AREA SITE
04258	MITCHELL BUILDING
04259	BANK OF MILWAUKEE
04260	MACKIE BUILDING
04261	JOSEPH SCHLITZ BREWING CO
04262	ENGINE HOUSE 7 MILWAUKEE FIRE DEPT
04263	NORTH PRESBYTERIAN CHURCH
04264	ST STANISLAUS ROMAN CATHOLIC CHURCH
04265	ST JACOBI EVANGELICAL LUTHERAN CHURCH BUILDINGS
04266	NATIONAL SOLDIERS HOME
04267	ST JOHNS INFIRMARY
04268	ROHR'S SWIMMING SCHOOL SITE
04269	JASON DOWNER HOUSE
04270	1ST CHURCH OF CHRIST SCIENTIST
04271	CHARLES ALLIS HOUSE
04272	ST PATRICKS ROMAN CATHOLIC CHURCH
04273	FREDERICK PABST MANSION
04274	TYPEWRITER PLAQUE
04275	PERE MARQUETTE HISTORIC SITE
04276	18TH STREET SCHOOL
04277	PFISTER HOTEL
04278	STEINMEYER BLDG.
04279	ST BENEDICT THE MOOR ROMAN CATHOLIC CHURCH
04280	SOLOMON HUMEAU TRADING POST SITE
04281	MARINE PLAZA
04282	LYOD R. SMITH HOUSE
04283	RAILWAY EXCHANGE BUILDING
04284	FREDERICK C. BOGK HOUSE
04285	GOODRICH HOUSE
04286	6TH CHURCH OF CHRIST SCIENTIST
04287	OLD MARSHALL & ILSLEY BANK
04288	CROSS KEYS HOTEL
04289	CLINTON STREET FILING STATION
04290	SAX BROTHERS THEATER SITE
04291	SCHROEDER HOTEL
04292	PABST THEATER
04293	CITY HALL
04294	MILWAUKEE PUBLIC LIBRARY & MUSEUM
04295	CALVARY PRESBYTERIAN CHURCH
04296	MT. STANI NEIGHBORHOOD
04326	ANNUNCIATION GREEK ORTHODOX CHURCH
04327	PRICE DAVIS HOUSE
04328	MOUNT MARY COLLEGE
04329	LOWELL DAMON HOUSE
04330	HARTS HILL MARKER
04331	BUTLER AIRPORT SITE
04350	WEST ALLIS HISTORICAL MUSEUM
04352	ALLIS-CHALMERS MANUFACTURING COMPANY
04353	STATE FAIR PARK
04354	MEADOWMERE
04355	ST JOSEPHS HOME FOR THE AGED
04356	STATE FAIR PARK INDIAN MOUNDS
04401	ST FRANCIS SEMINARY
04402	ST PETERS CHURCH
04403	HENNI HALL
04451	BODAMER LOG CABIN
04452	EVANGELICAL UNITED BRETHREN CHURCH & MUSEUM
04476	BOERNER BOTANICAL GARDENS
04501	ST MARTIN'S SACRED HEART OF JESUS MARY CATH. CH.
04502	EXPERIMENTAL AIRCRAFT ASSOCIATION MUSEUM
04503	PAINESVILLE CEMETERY CHAPEL
04551	JEREMIAH CURTIN HOUSE
04576	OAK CREEK HISTORICAL MUSEUM

Source: SEWRPC.

## HISTORIC SITES IN OZAUKEE COUNTY: 1973



Source: SEWRPC.

Map D-10 (continued)

OZAUKEE COUNTY

SITE NO.	SITE NAME
02000	LAKE SHORE STONE CO QUARRY
02001	ST MARYS OF THE LAKE CHURCH
02002	HOLY CROSS SETTLEMENT SITE
02026	INDIAN MOUNDS
02027	INDIAN VILLAGE SITE
02028	STONEY HILL SCHOOL
02029	CIGRAND MEMORIAL
02030	CIGRANDS BIRTHPLACE
02031	MILL & DAM
02032	LITTLE KOHLER CHURCH & CEMETERY
02033	ROBERT COOLEY HOME
02051	MILITARY ROAD SITE
02052	ST FINBARS SETTLEMENT SITE
02053	DAM & SPILLWAY OF OLD MILL SITE
02054	SAUKVILLE SETTLEMENT SITE
02055	PIONEER VILLAGE
02056	PAYNE'S HOTEL
02057	ULLRICH HOUSE
02058	CEDARBURG BOG
02059	CEDARBURG BEECH WOODS
02076	DRUECKER'S HOME
02101	SHIP ANCHOR FROM TOLEDO
02102	U S COAST GUARD LIGHT STATION
02103	CIVIL WAR ERA HOMES
02104	LELAND STANFORD LAW OFFICE
02105	DODGE HOUSE
02106	PORT WASHINGTON GOVERNMENT PIERS
02107	GNENTHEY-KOENIG HOUSE
02108	MICHAEL BOHAN-PHILLIP ECKEL HOUSE
02109	OZAUKEE OIL CO
02110	VINCENT MICHELS HOUSE
02111	SQUARE BRICK HOUSE
02112	A D BOLENS HOUSE
02113	EGHART HOUSE
02114	FEDERSFIEL HARDWARE
02115	TEED-BOHAN HOUSE
02116	STEINKE-WERKING HOUSE
02117	PORS HOUSE
02118	NORWEGIAN CEMETERY
02126	ONION STEEPLE CATHOLIC CHURCH RUINS

OZAUKEE COUNTY

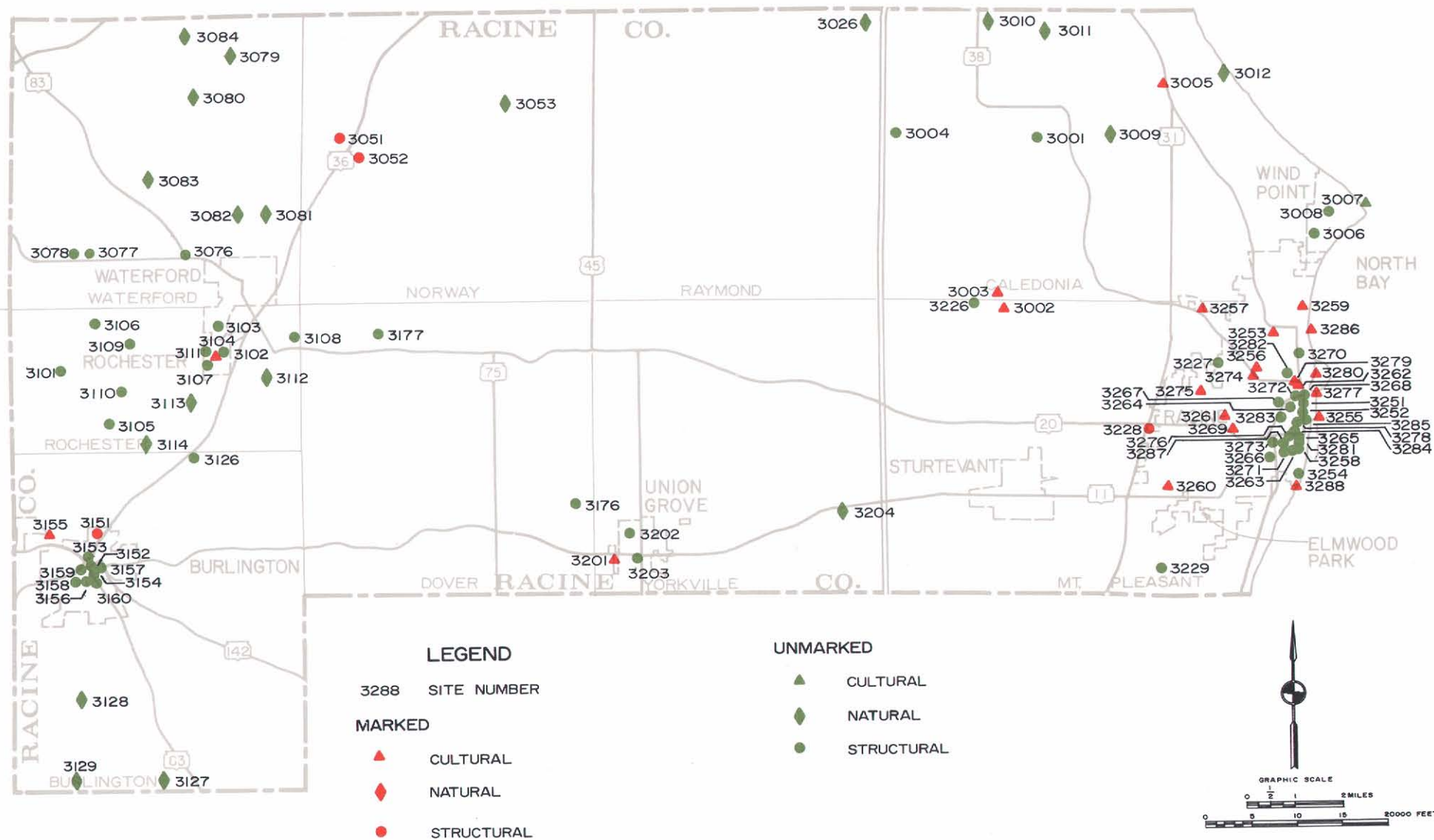
SITE NO.	SITE NAME
02127	ULAO PIERS
02128	FIRST MACADAM ROAD SITE
02129	THREE LIME KILNS
02130	GRAFTON WOOLEN MILLS
02131	BLACKSMITH SHOP
02132	WOODS HOTEL
02151	CONCORDIA MILL
02152	HAMILTON-NEW DUBLIN IRISH SETTLEMENT SITE
02153	COVERED BRIDGE
02154	PLEASANT VALLEY OCTAGONAL SCHOOL
02155	EXCELSION MILL
02176	WITTENBERG WOOLEN MILLS
02177	CEDARBURG MILL
02178	WILLIAM SCHROEDER HOME
02179	FRED HILGEN HOME
02180	COLUMBIA MILL
02201	HILGENDORF FARM
02202	SCHNEIDER HOME
02203	TRINITY LUTHERAN CHURCH
02204	TWO INDIAN GRAVES
02205	INDIAN VILLAGE SITE
02206	WOODWORTH FARM
02207	POESCHEL HOME
02208	OLD SCHOOL
02209	OPITZ CEMETERY
02210	OPITZ & ZIMMERMAN BREWERY
02211	ST JAMES CATHOLIC CHURCH
02212	HOLSTEIN SCHOOL
02213	TRINITY EVANGELICAL LUTHERAN CHURCH
02214	KIEKHAFFER BARN
02215	DALLMANN HOUSE
02216	JONATHAN CLARK HOUSE
02217	THIERMANN HOUSE
02218	ZIMMERMAN STORE & POST OFFICE
02219	THIEN HOUSE
02220	JOHN WESTON HOME SITE
02221	MILL, DAM & HEADGATES SITE
02222	WILDE HOUSE
02223	FAIRY CHASM

Source: SEWRPC.



Map D-11

## HISTORIC SITES IN RACINE COUNTY: 1973



Map D-11 (continued)

RACINE COUNTY

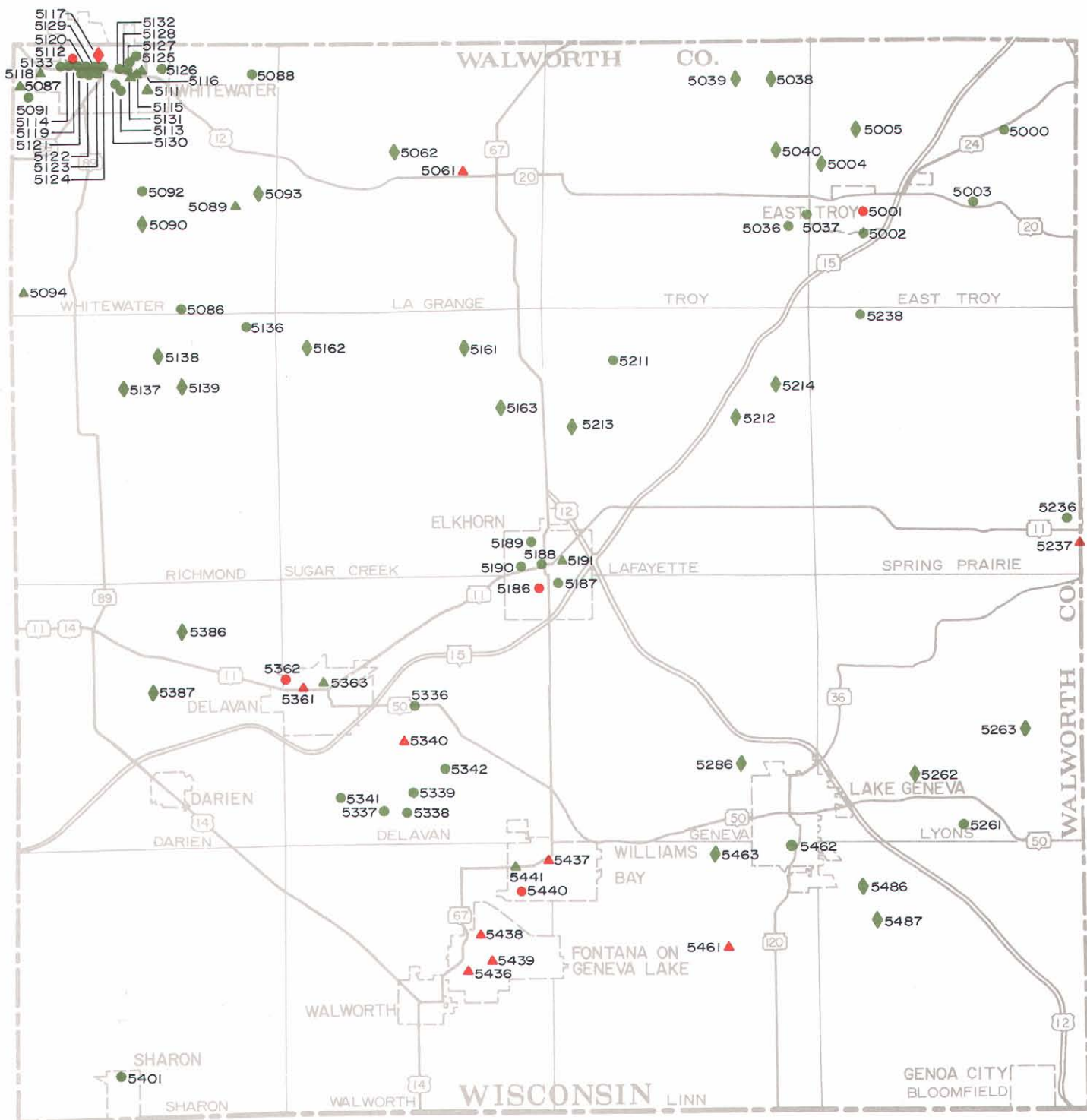
SITE NO.	SITE NAME
03001	COLLINS HOUSE
03002	SKUNK GROVE SETTLEMENT SITE
03003	CALEDONIA - MT PLEASANT LIVING MEMORIAL
03004	ST LOUIS CATHOLIC CHURCH
03005	32ND DIVISION MEMORIAL MARKER
03006	PRAIRIE SCHOOL
03007	RACINE LIGHT HOUSE
03008	WINGSPREAD
03009	RENAK-POLAK WOODS
03010	CADDY VISTA WOODS
03011	STONE WOODS
03012	CRESTVIEW RAVINES & BANKS
03026	COUNTY LINE LOWLAND WOODS
03051	COLONEL HEG MEMORIAL PARK
03052	NORWEGIAN LUTHERAN CHURCH & OLD MUSKEGO MARKER
03053	WIND LAKE TAMARAK
03076	ERWIN KOROUS HOUSE
03077	LEWIS MERRILLS HOUSE
03078	JAMES COOPER HOUSE
03079	VAN VALIN WOODS
03080	TICHIGAN MARSH
03081	ELM ISLAND BOG
03082	WATERFORD OAK WOODS
03083	TICHIGAN SPRINGS & FEN
03084	NORRIS MARSH & SLOUGH
03101	HAZEL COBBLESTONE HOUSE
03102	RICHARD EMERSON ELA HOUSE
03103	ELA FIELDSTONE SILOS
03104	RICHARD EMERSON ELA MARKER
03105	HENRY RUSSELL HOUSE
03106	KEMPEN COBBLESTONE HOUSE
03107	ANDREW RUSSELL HOUSE
03108	ACKER BARN
03109	DISTRICT SCHOOL NO 3
03110	HENNING HOUSE
03111	UNION HOUSE
03112	HERON ROOKERY
03113	CHERRY LAKE SEDGE BOG
03114	BROCK LAKE & MARSH
03126	ST FRANCIS MONASTERY
03127	KARCHER MARSH & SPRING
03128	RANGER MAC FEN
03129	FRIEDA LAKE
03151	PIONEER LOG CABIN & MILL SITE
03152	CROSS EVANGELICAL LUTHERAN CHURCH
03153	MEINHARDT BANK
03154	C R MC CANNA HOUSE
03155	AARON SMITH HISTORIC MARKER
03156	ANTHONY MEINHARDT HOUSE
03157	ST JOHNS EVANGELICAL LUTHERAN CHURCH
03158	OLD ST MARY'S CHURCH

RACINE COUNTY

SITE NO.	SITE NAME
03159	LUTHER HALL
03160	CHURCH OF ST JOHN THE DEVINE
03176	SOUTHERN COLONY
03177	CHARLES MEAD HOUSE & LOG CABIN
03201	OLD SETTLERS SOCIETY MARKER
03202	UNION GROVE CONGREGATIONAL CHURCH
03203	UNION GROVE DRAIN & TILE COMPANY
03204	STURTEVANT MESIC PRAIRE REMNANT
03226	FRANKESVILLE & UNION GROVE SAUERKRAUT FACTORY
03227	WILLARD H KELAND HOUSE
03228	MYGATTS CORNERS CHURCHES
03229	SANDERS PARK HARDWOODS
03251	RACINE CO HISTORICAL
03252	WOMEN'S CLUB OF RACINE
03253	CARL JONAS MONUMENT
03254	DE KOVEN FOUNDATION FOR CHURCH WORK
03255	MARY TODD & ABRAHAM LINCOLN STATUE
03256	LINCOLN MONUMENT
03257	HORLICK'S DAM & MILL SITE
03258	HUNT HOUSE
03259	ZOO PARK
03260	CARHART HISTORICAL MARKER
03261	MOUND CEMETERY
03262	PAUL HARRIS PLAGUE
03263	HARDY HOUSE
03264	COURTHOUSE
03265	WILLIAM F KUEHNEMAN HOUSE
03266	JOHNSON WAX CO ADMINISTRATION & RESEARCH BLOC
03267	1ST PRESBYTERIAN CHURCH
03268	UNITED STATES POST OFFICE
03269	WASHINGTON PARK
03270	ST PATRICK'S CATHOLIC CHURCH
03271	ST LUKES SCHOOL OF NURSING
03272	ST LUKES EPISCOPAL CHURCH
03273	ST CATHERINE'S HIGH SCHOOL
03274	ISLAND PARK
03275	DOUGHBOY MONUMENT
03276	RICHARD MURPHY HOUSE
03277	MEMORIAL HALL
03278	HOUSE AT 936 SOUTH MAIN ST
03279	MONUMENT SQUARE
03280	VISIT OF 1ST WHITE MEN MARKER
03281	CHAUNCEY HALL HOUSE
03282	1ST CONGREGATIONAL CHURCH
03283	1ST CHURCH OF CHRIST, SCIENTIST
03284	HENRY DURAND HOME
03285	WILLIAM W DINGEE HOUSE
03286	KNAPP MONUMENT
03287	GILBERT BILLINGS HOUSE
03288	F D ROOSEVELT MARKER

Source: SEWRPC.

## HISTORIC SITES IN WALWORTH COUNTY: 1973



## LEGEND

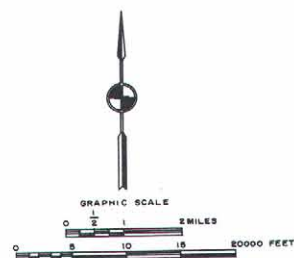
5432 SITE NUMBER

## MARKED

- ▲ CULTURAL
- ◆ NATURAL
- STRUCTURAL

## UNMARKED

- ▲ CULTURAL
- ◆ NATURAL
- STRUCTURAL



Source: SEWRPC.

Map D-12 (continued)

WALWORTH COUNTY

SITE NO.	SITE NAME
05000	STONE SCHOOL
05001	TROLLEY MUSEUM
05002	OBIE'S HOTEL
05003	JENNINGS MILL
05004	SWAN LAKE
05005	BEULAH BOG
05036	HEALY HOUSE
05037	MAIER HOUSE
05038	LULU LAKE & SEDGE MEADOW
05039	LULU LAKE FEN & PRAIRIE
05040	PICKEREL LAKE
05061	HOUGHTON FARM
05062	KETTLE MORaine STATE FOREST
05086	HEART PRAIRIE CHURCH & CEMETERY
05087	WARNER HOMESTEAD
05088	NELSON LOG CABIN
05089	LIME KILN SITE
05090	FLOWING WELL
05091	CLARK HOUSE
05092	WAGON SHOP
05093	HARRIS FARM SPRING AREA
05094	SHERMAN FARM
05111	FOOT BRIDGE
05112	LOG CABIN & SCHOOL HOUSE
05113	RAILROAD DEPOT
05114	WATER STATE UNIVERSITY
05115	THE POINT AREA
05116	STONE MILL SITE
05117	TERRITORIAL BURR OAK
05118	MAPLE INDIAN MOUNDS
05119	BASSETT HOUSE
05120	DORR-ENGEBRETSEN HOUSE
05121	POLLOCK HOUSE
05122	CONGER HOUSE
05123	GERALD CUTLER HOUSE
05124	BIGELOW HOUSE
05125	PLEGER HOUSE
05126	OCTAGON HOUSE
05127	STUMP HOUSE
05128	POSEY HOUSE
05129	GERALD COXE HOME
05130	ALLEN HOUSE
05131	CITY HALL SITE
05132	WHITE MEMORIAL LIBRARY
05133	SOLAR HOUSE
05136	LYONS CHURCH
05137	LAKE LORaine MARSH

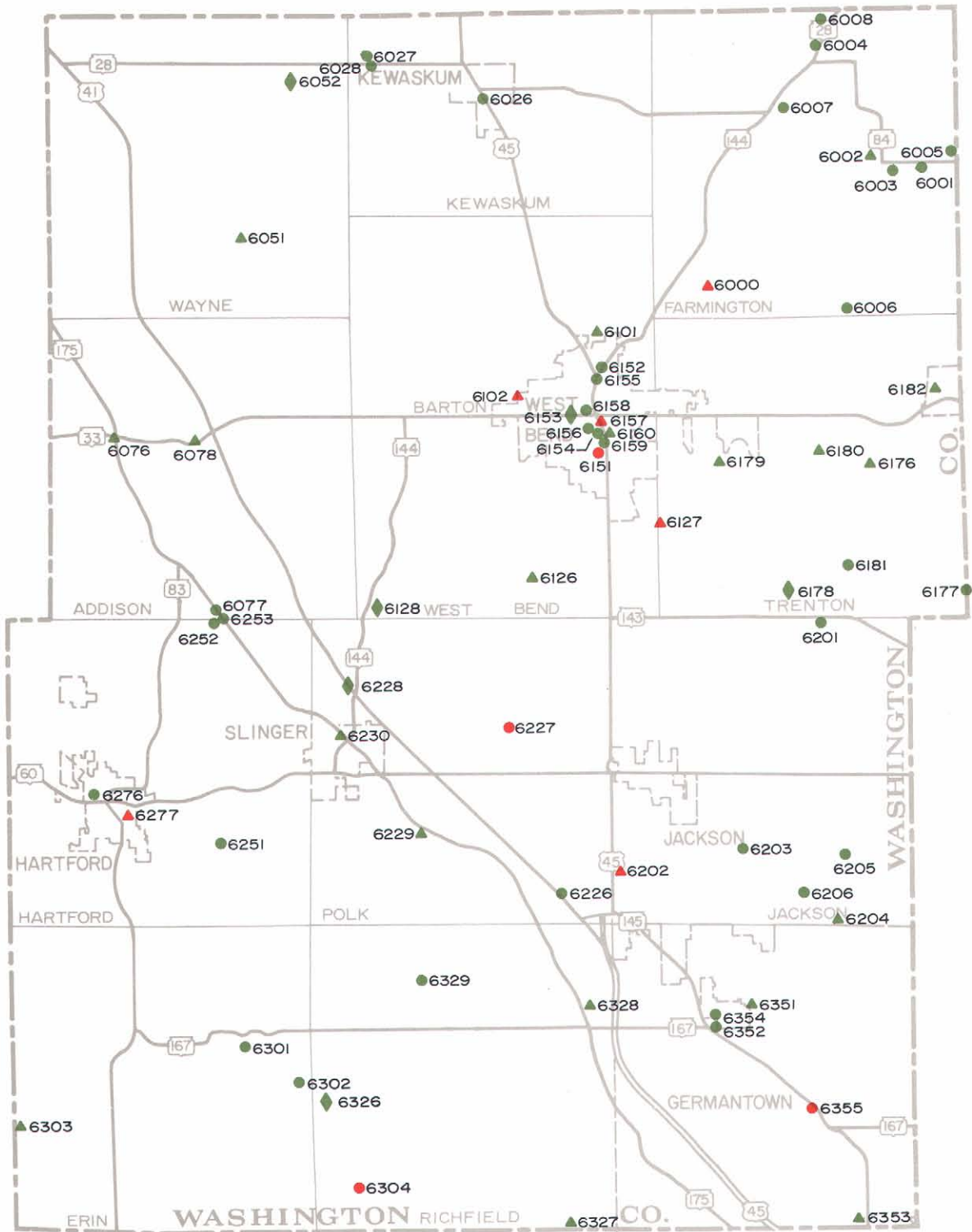
WALWORTH COUNTY

SITE NO.	SITE NAME
05138	WALWORTH COUNTY PARK
05139	LAKE NUMBER 10
05161	LAKE WANDAWEGA MARSH
05162	NORTH LAKE MARSH
05163	SILVER LAKE
05186	WEBSTER HOUSE
05187	OCTAGON HOUSE
05188	ST JOHN'S IN THE WILDERNESS EPISCOPAL CHURCH
05189	STEELE HOME
05190	JAIL
05191	WALWORTH COUNTY FAIRGROUNDS
05211	PECK'S STATION
05212	PALLOTTINE MAPLE WOODS
05213	ABELL'S CORNERS CEMETERY PRAIRIE
05214	GRANZEAU MAPLE-BASSWOOD
05236	TWO MORMON COTTAGES
05237	OLD VOREE SETTLEMENT SITE
05238	BOARINI HOUSE
05261	ST KILIAN CHURCH
05262	LAKE GENEVA BOG
05263	LYON TOWNSHIP GLACIAL DEPOSITS
05286	WARBLER TRAIL WILDLIFE SANCTUARY
05336	LAKE LAWN AREA
05337	A P JOHNSON HOUSE
05338	FRED B JONES HOUSE
05339	CHARLES ROSS HOUSE
05340	WINNEBAGO VILLAGE SITE
05341	CHARLES A STEVEN'S GARDENER'S LODGE
05361	HENRY WALLIS HOUSE
05362	CIRCUS COLONY SITE MARKER
05363	WISCONSIN SCHOOL FOR THE DEAF
05386	OLD SETTLERS CEMETERY
05387	DELANVAN SEDGE MEADOW & SHRUB CARR
05401	TURTLE CREEK SPRINGS
05436	MARY BIRD HOUSE
05437	CHIEF BIG FOOTS SACRED GROUNDS
05438	BIG FOOTS WIVES GRAVE
05439	BIG FOOTS LODGE SITE
05440	KENZIE MARKER
05441	YMCA ORGANIZATION SITE
05461	CHARLES T YERKES OBSERVATORY
05462	FIRST 4-H CLUB IN WISCONSIN SITE
05463	JAMES SAGER NORTON HOUSE
05486	WYCHWOOD
05487	PELL LAKE RAILROAD PRAIRIE REMNANT
	BLOOMFIELD TOWNSHIP TAMARACK & SEDGE MEADOW

Source: SEWRPC.



## HISTORIC SITES IN WASHINGTON COUNTY: 1973



## LEGEND

6329 SITE NUMBER

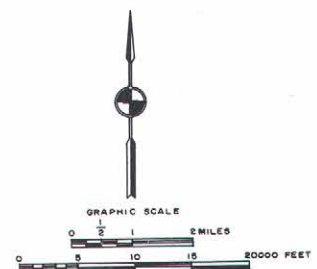
## MARKED

- ▲ CULTURAL
- ◆ NATURAL
- STRUCTURAL

## UNMARKED

- ▲ CULTURAL
- ◆ NATURAL
- STRUCTURAL

Source: SEWRPC.



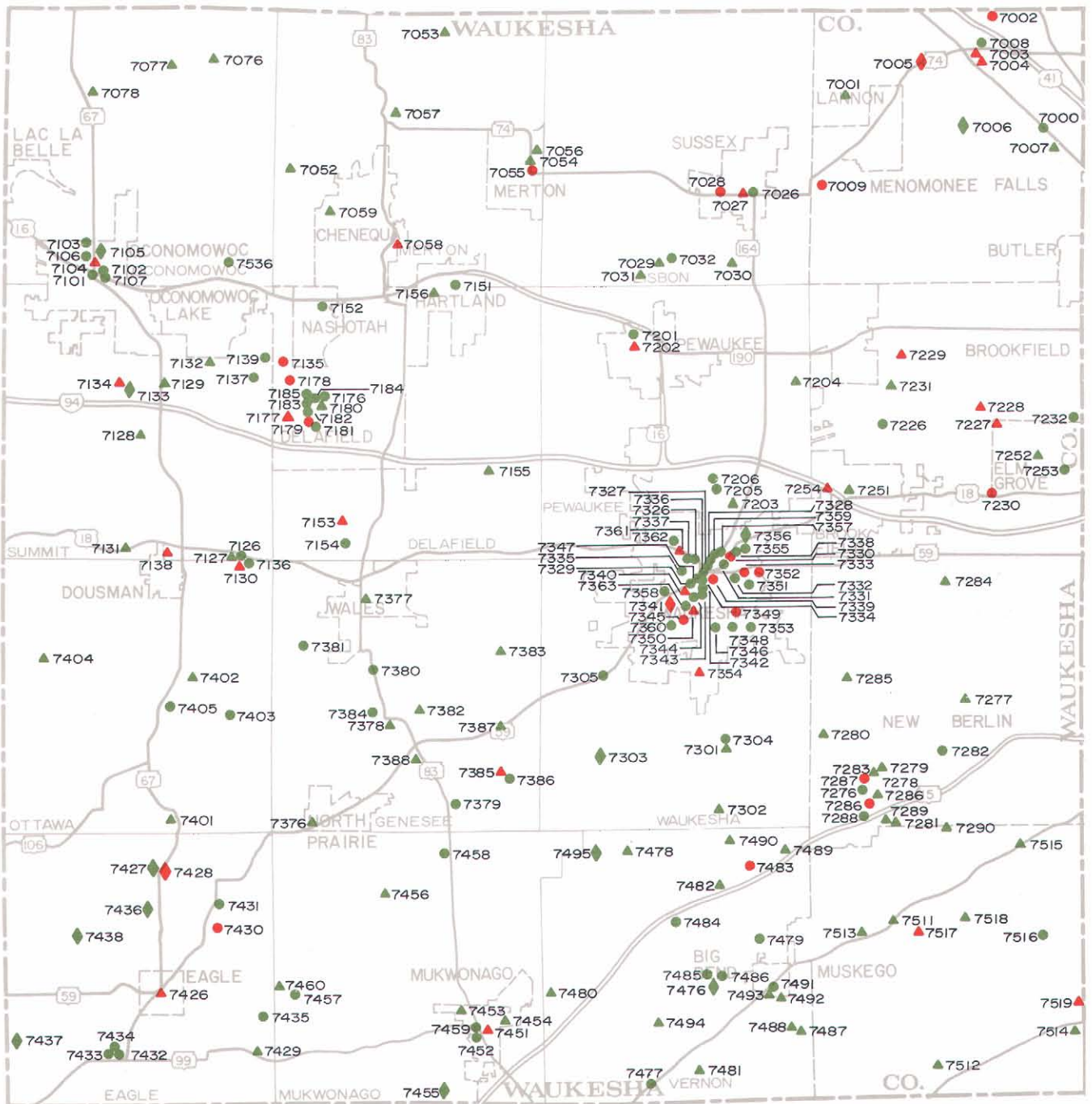
Map D-13 (continued)

WASHINGTON COUNTY

SITE NO.	SITE NAME
06000	LIZARD MOUND STATE PARK
06001	KLESSIG HOTEL & HALL
06002	AURIG FARM
06003	TURNER HALL AND RATHSKELLER
06004	L. GORDON HOME
06005	RUHLAND BARN
06006	ST PETER'S CHURCH
06007	ST JOHN'S CATHOLIC CHURCH
06008	WILMER WENDEL HOUSE
06026	GOOD TEMPLAR HALL
06027	TISS BARN
06028	MUCKERHEIDE HOUSE
06051	KOHLVILLE SETTLEMENT SITE
06052	DRUMLIN
06076	ADDISON CENTER SETTLEMENT SITE
06077	ZIEGELBAUER HOUSE
06078	ALLENTON SETTLEMENT SITE
06101	YOUNG AMERICA SETTLEMENT SITE
06102	FIRST RURAL POWER LINE
06126	STAGE ROUTE SITE
06127	CARL A SCHROEDER FARM
06128	CEDAR LAKE PARK
06151	COURT HOUSE SQUARE
06152	GADOM MILL
06153	WEST PARK SITE
06154	WEST BEND LITHIA BREWING CO
06155	ST AGNES CONVENT
06156	MERRIMAC HOTEL
06157	OLD SETTLERS TRIANGLE
06158	STORK HOUSE
06159	LEANDER-FRIZBY-DALY HOUSE
06160	SCHLITZ AMUSEMENT PARK SITE
06176	BOHEMIAN SETTLEMENT SITE
06177	ST AUGUSTINE CHURCH
06178	SITE OF TRENTON METEORITE
06179	WEBSTER'S FARM SITE
06180	DECORAH ROAD SITE
06181	J CANTY HOUSE
06182	UNION CEMETERY
06201	OLD COUNTY HOME
06202	SCHOWALTER PIONEER CEMETERY
06203	EMMANUEL'S EVANGELICAL LUTHERAN CHURCH
06204	JOHANN KRESSIN HOUSE
06205	RUSCH COTTAGE RUINS
06206	DAVID'S STAR EVANGELICAL LUTHERAN CHURCH
06226	COACH STOP
06227	MAXON-WRIGHT HOUSE
06228	ST LAWRENCE & MISSISSIPPI RIVER DIVIDE
06229	WINNEBAGO TRAIL SITE
06230	ROSENHEIMER FAMILY CEMETERY
06251	CHARLES STEWART HOME
06252	OLD DISTILLERY
06253	ST LAWRENCE CATHOLIC CHURCH AND CEMETERY
06276	WB PLACE TANNERY
06277	KISSEL CAR FACTORY SITE
06301	HOLY HILL
06302	ARTIST'S COLONY AREA
06303	NORWEGIAN SETTLEMENT SITE
06304	ST PAUL'S UNITED CHURCH OF CHRIST
06326	CREVASSE FILL
06327	COLGATE SETTLEMENT SITE
06328	LAUBENHEIMER FAMILY CEMETERY
06329	GRIST MILL
06351	ROCKFIELD LIME KILN RUINS
06352	OLD GERMANTOWN MUTUAL FIRE INSURANCE CO BLDG
06353	OLD GERMANTOWN TOWNSHIP SITE
06354	EVANGELICAL CHRISTUS KIRCHE
06355	GERMANTOWN MUTUAL INSURANCE CO

Source: SEWRPC.

HISTORIC SITES IN WAUKESHA COUNTY: 1973



LEGEND

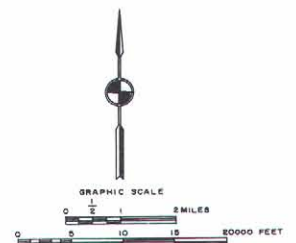
7333 SITE NUMBER

MARKED

- ▲ CULTURAL
- ◆ NATURAL
- STRUCTURAL

UNMARKED

- ▲ CULTURAL
- ◆ NATURAL
- STRUCTURAL



Source: SEWRPC.

Map D-14 (continued)

WAUKESHA COUNTY

SITE NO.	SITE NAME
07000	ST ANTHONY'S CATHOLIC CHURCH
07001	CAMP LANNON FIELDS FARM
07002	MILLER-DAVIDSON HOUSE
07003	MENOMONEE FALLS SETTLEMENT SITE
07004	LIME KILN PARK
07005	WATERSHED DIVIDE SITE
07006	TAMARACK SWAMP & MENOMONEE MARSH
07007	FUSSVILLE SETTLEMENT SITE
07008	GEORGE ROWELL HOME
07009	ST JAMES CATHOLIC CHURCH
07026	SUSSEX CANNERRIES
07027	SUSSEX SETTLEMENT SITE
07028	ST ALBANS EPISCOPAL CHURCH
07029	LISBON PLANK RD SITE
07030	OLD WEAVER QUARRIES
07031	MC KERROW FARMS
07032	SPINK'S TAVERN
07031	HOP HOUSE
07051	STONE BANK SETTLEMENT SITE
07053	MONCHES SETTLEMENT SITE
07054	MERTON SETTLEMENT SITE
07055	FIRST BAPTIST CHURCH
07056	KUNTZ INDIAN MOUNDS
07057	KETTLE MORaine STEAM RAILROAD
07058	GUSTAF UNONIUS MARKER
07059	CHENEQUA SETTLEMENT SITE
07076	OLD MAPLETON SETTLEMENT SITE
07077	MAPLETON SETTLEMENT SITE
07078	MONTEREY SETTLEMENT SITE
07101	1ST CONGREGATIONAL CHURCH
07102	OCONOMOWOC CITY HALL
07103	MONTGOMERY WARD HOME
07104	OCONOMOWOC SETTLEMENT SITE
07105	FOWLER LAKE
07106	OCONOMOWOC LIBRARY
07107	OCONOMOWOC RR DEPOT
07126	ABBOTT'S FOLLY
07127	ACACIA FARM
07128	SUMMIT CENTER SETTLEMENT SITE
07129	SUMMIT CORNERS SETTLEMENT SITE
07130	WATERVILLE SETTLEMENT SITE
07131	UTICA SETTLEMENT SITE
07132	PABST FARMS
07133	SILVER LAKE
07134	TURTLE EFFIGY MOUND
07135	NASHOTAH HOUSE
07136	SEBASTIAN BRAND HOUSE
07137	BLOODGOOD HOUSE
07138	MASONIC HOME
07139	CHAPEL OF ST MARY THE VIRGIN
07151	BURR OAK HOUSE
07152	HOLY INNOCENCE EPISCOPAL CHURCH
07153	LAPHAM PEAK RECREATION AREA
07154	WISCONSIN STATE SCHOOL FOR BOYS
07155	OLD TERRITORIAL ROAD SITE
07156	HARTLAND SETTLEMENT SITE
07176	OLD HOMESTEAD HOTEL
07177	CUSHING MEMORIAL STATE PARK
07178	BISHOP JACKSON KEMPER HOME
07179	HAWKS INN
07180	DELAFIELD VILLAGE SITE
07181	DELAFIELD TOWN HALL
07182	WISCONSIN STATE FISH HATCHERY
07183	ST JOHNS MILITARY ACADEMY
07184	ST JOHN CHRYSOSTOM EPISCOPAL CHURCH
07185	DE KOVEN HALL
07201	DEACON WEST OCTAGON HOUSE
07202	PEWAUKEE SETTLEMENT SITE
07203	WAUKESHA QUARRY
07204	DUPLAINEVILLE SETTLEMENT SITE
07205	WAUKESHA AIRPORT
07206	HODGSON HOUSE
07226	ROBERT KEICKHEFER HOUSE
07227	PIONEER CEMETERY
07228	BROOKFIELD SETTLEMENT SITE MARKER
07229	OAK HILL CEMETERY
07230	DUNKEL INN
07231	BROOKFIELD SETTLEMENT SITE
07232	SCHETBE BARN
07251	GOERKES CORNERS
07252	ELM GROVE SETTLEMENT SITE
07253	SISTERS OF NOTRE DAME CONVENT
07254	ALTON BROTHERS BIRTHPLACE SITE
07276	NEW BERLIN HISTORICAL SOCIETY MUSEUM & PARK
07277	NEW BERLIN SETTLEMENT SITE
07278	W W VANDERPOOL FARM
07279	WILLIAM SMITH FARM
07280	MEIDENBAUER PIONEER FARM
07281	MUSKEGO MILLS SETTLEMENT SITE
07282	ROUND BARN
07283	PROSPECT HILL SETTLEMENT SITE
07284	CALHOUN SETTLEMENT SITE
07285	LITTLE GROVE SETTLEMENT SITE
07286	CHENEY-FAULKNER HOME
07287	PROSPECT AID MEETING HOUSE
07288	GOVERNOR JULIUS HEIL HOME
07289	LINNIE LAC SETTLEMENT SITE
07290	INDIAN CAMPGROUND SITE
07301	MILL SITE
07302	CHINOOK PASS
07303	FOX RIVER
07304	WRIGHT HOUSE
07305	SEBINA BARNEY HOUSE
07326	MAIN STREET
07327	AVALON MANOR
07328	HOTEL WAUKESHA

WAUKESHA COUNTY

SITE NO.	SITE NAME
07329	VICTORIAN GOTHIC HOUSE
07330	OLD COURT HOUSE & INDIAN MOUND
07331	ST JOSEPHS ROMAN CATHOLIC CHURCH
07332	FIRST UNITED METHODIST CHURCH
07333	FIRST CONGREGATIONAL CHURCH
07334	FIRST BAPTIST CHURCH
07335	SAMUEL HADFIELD HOUSE
07336	OLD US POST OFFICE
07337	ROBINSON BLOCK
07338	ST MATTHIAS EPISCOPAL CHURCH
07339	LAIN-ESTBURG HOUSE
07340	CUTLER PARK
07341	DUNBAR OAK
07342	TOTTEN-BUTTERFIELD HOUSE
07343	ANDREW J FRAME HOUSE
07344	UNION SCHOOL
07345	CUTLER HOME
07346	GREEK REVIVAL HOUSE
07347	ROBERTS BUILDINGS
07348	WALTER CHANDLER HOUSE
07349	CARROLL COLLEGE
07350	SWEET SUE ENGINE
07351	SOO DEPOT
07352	SILURIAN SPRINGS
07353	CASPER M SANGER HOUSE
07354	LYMAN GOODNOW MEMORIAL
07355	RESTHAVEN HOTEL
07356	WHITE ROCK SPRINGS
07357	STOCK PAVILION
07358	O M HUBBARD BOARDING HOUSE
07359	SLOAN-SCHALOW HOUSE
07360	CIVIL WAR BARRACKS
07361	WAUKESHA FREIGHT DEPOT SITE
07362	BLAIR HOUSE
07363	THE DEPOT RESTAURANT
07376	NORTH PRAIRIE SETTLEMENT SITE
07377	WALES SETTLEMENT SITE
07378	GENESSE DEPOT SETTLEMENT SITE
07379	BOOTH HOUSE
07380	REES BARN
07381	BRYN MAWR & OLD WELSH CHURCH
07382	BROOKHILL FARM
07383	BETHESDA SETTLEMENT SITE
07384	TEN CHIMNEYS
07385	SAVLESVILLE SETTLEMENT SITE
07386	BLACKSMITH SHOP
07387	JOHNSTON QUARRY
07388	GENESSE SETTLEMENT SITE
07401	DOUSMAN TROUT FARMS SITE
07402	SUNNYBROOK FARM
07403	REID LOG HOUSE
07404	WEINER SETTLEMENT SITE
07405	MAURICE GREENBERG HOUSE
07426	EAGLE SETTLEMENT SITE
07427	KETTLE MORaine STATE FOREST
07428	KETTLE MORaine SCENIC DRIVE
07429	EAGLEVILLE SETTLEMENT SITE
07430	THE COBBLESTONE
07431	PALESTINE GRADE SCHOOL
07432	OLD WORLD WISCONSIN
07433	KOEPSSEL HOUSE
07434	CHRISTIAN TURK HOUSE
07435	JONATHAN PARSONS HOME
07436	KETTLE MORaine FEN & LOW PRAIRIE
07437	EAGLE OAK OPENING
07438	SCUPPERNON PRAIRIE
07451	MUKWONAGO SETTLEMENT SITE
07452	SEWALL ANDREWS HOME
07453	HORSE RACE TRACK SITE
07454	MUKWONAGO PLANK RD SITE
07455	PHANTOM LAKE RESORT AREA SITE
07456	OWENITE SETTLEMENT SITE
07457	ISAIAH SKIDMORE HOME
07458	STONE SCHOOL
07459	MUKWONAGO HOUSE
07460	JERICHO SETTLEMENT SITE
07476	MARTINS WOODS
07477	SMITH COBBLESTONE INN
07478	VERNON STATION SETTLEMENT SITE
07479	HASELTIME COBBLESTONE HOUSE
07480	HEAVEN CITY
07481	NORRIS FARM
07482	VERNON CENTER SETTLEMENT SITE
07483	REFORMED PRESBYTERIAN CHURCH OF VERNON
07484	OLD STORE & POST OFFICE
07485	MARTIN COBBLESTONE HOUSE
07486	STICKEY COBBLESTONE HOUSE
07487	INDIAN MOUNDS
07488	INDIAN MOUNDS
07489	GUTHRIE SETTLEMENT SITE
07490	FIRST COUNTY FARM
07491	PUTNAM TAVERN
07492	MILL SITE
07493	BIG BEND SETTLEMENT SITE
07494	DEWEY INDIAN MOUNDS
07495	VERNON MARSH
07511	JANESVILLE PLANK ROAD SITE
07512	BIG MUSKEGO LAKE SETTLEMENT SITE
07513	MUSKEGO PARK
07514	DURHAM HILL SETTLEMENT SITE
07515	TESS CORNERS SETTLEMENT SITE
07516	HOLZ LOG CABIN
07517	MUSKEGO SETTLEMENT SITE
07518	INDIAN BURIAL GROUNDS
07519	LUTHER PARKER CEMETERY
07536	OKAUCHEE HOUSE



# Appendix E

## WINTER OUTDOOR RECREATION USER SURVEY FORM—ONSITE INTERVIEW SURVEY

Form LU/P-1 1/74  
BPR/KM/lis  
1/31/74

Interviewer   
Initials

EXISTING OUTDOOR RECREATION USER SURVEY  
WINTER--1974

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
WAUKESHA, WISCONSIN 53186

Tn.	Rge.	Sec.	1/4 CBD	Sec. Code	Owner-ship	Civil Division
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Mo.	Day	Year
<input type="text"/>	<input type="text"/>	<input type="text"/>

1. Saturday	1. Morning
2. Sunday	2. Afternoon
3. Weekday	3. Evening

1. Male ☐ Female ☐

2. Home Address   
Street

Community  State  Zip Code

3. How did you get to this site?

<input type="checkbox"/>	01. Auto	08. Snowmobile
<input type="checkbox"/>	02. Bus	09. Bicycle
<input type="checkbox"/>	04. Truck	10. Walk
<input type="checkbox"/>	07. Motorbike	11. Other

Specify

4. How far did you travel to reach this site?

Miles or  Blocks

5. How many times have you been to this site?

a. During this winter season (1973-1974)

b. During the winter season 1972-1973

6. How much time will you (or did you) spend at this site during this particular outing?

Hours

7. What outdoor recreation activities were you engaged in while at this site during this outing?

<input type="text"/> Main Activity	<input type="text"/> Second (If Any)	<input type="text"/> Third (If Any)
------------------------------------	--------------------------------------	-------------------------------------

02. Cross-Country Skiing	14. Skiing--Downhill
04. Hiking	15. Sledding and/or Tobogganing
07. Ice Fishing	16. Snowmobiling
08. Ice Hockey	18. Other
09. Ice Skating	
10. Jogging	

Specify

8. How would you rate the facilities at this site today?

<input type="checkbox"/>	1. Excellent	3. Fair
<input type="checkbox"/>	2. Good	4. Poor

9. Please list any favorable or unfavorable comments about this recreation site or its facilities.

<input type="checkbox"/>	a. Favorable
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	b. Unfavorable
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

10. Please list your favorite winter outdoor recreation activities in order of preference.

<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

11. Has the availability of gasoline increased, decreased, or not affected your use of outdoor recreation facilities this season?

<input type="checkbox"/>	1. Not affected	3. Increased use
<input type="checkbox"/>	2. Decreased use	4. Don't know

12. Do you use any areas other than public or commercial recreational areas for your outdoor winter recreational activities?

☐ Yes ☐ No

If yes, specify activity.

13. Your age:

<input type="checkbox"/>	1. 0 - 9	5. 25 - 34
<input type="checkbox"/>	2. 10 - 14	6. 35 - 44
<input type="checkbox"/>	3. 15 - 19	7. 45 - 64
<input type="checkbox"/>	4. 20 - 24	8. 65 +

14. Your education (highest grade completed):

<input type="checkbox"/>	1. Elementary School	4. Some College
<input type="checkbox"/>	2. Junior High School	5. College Graduate
<input type="checkbox"/>	3. Senior High School	6. Post Graduate

15. Family size:

(Number in Family)

16. Your occupation:

17. Your family income:

<input type="checkbox"/>	1. Under \$3,000	5. \$10,000-\$14,999
<input type="checkbox"/>	2. \$3,000-\$4,999	6. \$15,000-\$24,999
<input type="checkbox"/>	3. \$5,000-\$6,999	7. \$25,000 +
<input type="checkbox"/>	4. \$7,000-\$9,999	8. Don't know

THANK YOU FOR YOUR ASSISTANCE.

# Appendix F

## WINTER OUTDOOR RECREATION USER SURVEY FORM—HAND-OUT, MAIL-BACK SURVEY

Form LU/P-2  
BPR/KH/1s  
1/30/74

Site Name

EXISTING OUTDOOR RECREATION USER SURVEY  
WINTER 1974

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
WAUKESHA, WISCONSIN 53186

### Instructions

Please complete each question in the space or box provided. Questions refer only to: 1) the site listed above; 2) the particular outing when this form was received; and 3) the individual who received the form. Shaded boxes are for office use only.

### SAMPLE QUESTION

How far did you travel to reach this site?

5 2 Miles

1. Male ☐ Female ☐  
2. Home Address \_\_\_\_\_  
Or Nearest Street Intersection \_\_\_\_\_

Community \_\_\_\_\_ State \_\_\_\_\_  
\_\_\_\_\_

3. Did this outing begin from home?  
☐ Yes ☐ No

If no, where did this outing begin?

Address or Nearest Intersection \_\_\_\_\_

Community \_\_\_\_\_ State \_\_\_\_\_  
\_\_\_\_\_

4. How did you get to this site? ☐

01. Auto 07. Motorcycle  
02. Bus 08. Snowmobile  
03. Train 09. Bike  
04. Truck 10. Walk  
05. Truck Camper 11. Other \_\_\_\_\_  
06. Motorhome Specify

5. How far did you travel to reach this site?

\_\_\_\_\_ Miles

6. How many times have you been to this site?

a. During this winter season (1973-1974)?

\_\_\_\_\_

b. During the winter season 1972-1973?

\_\_\_\_\_

7. How much time did you spend at this site during this outing?

\_\_\_\_\_ Hours

Town	Range	Section	1/4	CBD	Owner-ship
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Civil Div. <input type="checkbox"/>					
Date <input type="checkbox"/>					
1. Weekday 2. Saturday 3. Sunday					
FOR OFFICE USE ONLY					

8. What outdoor recreation activities were you engaged in while at this site during this outing?

a. Main Activity ☐ b. Second (If Any) ☐ c. Third (If Any) ☐

01. Camping 11. Nature Study  
02. Cross-Country Skiing 12. Pleasure Driving  
03. Horseback Riding 13. Sight-Seeing  
04. Hiking 14. Skiing--Downhill  
05. Hunting 15. Sledding and/or Tobogganing  
06. Ice Boating 16. Snowmobiling  
07. Ice Fishing 17. Snowshoeing  
08. Ice Hockey 18. Just Watching  
09. Ice Skating 19. Other \_\_\_\_\_  
10. Jogging Specify

9. If any equipment was required in order to participate in any recreation activity at this site, did you:

☐ 1. Use your own.  
2. Rent at this area.  
3. Rent somewhere else.  
4. Borrow it from someone.  
5. None required.  
6. Other \_\_\_\_\_  
Specify

10. Do you think that the fees charged at this site (if any) are fair and reasonable?

☐ 1. Yes  
2. No  
3. Don't know

11. How would you rate the facilities at the site visited?

☐ 1. Excellent 3. Fair  
2. Good 4. Poor

12. Please list any favorable or unfavorable comments about this recreation area or its facilities.

a. Favorable \_\_\_\_\_

b. Unfavorable \_\_\_\_\_

13. Please circle those items on which you spent money as part of this recreation outing.

1. Admission Fees 6. Gasoline  
2. Parking Fees 7. Food/Meals  
3. Skiing Fees 8. Lodging  
4. License Fees 9. Other \_\_\_\_\_  
5. Equipment Rental Specify

a. ☐

b. Approximately how much was spent for the total outing?

☐ Nearest Dollar

c. How much was spent within 5 miles of the site?

☐ Nearest Dollar

14. How has the availability of gasoline affected your use of outdoor recreation facilities this season?

☐ 1. Has not affected.  
2. Decreased use.  
3. Increased use.  
4. Don't know.

15. Would you use this facility more often if mass transportation (bus, train, etc.) were more available?

☐ 1. Yes  
2. No  
3. Don't know

16. Would you use this facility more often if it were closer to your home?

☐ 1. Yes  
2. No  
3. Don't know

17. Please list your favorite winter outdoor recreation activities in order of preference.

☐ 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

18. What do you think an outdoor recreation plan for the Southeastern Wisconsin Region should focus mainly upon?

☐ Enter two.

1. Protection of major natural resources and wildlife.  
2. Development of existing park sites and recreation lands for multiple uses.  
3. Acquisition of scientific and natural areas.  
4. Increased development of recreational areas for urban dwellers.  
5. Acquisition of additional park sites.  
6. Public acquisition of shoreline frontage of lakes.  
7. Public acquisition of lands adjacent to all major streams.  
8. Other: \_\_\_\_\_

Please specify.

19. Your age:

☐ 1. 0 - 9 5. 25 - 34  
2. 10 - 14 6. 35 - 44  
3. 15 - 19 7. 45 - 64  
4. 20 - 24 8. 65 +

20. Your education (highest grade completed):

☐ 1. Elementary School  
2. Junior High School  
3. Senior High School  
4. Some College  
5. College Graduate  
6. Post Graduate

21. Family size:

☐ (Number in Family)

22. Your occupation:

Please specify.

23. Your annual family income:

☐ 1. Under \$3,000 5. \$10,000-\$14,999  
2. \$3,000-\$4,999 6. \$15,000-\$24,999  
3. \$5,000-\$6,999 7. \$25,000 +  
4. \$7,000-\$9,999

24. Please complete this section only for those individuals in your group who did not receive a questionnaire (including your spouse, children, and others who accompanied you to the park or recreation area).

	Age	Male Or Female	Family Member Yes No	Activities Engaged In (Refer to Question 8)		Did Person Rent Equipment? Yes No	How Many Times Has Person Been to this Site?	
				Main Activity	Secondary Activity (If Any)		a. This Season (Winter 73-74)	b. Last Season (Winter 72-73)
Person #1								
Person #2								
Person #3								
Person #4								
Person #5								
Person #6								

Thank you very much for your time and assistance. The information you have provided will be held in the strictest confidence and used for recreation planning purposes only.



(This page intentionally left blank)



## Appendix H

### SUMMER OUTDOOR RECREATION USER SURVEY FORM—ONSITE INTERVIEW SURVEY

LU/P-6  
BPR/KM/lis  
6/5/74

To be completed on site by SEWRPC interviewers.

EXISTING OUTDOOR RECREATION USER SURVEY  
SUMMER 1974

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
WAUKESHA, WISCONSIN

Site Name	No.		Civil Division	
Activity Name	No.		Date	Int. Initial

1. Male ☐ Female ☐
2. Race: White ☐ Black ☐ Other ☐
3. Trip Origin:

Nearest Street Intersection

---

Community, State

4. Vehicle Type: ☐ ☐
- |                  |                |
|------------------|----------------|
| 01. Auto         | 07. Motorcycle |
| 02. Bus          | 08. Boat       |
| 03. Train        | 09. Bicycle    |
| 04. Truck        | 10. Walk       |
| 05. Truck Camper | 11. Other      |
| 06. Motorhome    |                |

5. Number of people in party? ☐ ☐ ☐
6. How far did you travel to reach this site?
- 
- Miles

7. How many times have you been to this site?
- 
- This Year
- 
- 
- Last Year

8. How long are you planning on staying at this site?
- 
- Days
- 
- Hours

9. How would you rate the quality of the facilities at this site?
- 
1. Excellent    3. Fair
- 
- 
2. Good    4. Poor
- 
5. Don't Know

10. Has the price of gasoline affected your use of outdoor recreation facilities this season?

a. ☐ 1. Yes    2. No    3. Don't Know

b. If yes, how?

- 
- Staying closer to home
- 
- 
- Taking fewer trips
- 
- 
- Taking longer trips
- 
- 
- Taking more trips
- 
- 
- Other

Specify

11. Would you use this facility more often if mass transportation (bus, train, etc.) was more available?

☐ 1. Yes    2. No    3. Don't Know

12. Would you use this facility more often if it was closer to your home?

☐ 1. Yes    3. Don't Know  
☐ 2. No    4. Not Applicable

13. What are your favorite summertime outdoor recreation activities in order of preference?

			1. _____
			2. _____
			3. _____

14. What other activities besides (activity) have you been involved in while at this site?

			1. _____
			2. _____
			3. _____

15. Would you (activity) more often if there were more (activity) facilities available in southeastern Wisconsin?

☐ 1. Yes    2. No    3. Don't Know

16. Why did you come to this particular (activity) area rather than somewhere else?

	1. Just happened on it.	8. Everyone else comes here.
	2. Close to home.	9. Cost is low.
	3. Group outing.	10. Challenging.
	4. Like the facilities.	11. Member.
	5. It's lifeguarded.	12. Other
	6. Safe.	Specify
	7. Scheduled event.	13. Don't know.

17. Your age:

	1. 0 - 9	5. 25 - 34
	2. 10 - 14	6. 35 - 44
	3. 15 - 19	7. 45 - 64
	4. 20 - 24	8. 65 +

18. Your education (highest grade completed):

	1. Elementary School	4. Some College
	2. Junior High School	5. College Graduate
	3. Senior High School	6. Post Graduate

19. Your occupation:

☐ ☐ Please specify.

20. Your annual family income range:

	1. Under \$3,000	5. \$10,000 - \$14,999
	2. \$3,000 - \$4,999	6. \$15,000 - \$24,999
	3. \$5,000 - \$6,999	7. \$25,000 +
	4. \$7,000 - \$9,999	8. Don't Know

21. Remarks or comments:

# BEACH SWIMMING:

22. In most instances, what supporting facilities must be present before you will consider using a swimming beach?

<input type="checkbox"/>	1. Lifeguard
<input type="checkbox"/>	2. Bathhouse
<input type="checkbox"/>	3. Concessions
<input type="checkbox"/>	4. Sandy Beach
<input type="checkbox"/>	5. Diving Board or Raft
<input type="checkbox"/>	6. Accompanying Picnic Area
<input type="checkbox"/>	7. Certain Depth of Water
<input type="checkbox"/>	8. Shaded Area
<input type="checkbox"/>	9. Parking
<input type="checkbox"/>	10. Other _____
<input type="checkbox"/>	11. Other _____

# BICYCLING

23. When you ride your bicycle strictly as a recreational activity, what type of road do you regard as acceptable for this type of activity?

<input type="checkbox"/>	1. Paved path specifically for bicycles.
<input type="checkbox"/>	2. Path on which motorized vehicles are not permitted.
<input type="checkbox"/>	3. Parkway or park road.
<input type="checkbox"/>	4. Any road with only light traffic.
<input type="checkbox"/>	5. Any paved road with only light traffic.
<input type="checkbox"/>	6. Any road.
<input type="checkbox"/>	7. Other _____

24. Would you be willing to pay higher registration fees on your bicycle if the money would be used for building bicycle trails?

<input type="checkbox"/>	1. Yes
<input type="checkbox"/>	2. No
<input type="checkbox"/>	3. Don't Know

25. Do you use your bicycle for non-recreational purposes?

<input type="checkbox"/>	1. Yes	If yes, please specify use:
<input type="checkbox"/>	2. No	
<input type="checkbox"/>		1. _____
<input type="checkbox"/>		2. _____
<input type="checkbox"/>		3. _____

26. When do you usually ride your bike as a recreational activity?

<input type="checkbox"/>	1. Weekday	<input type="checkbox"/>	1. Morning
<input type="checkbox"/>	2. Weekend	<input type="checkbox"/>	2. Afternoon
<input type="checkbox"/>	3. Saturdays Only	<input type="checkbox"/>	3. Evening
<input type="checkbox"/>	4. Sundays Only	<input type="checkbox"/>	4. Various Times of Day
<input type="checkbox"/>	5. Various Days of Week	<input type="checkbox"/>	

27. If paths designated for bicycles only were constructed on local streets, would you use your bicycle for non-recreational purposes (e.g., transportation to work, to store, for errands, etc.)?

<input type="checkbox"/>	1. Yes	If yes, what is the maximum distance for which you would replace vehicular travel with bicycle travel? _____ Miles
<input type="checkbox"/>	2. No	
<input type="checkbox"/>	3. Don't Know	If yes, how many miles per week would you travel by bicycle? _____ Miles
<input type="checkbox"/>		
<input type="checkbox"/>		

28. In your opinion, how many months of the year are suitable for bicycle travel? \_\_\_\_\_ Months

# CAMPING

29. ☐ Terminal ☐ Stop Over

30. ☐ Tent ☐ Trailer or Camper

31. Is cost an important factor in your choice of a campsite?

<input type="checkbox"/>	1. Yes
<input type="checkbox"/>	2. No
<input type="checkbox"/>	3. Sometimes

32. In most instances, which supporting facilities and natural resources must be present before you will consider using a camping area?

Priority Of Choice		1. Large trees
1st	<input type="checkbox"/>	2. Wooded area
	<input type="checkbox"/>	3. Lawn
	<input type="checkbox"/>	4. River
	<input type="checkbox"/>	5. Lake
2nd	<input type="checkbox"/>	6. Lake or river
	<input type="checkbox"/>	7. Area of water for swimming
3rd	<input type="checkbox"/>	8. Area of water for fishing
	<input type="checkbox"/>	9. Area of water for pleasure boating or skiing or sailing
4th	<input type="checkbox"/>	10. Pit toilets
	<input type="checkbox"/>	11. Flush toilets
5th	<input type="checkbox"/>	12. Picnic tables
	<input type="checkbox"/>	13. Grill or fireplace
6th	<input type="checkbox"/>	14. Concession or small store
	<input type="checkbox"/>	15. Other recreation areas nearby (e.g., golf course, playground, etc.)
	<input type="checkbox"/>	16. "Uncrowded" area or area with privacy
	<input type="checkbox"/>	17. Utility hook-ups
	<input type="checkbox"/>	18. Wildlife area
	<input type="checkbox"/>	19. Other _____
	<input type="checkbox"/>	20. Other _____

33. Are the campsites here too close together (1), too far apart (2), or well spaced (3)? ☐

34. Are the campsites here too small?

<input type="checkbox"/>	1. Yes
<input type="checkbox"/>	2. No
<input type="checkbox"/>	3. No Opinion

# FISHING, SAILING, WATER SKIING

35. When do you usually go (name activity) ?

<input type="checkbox"/>	1. Weekdays	<input type="checkbox"/>	1. Morning
<input type="checkbox"/>	2. Weekends	<input type="checkbox"/>	2. Afternoon
<input type="checkbox"/>	3. Saturdays Only	<input type="checkbox"/>	3. Evening
<input type="checkbox"/>	4. Sundays Only	<input type="checkbox"/>	4. Various Times of Day
<input type="checkbox"/>	5. Various Days of Day	<input type="checkbox"/>	

(If a particular day or time is mentioned), why do you \_\_\_\_\_ at that time?

<input type="checkbox"/>	1. Only free time available
<input type="checkbox"/>	2. Best time for _____ (best climatic conditions)
<input type="checkbox"/>	3. Most convenient time to get away
<input type="checkbox"/>	4. Not crowded
<input type="checkbox"/>	5. Other _____
<input type="checkbox"/>	6. Not applicable

36. In your opinion, which is the best lake (river or stream) for \_\_\_\_\_ in the Region?

<input type="checkbox"/>	1. _____
<input type="checkbox"/>	2. _____
<input type="checkbox"/>	3. Don't know

(If named), why is it the best?

37. Are there usually other types of water-based activities (fishing, sailing, water skiing, etc.) on this lake (river or stream)?

<input type="checkbox"/>	1. Yes
<input type="checkbox"/>	2. No
<input type="checkbox"/>	3. Don't Know

If yes, do they interfere with your \_\_\_\_\_ activity?

<input type="checkbox"/>	1. Yes
<input type="checkbox"/>	2. No

Comments: \_\_\_\_\_

38. In your opinion, does this lake (river or stream) ever become "overcrowded" to the point where your activity becomes "unenjoyable"?

<input type="checkbox"/>	1. Yes
<input type="checkbox"/>	2. No
<input type="checkbox"/>	3. No Opinion

If yes, when does this situation occur?

<input type="checkbox"/>	1. Sundays	<input type="checkbox"/>	1. Morning
<input type="checkbox"/>	2. Saturdays	<input type="checkbox"/>	2. Afternoon
<input type="checkbox"/>	3. Holidays	<input type="checkbox"/>	3. Evening
<input type="checkbox"/>	4. Other _____	<input type="checkbox"/>	4. Combination

39. FOR FISHING ONLY. ☐ Boat Fisherman ☐ Shore Fisherman

# GOLF

40. Do you prefer to play regulation-sized courses as opposed to par 3 courses?

<input type="checkbox"/>	1. Yes
<input type="checkbox"/>	2. No
<input type="checkbox"/>	3. No Preference

41. Do you ever play par 3 courses?

<input type="checkbox"/>	1. Often	<input type="checkbox"/>	4. Never
<input type="checkbox"/>	2. Sometimes	<input type="checkbox"/>	5. Always
<input type="checkbox"/>	3. Seldom	<input type="checkbox"/>	

42. To what extent does course layout, topography, and vegetation affect your choice of courses?

<input type="checkbox"/>	1. Very important
<input type="checkbox"/>	2. Of some importance
<input type="checkbox"/>	3. Of little importance
<input type="checkbox"/>	4. Unimportant

43. When do you usually go golfing?

<input type="checkbox"/>	1. Weekdays	<input type="checkbox"/>	1. Morning
<input type="checkbox"/>	2. Weekends	<input type="checkbox"/>	2. Afternoon
<input type="checkbox"/>	3. Saturdays Only	<input type="checkbox"/>	3. Evening
<input type="checkbox"/>	4. Sundays Only	<input type="checkbox"/>	4. Various Times of Day
<input type="checkbox"/>	5. Various Days of Week	<input type="checkbox"/>	

(If a particular day or time is mentioned), why do you golf at that time?

<input type="checkbox"/>	1. Only free time available
<input type="checkbox"/>	2. Best time for golfing (cool, sunny, etc.)
<input type="checkbox"/>	3. Most convenient time to get away
<input type="checkbox"/>	4. Not crowded
<input type="checkbox"/>	5. Other _____
<input type="checkbox"/>	6. Not applicable

44. In your opinion, which course is the best golf course in the Region?

<input type="checkbox"/>	1. _____
<input type="checkbox"/>	2. _____
<input type="checkbox"/>	3. No Opinion

(If a course is named), why is it the best?

45. What is the longest tee-off time you would consider waiting at a golf course?

<input type="checkbox"/>	Hours	<input type="checkbox"/>	Minutes
--------------------------	-------	--------------------------	---------

46. Comments: \_\_\_\_\_

## Appendix I

## SUMMER OUTDOOR RECREATION USER SURVEY FORM—MAIL-OUT, MAIL-BACK SURVEY OF REGISTERED BOAT OWNERS

10/29/74  
LW/P-11  
BPR/GE/mj

EXISTING OUTDOOR RECREATION USER SURVEY  
SUMMER 1974

BOATING

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
WAUKESHA, WISCONSIN 53186

## Instructions

All questions refer to the recreational use of your boat(s) by you and/or your immediate family during 1974. Please complete each question in the space or box provided. Shaded boxes are for office use only. Please complete both sides of the questionnaire.

1. Male ☐ Female ☐  
2. Race: White ☐ Black ☐ Other ☐

3. Home Address:

Or Nearest Street Intersection

Community

State

4. Family Size:

Number in  
Family

5. The following questions in the box below refer specifically to 1. the type and quantity of boat(s) you own, 2. the day(s) and time(s) you used your boat(s), 3. where you used your boat(s), and 4. your opinion on the water quality of the areas in which you used your boats.

Fill in the quantity and circle the type(s) of boat(s) you or your immediate family own.	Fill in the horsepower of the engine most often used with each boat type.	Put a check (✓) in the box that corresponds with the time(s) you most often used each boat type.	Fill in the name, county, and state (if not Wis.) of the body of water (lake or river) on which you used each boat type most often.	Check (✓) the water quality rating you would give this body of water.	Fill in the water-based recreational activity for which you used each boat type most often this past year.	Fill in the number of days on which you used each boat type this past year.	Check ( ) the average number of hours per outing you actually spent using your boat(s) this past year.
<input type="checkbox"/> 1. Canoe <input type="text"/> <input type="text"/> <input type="text"/>	H.P. <input type="text"/>	Morn. Aftn. Even. Weekday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Saturday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Sunday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Body of Water <input type="text"/> County <input type="text"/> State <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	Activity <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Days <input type="text"/> <input type="text"/> <input type="text"/> Number of days	<input type="checkbox"/> 0-3 hrs. <input type="checkbox"/> 7-10 hrs. <input type="checkbox"/> 4-6 hrs. <input type="checkbox"/> 11 + hrs.
<input type="checkbox"/> 2. Rowboat <input type="text"/> <input type="text"/> <input type="text"/>	H.P. <input type="text"/>	Morn. Aftn. Even. Weekday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Saturday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Sunday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Body of Water <input type="text"/> County <input type="text"/> State <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	Activity <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Days <input type="text"/> <input type="text"/> <input type="text"/> Number of days	<input type="checkbox"/> 0-3 hrs. <input type="checkbox"/> 7-10 hrs. <input type="checkbox"/> 4-6 hrs. <input type="checkbox"/> 11 + hrs.
<input type="checkbox"/> 3. Motorboat <input type="text"/> <input type="text"/> <input type="text"/>	H.P. <input type="text"/>	Morn. Aftn. Even. Weekday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Saturday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Sunday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Body of Water <input type="text"/> County <input type="text"/> State <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	Activity <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Days <input type="text"/> <input type="text"/> <input type="text"/> Number of days	<input type="checkbox"/> 0-3 hrs. <input type="checkbox"/> 7-10 hrs. <input type="checkbox"/> 4-6 hrs. <input type="checkbox"/> 11 + hrs.
<input type="checkbox"/> 4. Sailboat <input type="text"/> <input type="text"/> <input type="text"/>	H.P. <input type="text"/>	Morn. Aftn. Even. Weekday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Saturday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Sunday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Body of Water <input type="text"/> County <input type="text"/> State <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	Activity <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Days <input type="text"/> <input type="text"/> <input type="text"/> Number of days	<input type="checkbox"/> 0-3 hrs. <input type="checkbox"/> 7-10 hrs. <input type="checkbox"/> 4-6 hrs. <input type="checkbox"/> 11 + hrs.
<input type="checkbox"/> 5. Other <input type="text"/> <input type="text"/> <input type="text"/>	H.P. <input type="text"/>	Morn. Aftn. Even. Weekday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Saturday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Sunday <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Body of Water <input type="text"/> County <input type="text"/> State <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	Activity <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Days <input type="text"/> <input type="text"/> <input type="text"/> Number of days	<input type="checkbox"/> 0-3 hrs. <input type="checkbox"/> 7-10 hrs. <input type="checkbox"/> 4-6 hrs. <input type="checkbox"/> 11 + hrs.





# OUTDOOR RECREATION SITE MANAGER SURVEY FORM

LU/P-7 (1st of 3 sheets)  
BPR/GE/lb  
6/6/74

SITE MANAGER QUESTIONNAIRE  
USER COUNTS

Side 1

Site Name _____	Site Number <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	Civil Div. <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	Town <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	Range <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	Sec. <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	1/4 Sec. <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>
Interviewee _____	Position _____	Tel. No. _____	Interviewer _____	Date of Interview <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	<table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	<table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>
				Mo.      Day      Yr.		

1. How many years has the interviewee worked at the site? <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> Years	2. What time of the year is the site open? Open      Close Date      Date      Or Year Round <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>	3. What are the general hours the site is open for use? Daily      Sat.      Sun.
--	---	--

[illegible]

- O V E R -

SITE MANAGER QUESTIONNAIRE  
USER COUNTS

Side 2

Site Name \_\_\_\_\_ Site Number  Civil Div.  Town  Range  Sec.  1/4 Sec.

Interviewee \_\_\_\_\_ Position \_\_\_\_\_ Tel. No. \_\_\_\_\_ Interviewer \_\_\_\_\_ Date of Interview   
Mo. Day Yr.

1. How many years has the interviewee worked at the site?  Years

2. What time of the year is the site open?  
Open \_\_\_\_\_ Close \_\_\_\_\_  
Date \_\_\_\_\_ Date \_\_\_\_\_ Or Year Round

3. What are the general hours the site is open for use?  
Daily \_\_\_\_\_ Sat. \_\_\_\_\_ Sun. \_\_\_\_\_

WATER-BASED ACTIVITIES																														
Facility	Quantity	Average Capacity Per Unit	Total Capacity	Peak Month	Average Weekday								Average Saturday								Average Sunday								No. Times Crowded	
					Open	-10	10-12	12-2	2-4	4-6	6-8	8- Close	Average Day	Open	-10	10-12	12-2	2-4	4-6	6-8	8- Close	Average Day	Open	-10	10-12	12-2	2-4	4-6		6-8
440 Boat Access	Launches	NA	U.																											
441 Canoe or Rowboat R.	Boats	U/Boat	U.																											
443 Fishing Boat R.	Boats	U/Boat	U.																											
444 Fishing Shore	Feet	Ft./U	U.																											
450 Hockey Rink	Rinks	U/Rink	U.																											
451 Ice Skating	Acres	U/Acre	U.																											
452 Marina	Slips	NA	U.																											
453 Motor Boat R.	Boats	U/Boat	U.																											
454 Sailboat R.	Boats	U/Boat	U.																											
456 Swimming Beach	Feet	Ft./U	U.																											
457 Swimming Pool	Ft. <sup>2</sup>	Ft. <sup>2</sup> /U	U.																											
458 Wading Pool	Ft. <sup>2</sup>	Ft. <sup>2</sup> /U	U.																											
460 Other		U/	U.																											
461 Other		U/	U.																											
Water-Based Activity Subtotals																														
Land-Based Activity Subtotals																														
Site Activity Totals																														

LU/P-7 (3rd of 3 sheets)  
BPR/GE/ls  
6/6/74

SITE MANAGER QUESTIONNAIRE  
USER CHARACTERISTICS ANSWER SHEET

Site Number      Civil Division    Site Name  Interviewer  Date

Name of Activity

	1	2	3	4	5	6	7
Weekdays							
Saturdays							
Sundays							

8  9  J F M A M J J A S O N D

Name of Activity

	1	2	3	4	5	6	7
Weekdays							
Saturdays							
Sundays							

8  9  J F M A M J J A S O N D

Name of Activity

	1	2	3	4	5	6	7
Weekdays							
Saturdays							
Sundays							

8  9  J F M A M J J A S O N D

Name of Activity

	1	2	3	4	5	6	7
Weekdays							
Saturdays							
Sundays							

8  9  J F M A M J J A S O N D

Name of Activity

	1	2	3	4	5	6	7
Weekdays							
Saturdays							
Sundays							

8  9  J F M A M J J A S O N D

Name of Activity

	1	2	3	4	5	6	7
Weekdays							
Saturdays							
Sundays							

8  9  J F M A M J J A S O N D

Name of Activity

	1	2	3	4	5	6	7
Weekdays							
Saturdays							
Sundays							

8  9  J F M A M J J A S O N D

Name of Activity

	1	2	3	4	5	6	7
Weekdays							
Saturdays							
Sundays							

8  9  J F M A M J J A S O N D

Name of Activity

	1	2	3	4	5	6	7
Weekdays							
Saturdays							
Sundays							

8  9  J F M A M J J A S O N D

LU/P-7 (2nd of 3 sheets)  
BPR/GE/ls  
6/6/74

SITE MANAGER QUESTIONNAIRE  
USER CHARACTERISTICS QUESTIONNAIRE

1. Is there a distinct age group (or groups) that dominates the use of the facility?	1. Pre School 2. Grade School 3. High School 4. Young Adult 5. Middle Age 6. Elderly 7. Family 8. Various Age Groups 9. Don't Know
2. Are more than 75% of the users of one sex?	1. Yes, M 2. Yes, F 3. No 4. Don't Know
3. Are more than 75% of the users of one race?	1. Yes, W 2. Yes, B 3. Yes, Other 4. No (Various) 5. Don't Know
4. Do more than 75% of the users come from approximately the same distance?	1. Yes, Less Than 1 Mile 2. Yes, 1-3 Miles 3. Yes, 4-10 Miles 4. Yes, Over 10 Miles 5. No, Various Distances 6. Don't Know
5. Approximately what percentage of the users come from outside the State of Wisconsin?	1. Less Than 2% 2. 2-10% 3. 11-30% 4. 31-60% 5. More Than 60% 6. Don't Know
6. What is the average length of stay per user?	1. _____ Hours 2. _____ Days 3. Don't Know
7. How much does unfavorable weather condition affect the number of users?	1. Stops Use 2. Significantly Lessens Use 3. Slightly Lessens Use 4. Does Not Affect Use 5. Increases Use 6. Don't Know
8. To what extent does a holiday affect the use of the facility?	1. Results in Overuse 2. Significantly Increases Use 3. Slightly Increases Use 4. Does Not Affect Use 5. Decreases Use 6. Don't Know
9. Relative to the number of users of the facility during the peak month, what is the approximate percentage of use during the other months?	

(This page intentionally left blank)



## Appendix K

## POTENTIAL PARK SITE EVALUATION FORM

FORM T4-3 5/63 SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION		SOUTHEASTERN WISCONSIN REGIONAL LAND USE - TRANSPORTATION STUDY			
<b>INVENTORY OF POTENTIAL PARKS RECREATION AREAS AND OPEN SPACES</b>					
CARD NO.	1 2 3	INTERPRETER	DATE	OFFICE FIELD	SITE NO.
LOCATION	CIVIL DIVISION 4 5 6	TOWN & RANGE 7 8 9 10 11 12	SECTION 14 SEC 13 14 15 16 17 18	CHECKED BY	INITIALS DATE
				PUNCHED BY	INITIALS DATE
				VERIFIED BY	INITIALS DATE
LOCATION REMARKS:					
CONT. ON PAGE 4 ( )					
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>I LAND USE</b></p> <p>1. Residential</p> <p>2. Retail &amp; Services</p> <p>3. Wholesale</p> <p>4. Manufacturing (Non-Durable)</p> <p>5. Manufacturing (Durable)</p> <p>6. Transportation Communications &amp; Utilities</p> <p>7. Institution &amp; Government Services</p> <p>8. Recreation</p> <p>9. Agriculture &amp; Related</p> <p>10. Other Open lands, swamps &amp; Water areas</p> </div> <div style="width: 50%;"> <p style="text-align: center;">REMARKS</p> </div> </div>					
CONT. ON PAGE 4 ( )					
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>II NO. OF ACRES</b></p> <p>1. Less than 150</p> <p>2. 150 - 300</p> <p>3. 300 - 500</p> <p>4. 500 - 750</p> <p>5. 750 - 1,000</p> <p>6. More than 1,000</p> </div> <div style="width: 50%;"> <p style="text-align: center;">REMARKS</p> </div> </div>					
CONT. ON PAGE 4 ( )					
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>III KEY ATTRACTION TO AREA</b></p> <p>1. Lake</p> <p>2. Forest</p> <p>3. River</p> <p>4. Creek</p> <p>5. Flowage</p> <p>6. Topography</p> <p>7. Other</p> </div> <div style="width: 50%;"> <p style="text-align: center;">REMARKS</p> </div> </div>					
CONT. ON PAGE 4 ( )					
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>IV ACCESS</b></p> <p><b>A. Convenience &amp; Control</b></p> <p>1. Excellent</p> <p>2. Good</p> <p>3. Fair</p> <p>4. Poor</p> </div> <div style="width: 50%;"> <p style="text-align: center;">REMARKS</p> </div> </div>					
CONT. ON PAGE 4 ( )					
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>B. Road Description</b></p> <p>1. Interstate</p> <p>2. U.S. Highway</p> <p>3. State Highway</p> <p>4. County Trunk</p> <p>5. Town Road</p> <p>6. Private</p> <p>7. Developed</p> <p>8. Undeveloped</p> </div> <div style="width: 50%;"> <p style="text-align: center;">REMARKS</p> </div> </div>					
CONT. ON PAGE 4 ( )					
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>V GENERAL SOIL TYPES</b></p> <p>1. Clay</p> <p>2. Loam</p> <p>3. Sand</p> <p>4. Gravel</p> </div> <div style="width: 50%;"> <p style="text-align: center;">REMARKS</p> </div> </div>					
CONT. ON PAGE 4 ( )					
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>VI WATER-USE POSSIBILITIES</b></p> <p>1. Swimming</p> <p>2. Fast Boating &amp; Skiing</p> <p>3. Fishing - Slow-Boating</p> <p>4. Sailing</p> <p>5. Winter - Use</p> <p>6. Other</p> </div> <div style="width: 50%;"> <p style="text-align: center;">REMARKS</p> </div> </div>					
CONT. ON PAGE 4 ( )					
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>VII BEACH DEVELOPMENT</b></p> <p>1. Good Water Quality</p> <p>2. Sand Beach</p> <p>3. Drop Offs</p> <p>4. Some Shade</p> <p>5. Parking Available</p> <p>6. Good Sun Bathing Area</p> <p>7. Other</p> </div> <div style="width: 50%;"> <p style="text-align: center;">REMARKS</p> </div> </div>					
CONT. ON PAGE 4 ( )					
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>VIII TYPE OF FOREST COVER</b></p> <p><b>A. Trees</b></p> <p>1. Yes</p> <p>2. No</p> <p><b>B. Size - Diameter -</b> in order of dominance</p> <p>1. 1 - 2"</p> <p>2. 3 - 6"</p> <p>3. 7 - 12"</p> <p>4. 12 - 24"</p> <p>5. More than 24"</p> <p><b>C. Shrubs</b></p> <p>1. Yes</p> <p>2. No</p> <p><b>D. Grass</b></p> <p>1. Good Stand</p> <p>2. Weeds</p> </div> <div style="width: 50%;"> <p style="text-align: center;">REMARKS</p> </div> </div>					
CONT. ON PAGE 4 ( )					



# Appendix L

## CHARACTERISTICS OF REMAINING POTENTIAL PARK SITES BY PLANNING ANALYSIS AREA: 1975

Table L-1

### CHARACTERISTICS OF REMAINING POTENTIAL PARK SITES BY PLANNING ANALYSIS AREA IN KENOSHA COUNTY: 1975

Planning Analysis Area	Site Value	Remaining Potential Park Sites by Relationship to Primary Environmental Corridors										Number of Remaining Potential Park Sites by Specific Development Possibility					
		Number of Sites				Area											
		Entirely Within Primary Environmental Corridor	Partially Within Primary Environmental Corridor	Entirely Outside Primary Environmental Corridor	Total	Within Primary Environmental Corridor		Outside Primary Environmental Corridor		Total							
						Acres	Percent	Acres	Percent	Acres	Percent	Swimming	Picnicking	Nature Study	Campground	Hiking Trails	Golf
52	High	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Medium	--	3	--	3	261	42.0	361	58.0	622	100.0	--	3	3	--	2	1
	Low	--	--	1	1	0	--	46	100.0	46	100.0	--	1	1	--	--	--
	Total	--	3	1	4	261	39.1	407	60.9	668	100.0	--	4	4	--	2	1
53	High	--	2	--	2	196	53.7	169	46.3	365	100.0	--	2	--	--	--	1
	Medium	--	--	1	1	0	--	96	100.0	96	100.0	--	1	1	--	--	--
	Low	--	4	4	8	689	44.2	871	55.8	1,560	100.0	1	6	5	5	--	--
	Total	--	6	5	11	885	43.8	1,136	56.2	2,021	100.0	1	9	6	5	--	1
54	High	--	1	--	1	33	13.1	219	86.9	252	100.0	--	1	--	--	--	1
	Medium	1	1	4	6	123	19.0	526	81.0	649	100.0	--	6	6	5	5	--
	Low	--	--	7	7	0	--	319	100.0	319	100.0	--	5	4	4	3	--
	Total	1	2	11	14	156	12.8	1,064	87.2	1,220	100.0	--	12	10	9	8	1
55	High	1	4	1	6	473	46.1	553	53.9	1,026	100.0	1	6	5	--	2	1
	Medium	1	6	9	16	452	31.4	988	68.6	1,440	100.0	1	16	15	9	9	2
	Low	1	5	4	10	494	44.7	610	55.3	1,104	100.0	2	10	7	4	3	--
	Total	3	15	14	32	1,419	39.7	2,151	60.3	3,570	100.0	4	32	27	13	14	3
County Total	High	1	7	1	9	702	42.7	941	57.3	1,643	100.0	1	9	5	--	2	3
	Medium	2	10	14	26	836	29.8	1,971	70.2	2,807	100.0	1	26	25	14	16	3
	Low	1	9	16	26	1,183	39.1	1,846	60.9	3,029	100.0	3	22	17	13	6	--
	Total	4	26	31	61	2,721	36.4	4,758	63.6	7,479	100.0	5	57	47	27	24	6

Source: SEWRPC.

Table L-2

**CHARACTERISTICS OF REMAINING POTENTIAL PARK SITES BY  
PLANNING ANALYSIS AREA IN MILWAUKEE COUNTY: 1975**

Planning Analysis Area	Site Value	Remaining Potential Park Sites by Relationship to Primary Environmental Corridors										Number of Remaining Potential Park Sites by Specific Development Possibility					
		Number of Sites				Area											
		Entirely Within Primary Environmental Corridor	Partially Within Primary Environmental Corridor	Entirely Outside Primary Environmental Corridor	Total	Within Primary Environmental Corridor		Outside Primary Environmental Corridor		Total							
						Acres	Percent	Acres	Percent	Acres	Percent	Swimming	Picnicking	Nature Study	Campground	Hiking Trails	Golf
13	High	--	--	1	1	0	--	32	100.0	32	100.0	1	1	1	--	--	1
	Medium	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Low	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Total	--	--	1	1	0	--	32	100.0	32	100.0	1	1	1	--	--	1
17	High	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Medium	--	--	1	1	0	--	203	100.0	203	100.0	--	1	1	--	1	1
	Low	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Total	--	--	1	1	0	--	203	100.0	203	100.0	--	1	1	--	1	1
27	High	--	--	4	4	0	--	438	100.0	438	100.0	--	4	2	--	2	1
	Medium	--	1	--	1	67	44.1	85	55.9	152	100.0	--	1	1	--	1	1
	Low	1	3	2	6	179	56.8	136	43.2	315	100.0	1	6	5	--	2	2
	Total	1	4	6	11	246	27.2	659	72.8	905	100.0	1	11	8	--	5	4
28	High	--	1	1	2	100	22.6	343	77.4	443	100.0	--	2	2	--	2	1
	Medium	--	5	1	6	349	40.8	506	59.2	855	100.0	--	6	6	--	6	3
	Low	--	1	1	2	38	25.9	109	74.1	147	100.0	--	2	2	--	2	2
	Total	--	7	3	10	487	33.7	958	66.3	1,445	100.0	--	10	10	--	10	6
29	High	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Medium	--	--	1	1	0	--	68	100.0	68	100.0	--	1	1	--	1	--
	Low	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Total	--	--	1	1	0	--	68	100.0	68	100.0	--	1	1	--	1	--
County Total	High	--	1	6	7	100	11.0	813	89.0	913	100.0	1	7	5	--	4	3
	Medium	--	6	3	9	416	32.6	862	67.4	1,278	100.0	--	9	9	--	9	5
	Low	1	4	3	8	217	47.0	245	53.0	462	100.0	1	8	7	--	4	4
	Total	1	11	12	24	733	27.6	1,920	72.4	2,653	100.0	2	24	21	--	17	12

Source: SEWRPC.



Table L-3

**CHARACTERISTICS OF REMAINING POTENTIAL PARK SITES BY  
PLANNING ANALYSIS AREA IN OZAUKEE COUNTY: 1975**

Planning Analysis Area	Site Value	Remaining Potential Park Sites by Relationship to Primary Environmental Corridors										Number of Remaining Potential Park Sites by Specific Development Possibility					
		Number of Sites				Area											
		Entirely Within Primary Environmental Corridor	Partially Within Primary Environmental Corridor	Entirely Outside Primary Environmental Corridor	Total	Within Primary Environmental Corridor		Outside Primary Environmental Corridor		Total							
						Acres	Percent	Acres	Percent	Acres	Percent	Swimming	Picnicking	Nature Study	Campground	Hiking Trails	Golf
1	High	--	7	--	7	656	45.1	799	54.9	1,455	100.0	2	7	7	5	--	
	Medium	1	--	5	6	54	6.2	823	93.8	877	100.0	--	5	6	5	2	
	Low	--	--	4	4	0	--	365	100.0	365	100.0	--	2	4	--	--	
	Total	1	7	9	17	710	26.3	1,987	73.7	2,697	100.0	2	14	17	12	12	2
2	High	3	--	--	3	225	100.0	0	--	225	100.0	3	3	3	1	1	--
	Medium	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Low	--	--	3	3	0	--	223	100.0	223	100.0	--	2	3	1	--	--
	Total	3	--	3	6	225	50.2	223	49.8	448	100.0	3	5	6	2	1	--
3	High	--	5	--	5	706	61.1	449	38.9	1,155	100.0	1	5	5	4	5	--
	Medium	--	3	--	3	304	38.9	478	61.1	782	100.0	--	3	3	2	2	1
	Low	1	4	1	6	315	64.4	174	35.6	489	100.0	1	5	6	2	4	--
	Total	1	12	1	14	1,325	54.6	1,101	45.4	2,426	100.0	2	13	14	8	11	1
4	High	--	8	--	8	650	53.3	569	46.7	1,219	100.0	2	8	8	4	8	--
	Medium	--	3	--	3	537	65.6	282	34.4	819	100.0	1	1	2	1	2	--
	Low	--	4	--	4	154	45.2	187	54.8	341	100.0	--	1	2	2	1	--
	Total	--	15	--	15	1,341	56.4	1,038	43.6	2,379	100.0	3	10	12	7	11	--
5	High	--	2	--	2	132	47.0	149	53.0	281	100.0	1	2	2	2	2	1
	Medium	1	3	2	6	477	57.3	355	42.7	832	100.0	1	6	5	3	4	3
	Low	--	1	3	4	93	22.8	315	77.2	408	100.0	--	2	2	2	2	--
	Total	1	6	5	12	702	46.2	819	53.8	1,521	100.0	2	10	9	7	8	4
County Total	High	3	22	--	25	2,369	54.6	1,966	45.4	4,335	100.0	9	25	25	18	21	1
	Medium	2	9	7	18	1,372	41.5	1,938	58.5	3,310	100.0	2	15	16	11	13	6
	Low	1	9	11	21	562	30.8	1,264	69.2	1,826	100.0	1	12	17	7	9	--
	Total	6	40	18	64	4,303	45.4	5,168	54.6	9,471	100.0	12	52	58	36	43	7

Source: SEWRPC.

Table L-4

**CHARACTERISTICS OF REMAINING POTENTIAL PARK SITES BY  
PLANNING ANALYSIS AREA IN RACINE COUNTY: 1975**

Planning Analysis Area	Site Value	Remaining Potential Park Sites by Relationship to Primary Environmental Corridors										Number of Remaining Potential Park Sites by Specific Development Possibility					
		Number of Sites				Area											
		Entirely Within Primary Environmental Corridor	Partially Within Primary Environmental Corridor	Entirely Outside Primary Environmental Corridor	Total	Within Primary Environmental Corridor		Outside Primary Environmental Corridor		Total							
						Acres	Percent	Acres	Percent	Acres	Percent						
		Swimming	Picnicking	Nature Study	Campground	Hiking Trails	Golf										
43	High	--	3	--	3	227	47.4	252	52.6	479	100.0	1	3	3	1	3	--
	Medium	1	--	--	1	30	100.0	0	--	30	100.0	--	1	1	1	1	--
	Low	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Total	1	3	--	4	257	50.5	252	49.5	509	100.0	1	4	4	2	4	--
44	High	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Medium	--	--	1	1	0	--	77	100.0	77	100.0	--	1	1	--	--	--
	Low	--	--	1	1	0	--	43	100.0	43	100.0	--	1	--	--	--	1
	Total	--	--	2	2	0	--	120	100.0	120	100.0	--	2	1	--	--	1
45	High	--	3	--	3	177	47.6	195	52.4	372	100.0	--	3	3	--	3	--
	Medium	--	1	--	1	120	42.3	164	57.7	284	100.0	--	1	1	--	1	1
	Low	--	--	2	2	0	--	141	100.0	141	100.0	--	--	2	--	1	--
	Total	--	4	2	6	297	37.3	500	62.7	797	100.0	--	4	6	--	5	1
46	High	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Medium	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Low	--	1	4	5	77	14.3	462	85.7	539	100.0	--	4	2	--	--	1
	Total	--	1	4	5	77	14.3	462	85.7	539	100.0	--	4	2	--	--	1
47	High	--	2	--	2	244	73.9	86	26.1	330	100.0	--	2	2	--	2	1
	Medium	--	2	2	4	562	49.3	579	50.7	1,141	100.0	--	3	3	2	4	1
	Low	--	1	3	4	13	4.2	299	95.8	312	100.0	--	--	1	--	1	1
	Total	--	5	5	10	819	45.9	964	54.1	1,783	100.0	--	5	6	2	7	3
48	High	1	8	2	11	837	48.4	894	51.6	1,731	100.0	4	11	6	8	7	5
	Medium	--	9	8	17	807	27.4	2,135	72.6	2,942	100.0	1	17	15	9	13	2
	Low	1	3	10	14	290	24.4	898	75.6	1,188	100.0	2	12	10	8	9	1
	Total	2	20	20	42	1,934	33.0	3,927	67.0	5,861	100.0	7	40	31	25	29	8
49	High	--	6	--	6	1,342	61.1	856	38.9	2,198	100.0	--	6	4	2	5	1
	Medium	1	2	3	6	237	44.4	297	55.6	534	100.0	--	4	3	3	4	--
	Low	2	3	3	8	361	44.6	449	55.4	810	100.0	--	6	7	7	7	--
	Total	3	11	6	20	1,940	54.8	1,602	45.2	3,542	100.0	--	16	14	12	16	1
County Total	High	1	22	2	25	2,827	55.3	2,283	44.7	5,110	100.0	5	25	18	11	20	7
	Medium	2	14	14	30	1,756	35.1	3,252	64.9	5,008	100.0	1	27	24	15	23	4
	Low	3	8	23	34	741	24.4	2,292	75.6	3,003	100.0	2	23	22	15	18	4
	Total	6	44	39	89	5,324	40.5	7,827	59.5	13,151	100.0	8	75	64	41	61	15

Source: SEWRPC.

Table L-5

**CHARACTERISTICS OF REMAINING POTENTIAL PARK SITES BY  
PLANNING ANALYSIS AREA IN WALWORTH COUNTY: 1975**

Planning Analysis Area	Site Value	Remaining Potential Park Sites by Relationship To Primary Environmental Corridors										Number of Remaining Potential Park Sites by Specific Development Possibility					
		Number of Sites				Area											
		Entirely Within Primary Environmental Corridor	Partially Within Primary Environmental Corridor	Entirely Outside Primary Environmental Corridor	Total	Within Primary Environmental Corridor		Outside Primary Environmental Corridor		Total							
						Acres	Percent	Acres	Percent	Acres	Percent	Swimming	Picnicking	Nature Study	Campground	Hiking Trails	Golf
56	High	2	15	--	17	2,806	70.4	1,179	29.6	3,985	100.0	4	17	14	11	10	3
	Medium	1	2	5	8	634	39.5	973	60.5	1,607	100.0	--	8	3	5	4	2
	Low	--	1	6	7	9	2.4	361	97.6	370	100.0	--	4	--	1	--	--
	Total	3	18	11	32	3,449	57.8	2,513	42.2	5,962	100.0	4	29	17	17	14	5
57	High	2	6	--	8	724	74.1	253	25.9	977	100.0	3	8	6	7	7	1
	Medium	3	9	2	14	1,092	78.3	303	21.7	1,395	100.0	1	13	11	12	5	1
	Low	--	2	3	5	122	34.1	236	65.9	358	100.0	--	1	1	1	1	--
	Total	5	17	5	27	1,938	71.0	792	29.0	2,730	100.0	4	22	18	20	13	2
58	High	--	7	--	7	2,637	70.6	1,096	29.4	3,733	100.0	2	6	7	6	6	2
	Medium	--	1	2	3	85	30.8	191	69.2	276	100.0	--	3	3	2	1	--
	Low	--	1	8	9	28	4.4	615	95.6	643	100.0	1	4	3	1	--	--
	Total	--	9	10	19	2,750	59.1	1,902	40.9	4,652	100.0	3	13	13	9	7	2
59	High	3	13	2	18	3,071	59.0	2,132	41.0	5,203	100.0	1	18	18	13	17	2
	Medium	2	6	7	15	1,127	44.1	1,430	55.9	2,557	100.0	1	14	9	8	8	4
	Low	3	10	17	30	947	36.2	1,670	63.8	2,617	100.0	--	16	10	8	7	1
	Total	8	29	26	63	5,145	49.6	5,232	50.4	10,377	100.0	2	48	37	29	32	7
60	High	--	4	--	4	1,195	59.2	823	40.8	2,018	100.0	1	4	4	4	3	1
	Medium	--	5	9	14	342	19.8	1,385	80.2	1,727	100.0	--	14	12	9	7	4
	Low	--	3	8	11	101	10.2	888	89.8	989	100.0	--	9	6	2	1	--
	Total	--	12	17	29	1,638	34.6	3,096	65.4	4,734	100.0	1	27	22	15	11	5
County Total	High	7	45	2	54	10,433	65.6	5,483	34.4	15,916	100.0	11	53	49	41	43	9
	Medium	6	23	25	54	3,280	43.4	4,282	56.6	7,562	100.0	2	52	38	36	25	11
	Low	3	17	42	62	1,207	24.3	3,770	75.7	4,977	100.0	1	34	20	13	9	1
	Total	16	85	69	170	14,920	52.4	13,535	47.6	28,455	100.0	14	139	107	90	77	21

Source: SEWRPC.

Table L-6

**CHARACTERISTICS OF REMAINING POTENTIAL PARK SITES BY  
PLANNING ANALYSIS AREA IN WASHINGTON COUNTY: 1975**

Planning Analysis Area	Site Value	Remaining Potential Park Sites by Relationship to Primary Environmental Corridors										Number of Remaining Potential Park Sites by Specific Development Possibility					
		Number of Sites				Area											
		Entirely Within Primary Environmental Corridor	Partially Within Primary Environmental Corridor	Entirely Outside Primary Environmental Corridor	Total	Within Primary Environmental Corridor		Outside Primary Environmental Corridor		Total							
						Acres	Percent	Acres	Percent	Acres	Percent						
6	High	1	4	1	6	420	33.9	819	66.1	1,239	100.0	1	5	6	5	6	1
	Medium	--	3	1	4	571	68.8	259	31.2	830	100.0	--	4	4	4	4	1
	Low	--	2	2	4	182	48.0	197	52.0	379	100.0	--	2	4	1	2	--
	Total	1	9	4	14	1,173	47.9	1,275	52.1	2,448	100.0	1	11	14	10	12	2
7	High	2	12	--	14	2,315	67.7	1,106	32.3	3,421	100.0	5	13	14	9	10	5
	Medium	--	3	1	4	229	55.0	187	45.0	416	100.0	--	4	4	3	3	1
	Low	--	6	1	7	1,005	71.5	401	28.5	1,406	100.0	1	3	7	1	4	1
	Total	2	21	2	25	3,549	67.7	1,694	32.3	5,243	100.0	6	20	25	13	17	7
8	High	--	--	--	--	0	--	0	--	0	--	--	--	--	--	--	--
	Medium	--	1	1	2	145	24.8	440	75.2	585	100.0	--	2	2	2	2	2
	Low	--	3	--	3	158	33.6	312	66.4	470	100.0	--	--	2	--	--	2
	Total	--	4	1	5	303	28.7	752	71.3	1,055	100.0	--	2	4	2	2	4
9	High	--	2	1	3	548	66.8	272	33.2	820	100.0	2	2	3	1	2	--
	Medium	--	--	3	3	0	--	163	100.0	163	100.0	--	2	2	1	2	--
	Low	1	--	1	2	92	56.4	71	43.6	163	100.0	--	--	2	--	--	--
	Total	1	2	5	8	640	55.8	506	44.2	1,146	100.0	2	4	7	2	4	--
10	High	--	2	3	5	329	32.5	684	67.5	1,013	100.0	--	5	5	3	5	--
	Medium	--	1	2	3	55	20.2	217	79.8	272	100.0	1	3	2	3	3	--
	Low	--	3	3	6	362	22.4	1,257	77.6	1,619	100.0	1	6	4	2	3	1
	Total	--	6	8	14	746	25.7	2,158	74.3	2,904	100.0	2	14	11	8	11	1
11	High	1	--	--	1	40	100.0	0	--	40	100.0	--	1	1	1	--	--
	Medium	--	3	--	3	119	65.4	63	34.6	182	100.0	--	3	3	1	1	--
	Low	2	3	--	5	237	41.9	329	58.1	566	100.0	--	3	2	--	--	--
	Total	3	6	--	9	396	50.3	392	49.7	788	100.0	--	7	6	2	1	--
12	High	1	6	1	8	1,209	60.5	790	39.5	1,999	100.0	3	8	8	6	7	--
	Medium	1	6	--	7	944	79.2	248	20.8	1,192	100.0	--	6	7	6	4	--
	Low	--	2	2	4	369	51.0	355	49.0	724	100.0	--	2	4	--	2	--
	Total	2	14	3	19	2,522	64.4	1,393	35.6	3,915	100.0	3	16	19	12	13	--
County Total	High	5	26	6	37	4,861	57.0	3,671	43.0	8,532	100.0	11	34	37	25	30	6
	Medium	1	17	8	26	2,063	56.7	1,577	43.3	3,640	100.0	1	24	24	20	19	4
	Low	3	19	9	31	2,405	45.1	2,922	54.9	5,327	100.0	2	16	25	4	11	4
	Total	9	62	23	94	9,329	53.3	8,170	46.7	17,499	100.0	14	74	86	49	60	14

Source: SEWRPC.



Table L-7

**CHARACTERISTICS OF REMAINING POTENTIAL PARK SITES BY  
PLANNING ANALYSIS AREA IN WAUKESHA COUNTY: 1975**

Planning Analysis Area	Site Value	Remaining Potential Park Sites by Relationship to Primary Environmental Corridors										Number of Remaining Potential Park Sites by Specific Development Possibility					
		Number of Sites				Area											
		Entirely Within Primary Environmental Corridor	Partially Within Primary Environmental Corridor	Entirely Outside Primary Environmental Corridor	Total	Within Primary Environmental Corridor		Outside Primary Environmental Corridor		Total							
						Acres	Percent	Acres	Percent	Acres	Percent						
32	High	--	1	--	1	1,178	66.5	594	33.5	1,772	100.0	--	--	1	--	--	--
	Medium	--	1	2	3	41	14.4	243	85.6	284	100.0	--	3	3	2	3	--
	Low	--	3	--	3	150	71.1	61	28.9	211	100.0	--	3	2	1	2	1
	Total	--	5	2	7	1,369	60.4	898	39.6	2,267	100.0	--	6	6	3	5	1
33	High	--	1	2	3	44	12.8	300	87.2	344	100.0	--	3	3	1	1	--
	Medium	--	5	1	6	445	70.4	187	29.6	632	100.0	--	5	6	3	5	--
	Low	1	2	--	3	370	91.8	33	8.2	403	100.0	--	3	3	--	2	--
	Total	1	8	3	12	859	62.3	520	37.7	1,379	100.0	--	11	12	4	8	--
34	High	--	--	2	2	0	--	244	100.0	244	100.0	--	2	2	1	2	--
	Medium	--	--	4	4	0	--	687	100.0	687	100.0	--	3	3	2	3	2
	Low	--	--	5	5	0	--	490	100.0	490	100.0	--	1	2	--	2	--
	Total	--	--	11	11	0	--	1,421	100.0	1,421	100.0	--	6	7	3	7	2
35	High	--	--	1	1	0	--	213	100.0	213	100.0	--	1	--	--	--	1
	Medium	--	--	1	1	0	--	159	100.0	159	100.0	--	1	1	1	1	--
	Low	--	3	--	3	176	61.5	110	38.5	286	100.0	--	3	--	--	--	--
	Total	--	3	2	5	176	26.7	482	73.3	658	100.0	--	5	1	1	1	1
36	High	--	3	--	3	342	58.8	240	41.2	582	100.0	1	3	3	3	3	--
	Medium	--	5	4	9	848	46.6	971	53.4	1,819	100.0	--	8	7	8	8	--
	Low	--	4	3	7	683	51.6	646	48.4	1,323	100.0	--	5	4	5	4	1
	Total	--	12	7	19	1,873	50.3	1,851	49.7	3,724	100.0	1	16	14	16	15	1
37	High	--	4	--	4	878	56.0	689	44.0	1,567	100.0	1	4	4	3	3	--
	Medium	--	1	2	3	120	19.4	500	80.6	620	100.0	2	3	2	2	2	--
	Low	--	2	3	5	96	13.5	613	86.5	709	100.0	1	5	2	3	2	1
	Total	--	7	5	12	1,094	37.8	1,802	62.2	2,896	100.0	4	12	8	8	7	1
38	High	--	2	--	2	239	53.0	212	47.0	451	100.0	--	2	2	2	2	1
	Medium	--	2	--	2	293	53.1	259	46.9	552	100.0	--	2	2	2	2	2
	Low	--	1	--	1	87	100.0	0	--	87	100.0	--	1	1	1	--	--
	Total	--	5	--	5	619	56.8	471	43.2	1,090	100.0	--	5	5	5	4	3
39	High	1	11	1	13	1,070	49.8	1,080	50.2	2,150	100.0	6	13	8	8	5	4
	Medium	--	8	3	11	1,012	37.5	1,689	62.5	2,701	100.0	4	11	10	8	7	4
	Low	2	4	3	9	1,174	52.4	1,066	47.6	2,240	100.0	--	6	5	2	3	2
	Total	3	23	7	33	3,256	45.9	3,835	54.1	7,091	100.0	10	30	23	18	15	10
40	High	--	3	--	3	228	43.2	300	56.8	528	100.0	--	3	3	3	3	--
	Medium	--	6	5	11	1,029	35.2	1,889	64.8	2,916	100.0	1	10	9	8	8	2
	Low	--	1	5	6	241	25.5	705	74.5	946	100.0	--	4	3	2	1	3
	Total	--	10	10	20	1,496	34.1	2,894	65.9	4,390	100.0	1	17	15	13	12	5
41	High	--	3	2	5	291	25.1	868	74.9	1,159	100.0	3	5	3	4	3	1
	Medium	--	6	6	12	691	21.6	2,501	78.4	3,192	100.0	--	12	11	9	6	5
	Low	2	2	3	7	668	38.0	1,092	62.0	1,760	100.0	--	7	6	2	4	2
	Total	2	11	11	24	1,650	27.0	4,461	73.0	6,111	100.0	3	24	20	15	13	8
42	High	2	12	3	17	2,526	55.6	2,016	44.4	4,542	100.0	2	17	16	15	12	3
	Medium	2	4	3	9	325	27.5	858	72.5	1,183	100.0	--	8	9	7	6	--
	Low	--	--	6	6	0	--	612	100.0	612	100.0	--	3	4	2	3	1
	Total	4	16	12	32	2,851	45.0	3,486	55.0	6,337	100.0	2	28	29	24	21	4
County Total	High	3	40	11	54	6,796	79.6	6,756	20.4	13,552	100.0	13	53	45	40	34	10
	Medium	2	38	31	71	4,802	56.3	9,943	43.7	14,745	100.0	7	66	63	52	51	15
	Low	5	22	28	55	3,645	49.0	5,422	51.0	9,067	100.0	1	41	32	18	23	11
	Total	10	100	70	180	15,243	61.2	22,121	38.8	37,364	100.0	21	160	140	110	108	36

Source: SEWRPC.

(This page intentionally left blank)

# Appendix M

## INFLUENCE OF PARK AND OPEN SPACE ON RESIDENTIAL LAND VALUE SURVEY FORM—HOUSEHOLD INTERVIEW SURVEY

Address: \_\_\_\_\_  
(street) (minor civil division)

Park, Parkway: \_\_\_\_\_

Sample Number: \_\_\_\_\_

--	--	--

- Distance from park: 1) house abuts on park  
2) house is across street from park  
3) house is within sight of park  
4) house is one block away from park  
5) house is two blocks away from park  
6) house is three blocks away from park

--

At the request of Milwaukee County, the Southeastern Wisconsin Regional Planning Commission is conducting a special land value study to determine the impact of parks and parkways on surrounding residential land. As part of this study, the Commission is investigating the attitudes and preferences of households who reside near parks and parkways regarding the location in which they live.

1. When did you move into this house? \_\_\_\_\_

--	--

2a. This house is located near \_\_\_\_\_ Park (Parkway). In general, how satisfied are you with living near the park? Would you say that you are 1) very satisfied, 2) somewhat satisfied, 3) somewhat dissatisfied, or 4) very dissatisfied?

--

2b. Why do you feel this way? \_\_\_\_\_

--	--

3a. Did nearness to the park influence your decision to buy this house? 1) yes 2) no

--

3b. If yes: Would you say that you were initially 1) very much attracted, 2) somewhat attracted, or 3) only slightly attracted by nearness to this park?

--

4a. Since moving into this house, have your feelings changed about living near to the park? 1) yes 2) no

--

4b. If yes: Would you say that you have become 1) more satisfied, 2) less satisfied living near to the park?

--

4c. Why do you feel this way? \_\_\_\_\_

--	--

5a. Do you or does any member of your family use this park for recreational purposes? 1) yes 2) no

--

5b. If yes: How often? 1) not at all  
2) seldom  
3) frequently

--

6a. Do you think that nearness to the park has any effect on the value of your house? 1) yes 2) no  
If no, continue with question 7.

--

6b. If yes, does nearness to the park have a positive or negative effect on the value of your house?  
1) positive 2) negative

--

6c. Approximately how much would you sell this house for if you were to sell it today? \_\_\_\_\_

--	--

6d. If 6b is "positive": Approximately how much of this figure would you attribute to the location of your house—that is, to its nearness to the park? \_\_\_\_\_

Interview is completed.

--	--

6e. If 6b is "negative": Approximately how much lower is this figure than the selling price of a similar unit located some distance from the park? \_\_\_\_\_ Interview is completed.

--	--

7. Approximately how much did you pay for this house when you first moved into it? \_\_\_\_\_

--	--

8a. When you purchased this house, in your opinion did you pay 1) a higher price, 2) a lower price, or 3) the same price as you would have for a similar unit located some distance from the park? ☐ If "same," interview is completed.

--

8b. If "higher": How much more do you think you paid? \_\_\_\_\_

--	--

8c. If lower: How much less do you think you paid? \_\_\_\_\_

--	--



## Appendix N

### DEVELOPMENT OBJECTIVES ADOPTED UNDER PREVIOUS COMMON PLANNING PROGRAMS WHICH ARE RELEVANT TO PARK AND OPEN SPACE PLANNING

Commission Planning Report	Development Objective
SEWRPC Planning Report No. 7, <u>The Regional Land Use- Transportation Study</u>	<p style="text-align: center;">OBJECTIVE NO. 3</p> <p>A spatial distribution of the various land uses which will result in the protection, wise use, and development of the natural resources of the Region.</p>
SEWRPC Planning Report No. 9, <u>A Comprehensive Plan for the Root River Watershed</u>	<p style="text-align: center;">OBJECTIVE NO. 2</p> <p>An integrated system of water control facilities and pollution abatement devices adequate to ensure a quality of stream water permitting the following beneficial water uses:</p> <ul style="list-style-type: none"> <li>a. Recreation involving body contact</li> <li>b. Preservation of facultative fish life</li> <li>c. Wildlife and livestock watering</li> <li>d. Aesthetic setting for residential and recreational land use development</li> </ul>
SEWRPC Planning Report No. 12, A Comprehensive Plan for the Fox River Watershed, Volume Two	<p style="text-align: center;">OBJECTIVE NO. 2</p> <p>An integrated system of land management and water quality control facilities and pollution abatement devices adequate to ensure a quality of stream water permitting the following beneficial water uses in each of the following reaches of the stream system:</p> <p>The Fox River from a point five miles downstream from the Waukesha Sewage Treatment Plant outfall line to the Illinois State line shall have a level of water quality suitable for the following uses:</p> <ul style="list-style-type: none"> <li>a. Minimum standards</li> <li>b. Fish and other aquatic life</li> <li>c. Recreational use</li> <li>d. Industrial and cooling water use</li> </ul> <p>The Fox River from a point five miles downstream from the Waukesha Sewage Treatment Plant outfall line to the Barstow Street Dam in the City of Waukesha:</p> <ul style="list-style-type: none"> <li>a. Minimum standards</li> <li>b. Industrial and cooling water use</li> </ul> <p>The Fox River upstream from the Barstow Street Dam in the City of Waukesha:</p> <ul style="list-style-type: none"> <li>a. Minimum standards</li> <li>b. Fish and other aquatic life</li> <li>c. Recreational use—partial body contact recreational uses only</li> </ul>

Commission Planning Report	Development Objective	
SEWRPC Planning Report No. 12, (continued)	OBJECTIVE NO. 2 (continued)	
	The following major tributaries of the Fox River shall have a level of water quality suitable for the following water uses:	
	Bassett Creek	Ore Creek
	Beulah Lake Outlet	Pebble Brook
	Brandy Brook	Pebble Creek
	Como Creek	Peterson Creek
	Deer Creek	Poplar Creek
	Eagle Creek	Silver Lake Outlet
	Genesee Creek	Spring Lake Outlet
	Hoosier Creek	Sugar Creek
Jericho Creek	Waubeesee Drainage Canal	
Kee Nong Go Mong Lake Canal	White River	
Mill Creek	Wind Lake Canal	
Mukwonago River		
	a. Minimum standards	
	b. Recreational use	
	c. Fish and other aquatic life	
	The following major tributaries of the Fox River: Nippersink Creek, Muskego Canal, and Pewaukee River, shall have a level of water quality suitable for the following water uses:	
	a. Minimum standards	
	b. Recreational use—partial body contact recreational uses	
	c. Fish and other aquatic life	
	The remaining two streams tributary to the Fox River shall have a level of water quality suitable for the following water uses:	
	1. Honey Creek	
	a. Minimum standards	
	b. Fish and other aquatic life	
	c. Recreational use	
	d. Industrial and cooling use	
	2. Sussex Creek	
	a. Minimum standards	
	b. Recreational use—partial body contact only	

Commission Planning Report	Development Objective
<p>SEWRPC Planning Report No. 12, (continued)</p>	<p style="text-align: center;"><b>OBJECTIVE NO. 3</b></p> <p>An integrated system of land management and water control facilities and pollution abatement devices adequate to ensure a quality of lake water necessary to permit the following beneficial water uses in each of the following lakes:</p> <p>For Echo, Long, North, Silver (Walworth County), and Peters Lakes:</p> <ul style="list-style-type: none"> <li>a. Minimum standards</li> <li>b. Recreational use—partial body contact only</li> <li>c. Fish and aquatic life</li> <li>d. Wildlife watering</li> </ul> <p>For Eagle, Tichigan, Wind, Eagle Spring, and Big Muskego Lakes:</p> <ul style="list-style-type: none"> <li>a. Minimum standards</li> <li>b. Recreational use—full or partial body contact</li> <li>c. Fish and aquatic life</li> <li>d. Wildlife watering</li> </ul> <p>The use of these lakes for full body contact recreation is subject to the financial feasibility of attaining the higher level of water quality required.</p> <p>For all 35 other lakes within the watershed having a surface area of 50 acres or more:</p> <ul style="list-style-type: none"> <li>a. Minimum standards</li> <li>b. Recreational use—full body contact</li> <li>c. Fish and aquatic life</li> <li>d. Wildlife watering</li> </ul>
<p>SEWRPC Planning Report No. 13, A Comprehensive Plan for the Milwaukee River Watershed, Volume Two</p>	<p style="text-align: center;"><b>OBJECTIVE NO. 2</b></p> <p>An integrated system of land management and water quality control facilities and pollution abatement devices adequate to ensure a quality of stream water permitting the following beneficial water uses in each of the following reaches of the stream system:</p> <p>The Milwaukee River from its headwaters to the North Avenue Dam shall have a level of water quality suitable for the following water uses:</p> <ul style="list-style-type: none"> <li>a. Minimum standards</li> <li>b. Fish and other aquatic life</li> <li>c. Recreational use—full body contact</li> <li>d. Industrial and cooling water use</li> </ul> <p>The Milwaukee River from the North Avenue Dam to the Milwaukee Harbor in the City of Milwaukee:</p> <ul style="list-style-type: none"> <li>a. Minimum standards</li> <li>b. Industrial and cooling water use</li> <li>c. Recreational use—partial body contact only</li> </ul>

Commission Planning Report	Development Objective
SEWRPC Planning Report No. 13, (continued)	OBJECTIVE NO. 2 (continued)
	The following major tributaries of the Milwaukee River shall have a level of water quality suitable for the following water uses:
	Cedar Creek except in Cedarburg North Branch Milwaukee River East Branch Milwaukee River West Branch Milwaukee River
	Silver Creek (Sherman Township) Adell Tributary Silver Creek (West Bend Township) Pigeon Creek
	a. Minimum standards
	b. Recreational use—full body contact
	c. Fish and other aquatic life
	The remaining three streams tributary to the Milwaukee River shall have a level of water quality suitable for the following water uses:
	1. Cedar Creek in Cedarburg
	a. Minimum standards
b. Fish and other aquatic life	
c. Recreational use—full body contact	
d. Industrial and cooling water use	
2. Lincoln Creek	
a. Minimum standards	
b. Recreational use—partial body contact only	
3. Indian Creek	
a. Minimum standards	
OBJECTIVE NO. 3	
An integrated system of land management and water quality control facilities and pollution abatement devices adequate to ensure a quality of lake water permitting the following beneficial water uses in each of the following lakes and impoundments:	
For West Bend Dam Pond and Woolen Mills Dam Pond:	
a. Minimum standards	
b. Industrial and cooling water use	
c. Recreational use—full body contact	
d. Fish and other aquatic life	
e. Wildlife watering	
For all remaining 19 lakes having a surface area of 50 acres or more:	
a. Minimum standards	
b. Recreational use—full body contact	
c. Fish and other aquatic life	
d. Wildlife watering	



Commission Planning Report	Development Objective
SEWRPC Planning Report No. 16, <u>A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin</u>	<p>OBJECTIVE NO. 2</p> <p><i>The development of sanitary sewerage systems so as to meet established water use objectives and supporting water quality standards.</i></p>
SEWRPC Planning Report No. 26, <u>A Comprehensive Plan for the Menomonee River Watershed,</u> Volume Two	<p>OBJECTIVE NO. 2</p> <p>An integrated system of land management and water quality control facilities and pollution abatement devices adequate to assure a quality of surface water necessary to meet the water use objectives.</p> <p>OBJECTIVE NO. 3</p> <p>The attainment of sound groundwater resource development and protective practices to minimize the possibility for pollution and depletion of the groundwater resources.</p>

Source: SEWRPC.

## Appendix O

### FORMULATION OF PER CAPITA FACILITY STANDARDS FOR INTENSIVE OUTDOOR RECREATION ACTIVITIES

#### OBJECTIVE

The purpose of this Appendix is to describe the methodology used in the formulation of per capita facility standards for intensive outdoor recreation activities presented in Chapter XI, including both resource-oriented and nonresource-oriented activities.

#### OVERVIEW

With the exception of a limited few facility standards published by the National Recreation and Parks Association, per capita standards for outdoor recreation facilities are almost nonexistent. Moreover, such facility standards as do exist are not uniformly applicable from region to region because recreation demands vary by geographic locality. The formulation of recreation facility standards, recognizing the unique needs and preferences of the resident population of southeastern Wisconsin, relied heavily on the results of a survey of recreation site managers conducted as part of the regional park study. These data provided a good indication of the adequacy of the existing facilities on a per capita basis for use in the formulation of standards.

The first step in the formulation of per capita standards for the various intensive outdoor recreation facilities was a determination of the existing level of provision of each type of facility on a per capita basis. These per capita figures were then adjusted to take into account any current overuse of that type of facility, evident from the results of the site manager survey. A facility was considered to be overused if, according to the results of the site manager survey, at least three-fourths of the facilities were heavily used on the peak day of the week. Existing per capita figures for overused facilities were initially adjusted as follows:

Percent of Sites with Heavy Use	Percent Increase Over Existing Per Capita Figure
75-89	10
90+	25

After this initial adjustment, the per capita figures for certain facilities were further adjusted to incorporate the views of the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning as well as the professional judgment of the staff.

The recommended per capita facility standards for intensive outdoor recreation activities prescribe facility requirements for both the public and nonpublic sectors. Recommended per capita facility standards for the nonpublic sector are, for the most part, the same as the existing per capita provision of such nonpublic facilities. Adjustments required to remedy the current overuse of facilities were recommended primarily for the public sector.

#### Resource-Oriented Facilities

Intensive resource-oriented outdoor recreation facilities, including camp sites, golf courses, picnic areas, skiing areas, and swimming beaches, generally attract users from relatively long distances and serve residents of both urban and rural areas. Accordingly, the recommended per capita facility standards for intensive resource-oriented recreation activities are intended to be applied to the total population—both urban and rural components—of the Region.

The results of the site manager survey indicated that picnic areas, ski hills, and swimming beaches in the Region are currently neither overused nor underused. The recommended per capita standards for picnic tables, ski hills, and swimming beaches are, therefore, the same as the existing per capita provision of these facilities in the Region. Conversely, the site manager survey indicated that camp sites in the Region are presently overused, with 75 percent of the camping areas included in the site manager survey experiencing heavy use. In order to reduce the intensity of use, the regional park and open space plan recommends provision of 0.35 public camp site per thousand persons in the Region, an increase of 13 percent over the existing level of 0.31 public camp site per thousand persons (see Table O-1).

Table O-1

## PER CAPITA FACILITY STANDARDS FOR INTENSIVE RESOURCE-ORIENTED RECREATION ACTIVITIES

Activity	Facility	Ownership	Percent of Site Manager Sites with Heavy Use <sup>a</sup>	Facilities per Thousand Persons 1973	Recommended Standard (Facilities per Thousand Persons)	Percent Change
Camping . . . .	Camp Site	Public		0.31	0.35	12.9
		Nonpublic		1.47	1.47	--
		Total	75	1.78	1.82	2.2
Golf . . . . .	Regulation 18-Hole Course	Public		0.010	0.013	30.0
		Nonpublic		0.032	0.027	- 15.6
		Total	54	0.042	0.040	- 4.8
Picnicking . . .	Tables	Public		6.35 <sup>b</sup>	6.35 <sup>b</sup>	--
		Nonpublic		2.39	2.39	--
		Total	47 <sup>b</sup>	8.74	8.74	--
Skiing . . . . .	Developed Slope (acres)	Public		0.01	0.01	--
		Nonpublic		0.09	0.09	--
		Total	42	0.10	0.10	--
Swimming . . .	Inland Beach (linear feet)	Public		6	6	--
		Nonpublic		12	12	--
		Total	53	18	18	--
	Lake Michigan Beach (linear feet)	Public		16	16	--
		Nonpublic		--	--	--
		Total	-- <sup>c</sup>	16	16	--

<sup>a</sup> Percent of sites with heavy use on a weekend day. Information concerning level of use pertains to public and nonpublic sites combined.

<sup>b</sup> Figures pertain to resource-oriented picnicking and local picnicking combined.

<sup>c</sup> Survey data are not available for Lake Michigan beaches.

Source: SEWRPC.

According to the site manager survey, golf courses in the Region are not overutilized, with only 54 percent of all public and nonpublic courses combined experiencing heavy use. The staff, therefore, proposed that the per capita standard for golf courses should be the same as the existing per capita provision of golf courses in the Region—namely, 0.010 public golf course per thousand persons and 0.032 nonpublic golf course per thousand persons. The Technical and Citizen Advisory Committee, in its review of the standards suggested by the staff, indicated that the public standard of 0.010 facility per thousand seemed low and recommended a substantial increase in this standard. The committee also recommended that the per capita standard for nonpublic golf courses be lowered somewhat to prevent an overall excess of golf courses in the Region. Subsequent analysis of the results of the site manager survey for public golf courses alone revealed that almost 75 percent of the public courses are presently heavily used while only 30 percent of the nonpublic courses currently experience heavy use. In order to relieve the current overuse of public courses, the Committee ultimately adopted a standard of 0.013 public golf course per thousand persons, an increase of 30 percent over the present level of 0.010 public course per thousand persons in the Region. The Committee also adopted a standard of 0.027 nonpublic golf course per thousand persons, a decrease of 16 percent from the present level of 0.032 nonpublic golf course per thousand population.

### Nonresource-Oriented Facilities

In contrast to resource-oriented facilities, facilities for intensive nonresource-oriented activities, including baseball, basketball, ice skating, playground activities, playfield activities, pool swimming, softball, and tennis, are typically provided in urban community or neighborhood parks. These parks usually are within walking distances of large concentrations of urban population. Such facilities should be located in urban areas where they are needed and where they can most efficiently and economically be provided and used. Accordingly, per capita facility standards for nonresource-oriented outdoor recreation activities are intended to be applied only to the urban population of the Region.

The methodology used in the preparation of the per capita standards for nonresource-oriented facilities is basically the same as that used in the formulation of resource-oriented facility standards—except for the focus on the urban population. Per capita standards for nonresource-oriented facilities were formulated upon a basis of considering the existing per capita provision of such facilities and the level of use of such facilities within the areas shown on Map O-1. These areas were selected because they are basically urban in nature, because they represent the full range of urban development densities, and because data required for the formulation of per capita standards could be readily assembled for this area. It should be noted that the per capita standards for nonresource-oriented recreation facilities developed within the context of these large urban areas are intended to be applied uniformly within all of the urban areas of the Region shown on Map 85 in Chapter XII.

According to the site manager survey, basketball courts, ice skating rinks, playfields, playgrounds, and swimming pools within the urban areas delineated on Map O-1 are neither overused nor underused. Accordingly, the recommended per capita facility standards for basketball courts, ice skating rinks, playfields, playgrounds, and swimming pools are the same as the existing per capita provision of these facilities within the study areas. Conversely, the site manager survey indicated that softball and baseball diamonds in the study areas are overused. In order to relieve the overuse of softball diamonds, the regional park and open space plan recommends the provision of 0.53 public diamond per thousand persons, an increase of 8 percent over the current level of 0.49 diamond per thousand (see Table O-2). The plan also proposes the provision of 0.09 public baseball diamond per thousand population, an increase of 12 percent over the figure of 0.08 diamond per thousand persons presently provided in the urban areas shown on Map O-1.

The site manager survey indicated that, of all intensive outdoor recreation facilities, tennis courts are the most overused. Virtually all tennis courts located in the urban areas shown on Map O-1 and included in the site manager survey presently experience heavy use. To help relieve this situation, the regional park and open space plan recommends the provision of 0.50 public tennis court per thousand persons, an increase of 22 percent over the present level of 0.41 tennis court per thousand persons in urban areas. To further relieve the existing overuse, the plan recommends a nonpublic standard of 0.10 court per thousand persons, an increase of 11 percent over the existing level of 0.09 nonpublic court per thousand. The proposed increase in the standard for nonpublic tennis courts appears to be reasonable in light of recent growth in private outdoor tennis facilities.

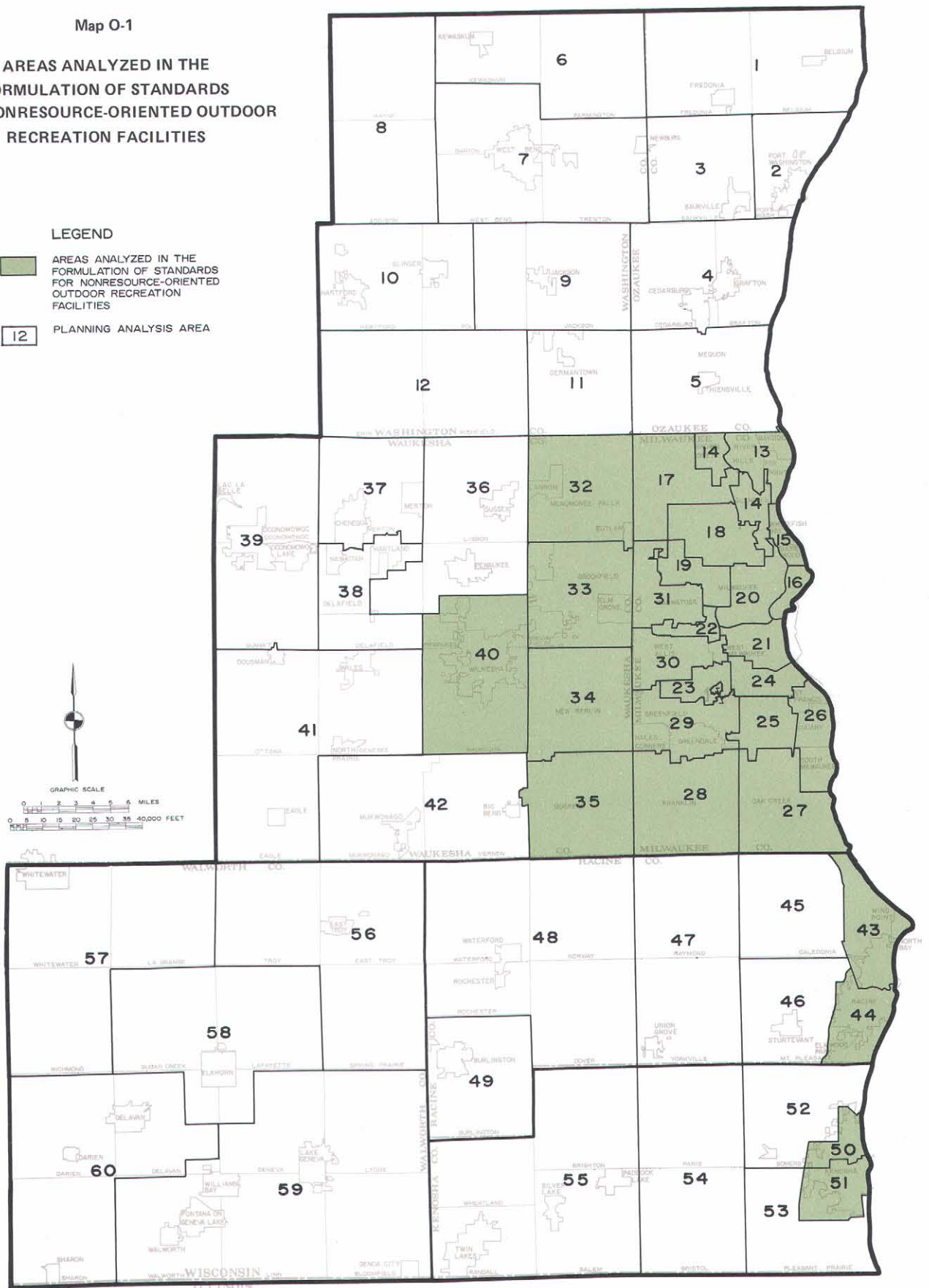


Map O-1

**AREAS ANALYZED IN THE  
FORMULATION OF STANDARDS  
FOR NONRESOURCE-ORIENTED OUTDOOR  
RECREATION FACILITIES**

**LEGEND**

- AREAS ANALYZED IN THE FORMULATION OF STANDARDS FOR NONRESOURCE-ORIENTED OUTDOOR RECREATION FACILITIES
- 12 PLANNING ANALYSIS AREA



Source: SEWRPC.

Table O-2

## PER CAPITA FACILITY STANDARDS FOR INTENSIVE NONRESOURCE-ORIENTED RECREATION ACTIVITIES

Activity	Facility	Ownership	Percent of Site Manager Sites with Heavy Use <sup>a</sup>	Facilities per Thousand Persons 1973 <sup>b</sup>	Recommended Standard (Facilities per Thousand Persons)	Percent Change
Baseball . . . . .	Diamond	Public		0.08	0.09	12.5
		Nonpublic		0.01	0.01	--
		Total	81	0.09	0.10	11.1
Basketball . . . . .	Goal	Public		0.91	0.91	--
		Nonpublic		0.22	0.22	--
		Total	63	1.13	1.13	--
Ice Skating . . . . .	Rink	Public		0.15	0.15	--
		Nonpublic		-- <sup>c</sup>	--	--
		Total	37	0.15	0.15	--
Playfield Activities . . . . .	Playfield	Public		0.39	0.39	--
		Nonpublic		0.11	0.11	--
		Total	39	0.50	0.50	--
Playground Activities . . . . .	Playground	Public		0.35	0.35	--
		Nonpublic		0.07	0.07	--
		Total	29	0.42	0.42	--
Softball . . . . .	Diamond	Public		0.49	0.53	8.2
		Nonpublic		0.07	0.07	--
		Total	77	0.56	0.60	7.1
Swimming . . . . .	Pool	Public		0.015	0.015	--
		Nonpublic		--	--	--
		Total	53	0.015	0.015	--
Tennis . . . . .	Court	Public		0.41	0.50	22.2
		Nonpublic		0.09	0.10	11.1
		Total	100	0.50	0.60	20.0

<sup>a</sup> Information concerning level of use pertains to public and nonpublic facilities combined within the urban areas delineated on Map O-1.

<sup>b</sup> Data relate to facilities and population within urban areas delineated on Map O-1.

<sup>c</sup> Less than 0.01 percent.

Source: SEWRPC.

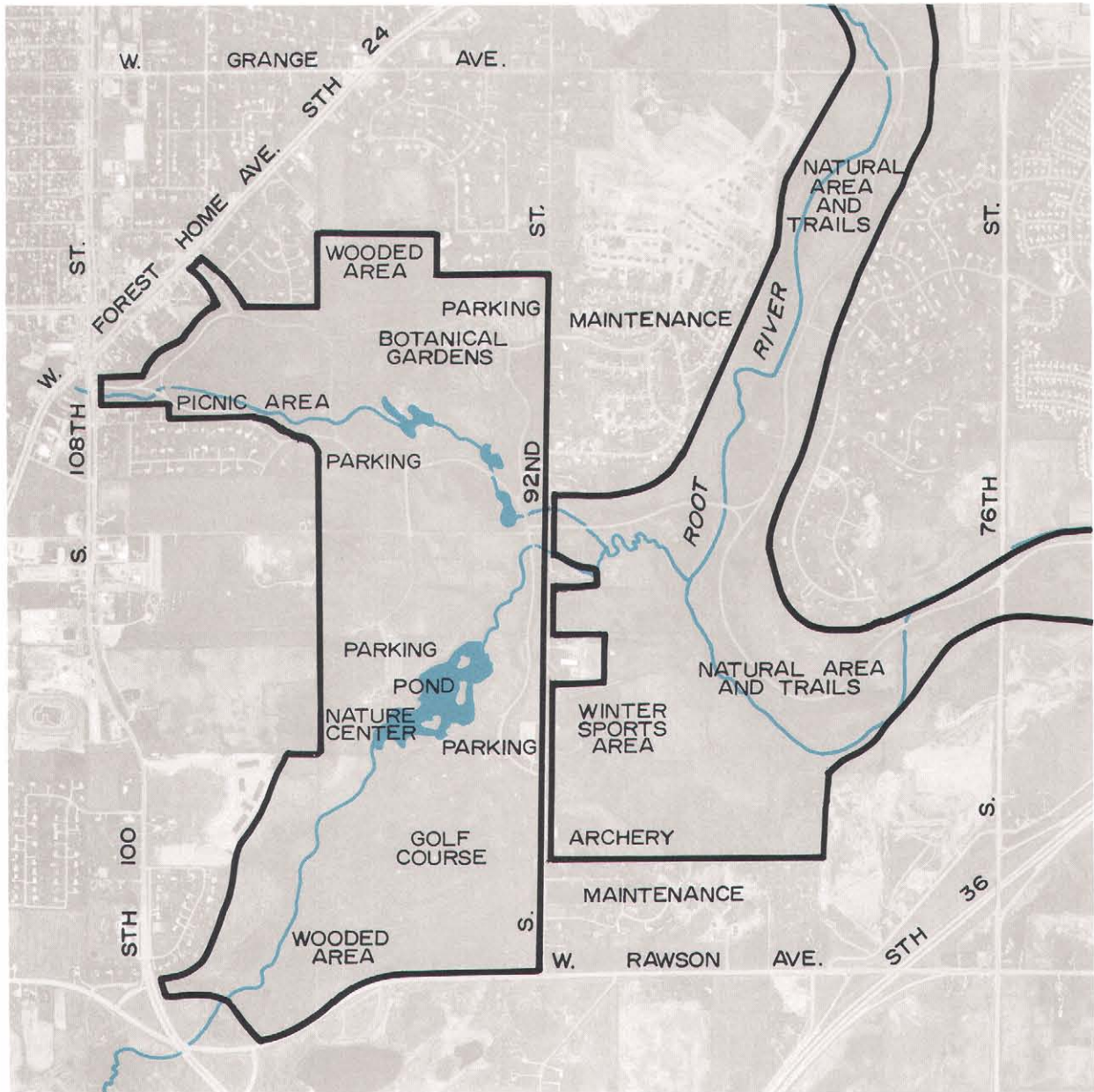
(This page intentionally left blank)

Appendix P

DESIGN OF GENERAL USE OUTDOOR RECREATION SITES BY TYPE

Figure P-1

SAMPLE TYPE I PARK, WHITNALL PARK, MILWAUKEE COUNTY

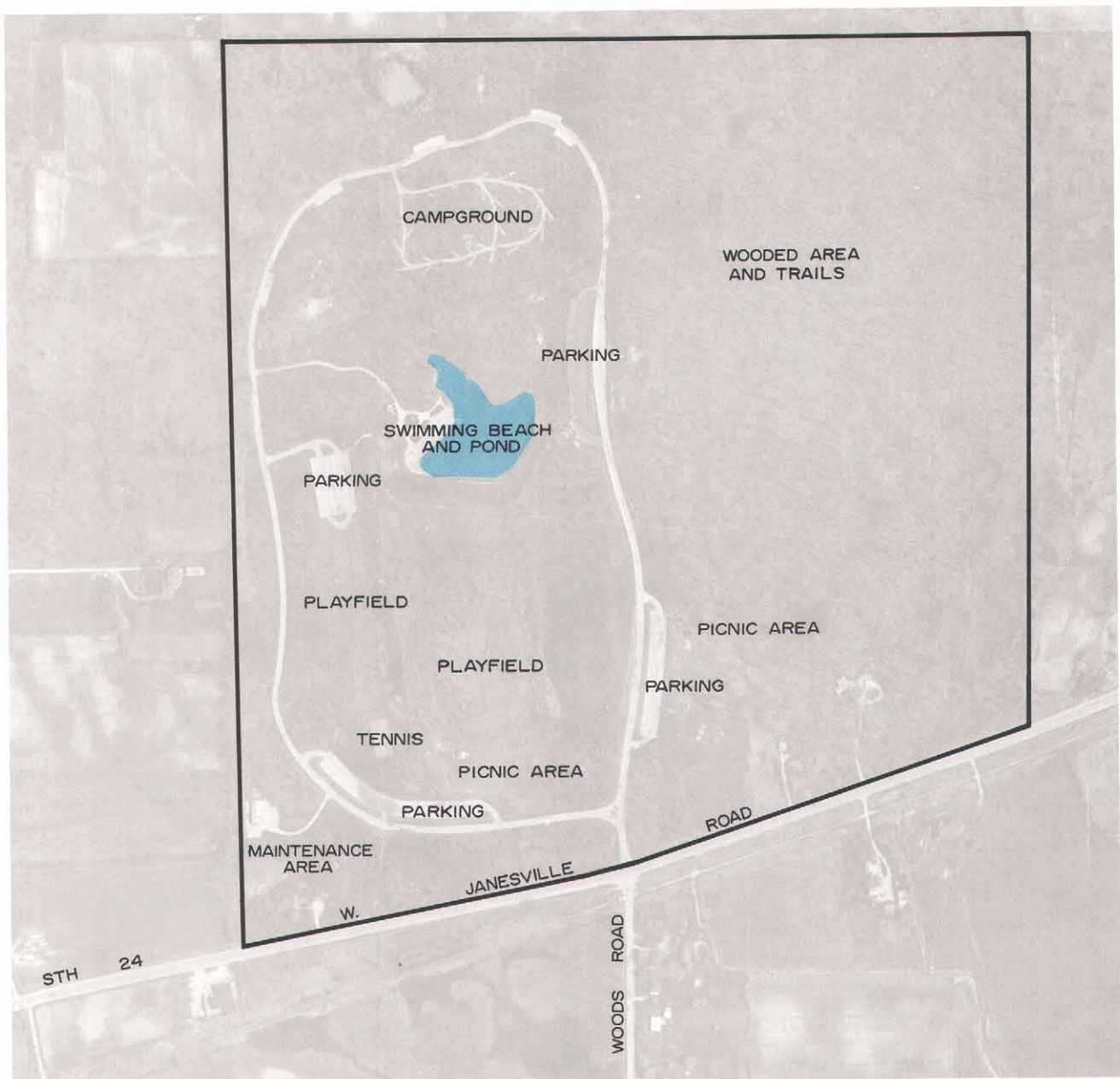


Source: SEWRPC.



Figure P-2

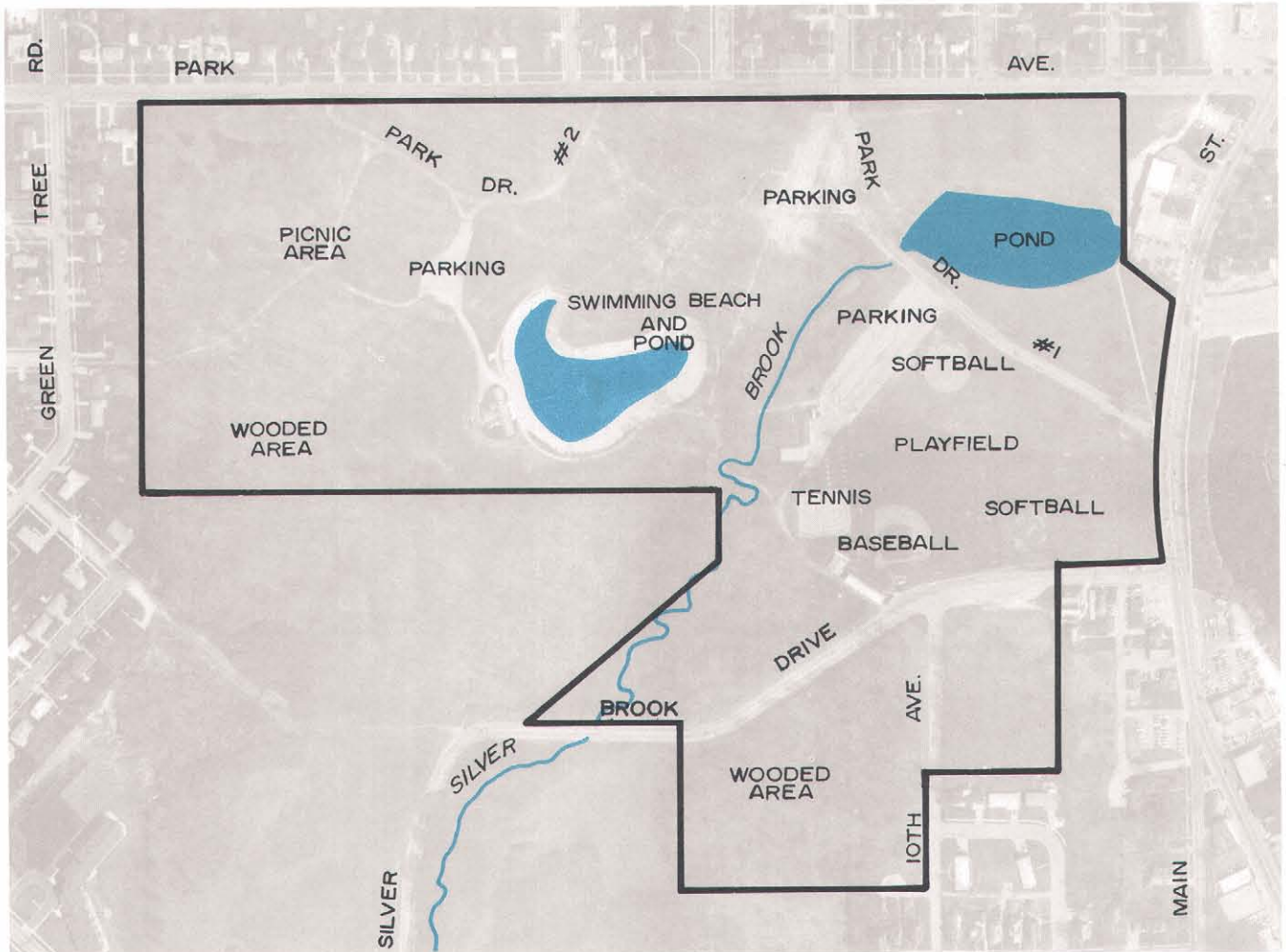
SAMPLE TYPE II PARK, MUSKEGO PARK, WAUKESHA COUNTY



Source: SEWRPC.

Figure P-3

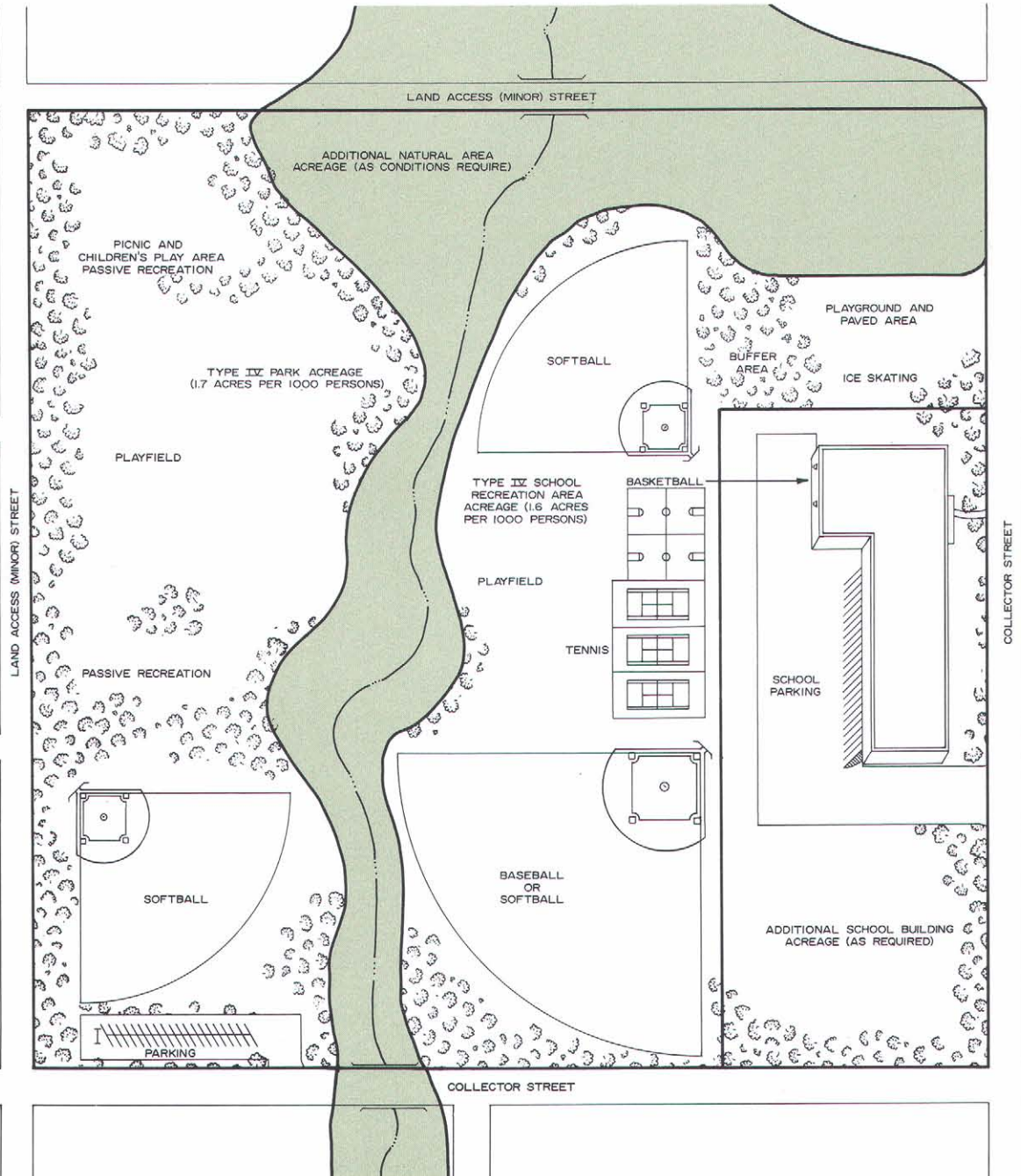
SAMPLE TYPE III PARK, REGNER PARK, WEST BEND, WASHINGTON COUNTY



Source: SEWRPC.

Figure P-4

TYPICAL TYPE IV NEIGHBORHOOD PARK AND SCHOOL RECREATION AREA



Source: SEWRPC.

A. Assumptions:

- 1) Neighborhood Density—Medium (2.30 to 6.99 dwelling units per net residential acre)
- 2) Population—6,500
- 3) Area—One Square Mile

B. Outdoor Recreation Site Requirements:<sup>a</sup>

Site Type	Minimum Standard Acreage Requirement	Total Acreage Required
Park	1.7 per 1,000	11.05
School	1.6 per 1,000	10.40
Park and School Combined	3.3 per 1,000	21.45

C. Outdoor Recreation Facility Requirements:<sup>a</sup>

Facility	Minimum Standard Public Facility Requirement	Number of Facilities Required	Total Acreage Required
Baseball Diamond	0.09 per 1,000	0.59 = 1 <sup>b</sup>	4.5
Basketball Goal	0.91 per 1,000	5.9 = 6	0.42
Ice Skating Rink	0.15 per 1,000	0.98 = 1	0.35 Minimum
Playfield	0.39 per 1,000	2.5 = 3	4.95 Minimum
Playground	0.35 per 1,000	2.3 = 2	1.24 Minimum
Softball Diamond	0.53 per 1,000	3.4 = 2 <sup>b</sup>	5.36
Tennis Court	0.50 per 1,000	3.3 = 3	0.96
		Subtotal	17.78 Minimum
Passive Recreation Area	(+10 percent)		1.8
Other Recreation Area	(+10 percent)		1.8
Total			21.38 Minimum

In addition, facilities for picnicking should be provided in Type IV parks.

D. Additional Acreage Requirements:

- 1) School Building—The acreage requirement for the school building should be considered an addition to the Type IV park-school acreage standard.

—In the typical Type IV site shown on Page 654, the area for this use is approximately seven acres.

- 2) Natural Areas—Natural areas may be incorporated into the design of Type IV sites. However, acreages for areas with steep slopes, poor soils, floodwater storage, and drainageways, should be considered as additions to the Type IV park-school acreage standard.

—In the typical Type IV site shown on page 654, the area for this use is approximately seven acres.

<sup>a</sup> Outdoor recreation site and facility requirements are set forth in Chapter XI.

<sup>b</sup> Though the provision of a baseball diamond is not strictly required through application of the standards, one baseball diamond replaced a softball diamond in the typical Type IV site shown on page 654.



# Appendix Q

## SCHEDULE OF COSTS OF THE PRELIMINARY RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN BY LEVEL OF GOVERNMENT BY COUNTY WITHIN THE REGION: 1975-2000

Table Q-1

## SCHEDULE OF CAPITAL AND OPERATION AND MAINTENANCE COSTS OF THE RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN BY LEVEL OF GOVERNMENT WITHIN KENOSHA COUNTY BY YEAR: 1975-2000

		County					Cities, Villages, Towns, School Districts					State					All Levels of Government				
		Major Parks Recreation Corridors Water Access Facilities Environmental Corridor Preservation					Local Parks Water Access Facilities					Major Parks Recreation Corridor Environmental Corridor Preservation									
Calendar Year	Project Year	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Total
1975	1	223,015	134,877	357,892	403,398	761,290	113,076	88,261	201,337	432,515	633,852	85,231	7,846	93,077	36,357	129,434	421,322	230,984	652,306	872,270	1,524,576
1976	2	223,015	134,877	357,892	417,296	775,188	113,077	88,260	201,337	438,630	639,967	85,231	7,846	93,077	37,514	130,691	421,323	230,983	652,306	893,540	1,545,846
1977	3	223,015	134,877	357,892	431,194	789,086	113,077	88,261	201,338	444,745	646,083	85,231	7,846	93,077	38,871	131,948	421,323	230,984	652,307	914,810	1,567,117
1978	4	223,015	134,877	357,892	445,092	802,984	113,077	88,260	201,337	450,860	652,197	85,230	7,847	93,077	40,128	133,205	421,322	230,984	652,306	936,080	1,588,386
1979	5	223,015	134,877	357,892	458,990	818,882	113,077	88,261	201,338	456,975	658,213	85,231	7,846	93,077	41,385	134,462	421,323	230,984	652,307	957,350	1,609,657
1980	6	223,015	134,877	357,892	472,888	830,780	113,077	88,260	201,337	463,090	664,427	85,231	7,846	93,077	42,642	135,719	421,323	230,983	652,306	978,520	1,630,926
1981	7	223,015	134,877	357,892	486,786	844,678	113,077	88,261	201,338	469,205	670,543	85,231	7,846	93,077	43,899	136,976	421,323	230,984	652,307	999,890	1,652,197
1982	8	223,015	134,877	357,892	500,684	858,576	113,077	88,260	201,337	475,320	676,657	85,231	7,846	93,077	45,156	138,233	421,323	230,983	652,306	1,021,160	1,673,466
1983	9	223,015	134,877	357,892	514,582	872,474	113,077	88,261	201,338	481,435	682,773	85,231	7,846	93,077	46,414	139,491	421,323	230,984	652,307	1,042,431	1,694,738
1984	10	223,015	134,877	357,892	528,480	886,372	113,077	88,260	201,337	487,550	688,887	85,231	7,846	93,077	47,672	140,749	421,323	230,983	652,306	1,063,702	1,716,008
1985	11	223,015	134,877	357,892	542,378	900,270	113,077	88,261	201,338	493,665	695,003	85,231	7,846	93,077	48,930	142,007	421,323	230,984	652,307	1,084,973	1,737,280
1986	12	223,015	134,877	357,892	556,276	914,168	113,077	88,261	201,338	499,780	701,118	85,231	7,846	93,077	50,188	143,265	421,323	230,984	652,307	1,106,244	1,758,551
1987	13	223,015	134,877	357,892	570,174	928,066	113,077	88,261	201,338	505,895	707,233	85,231	7,846	93,077	51,446	144,523	421,323	230,984	652,307	1,127,515	1,779,822
1988	14	223,015	134,877	357,892	584,072	941,964	113,077	88,261	201,338	512,010	713,348	85,230	7,847	93,077	52,704	145,781	421,322	230,985	652,307	1,148,786	1,801,093
1989	15	223,015	134,877	357,892	597,970	955,862	113,077	88,260	201,337	518,125	719,462	85,231	7,846	93,077	53,962	147,039	421,323	230,983	652,306	1,170,057	1,822,363
1990	16	223,015	134,877	357,892	611,868	969,760	113,077	88,261	201,338	524,240	725,578	85,230	7,846	93,076	55,220	148,296	421,322	230,984	652,306	1,191,328	1,843,634
1991	17	57,496	300,396	357,892	625,766	983,658	113,077	88,260	201,337	530,356	731,693	85,230	7,847	93,077	56,478	149,555	255,803	396,503	652,306	1,212,600	1,864,906
1992	18	57,496	300,396	357,892	639,664	997,556	113,077	88,261	201,338	536,472	737,810	85,231	7,846	93,077	57,736	150,813	255,804	396,504	652,307	1,233,872	1,886,179
1993	19	57,496	300,397	357,893	653,562	1,011,455	113,077	88,260	201,337	542,588	743,925	85,230	7,847	93,077	58,994	152,071	255,803	396,504	652,307	1,255,144	1,907,451
1994	20	57,496	300,397	357,893	667,460	1,025,353	113,077	88,261	201,338	548,704	750,042	85,231	7,846	93,077	60,252	153,329	255,804	396,504	652,308	1,276,416	1,928,724
1995	21	57,496	300,397	357,893	681,358	1,039,251	113,077	88,260	201,337	554,820	756,157	85,231	7,846	93,077	61,510	154,587	255,804	396,503	652,307	1,297,688	1,949,995
1996	22	57,496	300,397	357,893	695,256	1,053,149	113,077	88,261	201,338	560,936	762,274	85,231	7,846	93,077	62,768	155,845	255,804	396,504	652,308	1,318,960	1,971,268
1997	23	57,496	300,397	357,893	709,154	1,067,047	113,077	88,260	201,337	567,052	768,389	85,231	7,846	93,077	64,026	157,103	255,804	396,503	652,307	1,340,232	1,992,539
1998	24	57,496	300,397	357,893	723,052	1,080,945	113,077	88,261	201,338	573,168	774,506	85,231	7,846	93,077	65,284	158,361	255,804	396,504	652,308	1,361,504	2,013,812
1999	25	57,496	300,397	357,893	736,951	1,094,844	113,077	88,260	201,337	579,284	780,621	85,230	7,846	93,076	66,542	159,618	255,803	396,503	652,306	1,382,777	2,035,083
2000	26	57,496	300,397	357,893	750,850	1,108,743	113,076	88,261	201,337	585,400	786,737	85,231	7,846	93,077	67,800	160,877	255,803	396,504	652,307	1,404,050	2,056,357
Total		4,143,200	5,162,000	9,305,200	15,005,201	24,310,401	2,940,000	2,294,775	5,234,775	13,232,820	18,467,595	2,216,000	204,000	2,420,000	1,353,978	3,773,978	9,299,200	7,660,775	16,969,975	29,591,999	46,551,974
Annual Average		159,354	198,538	357,892	577,123	935,015	113,077	88,261	201,338	508,955	710,293	85,231	7,846	93,077	52,076	145,153	357,862	294,645	652,307	1,138,154	1,790,461

Source: SEWRPC

Table Q-2

## SCHEDULE OF CAPITAL AND OPERATION AND MAINTENANCE COSTS OF THE RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN BY LEVEL OF GOVERNMENT WITHIN MILWAUKEE COUNTY BY YEAR: 1975-2000

		County					Cities, Villages, Towns, School Districts					State									
		Major Parks Recreation Corridors Water Access Facilities Environmental Corridor Preservation					Local Parks Water Access Facilities					Major Parks Recreation Corridor Environmental Corridor Preservation					All Levels of Government				
Calendar Year	Project Year	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Total
1975	1	2,671,922	1,128,827	3,800,749	14,386,575	18,187,324	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,922	1,128,827	3,800,749	18,960,275	22,761,024
1976	2	2,671,924	1,128,825	3,800,749	14,420,650	18,221,399	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,924	1,128,825	3,800,749	18,994,350	22,795,099
1977	3	2,671,922	1,128,827	3,800,749	14,454,725	18,255,474	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,922	1,128,827	3,800,749	19,028,425	22,829,174
1978	4	2,671,923	1,128,826	3,800,749	14,488,800	18,289,549	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,062,500	22,863,249
1979	5	2,671,923	1,128,826	3,800,749	14,522,875	18,323,624	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,096,575	22,897,324
1980	6	2,671,923	1,128,826	3,800,749	14,556,950	18,357,699	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,130,650	22,931,399
1981	7	2,671,923	1,128,826	3,800,749	14,591,025	18,391,774	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,164,725	22,965,474
1982	8	2,671,924	1,128,825	3,800,749	14,625,100	18,425,849	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,924	1,128,825	3,800,749	19,198,800	22,999,549
1983	9	2,671,923	1,128,826	3,800,749	14,659,175	18,459,924	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,232,875	23,033,624
1984	10	2,671,923	1,128,826	3,800,749	14,693,250	18,493,999	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,266,950	23,067,699
1985	11	2,671,924	1,128,825	3,800,749	14,727,325	18,528,074	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,924	1,128,825	3,800,749	19,301,025	23,101,754
1986	12	2,671,923	1,128,826	3,800,749	14,761,401	18,562,150	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,335,101	23,135,850
1987	13	2,671,923	1,128,826	3,800,749	14,795,477	18,596,226	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,403,253	23,204,007
1988	14	2,671,923	1,128,826	3,800,749	14,829,553	18,630,302	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,439,177	23,238,078
1989	15	2,671,923	1,128,826	3,800,749	14,863,629	18,664,378	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,473,229	23,272,154
1990	16	2,671,924	1,128,825	3,800,749	14,897,705	18,698,454	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,924	1,128,825	3,800,749	19,471,405	23,272,154
1991	17	2,671,923	1,128,826	3,800,749	14,931,782	18,732,531	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,505,482	23,306,231
1992	18	2,671,923	1,128,826	3,800,749	14,965,859	18,766,608	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,539,559	23,340,308
1993	19	2,671,923	1,128,826	3,800,749	14,999,936	18,800,685	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,573,636	23,374,385
1994	20	2,671,923	1,128,826	3,800,749	15,034,013	18,834,762	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,607,713	23,408,462
1995	21	2,671,923	1,128,826	3,800,749	15,068,090	18,868,839	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,641,790	23,442,539
1996	22	2,671,923	1,128,826	3,800,749	15,102,167	18,902,916	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,675,867	23,476,616
1997	23	2,671,922	1,128,827	3,800,749	15,136,244	18,936,993	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,922	1,128,827	3,800,749	19,709,944	23,503,693
1998	24	2,671,924	1,128,825	3,800,749	15,170,321	18,971,070	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,924	1,128,825	3,800,749	19,744,021	23,544,770
1999	25	2,671,922	1,128,827	3,800,749	15,204,398	19,005,147	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,922	1,128,827	3,800,749	19,778,098	23,578,847
2000	26	2,671,924	1,128,826	3,800,750	15,238,475	19,039,226	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,924	1,128,826	3,800,750	19,812,175	23,612,925
Total		69,470,000	29,349,475	98,819,475	385,125,500	483,944,975	0	0	0	118,916,200	118,916,200	0	0	0	0	0	69,470,000	29,349,475	98,819,475	504,041,700	602,861,175
Annual Average		2,671,923	1,128,826	3,800,749	14,812,519	18,613,268	0	0	0	4,573,700	4,573,700	0	0	0	0	0	2,671,923	1,128,826	3,800,749	19,386,219	23,186,966

Table Q-3

**SCHEDULE OF CAPITAL AND OPERATION AND MAINTENANCE COSTS OF THE RECOMMENDED REGIONAL PARK AND  
OPEN SPACE PLAN BY LEVEL OF GOVERNMENT WITHIN OZAUKEE COUNTY BY YEAR: 1975-2000**

Calendar Year	Project Year	County					Cities, Villages, Towns, School Districts					State					All Levels of Government				
		Major Parks Recreation Corridors Water Access Facilities Environmental Corridor Preservation					Local Parks Water Access Facilities					Major Parks Recreation Corridor Environmental Corridor Preservation					All Levels of Government				
		Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Total
1975	1	322,875	107,625	430,500	171,946	602,446	28,500	141,796	170,296	279,261	449,557	94,731	0	94,731	38,415	133,146	446,106	249,421	695,527	488,622	1,185,149
1976	2	322,875	107,625	430,500	181,492	611,992	28,500	141,797	170,297	285,222	455,519	94,730	0	94,730	39,930	134,660	446,105	249,422	695,527	506,644	1,202,171
1977	3	322,875	107,625	430,500	191,038	621,538	28,500	141,797	170,297	291,183	461,480	94,731	0	94,731	41,445	136,176	446,106	249,422	695,528	523,666	1,219,194
1978	4	322,875	107,625	430,500	200,584	631,084	28,500	141,796	170,296	297,144	467,440	94,730	0	94,730	42,960	137,690	446,105	249,421	695,526	540,688	1,236,214
1979	5	322,875	107,625	430,500	210,130	640,630	28,500	141,797	170,297	303,105	473,402	94,731	0	94,731	44,475	139,206	446,106	249,422	695,528	557,710	1,253,238
1980	6	322,875	107,625	430,500	219,676	650,176	28,500	141,797	170,297	309,066	479,363	94,730	0	94,730	45,990	140,720	446,105	249,422	695,527	574,732	1,270,259
1981	7	322,875	107,625	430,500	229,222	659,722	28,500	141,796	170,296	315,027	485,323	94,731	0	94,731	47,505	142,236	446,106	249,421	695,527	591,754	1,287,281
1982	8	322,875	107,625	430,500	238,768	669,268	28,500	141,797	170,297	320,988	491,285	94,731	0	94,731	49,020	143,751	446,106	249,422	695,528	608,776	1,304,304
1983	9	322,875	107,625	430,500	248,314	678,814	28,500	141,797	170,297	326,949	497,246	94,731	0	94,731	50,535	145,266	446,106	249,422	695,528	625,798	1,321,326
1984	10	322,875	107,625	430,500	257,860	688,360	28,500	141,796	170,296	332,910	503,206	94,731	0	94,731	52,050	146,781	446,106	249,421	695,527	642,820	1,338,347
1985	11	322,875	107,625	430,500	267,406	697,906	28,500	141,797	170,297	338,871	509,168	94,731	0	94,731	53,565	148,296	446,106	249,422	695,528	659,842	1,355,370
1986	12	322,875	107,625	430,500	276,952	707,452	28,500	141,797	170,297	344,832	515,129	94,731	0	94,731	55,080	149,811	446,106	249,422	695,528	676,864	1,372,392
1987	13	322,875	107,625	430,500	286,498	716,998	28,500	141,796	170,296	350,794	521,090	94,730	0	94,730	56,595	151,326	446,105	249,421	695,526	693,887	1,389,413
1988	14	322,875	107,625	430,500	296,044	726,544	28,500	141,797	170,297	356,756	527,053	94,731	0	94,731	58,110	152,841	446,106	249,422	695,528	710,910	1,406,438
1989	15	322,875	107,625	430,500	305,590	736,090	28,500	141,797	170,297	362,718	533,016	94,731	0	94,731	59,625	154,356	446,106	249,422	695,528	727,933	1,423,461
1990	16	322,875	107,625	430,500	315,136	745,636	28,500	141,796	170,296	368,680	538,978	94,731	0	94,731	61,140	155,871	446,106	249,421	695,527	744,956	1,440,483
1991	17	271,000	159,500	430,500	324,682	755,182	28,500	141,797	170,297	374,642	544,939	94,731	0	94,731	62,656	157,387	394,231	301,297	695,528	761,980	1,457,508
1992	18	271,000	159,500	430,500	334,228	764,728	28,500	141,797	170,297	380,604	550,901	94,731	0	94,731	64,172	158,903	394,231	301,297	695,528	779,004	1,474,532
1993	19	271,000	159,500	430,500	343,774	774,274	28,500	141,796	170,296	386,566	556,862	94,731	0	94,731	65,688	160,419	394,231	301,296	695,527	796,028	1,491,555
1994	20	271,000	159,500	430,500	353,320	783,820	28,500	141,797	170,297	392,528	562,825	94,731	0	94,731	67,204	161,935	394,231	301,297	695,528	813,052	1,508,580
1995	21	271,000	159,500	430,500	362,866	793,366	28,500	141,797	170,297	398,490	568,787	94,731	0	94,731	68,720	163,451	394,231	301,297	695,528	830,076	1,525,604
1996	22	271,000	159,500	430,500	372,412	802,912	28,500	141,797	170,297	404,452	574,749	94,731	0	94,730	70,236	164,966	394,230	301,297	695,527	847,100	1,542,627
1997	23	271,000	159,500	430,500	381,958	812,458	28,500	141,797	170,297	410,414	580,711	94,731	0	94,731	71,752	166,483	394,231	301,297	695,528	864,126	1,559,653
1998	24	271,000	159,500	430,500	391,504	822,004	28,500	141,797	170,297	416,376	586,673	94,731	0	94,731	73,268	167,999	394,231	301,297	695,528	881,150	1,576,678
1999	25	271,000	159,500	430,500	401,050	831,550	28,500	141,797	170,297	422,338	592,635	94,731	0	94,731	74,784	169,515	394,231	301,297	695,528	898,175	1,593,703
2000	26	271,000	159,500	430,500	410,596	841,100	28,500	141,797	170,297	428,300	598,597	94,730	0	94,730	76,300	171,030	394,230	301,297	695,527	915,200	1,610,727
Total		7,876,000	3,317,000	11,193,000	7,573,056	18,766,056	741,000	3,686,715	4,427,715	9,198,216	13,625,931	2,463,000	0	2,463,000	1,491,220	3,954,220	11,080,000	7,003,716	18,083,716	18,262,492	36,346,207
Annual Average		302,923	127,577	430,500	291,271	721,771	28,500	141,797	170,297	353,777	524,074	94,731	0	94,731	57,355	152,086	426,154	269,374	695,528	702,403	1,397,931

Source: SEWRPC.

Table Q-4

**SCHEDULE OF CAPITAL AND OPERATION AND MAINTENANCE COSTS OF THE RECOMMENDED REGIONAL PARK AND  
OPEN SPACE PLAN BY LEVEL OF GOVERNMENT WITHIN RACINE COUNTY BY YEAR: 1975-2000**

Calendar Year	Project Year	County					Cities, Villages, Towns, School Districts					State					All Levels of Government				
		Major Parks Recreation Corridors Water Access Facilities Environmental Corridor Preservation					Local Parks Water Access Facilities					Major Parks Recreation Corridor Environmental Corridor Preservation					All Levels of Government				
		Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Total
1975	1	310,378	103,502	413,880	474,594	888,474	304,480	115,676	420,156	1,001,661	1,421,817	154,846	7,231	162,077	17,343	179,420	769,704	226,409	996,113	1,493,598	2,489,711
1976	2	310,379	103,501	413,880	487,188	901,068	304,480	115,676	420,156	1,007,122	1,427,278	154,846	7,231	162,077	19,386	181,463	769,705	226,408	996,113	1,513,696	2,509,809
1977	3	310,378	103,502	413,880	499,782	913,662	304,480	115,676	420,156	1,012,583	1,432,739	154,846	7,231	162,077	21,429	183,506	769,704	226,409	996,113	1,533,794	2,529,907
1978	4	310,379	103,501	413,880	512,376	926,256	304,480	115,676	420,156	1,018,044	1,438,200	154,847	7,230	162,077	23,472	185,549	769,706	226,407	996,113	1,553,892	2,550,005
1979	5	310,378	103,502	413,880	524,970	938,850	304,480	115,676	420,156	1,023,505	1,443,661	154,846	7,231	162,077	25,515	187,592	769,704	226,409	996,113	1,573,990	2,570,103
1980	6	310,379	103,501	413,880	537,564	951,444	304,480	115,676	420,156	1,028,966	1,449,122	154,846	7,231	162,077	27,558	189,635	769,705	226,408	996,113	1,594,088	2,590,201
1981	7	310,378	103,503	413,881	550,158	964,039	304,481	115,675	420,156	1,034,427	1,454,583	154,846	7,231	162,077	29,601	191,678	769,705	226,409	996,114	1,614,186	2,610,300
1982	8	310,379	103,502	413,881	562,752	976,633	304,481	115,676	420,157	1,039,888	1,460,045	154,847	7,230	162,077	31,644	193,721	769,707	226,408	996,115	1,634,284	2,630,399
1983	9	310,378	103,503	413,881	575,346	989,227	304,481	115,676	420,157	1,045,349	1,465,506	154,846	7,231	162,077	33,687	195,764	769,705	226,410	996,115	1,654,382	2,650,497
1984	10	310,379	103,502	413,881	587,940	1,001,821	304,481	115,676	420,157	1,050,810	1,470,967	154,846	7,231	162,077	35,730	197,807	769,706	226,409	996,115	1,674,480	2,670,595
1985	11	310,378	103,503	413,881	600,534	1,014,415	304,481	115,676	420,157	1,056,271	1,476,428	154,846	7,231	162,077	37,773	199,850	769,705	226,410	996,115	1,694,578	2,690,693
1986	12	310,379	103,502	413,881	613,128	1,027,009	304,481	115,676	420,157	1,061,732	1,481,889	154,846	7,230	162,076	39,816	201,892	769,706	226,408	996,114	1,714,676	2,710,790
1987	13	310,378	103,503	413,881	625,722	1,039,803	304,481	115,676	420,157	1,067,194	1,487,351	154,846	7,231	162,077	41,859	203,936	769,705	226,410	996,115	1,734,775	2,730,889
1988	14	310,379	103,502	413,881	638,316	1,052,197	304,481	115,676	420,157	1,072,656	1,492,813	154,846	7,231	162,077	43,902	205,979	769,706	226,409	996,115	1,754,874	2,750,988
1989	15	310,378	103,503	413,881	650,910	1,064,791	304,481	115,676	420,157	1,078,118	1,498,275	154,846	7,231	162,077	45,945	208,022	769,705	226,410	996,115	1,774,973	2,771,088
1990	16	310,379	103,502	413,881	663,505	1,077,386	304,481	115,676	420,157	1,083,580	1,503,737	154,847	7,230	162,077	47,988	210,065	769,707	226,408	996,115	1,795,073	2,791,188
1991	17	91,574	322,307	413,881	676,099	1,089,980	304,481	115,676	420,157	1,089,042	1,509,199	154,846	7,231	162,077	50,031	212,108	550,901	445,214	996,115	1,815,172	2,811,287
1992	18	91,575	322,306	413,881	688,693	1,102,574	304,481	115,676	420,157	1,094,504	1,514,661	154,846	7,231	162,077	52,074	214,151	550,902	445,213	996,115	1,835,271	2,831,386
1993	19	91,574	322,307	413,881	701,287	1,115,168	304,481	115,676	420,157	1,099,966	1,520,123	154,846	7,231	162,077	54,117	216,194	550,901	445,213	996,115	1,855,370	2,851,485
1994	20	91,575	322,306	413,881	713,881	1,127,762	304,481	115,676	420,157	1,105,428	1,525,585	154,847	7,230	162,077	56,161	218,238	550,903	445,212	996,115	1,875,470	2,871,584
1995	21	91,574	322,307	413,881	726,475	1,140,356	304,481	115,676	420,157	1,110,880	1,531,047	154,846	7,231	162,077	58,205	220,282	550,901	445,214	996,115	1,895,570	2,891,685
1996	22	91,575	322,306	413,881	739,070	1,152,951	304,481	115,676	420,157	1,116,352	1,536,509	154,846	7,231	162,077	60,249	222,326	550,902	445,213	996,115	1,915,671	2,911,786
1997	23	91,574	322,307	413,881	751,665	1,165,546	304,481	115,676	420,157	1,121,814	1,541,971	154,846	7,231	162,077	62,293	224,370	550,902	445,214	996,115	1,935,772	2,931,887
1998	24	91,575	322,306	413,881	764,260	1,178,141	304,481	115,676	420,157	1,127,276	1,547,433	154,846	7,230	162,076	64,337	226,413	550,901	445,212	996,114	1,955,873	2,951,987
1999	25	91,574	322,307	413,881	776,855	1,190,736	304,481	115,676	420,157	1,132,738	1,552,895	154,846	7,231	162,077	66,381	228,458	550,901	445,214	996,115	1,975,974	2,972,088
2000	26	91,574	322,307	413,881	789,450	1,203,331	304,481	115,676	420,157	1,138,200	1,558,357	154,846	7,231	162,077	68,425	230,502	550,901	445,214	996,115	1,996,075	2,992,190
Total		5,881,800	4,879,100	10,760,900	16,432,520	27,193,420	7,916,500	3,007,575	10,924,075	27,818,116	38,742,191	4,026,000	188,000	4,214,000	1,114,921	5,328,921	17,874,300	8,074,675	25,988,975	45,365,557	71,264,532
Average Annual		226,272	187,658	413,881	613,620	1,045,903	304,481	115,675	420,156	1,069,927	1,490,083	154,846	7,231	162,077	42,882	204,959	685,650	310,564	996,114	1,744,878	2,740,943

Table Q-5

### SCHEDULE OF CAPITAL AND OPERATION AND MAINTENANCE COSTS OF THE RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN BY LEVEL OF GOVERNMENT WITHIN WALWORTH COUNTY BY YEAR: 1975-2000

Calendar Year	Project Year	County					Cities, Villages, Towns, School Districts					State					All Levels of Government				
		Major Parks Recreation Corridors Water Access Facilities Environmental Corridor Preservation					Local Parks Water Access Facilities					Major Parks Recreation Corridor Environmental Corridor Preservation					All Levels of Government				
		Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Total
1975	1	268,569	29,342	297,911	6,622	304,533	22,212	44,155	66,367	282,061	348,428	319,962	100,962	420,924	146,256	567,180	610,743	174,459	785,202	434,939	1,220,141
1976	2	268,569	29,342	297,911	11,844	309,755	22,211	44,155	66,367	287,522	353,889	319,961	100,962	420,923	156,712	577,635	610,741	174,460	785,201	456,078	1,241,279
1977	3	268,569	29,342	297,911	17,066	314,977	22,212	44,155	66,367	292,983	359,350	319,962	100,961	420,923	167,168	588,091	610,743	174,458	785,201	477,217	1,262,418
1978	4	268,570	29,342	297,912	22,288	320,200	22,211	44,155	66,367	298,444	364,811	319,961	100,962	420,923	177,624	598,047	610,742	174,460	785,202	498,366	1,283,558
1979	5	268,569	29,342	297,911	27,510	325,421	22,212	44,155	66,367	303,905	370,272	319,962	100,961	420,923	188,080	609,003	610,743	174,458	785,201	519,495	1,304,696
1980	6	268,569	29,342	297,911	32,732	330,643	22,211	44,155	66,367	309,366	375,733	319,961	100,962	420,923	198,536	619,459	610,741	174,460	785,201	540,534	1,325,835
1981	7	268,569	29,342	297,911	37,954	335,865	22,212	44,155	66,367	314,827	381,194	319,962	100,961	420,923	208,992	629,915	610,743	174,458	785,201	561,773	1,346,974
1982	8	268,570	29,342	297,912	43,176	341,088	22,211	44,155	66,367	320,288	386,655	319,961	100,962	420,923	219,449	640,372	610,742	174,460	785,202	582,913	1,368,115
1983	9	268,569	29,342	297,911	48,398	346,309	22,212	44,155	66,367	325,749	392,116	319,962	100,961	420,923	229,906	660,829	610,743	174,458	785,201	604,053	1,389,254
1984	10	268,569	29,342	297,911	53,620	351,531	22,211	44,155	66,367	331,210	397,577	319,961	100,962	420,923	240,363	661,286	610,741	174,460	785,201	625,193	1,410,394
1985	11	268,569	29,342	297,911	58,842	356,753	22,212	44,155	66,367	336,671	403,038	319,962	100,961	420,923	250,820	671,743	610,743	174,458	785,201	646,333	1,431,534
1986	12	268,570	29,342	297,912	64,064	361,976	22,211	44,155	66,367	342,132	408,499	319,961	100,962	420,923	261,277	682,200	610,742	174,460	785,202	667,473	1,452,675
1987	13	268,569	29,343	297,912	69,286	367,198	22,212	44,156	66,368	347,594	413,962	319,962	100,961	420,923	271,734	692,657	610,743	174,460	785,203	688,614	1,473,817
1988	14	268,569	29,343	297,912	74,508	372,420	22,211	44,156	66,367	353,056	419,423	319,961	100,962	420,923	282,191	703,114	610,741	174,461	785,202	709,755	1,494,957
1989	15	268,569	29,343	297,912	79,730	377,642	22,212	44,156	66,368	358,518	424,886	319,962	100,961	420,923	292,648	713,571	610,743	174,460	785,203	730,896	1,516,099
1990	16	268,570	29,342	297,912	84,952	382,864	22,211	44,155	66,367	363,980	430,347	319,961	100,962	420,923	303,105	724,028	610,742	174,460	785,202	752,037	1,537,239
1991	17	268,569	29,343	297,912	90,174	388,086	22,212	44,156	66,368	369,442	435,810	319,962	100,961	420,923	313,562	734,485	610,743	174,460	785,203	773,178	1,558,381
1992	18	268,569	29,342	297,911	95,396	393,307	22,211	44,156	66,367	374,904	441,271	319,961	100,962	420,923	324,019	744,942	610,741	174,460	785,201	794,319	1,579,520
1993	19	268,569	29,343	297,912	100,618	398,530	22,212	44,156	66,368	380,366	446,734	319,962	100,961	420,923	334,476	755,399	610,743	174,460	785,203	815,460	1,600,663
1994	20	268,570	29,342	297,912	105,840	403,752	22,211	44,156	66,367	385,828	452,195	319,961	100,962	420,923	344,933	765,856	610,742	174,460	785,202	836,601	1,621,803
1995	21	268,569	29,343	297,912	111,062	408,974	22,212	44,156	66,368	391,290	457,558	319,962	100,961	420,923	355,390	776,313	610,743	174,460	785,203	857,742	1,642,945
1996	22	268,569	29,342	297,911	116,284	414,196	22,211	44,156	66,367	396,752	463,119	319,961	100,962	420,923	365,847	786,770	610,741	174,460	785,201	878,883	1,664,084
1997	23	268,569	29,343	297,912	121,506	419,418	22,212	44,156	66,368	402,214	468,582	319,962	100,961	420,923	376,304	797,227	610,743	174,460	785,203	900,024	1,685,227
1998	24	268,570	29,342	297,912	126,729	424,641	22,211	44,156	66,367	407,676	474,043	319,961	100,962	420,923	386,761	807,684	610,742	174,460	785,202	921,166	1,706,368
1999	25	268,569	29,342	297,911	131,952	429,863	22,212	44,156	66,368	413,138	479,506	319,962	100,961	420,923	397,218	818,141	610,743	174,459	785,202	942,308	1,727,510
2000	26	268,569	29,343	297,912	137,175	435,087	22,212	44,156	66,368	418,500	484,968	319,962	100,962	420,924	407,676	826,599	610,743	174,461	785,204	963,450	1,748,554
Total		6,982,800	762,900	7,745,700	1,869,328	9,615,028	577,500	1,148,056	1,725,556	9,108,516	10,834,066	3,319,000	2,625,000	10,944,000	7,201,046	18,145,046	15,879,300	4,535,950	20,415,250	18,178,890	38,594,140
Annual Average		268,570	29,342	297,912	71,897	369,809	22,211	44,156	66,367	350,328	416,695	319,961	100,962	420,923	276,963	697,886	610,742	174,460	785,202	699,188	1,484,390

Source: SEWRPC.

Table Q-6

### SCHEDULE OF CAPITAL AND OPERATION AND MAINTENANCE COSTS OF THE RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN BY LEVEL OF GOVERNMENT WITHIN WASHINGTON COUNTY BY YEAR: 1975-2000

		County					Cities, Villages, Towns, School Districts					State									
		Major Parks Recreation Corridors Water Access Facilities Environmental Corridor Preservation					Local Parks Water Access Facilities					Major Parks Recreation Corridor Environmental Corridor Preservation					All Levels of Government				
Calendar Year	Project Year	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Total
1975	1	341,873	113,935	455,808	48,824	504,632	3,462	55,824	59,286	327,838	387,124	462,885	73,461	536,346	99,633	636,979	808,220	243,220	1,051,440	476,295	1,527,735
1976	2	341,873	113,934	455,807	64,848	520,655	3,462	55,825	59,287	331,377	390,664	462,884	73,462	536,346	110,966	647,312	808,219	243,221	1,051,440	507,191	1,558,631
1977	3	341,873	113,935	455,808	80,872	536,680	3,461	55,825	59,286	334,915	394,201	462,885	73,461	536,346	122,298	658,644	808,219	243,221	1,051,440	538,085	1,589,525
1978	4	341,872	113,935	455,807	96,896	552,703	3,462	55,824	59,286	338,454	397,740	462,884	73,462	536,346	133,631	669,977	808,218	243,221	1,051,439	568,981	1,620,420
1979	5	341,873	113,935	455,808	112,920	568,728	3,461	55,825	59,286	341,902	401,278	462,885	73,461	536,346	144,964	681,310	808,219	243,221	1,051,440	599,876	1,651,316
1980	6	341,873	113,935	455,808	128,944	584,752	3,462	55,824	59,286	345,831	404,817	462,884	73,462	536,346	156,296	692,642	808,219	243,221	1,051,440	630,771	1,682,211
1981	7	341,873	113,935	455,808	144,968	600,776	3,461	55,825	59,286	349,069	408,355	462,885	73,461	536,346	167,629	703,975	808,219	243,221	1,051,440	661,666	1,713,106
1982	8	341,872	113,935	455,807	160,992	616,799	3,462	55,825	59,287	352,508	411,895	462,884	73,462	536,346	178,962	715,308	808,218	243,222	1,051,440	692,562	1,744,002
1983	9	341,873	113,935	455,808	177,016	632,824	3,461	55,825	59,286	356,146	415,432	462,885	73,461	536,346	190,294	726,640	808,219	243,221	1,051,440	723,456	1,774,896
1984	10	341,873	113,935	455,808	193,040	648,848	3,462	55,824	59,286	359,585	418,971	462,884	73,462	536,346	201,627	737,973	808,219	243,221	1,051,440	754,352	1,806,292
1985	11	341,873	113,935	455,808	209,064	664,872	3,461	55,825	59,286	363,223	422,509	462,885	73,461	536,346	212,960	749,306	808,219	243,221	1,051,440	785,247	1,836,587
1986	12	341,872	113,935	455,807	225,088	680,895	3,462	55,824	59,286	366,762	426,048	462,885	73,462	536,347	224,292	760,639	808,219	243,221	1,051,440	816,142	1,867,582
1987	13	341,873	113,935	455,808	241,112	696,920	3,461	55,825	59,286	370,300	429,586	462,885	73,461	536,346	235,625	771,971	808,219	243,221	1,051,440	847,037	1,898,477
1988	14	341,873	113,934	455,807	257,136	712,943	3,462	55,825	59,287	373,839	433,126	462,884	73,462	536,346	246,958	783,304	808,219	243,221	1,051,440	877,933	1,929,373
1989	15	341,873	113,935	455,808	273,160	728,968	3,461	55,825	59,286	377,377	436,563	462,885	73,461	536,346	258,290	794,936	808,219	243,221	1,051,440	900,827	1,960,267
1990	16	341,872	113,935	455,807	289,184	744,991	3,462	55,824	59,286	380,916	440,202	462,885	73,462	536,347	269,623	806,970	808,219	243,221	1,051,440	939,723	1,991,163
1991	17	165,264	290,544	455,808	305,208	761,016	3,461	55,825	59,286	384,454	443,740	462,885	73,461	536,346	280,956	817,302	631,610	419,830	1,051,440	970,618	2,022,058
1992	18	165,263	290,545	455,808	321,232	777,040	3,462	55,825	59,286	387,993	447,279	462,885	73,461	536,346	292,288	828,634	631,610	419,830	1,051,440	1,001,513	2,052,953
1993	19	165,264	290,544	455,808	337,256	793,064	3,461	55,825	59,286	391,531	450,817	462,884	73,462	536,346	303,621	839,967	631,609	419,831	1,051,440	1,032,408	2,083,848
1994	20	165,263	290,544	455,807	353,280	809,887	3,462	55,825	59,287	395,010	454,957	462,885	73,462	536,347	314,954	851,301	631,610	419,831	1,051,441	1,063,304	2,114,693
1995	21	165,264	290,544	455,808	369,304	825,112	3,461	55,825	59,286	398,068	457,894	462,884	73,462	536,346	326,286	862,632	631,609	419,831	1,051,440	1,094,198	2,146,638
1996	22	165,264	290,544	455,808	385,328	841,136	3,462	55,824	59,286	402,147	461,433	462,885	73,461	536,346	337,619	873,955	631,611	419,829	1,051,440	1,125,094	2,176,534
1997	23	165,263	290,544	455,807	401,352	857,159	3,461	55,825	59,286	405,685	464,971	462,884	73,462	536,346	348,952	885,298	631,608	419,831	1,051,439	1,155,989	2,207,428
1998	24	165,264	290,544	455,808	417,376	873,184	3,462	55,824	59,286	409,224	468,510	462,885	73,462	536,347	360,284	896,631	631,611	419,830	1,051,441	1,186,884	2,238,325
1999	25	165,263	290,545	455,808	433,400	889,208	3,461	55,825	59,286	412,762	472,048	462,884	73,462	536,346	371,617	907,963	631,608	419,832	1,051,440	1,217,779	2,269,219
2000	26	165,264	290,544	455,808	448,426	905,233	3,462	55,824	59,286	416,300	475,586	462,885	73,461	536,346	382,590	919,298	631,611	419,829	1,051,440	1,248,675	2,300,115
Total		7,122,600	4,728,400	11,851,000	6,477,225	18,328,225	90,000	1,451,440	1,541,440	9,673,800	11,215,246	12,035,000	1,910,000	13,945,000	6,273,575	20,218,575	19,247,600	8,089,840	27,337,440	22,246,608	49,762,046
Annual Average		273,946	181,862	455,808	249,124	704,932	3,461	55,825	59,286	372,070	431,356	462,885	73,461	536,346	241,291	777,737	740,292	311,148	1,051,440	862,485	1,913,925

Table Q-7

**SCHEDULE OF CAPITAL AND OPERATION AND MAINTENANCE COSTS OF THE RECOMMENDED REGIONAL PARK AND  
OPEN SPACE PLAN BY LEVEL OF GOVERNMENT WITHIN WAUKESHA COUNTY BY YEAR: 1975-2000**

Calendar Year	Project Year	County					Cities, Villages, Towns, School Districts					State					All Levels of Government				
		Major Parks Recreation Corridors Water Access Facilities Environmental Corridor Preservation					Local Parks Water Access Facilities					Major Parks Recreation Corridor Environmental Corridor Preservation									
		Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Subtotal	Acquisition	Development	Total Outlay	Operation and Maintenance	Total
1975	1	1,424,586	47,541	1,472,127	858,002	2,330,129	88,904	175,157	264,061	1,163,904	1,427,965	314,500	21,711	336,211	137,784	473,996	1,827,990	244,409	2,072,399	2,159,690	4,232,089
1976	2	1,424,586	47,541	1,472,127	900,804	2,372,931	88,903	175,157	264,060	1,180,808	1,444,868	314,500	21,712	336,212	141,068	477,280	1,827,989	244,410	2,072,399	2,222,690	4,295,079
1977	3	1,424,586	47,541	1,472,127	943,506	2,415,733	88,904	175,157	264,061	1,197,712	1,461,773	314,500	21,712	336,212	144,351	480,563	1,827,990	244,410	2,072,400	2,286,669	4,398,069
1978	4	1,424,586	47,541	1,472,127	986,409	2,458,536	88,904	175,157	264,061	1,214,616	1,478,677	314,500	21,711	336,211	147,635	483,846	1,827,990	244,409	2,072,399	2,348,660	4,421,059
1979	5	1,424,586	47,541	1,472,127	1,029,212	2,501,339	88,904	175,157	264,061	1,231,519	1,495,580	314,500	21,712	336,212	150,919	487,131	1,827,990	244,410	2,072,400	2,411,650	4,484,050
1980	6	1,424,586	47,541	1,472,127	1,072,015	2,544,142	88,903	175,158	264,061	1,248,423	1,512,484	314,500	21,711	336,211	154,202	490,413	1,827,989	244,410	2,072,399	2,474,640	4,547,039
1981	7	1,424,586	47,541	1,472,127	1,114,818	2,586,945	88,904	175,157	264,061	1,265,327	1,529,388	314,500	21,712	336,212	157,486	493,696	1,827,990	244,410	2,072,400	2,537,631	4,610,031
1982	8	1,424,586	47,541	1,472,127	1,157,621	2,629,748	88,904	175,157	264,061	1,282,231	1,546,292	314,500	21,711	336,211	160,770	496,981	1,827,990	244,409	2,072,399	2,600,622	4,673,021
1983	9	1,424,586	47,541	1,472,127	1,200,424	2,672,551	88,904	175,157	264,061	1,299,135	1,563,196	314,500	21,712	336,212	164,053	500,265	1,827,990	244,410	2,072,400	2,663,612	4,736,012
1984	10	1,424,586	47,541	1,472,127	1,243,227	2,715,354	88,904	175,157	264,061	1,316,038	1,580,100	314,500	21,711	336,211	167,337	503,548	1,827,990	244,409	2,072,399	2,728,603	4,799,002
1985	11	1,424,586	47,541	1,472,127	1,286,030	2,758,157	88,904	175,157	264,061	1,332,943	1,597,004	314,500	21,712	336,212	170,621	506,833	1,827,990	244,410	2,072,400	2,789,594	4,861,994
1986	12	1,424,586	47,541	1,472,127	1,328,833	2,800,960	88,903	175,158	264,061	1,349,847	1,613,908	314,500	21,711	336,211	173,904	510,115	1,827,989	244,410	2,072,399	2,852,584	4,924,983
1987	13	1,424,586	47,541	1,472,127	1,371,636	2,843,763	88,904	175,157	264,061	1,366,751	1,630,812	314,500	21,712	336,212	177,188	513,400	1,827,990	244,410	2,072,400	2,915,575	4,987,975
1988	14	1,424,586	47,541	1,472,127	1,414,439	2,886,566	88,904	175,157	264,061	1,383,655	1,647,716	314,500	21,711	336,211	180,472	516,683	1,827,990	244,409	2,072,399	2,978,566	5,050,965
1989	15	1,424,586	47,541	1,472,127	1,457,242	2,929,369	88,904	175,157	264,061	1,400,558	1,664,619	314,500	21,712	336,212	183,756	519,967	1,827,990	244,410	2,072,400	3,041,555	5,113,955
1990	16	1,424,586	47,541	1,472,127	1,500,045	2,972,172	88,903	175,158	264,061	1,417,462	1,681,523	314,500	21,711	336,211	187,039	523,250	1,827,989	244,410	2,072,399	3,104,546	5,176,945
1991	17	494,962	977,164	1,472,126	1,542,848	3,014,974	88,904	175,157	264,061	1,434,366	1,698,427	314,500	21,712	336,212	190,323	526,535	898,366	1,174,033	2,072,399	3,167,537	5,239,936
1992	18	494,963	977,164	1,472,127	1,585,651	3,057,778	88,904	175,157	264,061	1,451,270	1,715,331	314,500	21,711	336,211	193,606	529,817	898,367	1,174,032	2,072,399	3,230,527	5,302,926
1993	19	494,962	977,165	1,472,127	1,628,454	3,100,581	88,904	175,157	264,061	1,468,174	1,732,235	314,500	21,712	336,212	196,890	533,102	898,366	1,174,033	2,072,400	3,293,518	5,366,918
1994	20	494,963	977,164	1,472,127	1,671,257	3,143,384	88,904	175,157	264,061	1,485,077	1,749,138	314,500	21,711	336,211	200,174	536,385	898,367	1,174,032	2,072,399	3,356,508	5,428,907
1995	21	494,962	977,165	1,472,127	1,714,060	3,186,181	88,904	175,157	264,061	1,501,981	1,766,042	314,500	21,712	336,212	203,457	539,669	898,366	1,174,034	2,072,400	3,419,498	5,491,898
1996	22	494,963	977,164	1,472,127	1,756,863	3,228,990	88,904	175,157	264,061	1,518,885	1,782,946	314,500	21,711	336,211	206,741	542,952	898,366	1,174,032	2,072,399	3,482,489	5,554,888
1997	23	494,962	977,165	1,472,127	1,799,666	3,271,793	88,904	175,157	264,061	1,535,789	1,799,850	314,500	21,712	336,212	210,025	546,237	898,366	1,174,034	2,072,400	3,545,480	5,617,880
1998	24	494,963	977,164	1,472,127	1,842,469	3,314,596	88,904	175,157	264,061	1,552,693	1,816,754	314,500	21,711	336,211	213,308	549,519	898,367	1,174,034	2,072,399	3,608,470	5,680,869
1999	25	494,962	977,165	1,472,127	1,885,272	3,357,399	88,904	175,157	264,061	1,569,597	1,833,658	314,500	21,712	336,212	216,591	552,803	898,366	1,174,034	2,072,400	3,671,460	5,743,860
2000	26	494,962	977,164	1,472,126	1,928,075	3,400,201	88,904	175,157	264,061	1,586,500	1,850,561	314,500	21,712	336,212	219,875	556,087	898,366	1,174,033	2,072,400	3,734,450	5,806,849
Total		27,743,000	10,532,300	38,275,300	36,218,978	74,494,278	2,311,500	4,594,085	6,865,585	35,756,262	42,620,847	8,177,000	564,500	8,741,500	4,649,574	13,391,074	38,231,500	15,850,885	53,882,385	76,623,814	130,506,199
Annual Average		1,067,038	405,088	1,472,126	1,393,038	2,865,164	88,904	175,157	264,061	1,375,202	1,639,263	314,500	21,712	336,212	178,830	515,042	1,470,442	601,967	2,072,399	2,947,070	5,019,498

Source: SEWRPC.

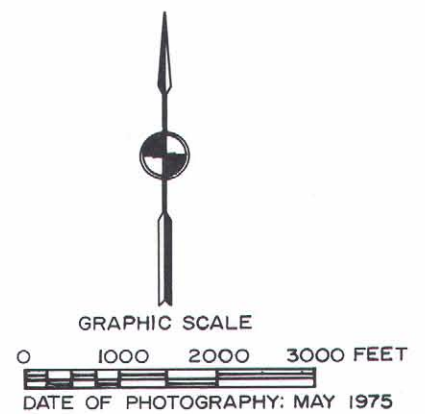
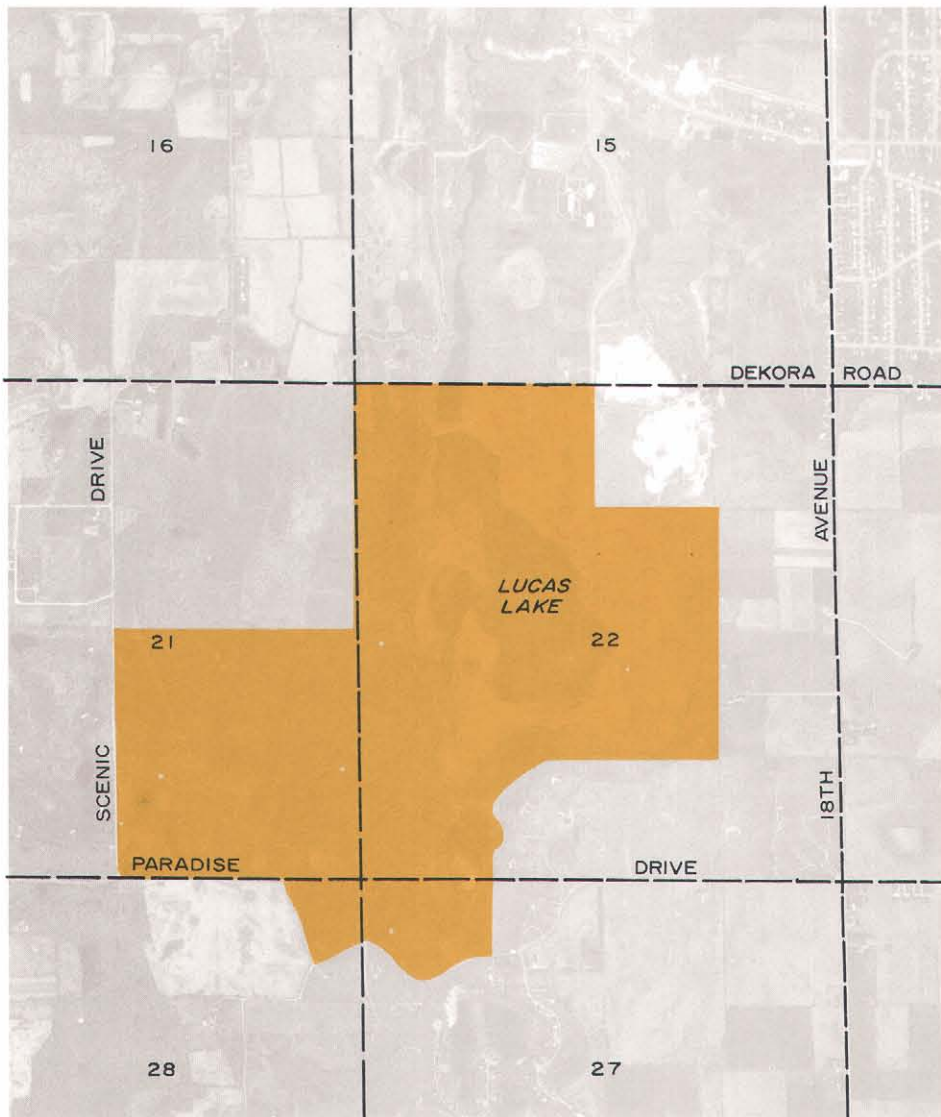


Appendix R

SUGGESTED SITE LOCATIONS FOR PROPOSED TYPE I PARKS

Map R-1

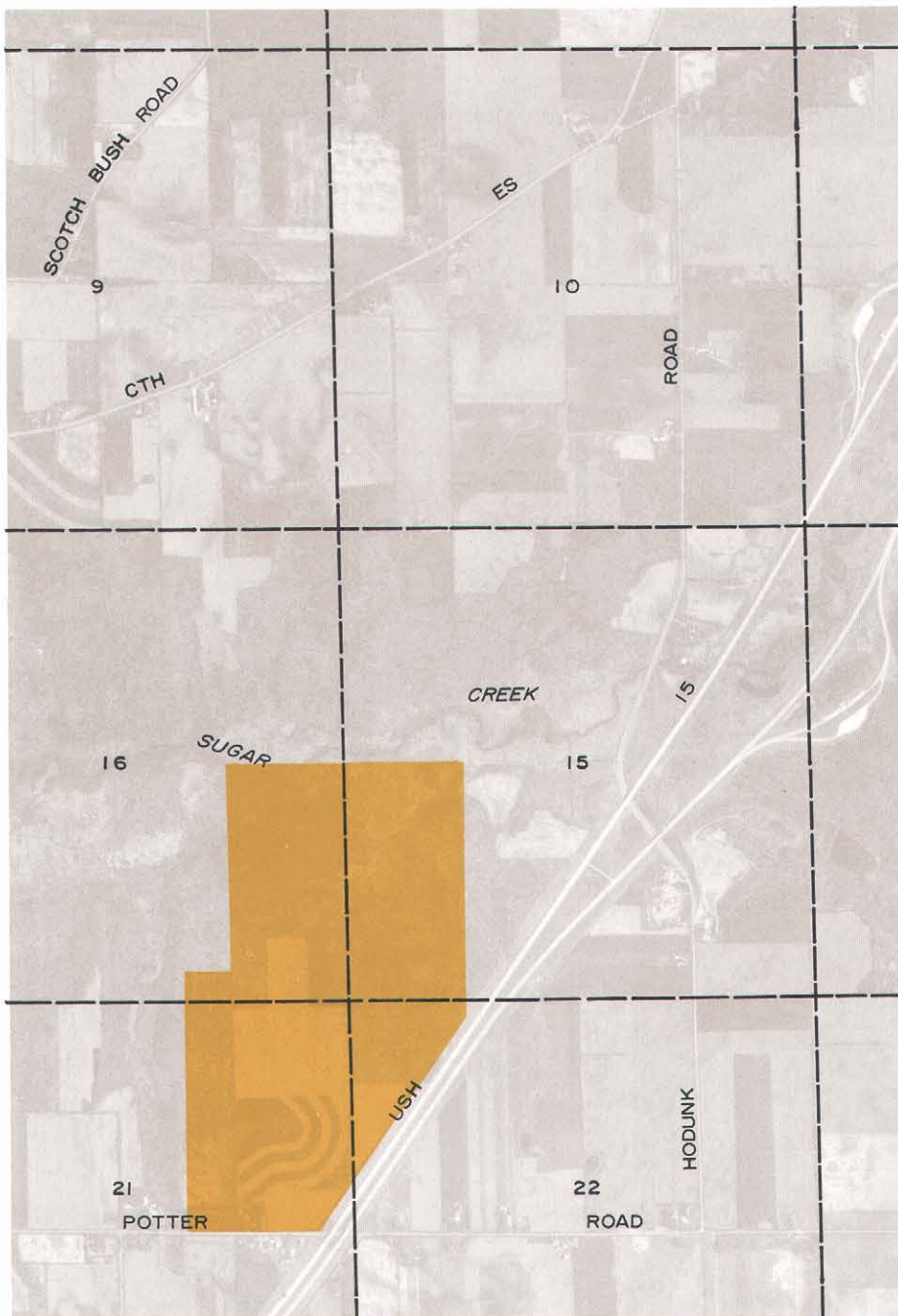
PROPOSED PARADISE VALLEY PARK SITE, TOWN OF WEST BEND, WASHINGTON COUNTY



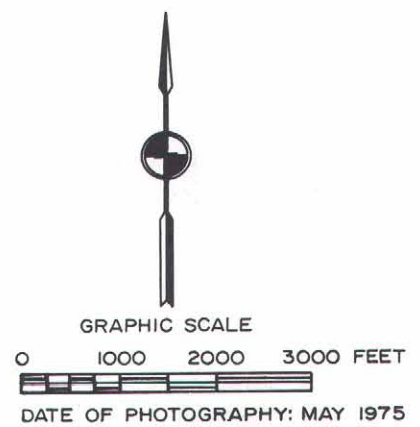
Source: SEWRPC.

Map R-2

PROPOSED SUGAR CREEK PARK SITE, TOWN OF LAFAYETTE, WALWORTH COUNTY



Source: SEWRPC.



## Appendix S

### A SUMMARY OF PLAN DATA UNDER THE FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN FOR SOUTHEASTERN WISCONSIN: 2000

Table S-1

#### PRESERVATION OF NET PRIMARY ENVIRONMENTAL CORRIDORS IN THE REGION UNDER THE FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

County	Total Lands Within Primary Environmental Corridors <sup>a</sup> Acres	Lands to be Preserved Through Public Land Use Regulation Acres	Lands to be Preserved Through Public Ownership											
			Existing Ownership			Proposed Ownership						Combined Existing and Proposed Ownership		
			County and Other Local Acres	State Acres	Total Acres	County		State		Total		County and Other Local Acres	State Acres	Total Acres
						Acres	Cost <sup>b</sup>	Acres	Cost <sup>b</sup>	Acres	Cost <sup>b</sup>			
Kenosha . . . . .	24,550	15,900	1,320	1,800	3,120	5,080	\$ 4,774,000	450	\$ 299,000	5,530	\$ 5,073,000	6,400	2,250	8,650
Milwaukee . . . .	13,260	3,220	8,870	0	8,870	1,170	1,599,000	0	0	1,170	1,599,000	10,040	0	10,040
Ozaukee . . . . .	20,750	14,930	500	1,990	2,490	2,980	3,338,000	350	196,000	3,330	3,534,000	3,480	2,340	5,820
Racine . . . . .	27,840	16,600	2,020	1,870	3,890	5,470	5,625,000	1,880	1,058,000	7,350	6,683,000	7,490	3,750	11,240
Walworth . . . . .	70,240	55,450	220	6,920	7,140	3,650	4,843,000	4,000	4,614,000	7,650	9,457,000	3,870	10,920	14,790
Washington . . . .	50,150	32,940	300	6,760	7,060	4,940	4,559,000	5,210	6,865,000	10,150	11,424,000	5,240	11,970	17,210
Waukesha . . . . .	72,910	22,530	2,660	10,680	13,340	29,240	24,243,000	7,800	7,556,000	37,040	31,799,000	31,900	18,480	50,380
Region	279,700	161,570	15,890	30,020	45,910	52,530	\$48,981,000	19,690	\$20,588,000	72,220	\$69,569,000	68,420	49,710	118,130

<sup>a</sup> Net primary environmental corridor lands include recreational land use; agricultural and related land use; and wetlands, woodlands, and other open space land uses, except water.

<sup>b</sup> All costs are 1975 constant dollars and have been assigned to the state and county units of government as designated above in the summary of public expenditures in Table S-7 of this Appendix.

Source: SEWRPC.

Table S-2

#### PRESERVATION OF NET<sup>a</sup> AGRICULTURAL LANDS IN THE REGION UNDER THE FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

County	Prime Agricultural Lands			Other Agricultural Lands						Total Agricultural Lands		
	Existing (1970) Acres	Existing (1970) Acres Proposed for Conversion to Urban Use 1970-2000	Existing (1970) Acres Proposed for Preservation Through Exclusive Agricultural Zoning: 2000	Lands Surrounding Major Scientific, Educational, and Recreational Sites			Remaining Lands			Existing (1970) Acres	Existing (1970) Acres Proposed for Conversion to Urban Use 1970-2000	Existing (1970) Acres Proposed for Agricultural Use: 2000
				Existing (1970) Acres	Existing (1970) Acres Proposed for Conversion to Urban Use 1970-2000	Existing (1970) Acres Proposed for Preservation Through Exclusive Agricultural Zoning: 2000	Existing (1970) Acres	Existing (1970) Acres Proposed for Conversion to Urban Use 1970-2000	Existing (1970) Acres Proposed for Agricultural Use: 2000			
Kenosha . . . .	66,038	2,295	63,743	3,863	161	3,702	44,027	4,560	39,467	113,928	7,016	106,912
Milwaukee . . .	7,116	782	6,334	2,987	1,097	1,890	18,504	6,548	11,956	28,607	8,427	20,180
Ozaukee . . . .	37,080	185	36,895	5,244	391	4,853	58,167	7,413	50,754	100,491	7,989	92,502
Racine . . . . .	68,951	1,097	67,854	4,401	547	3,854	73,855	4,599	69,256	147,207	6,243	140,964
Walworth . . . .	185,144	578	184,566	3,658	482	3,176	72,942	5,414	67,528	261,744	6,474	255,270
Washington . . .	49,531	563	48,968	3,038	446	2,592	133,897	14,738	119,159	186,466	15,747	170,719
Waukesha . . . .	63,729	2,866	60,863	7,050	1,225	5,825	130,897	23,792	107,105	201,676	27,883	173,793
Region	477,589	8,366	469,223	30,241	4,349	25,892	532,289	67,064	465,225	1,040,119	79,779	960,340

<sup>a</sup> Net agricultural lands are those lands actually used for agricultural purposes.

Source: SEWRPC.

Table S-3

## TYPE I AND TYPE II PARKS IN THE REGION UNDER THE FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

County	Ownership	Type I and Type II Parks														
		Existing Parks		Proposed Parks								Existing and Proposed Parks				
		Number of Sites	Acres	Number of Sites	Lands to be Acquired Under Open Space Preservation Plan Element		Lands to be Acquired Under Resource-Oriented Outdoor Recreation Plan Component				Total Lands to be Acquired		Number of Sites	Acres	Facility Development Cost <sup>a</sup>	Total Additional Land Acquisition and Facility Development Cost <sup>a,b</sup>
					Acres Within Primary Environmental Corridor	Cost <sup>a</sup>	Acres Within Primary Environmental Corridor	Cost <sup>a</sup>	Acres Outside of Primary Environmental Corridor	Cost <sup>a</sup>	Acres	Cost <sup>a</sup>				
Kenosha	State County	0 5	0 1,280	0 2	0 85	\$ 0 43,000	0 220	\$ 0 215,000	0 120	\$ 0 361,000	0 425	\$ 0 619,000	0 7	0 1,705	\$ 1,900,000 <sup>c</sup> 4,586,000	\$ 1,900,000 5,205,000
Milwaukee	State County	0 17	0 4,790	0 2	0 0	0 0	0 0	0 0	0 325 <sup>d</sup>	0 451,000	0 325	0 451,000	0 19	0 5,115	0 3,875,000	0 4,326,000
Ozaukee	State County	1 2	630 520	0 2	0 0	0 0	0 190	0 189,000	0 150	0 396,000	0 340	0 585,000	1 4	630 860	0 2,231,000	0 2,816,000
Racine	State County	0 5	0 1,150	0 1	0 100	0 100,000	0 110	0 137,000	0 70	0 80,000	0 280	0 317,000	0 6	0 1,430	0 3,891,000	0 4,208,000
Walworth	State County	2 0	510 0	0 2	0 0	0 0	0 345	0 349,000	0 60	0 72,000	0 405	0 421,000	2 2	510 405	0 2,499,000	0 2,920,000
Washington	State County	1 2	670 400	1 3	460 205	1,129,000 469,000	0 255	0 325,000	120 0	143,000 0	580 460	1,272,000 794,000	2 5	1,250 860	1,342,000 4,088,000	2,614,000 4,882,000
Waukesha	State County	3 11 <sup>e</sup>	440 2,630 <sup>e</sup>	0 7	0 625	0 771,000	0 0	0 0	0 740	0 1,134,000	0 1,365	0 1,905,000	3 18	440 3,995	0 8,205,000	0 10,110,000
Region	State County	7 42	2,250 10,770	1 19	460 1,015	1,129,000 \$1,383,000	0 1,120	0 \$1,215,000	120 1,465	143,000 \$2,494,000	580 3,600	1,272,000 \$5,092,000	8 61	2,830 14,370	3,242,000 \$29,375,000	4,514,000 \$34,467,000

<sup>a</sup> All costs are 1975 constant dollars and have been assigned to the state and county units of government as designated above in the summary of public expenditures in Table S-7 of this Appendix.

<sup>b</sup> This total cost includes the costs for proposed parks located within primary environmental corridor lands to be acquired under the open space preservation plan element. Such costs are included in order to provide the total cost estimates for acquisition and development of major parks under the final park and open space plan.

<sup>c</sup> \$1.9 million has been included in the facility development costs under the final recommended regional park and open space plan for the development of Bong recreation area.

<sup>d</sup> This total includes 100 acres of land already owned by Milwaukee County to be included in the acreage for Park Site No. 3.

<sup>e</sup> This total includes Retzer Nature Area, a 90-acre site proposed for expansion to a Type II park.

Source: SEWRPC.

Table S-4

## RECREATION CORRIDORS IN THE REGION UNDER THE FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

County	Ownership	Recreation Corridors											
		Proposed Acquisition								Proposed Development			Total Acquisition and Development Cost <sup>a,b</sup>
		Lands to be Acquired Under Open Space Preservation Plan Element		Lands to be Acquired Under Resource-Oriented Outdoor Recreation Plan Component				Total Lands to be Acquired		Linear Miles Under Existing Ownership	Linear Miles to be Acquired	Cost <sup>a</sup>	
		Acres Within Primary Environmental Corridor	Cost <sup>a</sup>	Acres Within Primary Environmental Corridor	Cost <sup>a</sup>	Acres Outside of Primary Environmental Corridor	Cost <sup>a</sup>	Acres	Cost <sup>a</sup>				
Kenosha	State County	0 180	\$ 0 214,000	0 70	\$ 0 141,000	0 100	\$ 0 1,142,000	0 350	\$ 0 1,497,000	0 9	0 24	\$ 0 1,056,000	\$ 0 2,563,000
Milwaukee	State County	0 40	0 72,000	0 180	0 1,291,000	0 30	0 185,000	0 250	0 1,548,000	0 54	0 19	0 2,664,000	0 4,212,000
Ozaukee	State County	0 150	0 216,000	0 200	0 203,000	0 10	0 96,000	0 360	0 515,000	0 4	0 31	0 1,000,000	0 1,515,000
Racine	State County	20 280	24,000 307,000	0 100	0 158,000	0 50	0 749,000	20 430	24,000 1,214,000	2 6	1 35	48,000 1,118,000	72,000 2,332,000
Walworth	State County	90 0	91,000 0	130 290	120,000 275,000	0 0	0 0	220 290	211,000 275,000	15 2	13 23	470,000 400,000	681,000 675,000
Washington	State County	80 110	168,000 251,000	140 120	127,000 104,000	60 10	93,000 23,000	280 240	388,000 378,000	5 3	25 20	568,000 632,000	956,000 1,010,000
Waukesha	State County	150 740	145,000 714,000	0 110	0 132,000	70 310	268,000 1,225,000	220 1,160	413,000 2,071,000	20 12	19 95	690,000 3,186,000	1,103,000 5,257,000
Region	State County	340 1,500	428,000 \$1,774,000	270 1,070	247,000 \$2,304,000	130 510	361,000 \$3,420,000	740 3,080	1,036,000 \$7,498,000	42 90	58 247	1,776,000 \$10,056,000	2,812,000 \$17,554,000

<sup>a</sup> All costs are 1975 constant dollars and have been assigned to the state and county units of government as designated above in the summary of public expenditures in Table S-7 of this Appendix.

<sup>b</sup> This total cost includes the costs for proposed recreation corridors located within primary environmental corridor lands to be acquired under the open space preservation plan element. Such costs are included in order to provide the total cost estimate for acquisition and development of recreation corridors under the final park and open space plan.

Source: SEWRPC.

Table S-5

## WATER ACCESS FACILITIES IN THE REGION UNDER THE FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

County	Water Access Facilities											
	Major Inland Lake and River Access										Lake Michigan Facility Development Cost	Total Acquisition and Facility Development Cost <sup>b,c</sup>
	Proposed Acquisition								Proposed Facility Development Cost <sup>a</sup>	Total Acquisition and Facility Development Cost <sup>a</sup>		
	Lands to be Acquired Under Open Space Preservation Plan Element		Lands to be Acquired Under Resource-Oriented Outdoor Recreation Plan Component				Total Lands to be Acquired					
	Acres Within Primary Environmental Corridor	Cost	Acres Within Primary Environmental Corridor	Cost	Acres Outside of Primary Environmental Corridor	Cost	Acres	Cost <sup>a</sup>				
Kenosha . . . .	0	\$ 0	0	\$ 0	8	\$ 9,600	8	\$ 9,600	\$ 6,000	\$ 15,600	\$ 473,500 <sup>d</sup>	\$ 489,100
Milwaukee . . .	0	0	0	0	0	0	0	0	2,400	2,400	16,000,000 <sup>e</sup>	16,002,400
Ozaukee . . . .	0	0	0	0	0	0	0	0	1,200 <sup>d</sup>	1,200 <sup>d</sup>	2,300,000 <sup>d</sup>	2,301,200
Racine . . . . .	2	3,000	4	3,800	2	2,400	8	9,200	10,100	19,300	506,500 <sup>d</sup>	525,800
Walworth . . . .	0	0	0	0	4	1,600	4	1,600	2,400	4,000	-- <sup>f</sup>	4,000
Washington . . .	4	3,600	0	0	0	0	4	3,600	4,800	8,400	-- <sup>f</sup>	8,400
Waukesha . . . .	2	3,000	4	6,000	6	44,000	12	53,000	13,700	66,700	-- <sup>f</sup>	66,700
Region	8	\$9,600	8	\$9,800	20	\$57,600	36	\$77,000	\$40,600	\$117,600	\$19,280,000	\$19,397,600

<sup>a</sup> This cost has been assigned to the county unit of government, except as footnoted, in the summary of public expenditure in Table S-7 of this Appendix.

<sup>b</sup> All costs are 1975 constant dollars.

<sup>c</sup> This total cost includes the costs for proposed water access facilities located within primary environmental corridor lands to be acquired under the open space preservation plan element. Such costs are included in order to provide the total cost estimate for acquisition and development of water access facilities under the final park and open space plan.

<sup>d</sup> This cost has been assigned to the local (city, village, town, school district) units of government in the summary of public expenditure in Table S-7 of this Appendix.

<sup>e</sup> This cost has been assigned to the county unit of government in the summary of public expenditure in Table S-7 of this Appendix.

<sup>f</sup> Not applicable.

Source: SEWRPC.

Table S-6

## URBAN PARKS UNDER THE FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

County	Proposed Urban Parks					
	Number of Type III Parks	Number of Type IV Parks	Total Number of Parks	Acquisition Cost	Development Cost <sup>a</sup>	Total Cost <sup>b</sup>
Kenosha . . . . .	2	29	31	\$ 2,940,000	\$ 1,821,275	\$ 4,761,275
Milwaukee . . . .	8	66	74	61,006,000	6,771,075	67,777,075 <sup>c</sup>
Ozaukee . . . . .	3	15	18	741,000	1,385,515	2,126,515
Racine . . . . .	2	26	28	7,916,500	2,501,075	10,417,575
Walworth . . . . .	4	15	19	577,500	1,148,050	1,725,550
Washington . . . .	1	16	17	90,000	1,451,440	1,541,440
Waukesha . . . . .	10	45	55	2,311,500	4,554,085	6,865,585
Region	30	212	242	\$75,582,500	\$19,632,515	\$95,215,015

<sup>a</sup> Includes general park development costs and facility development costs.

<sup>b</sup> All costs are 1975 constant dollars and have been assigned to the local (city, village, town, and school district) units of government, except as footnoted, in the summary of public expenditures in Table S-7 of this Appendix.

<sup>c</sup> This total cost for acquisition and development has been assigned to the county unit of government in the summary of public expenditures in Table S-7 of this Appendix.

Source: SEWRPC.



Table S-7

## PUBLIC EXPENDITURES UNDER THE FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN

County	Public Expenditures <sup>a</sup>																							
	County						City, Village, Town, School District						Total Local						State			Total		
	Acquisition and Development Cost		Operation and Maintenance Cost		Total Cost		Acquisition and Development Cost		Operation and Maintenance Cost		Total Cost		Acquisition and Development Cost		Operation and Maintenance Cost		Total Cost		Acquisition and Development Cost	Operation and Maintenance Cost	Total Cost			
	Total	Per Capita (annual)	Total	Per Capita (annual)	Total	Per Capita (annual)	Total	Per Capita (annual)	Total	Per Capita (annual)	Total	Per Capita (annual)	Total	Per Capita (annual)	Total	Per Capita (annual)	Total	Per Capita (annual)						
Kenosha	12,290,600	3.14	15,005,201	3.83	27,295,801	6.97	5,234,775	1.33	13,232,820	3.38	18,467,595	4.71	17,525,375	4.47	28,238,021	7.21	45,763,396	11.68	2,199,000	1,353,978	3,552,978	19,724,375	29,591,999	49,316,374
Milwaukee	93,844,475	3.50	385,125,500	14.36	478,969,975	17.86	0	0.00	118,916,200	4.44	118,916,200	4.44	93,844,475	3.50	504,041,700	18.80	597,886,175	22.30	0	0	0	93,844,475	504,041,700	597,886,175
Ozaukee	7,453,000	3.21	7,573,056	3.26	15,026,056	6.47	4,427,715	1.90	9,198,216	3.95	13,625,931	5.85	11,880,715	5.11	16,771,272	7.21	28,651,987	12.32	196,000	1,491,220	1,687,220	12,076,715	18,262,492	30,339,207
Racine	11,774,300	2.28	16,432,520	3.19	28,206,820	5.47	10,924,075	2.12	27,818,116	5.40	38,742,191	7.52	22,698,375	4.40	44,250,636	8.59	66,949,011	12.99	1,106,000	1,114,921	2,220,921	23,804,375	45,365,557	69,169,932
Walworth	8,442,000	3.89	1,869,328	0.86	10,311,328	4.75	1,725,550	0.79	9,108,516	4.19	10,834,066	4.98	10,167,550	4.68	10,977,844	5.05	21,145,394	9.73	5,204,000	7,201,046	12,405,046	15,371,550	18,178,890	33,550,440
Washington	9,735,800	3.41	6,477,225	2.27	16,213,025	5.68	1,541,440	0.54	9,673,806	3.39	11,215,246	3.93	11,277,240	3.95	16,151,031	5.66	27,428,271	9.61	9,138,000	6,273,575	15,411,575	20,415,240	22,424,606	42,839,846
Waukesha	38,188,700	4.30	36,218,978	4.08	74,407,678	8.38	6,865,585	0.77	35,755,262	4.02	42,620,847	4.79	45,054,285	5.07	71,974,240	8.10	117,028,525	13.17	8,514,000	4,649,574	13,163,574	53,568,285	76,623,814	130,192,099
Region	181,728,875	3.49	468,701,808	8.99	650,430,683	12.48	30,719,140	0.59	223,702,936	4.29	254,422,076	4.88	212,448,015	4.08	692,404,744	13.28	904,852,759	17.36	26,357,000	22,084,314	48,441,314	238,806,015	714,489,058	953,294,073

<sup>a</sup> All costs are 1975 constant dollars.

Source: SEWRPC.

## Appendix T

### AN ENVIRONMENTAL ASSESSMENT OF THE FINAL RECOMMENDED REGIONAL PARK AND OPEN SPACE PLAN FOR SOUTHEASTERN WISCONSIN: 2000

#### ABSTRACT

The regional park and open space plan provides another element of the evolving comprehensive plan for the physical development of the 2,689 square mile Southeastern Wisconsin Region. The purpose of the plan is to guide the preservation, acquisition, and development of land needed for outdoor recreation in the Region to the year 2000 and for the protection of the natural resource base and thereby the preservation of the overall quality of life within the Region. More specifically, the regional park and open space plan identifies the need for and recommends the location, size, and type of park and open space sites and facilities needed in the Southeastern Wisconsin Region to the year 2000. The plan contains data that can be used in county and local park and related open space planning and in private recreational development planning and is intended to promote coordination of public and private recreation facility development so that efforts in the two sectors complement rather than duplicate one another. Finally, the planning program is intended to qualify units and agencies of government in the Region for state and federal park and open space grants and to provide a basis for Commission review of federal and state grant applications for park and open space purposes.

#### Open Space Preservation Plan Element

The regional park and open space plan for southeastern Wisconsin consists of two basic plan elements, an open space preservation plan element and an outdoor recreation plan element. The open space preservation plan element seeks to assure the preservation of high quality open space lands for the protection of the underlying and sustaining natural resource base and the enhancement of the social and economic well being of the Region. The open space preservation plan element consists of recommendations for the preservation of primary environmental corridors and prime agricultural lands in the Region.

**Primary Environmental Corridors:** Primary environmental corridors are defined as elongated areas which encompass the best remaining elements of the natural resource base. The primary environmental corridors of southeastern Wisconsin generally lie along major stream valleys, around major lakes, and in the Kettle Moraine area. These primary environmental corridors contain almost all of the best remaining woodlands, wetlands, and wildlife habitat areas within the Region; all of the remaining bodies of surface water and associated undeveloped floodlands and shorelands; and important recharge areas for the groundwater aquifers underlying the Region. These corridors also contain the best remaining potential park sites and the most important sites with cultural and scientific value.

Primary environmental corridor lands, excluding the 66 square miles of surface area of lakes and streams, totaled 437 square miles in 1970. About 72 square miles; or 16 percent of this area, are presently in public ownership. The open space preservation plan element recommends public acquisition of an additional 113 square miles, or an additional 26 percent of the primary environmental corridor lands. Including the 72 miles currently in public ownership, a total of 185 square miles of such lands, or about 42 percent of the primary environmental corridor lands, and about 7 percent of the total area of the Region, would be permanently held in public trust upon full implementation of this plan element. In general primary environmental corridor lands which are recommended for public acquisition under the regional park and open space plan are those segments of the primary environmental corridor which are or may be expected to be threatened by urban encroachment and those corridor segments encompassed in duly adopted state, county, and local land use and park and open space plans.

Those areas of the primary environmental corridors which are not actually acquired by the public sector, including existing private outdoor recreation areas, would be kept in compatible, essentially natural open uses through the use of exclusive agricultural, floodland, shoreland, conservancy, and very low density residential zoning. Properly applied and maintained, local land use controls can effectively preserve the corridors and obviate the need for public acquisition. In total, about 252 square miles, or about 58 percent of the primary environmental corridor lands in the Region, would be preserved through zoning.

**Prime Agricultural Lands:** Prime agricultural lands in the Region have been defined by the Commission as lands which are highly productive for agricultural purposes on the basis of soils; the size and extent of the areas farmed; the investment made in drainage, irrigation, and soil conservation facilities; and the historic capability of the area to produce better than average crop yields. The open space preservation plan element recommends the preservation through exclusive agricultural zoning of 733 square miles of prime agricultural lands, or about 98 percent of the existing prime agricultural acreage in the Region. An additional 40 square miles of other agricultural lands also are recommended to be kept in agricultural use to provide a desirable open space setting around major park and scientific sites. A total of 773 square miles of agricultural land, or about 51 percent of the total agricultural land and about 29 percent of the total area of the Region, would be preserved in agricultural use.

### Outdoor Recreation Plan Element

The outdoor recreation plan element consists of two components: a resource-oriented outdoor recreation plan component, which includes recommendations for the number and location of large parks, proposed recreation corridors to accommodate trail-oriented activities, and water access facilities to facilitate the use of rivers, inland lakes, and Lake Michigan; and an urban outdoor recreation plan component which provides recommendations for the number and distribution of local parks and facilities required in urban areas of the Region.

#### Resource-Oriented Outdoor Recreation Plan Component:

Under the resource-oriented outdoor recreation plan component, the acreage of large parks within the Region would be increased 48 percent from 11,610 acres in 1973 to about 17,200 acres by the plan design year 2000. About 4,180 acres, or 75 percent of the proposed 5,590 acre increase, would result from the public acquisition and development of 20 new large—greater than 100 acre—parks and the expansion of existing large parks. The remaining 1,410 acres would result from the development of existing park lands.

Under the recommended plan, all additional resource-oriented recreation facilities would be developed at existing or proposed large parks. Facility development proposals include the provision of five more public swimming beaches along Lake Michigan and five more inland swimming beaches; almost 220 additional public campsites; 12 new golf facilities; about 2,200 new picnic tables; eight more public nature study areas; and two new public downhill skiing areas in the Region.

The resource-oriented recreation plan component proposes the development of a recreation corridor network with a total length of about 437 linear miles. This network would accommodate trails for biking and hiking, horseback riding, and ski touring and would connect many of the existing and proposed large parks, thereby enhancing the integrity of the regional park and open space system. Biking and hiking trails would be developed throughout the entire 437 miles of proposed corridor, while the corridor network would accommodate 113 miles of horseback riding trails, 45 miles of nature study trails, and 48 miles of ski touring trails.

The resource-oriented recreation plan component recommends new or improved small boat water access points on 18 major inland lakes in the Region. Two of these access points—access points on Pine Lake in Waukesha County and Wind Lake in Racine County—would be intended to accommodate fast boating activities, while the remaining 16 access points would be intended to accommodate slow boating activities such as fishing and canoeing. Recreational boat access to rivers in the Region would be expanded under the recommended plan through the provision of five canoe access points on the Milwaukee River and four canoe access points on the Fox River. Finally, the resource-oriented recreation plan component proposes over 1,300 additional boat mooring slips and 19 additional boat launch ramps within harbors of refuge along the Lake Michigan shoreline within the

Southeastern Wisconsin Region to meet the existing and anticipated future needs for recreational water access facilities on Lake Michigan.

Urban Outdoor Recreation Plan Component: The urban outdoor recreation plan component seeks to provide the quantity of local recreational sites—sites less than 100 acres in area—and intensive nonresource-oriented outdoor recreation facilities, including baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, tennis courts, and swimming pools sufficient to meet the overall demand with the urban areas of the Region through the plan design year. Under this plan component, about 3,158 acres of additional local public recreation lands within almost 250 park and school recreation sites would be provided by the plan design year. About 673 acres, or 21 percent of this total increment, would be provided through subdivision dedication; about 230 acres, or about 7 percent of the total increment, may be expected to be provided through school expansion; and about 748 acres, or 24 percent of the increment, would be provided through the development of existing publicly owned, undeveloped park sites. In addition, this plan component would require the public acquisition and development of 1,333 acres of existing open lands and the public acquisition, clearance, and redevelopment for park purposes of about 174 acres of lands currently in urban use. Park study analysis indicated that urban sites and facilities are often most needed in densely populated and already built-up areas of the Region. Clearance and redevelopment are, however, notably expensive in such areas. Accordingly, the plan calls for only enough clearance and redevelopment to allow each resident of an urban area to have access—within one-half mile—to a public outdoor recreation site.

### ENVIRONMENTAL IMPACTS

#### Open Space Preservation Plan Element—

##### Primary Environmental Corridors

The open space preservation plan element proposes to preserve through a combination of public acquisition and the application of public land use controls all remaining primary environmental corridors in the Southeastern Wisconsin Region. Primary environmental corridors in southeastern Wisconsin have been delineated by the Commission as areas which contain at least three of the following elements of the natural resource base or elements which are closely related to or centered on that base: lakes, rivers, streams, and the associated undeveloped shorelands and floodlands; wetlands; woodlands; wildlife habitat areas; rugged terrain and high relief topography; significant geological formations and physiographic features; wet, poorly drained, and organic soils; existing outdoor recreation sites; potential outdoor recreation sites; historic sites and structures; and significant scenic areas and vistas. The primary environmental corridors, are in effect, a composite of the best of the individual elements of the natural resource base of southeastern Wisconsin and they have truly immeasurable environmental and recreational value. The preservation of these environmental corridors as proposed under the regional park and open space plan, would have very basic, positive impacts on the environment of the Region.

Implementation of the corridor preservation recommendations would result in the preservation of a total of 142 square miles of wetlands in the Region. Such wetlands contribute to flood control, serving to temporarily store excess runoff and reduce peak flood flows. Wetlands with standing water are suitable habitat for waterfowl and marsh furbearers, while drier types of wetland support upland game because of the protection afforded by vegetation growth. Wetlands serve as important recharge areas for the groundwater aquifers underlying the Region. Wetlands also contribute to the maintenance of good water quality; wetlands act as "traps" retaining nutrients and sediments, thereby preventing such nutrients from reaching streams and lakes.

Implementation of the corridor preservation recommendations of the plan would preserve a total of 101 square miles of woodlands. Woodlands contribute to clean air and water, and to the maintenance of a diversity of plant and animal life. Woodlands reduce soil erosion and siltation of streams and contribute to flood control by reducing runoff.

Implementation of the corridor preservation recommendations would also preserve many of the best remaining potential park sites in southeastern Wisconsin. Of the 211 remaining high value potential park sites identified in the Commission's potential park sites inventory, 87 percent are located in whole or in part within the Region's primary environmental corridors. The preservation of these high value potential park sites is necessary to ensure the availability of suitable outdoor recreation sites to provide recreational opportunities for the regional population for all time.

Implementation of the corridor preservation recommendations of the plan would also preserve all of the remaining undeveloped floodlands of the Region in essentially natural, open land uses and, thus, aggravation of existing flood problems along developed reaches of the perennial rivers and streams in the Region, as well as avoid the creation of new flood problems. Commission studies have clearly indicated the major impact on flood flows, flood stages, and flood damages of not following the basic park and open space recommendations of preserving the primary environmental corridors in their natural use, but instead permitting the filling and development of the remaining natural floodlands for urban purposes. The results of these analyses indicate that 100 year recurrence interval flood flows may be increased by up to 85 percent under land use conditions involving complete development of floodlands, while corresponding flood stages may be expected to be increased by up to four feet. The increases in flood flows and flood stages would also result in significant—up to 75 percent—increases in flood damages. Preserving the primary environmental corridors in their natural state would preserve many of the remaining natural floodlands in the Region and their attendant floodwater storage capacity and thereby significantly reduce potential flood flows, flood stages, and flood damages associated with the filling and development of remaining natural floodlands.

In addition to wetlands, woodlands, and surface water areas, the primary environmental corridors include areas of rugged terrain and high relief topography, significant geological formations and physiographic features, and significant scenic areas and vistas. Clearly, the preservation of the primary environmental corridors would serve to maintain the overall natural beauty of the Region. In urban areas, the environmental corridors, when properly preserved, provide relief from the patterns of urban development, lending form and structure to urban land uses.

#### Open Space Preservation Plan Element— Prime Agricultural Lands

Agricultural lands are a most important element of the natural resource base of the Region. Implementation of the plan recommendations to preserve most of the remaining prime agricultural lands in the Region will have a positive impact on the environment of southeastern Wisconsin. Preservation of prime agricultural lands through establishment of exclusive agricultural zoning districts will also assist in the implementation of sound soil and water conservation practices and diffused source water pollution abatement measures, such as conservation tillage, crop rotation, contouring, cover crops, terracing, diversion structures and dikes, water and grade control structures, and grassed waterways, and will facilitate implementation of appropriate wind erosion, streambank erosion, pesticide, fertilizer, and animal waste controls. The implementation of such conservation practices and other pollution control measures on agricultural land will preserve and maintain streams and lakes with existing high water quality and help improve the substandard water quality of polluted lakes and streams in order to provide for recreational use and the maintenance of fish and aquatic life. The water quality benefits from conservation practices include reduced sediment, organic matter, and nutrient and pesticide contributions to surface waters. The Commission's areawide water quality management program has shown that well managed agricultural land contributes less pollutants to surface waters than urban and suburban land uses, which include construction and transportation activities and a higher proportion of impervious land surface. Those studies have also shown, however, that land owners are willing to invest in such practices only on lands located in "permanent" agricultural areas and not on lands located in areas likely to be subject to conversion to other uses. Agricultural areas, in addition to providing food and fiber, contribute significantly to the maintenance of an ecological balance between plants and animals. The preservation of prime agricultural lands will serve to maintain the rural character and natural beauty of outlying areas of the Region, at the same time giving form and structure to urban development.

In addition to prime agricultural lands, the open space preservation plan element recommends the permanent preservation of a total of 40 square miles of agricultural lands surrounding major parks and scientific sites in the Region. Such lands would provide a desirable open space setting for these major sites and—especially important for the scientific sites—would contribute to wildlife habitat.

### Resource-Oriented Outdoor Recreation Plan Component

The resource-oriented component of the outdoor recreation plan element includes recommendations on the provision of large parks, recreation corridors to accommodate trail-oriented activities, and recreational water access facilities. Implementation of the recommendations of this plan component would have an overriding positive effect on the environment inasmuch as the public acquisition of land for the proposed parks and recreation corridors would permanently preserve additional segments of the primary environmental corridor and other open lands which were not recommended for public acquisition under the open space preservation plan element.

While the provision of public parks and recreation corridors serves to permanently preserve high value resource areas in essentially open use, natural conditions within future recreation areas will necessarily be altered somewhat to accommodate facilities for participation in intensive and extensive outdoor recreation activities. The actual design of the proposed recreation sites should preserve, as far as possible, the natural condition of each site. Detailed site designs should, for example, minimize the displacement of wildlife and loss of woodlands and, in general, should preserve the most significant resource amenities of each site. In addition, water quality should be protected by providing vegetation buffer strips along streams, by streambank and lakeshore erosion control measures, and by temporary erosion control practices during facility or site development. It should be recognized that the resource-oriented recreation plan component proposes general locations for future large parks and recreation corridors and is not site specific in nature. The selection of specific sites and the design of detailed site plans is part of the local park planning process which refines the generalized regional plan.

**Large Parks:** For the purposes of the regional park and open space plan, large parks are defined as parks of at least 100 acres which have a countywide or multicounty service area. Large parks rely for recreational value and character on natural resource amenities and usually contain large natural open areas. Large parks typically provide space and facilities for such activities as camping, golf, picnicking, and swimming. The resource-oriented component of the outdoor recreation plan element proposes the provision of an additional 5,590 acres of large parks in the Region by the year 2000. Of this total, 4,180 acres, or 75 percent, would be provided through the public acquisition and development of 20 new parks or the expansion of existing parks, and the remainder would be provided through the development of existing public lands. This plan component also suggests allocation of intensive resource-oriented facilities—swimming beaches, campsites, golf facilities, picnic tables, nature study areas, and downhill skiing areas—to new and existing large parks.

Because many of the large parks included in the resource-oriented component of the outdoor recreation plan element are located within the primary environmental corridors of the Region, implementation of the park proposals would contribute to the preservation and

enhancement of valuable natural resource amenities in the Region. Thus, the plan calls for the public acquisition of 2,595 acres of primary environmental corridor lands for development as new large parks, thereby ensuring the permanent preservation of these areas.<sup>1</sup>

The plan also proposes the public acquisition of 1,585 acres of open lands outside the primary environmental corridors for new large parks. These lands are recommended for acquisition and development as large parks under the regional plan because they are included in local park and open space plans or because of the proximity to population concentrations. Although not situated within primary environmental corridors, these proposed parks contain natural resource amenities, the preservation of which would impact positively on the environment of the Region.

As previously noted, while the provision of large parks serves to permanently preserve high value resource areas in essentially open uses, the development of recreation facilities requires the alteration of natural conditions of the proposed recreation sites. Good park site selection and site design techniques must attempt to minimize problems attendant to park development such as the displacement of wildlife, loss of woodlands, and erosion. Park site selection and site design processes, however, remain local rather than regional park planning functions. Rather than proposing specific sites for development as new large parks, the regional plan, with two exceptions, identifies general areas in which large parks should be developed.<sup>2</sup> Frequently these areas contain several high value potential park sites which could be developed to accommodate the required facilities. By recommending general areas for new large parks, the regional plan attempts to provide desirable flexibility to the public sector in efforts to implement the regional plan, allowing the selection of a site which is suitable for the required facilities and which is actually available for purchase at a cost within the economic capability of the governmental units involved.

**Recreation Corridors:** Recreation corridors are defined as publicly owned ribbons of land of at least 15 miles in length located through areas of scenic, scientific, historic, or other cultural interest, which contain trails marked and maintained for such activities as hiking, biking, horse-

---

<sup>1</sup> About 1,475 acres, or 57 percent of this total, are recommended for permanent preservation through public acquisition under the open space preservation plan element.

<sup>2</sup> The exceptions are the two major parks—parks of over 250 acres—recommended under the regional park and open space plan: the Paradise Valley park site in Washington County and the Sugar Creek park site in Walworth County. While preliminary site boundaries have been recommended by the Commission for each of these sites, the Commission has not prepared detailed site designs for these sites.



back riding, and ski touring. The resource-oriented component of the outdoor recreation plan element proposes the development of a system of recreation corridors with a total length of 437 linear miles. The proposed recreation corridors would be located for the most part within primary environmental corridors situated within areas of the Region possessing recreational resource values of regional significance, including the Kettle Moraine, the Lake Michigan shoreline, and the Milwaukee River, Fox River, Root River, Sugar Creek, and Turtle Creek corridors.

Implementation of the recreation corridor proposals would contribute significantly to the permanent preservation of primary environmental corridor lands in the Region. The importance of the preservation of environmental corridor lands to the regional environment has already been discussed. The plan calls for the public acquisition of about 3,180 acres of primary environmental corridor lands for recreation corridor purposes, thereby ensuring the permanent preservation of these areas.<sup>3</sup>

The plan also recommends public acquisition of 640 acres of open lands outside the primary environmental corridor for recreation trail purposes. Such lands are necessary to provide continuity to the recreation corridor network. While not located in primary environmental corridors, these open lands contain certain natural resource amenities, the preservation of which will have a positive impact on the regional environment.

The regional park and open space plan proposes that large parks should be developed only to accommodate facilities for those activities which rely heavily on natural resource amenities to enhance the quality of the recreational experience. Specifically, the plan proposes that new large parks should accommodate facilities for such resource-oriented activities as camping, golf, picnicking, nature study, beach swimming, and downhill skiing. Under the plan, facilities for such activities as baseball and tennis, which do not rely on natural resource amenities for the quality of the recreational experience, would not be provided in large parks. Rather, such nonresource-oriented facilities would be provided in smaller parks in urban areas of the Region. Nonresource-oriented facilities are not consistent with the nature of large parks as conceived by the Commission, and the provision of such facilities within large parks would result in an unnecessary alteration of high value resource areas.

Regional plan proposals for resource-oriented facilities within new and existing large parks were formulated within the context of the identified need for such facilities and suitability of potential park areas for the various facilities as indicated by the Commission's potential park sites inventory. Under the potential park sites inventory,

---

<sup>3</sup>About 1,840 acres, or about 58 percent of this total, are recommended for permanent preservation through public acquisition under the open space preservation plan element.

each identified potential park site was evaluated according to its development possibility for a variety of resource-oriented recreation facilities. The planned allocation of needed facilities under the regional park and open space plan was accomplished within the framework of these development possibilities. This ensured that the proposed parks would have the natural resource amenities required to provide high quality recreation experience and, at the same time, ensure that the recommended facilities would be provided without significant adverse environmental impact.

Although development of the recreation corridor system will contribute to the permanent preservation in open use of primary environmental corridors in the Region, the provision of recreation trails within such areas requires an alteration of natural conditions. The plan envisions the development of hiking and biking trails throughout the entire corridor network. Segments of the overall system would also accommodate horseback riding, nature study, and cross country skiing activities. Compacted gravel trails would be provided in rural areas and hard surface trails would be provided in more heavily used segments of the recreation corridor in urban areas. The trails themselves would be relatively narrow, and proper trail design should minimize potential problems of loss of woodlands, displacement of wildlife, and erosion. It should be noted, however, that the regional plan represents only a generalized corridor network. Refinement of the proposed recreation corridor network and detailed design of trail facilities are properly local planning functions.

The recommended recreation corridor system, like the proposed major parks, would provide an opportunity for the regional population to participate in resource-oriented activities in an appropriate setting. The introduction of human activity into previously wholly undeveloped areas is likely to affect the environment, the most significant impact being the potential displacement of wildlife. Proper trail design and proper management, however, should minimize any adverse effects associated with trail use. In this regard, the plan emphatically states that snowmobiles and off-the-road motorized vehicles should not be allowed in the proposed corridor system. Potential misuse of trails can be controlled through design features which, for example, allow passage bicyclists and pedestrians but prohibit passage of snowmobilers.

Inland Water Access—Fast Boating Activities: The resource-oriented outdoor recreation plan component recommends the provision of water access facilities to accommodate fast boating activities such as water skiing and pleasure boating on two of the 100 major inland lakes of the Region—Pine Lake in Waukesha County and Wind Lake in Racine County. Each access point would be improved with a boat launch ramp and an area for car and trailer parking. Ten parking spaces would be provided at Pine Lake and 12 at Wind Lake.

Motor boating activity is frequently criticized because of the wave action and noise generated and because of suspected adverse effects on water quality. Concerning

water quality, tests on the effects of outbound engine exhaust emissions on the aquatic environment conducted by a private consultant under the guidance of the U. S. Environmental Protection Agency have indicated that outboard motor operation does not contaminate or degrade water quality, fish life, or the biological communities and organisms of inland lakes.<sup>4</sup> Noise and wave action, however, are generated by most motor boating activities. Noise generated by motor boats can disturb wildlife and upset the serenity of the area for slow boaters and riparian owners. Wave action can upset the tranquility of the lake for slow boaters and can cause shore erosion. It should be noted that the small number of parking spaces at the proposed access points on Pine Lake and Wind Lake would serve to limit the number of nonriparian fast boaters on these lakes and, therefore, to control these adverse environmental impacts. The development and enforcement of sound boating regulations for each lake can further mitigate the adverse impacts of noise and wave action generated by fast boating activities.

**Inland Water Access—Slow Boating Activity:** The resource-oriented outdoor recreation plan recommends new or improved water access facilities on 16 major inland lakes to accommodate slow boating activities such as fishing, canoeing, and rowboating as well as the provision of nine canoe access points on rivers in the Region, including five access points on the Milwaukee River and four on the Fox River. These access facilities would include an area for parking cars—typically six car spaces—and would be designed to facilitate convenient launching of boats by hand. The access points would be designed to preclude access for fast boating activities such as water skiing and pleasure boating, with no boat launch ramps recommended at these sites.

In general, the proposed access points would facilitate slow boating activities which would not generate significant noise, wave action, or other adverse environmental impacts. Motorized activity would be that which is incidental to fishing, and motors would necessarily be of low horsepower since they would be hand carried from automobiles to small boats.

**Recreational Boating Access—Lake Michigan:** The resource-oriented outdoor recreation plan component also recommends the provision of about 1,300 additional boat mooring slips and 19 additional boat launch ramps within harbors of refuge along the Lake Michigan shoreline in southeastern Wisconsin. While the park study has identified “voids” in location of access points along the Lake Michigan shoreline in southeastern Wisconsin, park plan recommendations for additional access facilities are generalized, rather than site specific, in nature. The park plan calls on the U. S. Department of the Army, Corps of Engineers, to conduct detailed studies of potential recreational harbors and ultimately construct small boat

harbors of refuge in a manner which satisfies the recommended Lake Michigan water access facility standards to the maximum extent practicable.

Owing to the large size of Lake Michigan, the noise and wave action generated by additional fast boating activity would not represent an adverse environmental impact. The construction of new harbors or the improvement of existing harbors to accommodate the needed access facilities, however, may impact on water quality, fish life, and shore erosion. In this regard, the Corps of Engineers would prepare a detailed environmental impact statement for each of its proposed harbors of refuge and would take the necessary precautions in the design and construction of the harbors to ensure conformance with environmental safeguards.

#### Urban Outdoor Recreation Plan Component

The urban outdoor recreation plan component proposes the provision of 3,158 additional acres of local park land within urban areas of the Region by the year 2000. The plan recommends a total of 30 Type III parks, which range in size from 25 to 99 acres, and 212 Type IV parks and school recreation sites, which are less than 25 acres in area. A small portion of the proposed increase in local park lands—174 acres, or 6 percent—would be provided through the acquisition, clearance, and redevelopment for park purposes of land currently in urban area.

In contrast to the large parks proposed under the resource-oriented outdoor recreation plan component, local parks proposed within the urban areas of the Region rely less for character on natural resource amenities and more on the developmental conditions of the area to be served. Nevertheless, the local parks, especially Type III parks, often contain significant natural features such as stands of trees or small wetland or surface water areas which are permanently preserved in the public domain. Implementation of the urban outdoor recreation plan component would, thus, contribute to the preservation of small natural areas containing resource amenities which might otherwise be lost to urban development. In addition, local parklands lend form and structure to urban development within the Region.

While the provision of local parks can permanently preserve resource areas from the threat of urban encroachment, the development of recreation facilities implies certain changes in the natural condition of the proposed recreation sites. The proposed local parks would be heavily developed to accommodate facilities for intensive nonresource-oriented activities such as baseball, basketball, and tennis. Potential adverse environmental impacts associated with attempts to provide such facilities, such as loss of woodlands and erosion, can be minimized through proper site selection and design in the local park planning process. Good site selection and design techniques must also attempt to minimize any adverse impact of the local park on the surrounding neighborhood, the major considerations in this regard being the provision of adequate parking areas and the provision of buffers between heavily used recreation facility areas and surrounding residential areas.

---

<sup>4</sup> *Analyses of Pollution from Marine Engines and Effect on Environment—U. S. Environmental Protection Agency, Grant R-801799, Program Element 1-BB038.*

While most additional local park land proposed under the plan would be developed on existing open land, the plan also recommends the acquisition and clearance of 174 acres of land which are currently in urban use for redevelopment as local parks. Such redevelopment would occur in the central portions of the Cities of Kenosha, Milwaukee, and Racine in areas dominated by deteriorating residential structures with limited remaining economic life. Reclaiming deteriorating areas for local park purposes would provide welcome relief to surrounding high-density urban development, would upgrade the quality of neighborhoods, and, in general, would beautify the urban environment.

An overriding consideration of the urban outdoor recreation plan component is that small parks and public nonresource-oriented facilities such as baseball diamonds, basketball courts, and tennis courts should be provided primarily in urban areas of the Region. Because of their small service radii, these facilities can economically be provided only in the urban areas with a significant population concentration. The provision of local parks and nonresource-oriented recreation facilities in rural areas of the Region is not only inefficient but also contributes to urban sprawl, with all of the attendant adverse environmental impacts. The regional park plan, however, recommends that rural town units of government which currently lack any town-owned parks and recreational facilities be allowed the opportunity to acquire and develop, with available federal and state grant-in-aid support, one town park and associated recreation facilities to meet the basic local recreation needs of the town residents and to promote a desirable local sense of community. It is not intended that numerous local parks with intensive nonresource-oriented facilities be provided with grant-in-aid support to serve the lower density existing or future suburban development in many rural areas, thereby contributing to urban sprawl. Such suburban development would not qualify as an "urban area" and, thus, according to the adopted standards for urban parks, it would not be considered eligible for grant-in-aid support of local park and recreational facilities.<sup>5</sup>

#### ALTERNATIVE PARK AND OPEN SPACE PLANS

Frequently Commission plan preparation activities are complicated by having to consider a wide spectrum of alternative plan elements. The regional park and open space plan was comparatively simple in this respect. The open space preservation element—because of its direct relationship to the natural resource base—and the urban component of the outdoor recreation plan element—because of its direct relationship to the urban

areas identified in the adopted regional land use plan—required no alternative plan proposals. The resource-oriented component of the outdoor recreation plan element did, however, generate two alternative plan proposals from which a choice had to be made. These two plan proposals—an accessibility based alternative and a resource based alternative—each include recommendations for large parks which would accommodate needed facilities for intensive resource-oriented activities; recreation corridors which would accommodate needed facilities for trail-oriented activities; and proposed water access facilities which would accommodate use of rivers, major inland lakes, and Lake Michigan for extensive water based activities.

Both alternative plan components were designed to meet the identified need for resource-oriented outdoor recreation sites and facilities within the Region by the plan design year. The accessibility based alternative would attempt to meet existing and anticipated outdoor recreation requirements by locating future sites in the areas readily accessible to population centers of the Region. Under this alternative plan, a large portion of the proposed public recreation corridor network would be developed in locations that provide convenient access to residents of the Kenosha, Milwaukee, and Racine urbanized areas. In addition, individual recreation corridor segments in outlying areas of the Region would provide convenient access to residents of smaller urban centers including Whitewater, Oconomowoc, Hartford, and West Bend. Nine of the 19 new large parks proposed under the accessibility alternative would be located within 20 miles of the central business district of the City of Milwaukee. Of the remaining 10 large parks proposed under this alternative plan, two would be located in eastern Kenosha County to provide space for resource-oriented facilities for residents of the Kenosha urbanized area, and eight would be located in the outlying portions of the Region to provide space required for resource-oriented facilities for residents of the rural and outlying urban areas of the Region.

The second alternative plan component, the resource based alternative, would address the identified needs for public resource-oriented recreation sites and facilities in the Region through a design which, in comparison to the accessibility based alternative, places greater emphasis in the location of parks on site quality and less emphasis on the overall accessibility of recreation sites and facilities to the regional population. In general, the resource based alternative proposes to meet existing and anticipated future resource-oriented outdoor recreation requirements by developing the needed facilities at the best remaining potential recreation sites in the Region. Under this alternative, public recreation corridors, which would accommodate trail facilities for hiking, biking, and other trail activities, would be located primarily in primary environmental corridors situated within the Kettle Moraine, along the Lake Michigan shoreline, and along the Milwaukee River, Fox River, Root River, Sugar Creek, and Turtle Creek corridors. Under this alternative, many of the proposed large park sites would

<sup>5</sup> Urban areas are defined as areas containing a closely spaced network of minor streets which include concentrations of residential, commercial, industrial, governmental, or institutional land uses having a minimum total area of 160 acres and a minimum population of 500 persons. Such areas are usually incorporated and served by sanitary sewerage facilities.

be situated in outlying areas of the Region where natural resource amenities with high recreational value are relatively abundant. Only four new large parks proposed under this alternative would be located within 20 miles of the central business district of the City of Milwaukee.

After detailed review and evaluation of the degree to which the accessibility based alternative and the resource based alternative plan components would meet park and open space development standards, the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning chose the resource based alternative for incorporation into the recommended park and open space plan for southeastern Wisconsin. Selection of the resource based alternative reflected the finding that this alternative would provide a higher quality of recreational experience than the accessibility based alternative because it incorporated more high value potential park sites. Moreover, the resource based alternative would contribute more significantly to the protection and wise use of the natural resource base of the Region than would the accessibility based alternative.

Large parks and recreation corridors should, to the maximum extent, be located in primary environmental corridors in order to provide an appropriate setting for resource-oriented activities and to achieve important open space preservation objectives. Under both alternative plan components, more than 90 percent of the proposed recreation corridor network would be situated in primary environmental corridors. The resource based alternative would, however, provide more new large parks in the primary environmental corridor than the accessibility based alternative. Thus, 14 parks, or 82 percent of the 17 new large parks proposed under the resource based alternative, would be situated in primary environmental corridors. In comparison, 13 parks, or 68 percent of the 19 new large parks proposed under the accessibility based alternative, would be located within the primary environmental corridors.

There are several other indications that the resource based alternative would better achieve regional open space preservation objectives and provide for higher quality recreational experience than the accessibility based alternative. Under the resource based alternative, 82 percent of the recreation corridor network would be situated in areas identified in the Commission's potential park sites inventory as possessing natural resource amenities of regional significance including the Kettle Moraine, the Lake Michigan shoreline, and the Milwaukee River, Fox River, Root River, Sugar Creek, and Turtle Creek corridors. In comparison, only 59 percent of the recreation corridor system proposed under the accessibility based alternative would be located in such regionally significant resource areas. Furthermore, 16 of 17 new large parks, or 94 percent of the new large parks proposed under the resource based plan, would be developed within areas designated as high value potential park sites in the Commission's potential park sites inventory. In contrast, only 13 of 19 new parks, or 68 percent of the new parks proposed under the accessibility based plan, would be developed at high value potential park sites.

## RELATIONSHIP BETWEEN SHORT-TERM AND LONG-TERM USES

Past and present land development activities in southeastern Wisconsin affect the Region's ability to meet the outdoor recreation and open space needs of the regional population for all time. Many potential parks and other high value resource areas have been lost forever to urban encroachment. In view of the continued proliferation of scattered low-density development, the regional park and open space plan takes on increased importance as a framework within which the outdoor recreation and open space needs of the existing and future population of the Region can be met.

The regional park and open space plan recommends public acquisition of many segments of the primary environmental corridors and the public acquisition and development of a wide range of outdoor recreation sites and recreation corridors. Such public acquisition would serve to permanently preserve important natural resource areas in essentially open use. Public financial resources available for park development and open space preservation purposes are limited, and public acquisition and development of land under the regional park and open space plan will be undertaken gradually over the plan design period. The preservation of potential recreation areas and open space lands, however, should be accomplished as soon as possible. Such immediate preservation can be achieved through appropriate zoning, involving the use of exclusive agricultural, floodland, shoreland, and conservancy districts. Such zoning should, of course, include all primary environmental corridor lands and all agricultural lands which are recommended to be preserved through zoning under the open space preservation plan element. In addition, those areas of the primary environmental corridors which are recommended for acquisition under the open space preservation plan element and other lands which are recommended for acquisition and development as large parks, urban parks, or recreation corridors under the outdoor recreation plan element should also be initially zoned utilizing appropriate zoning districts in order to achieve immediate protection from urban encroachment, pending acquisition.

## COMMITMENT OF RESOURCES

There would be relatively few irreversible and irretrievable commitments of resources with implementation of the regional park and open space plan. No development whatsoever is proposed under the open space preservation element of the plan, the primary purpose of which is the preservation through a combination of public acquisition and the application of land use controls of the primary environmental corridor and prime agricultural lands in the Region. Development activities under the outdoor recreation element of the plan would be limited to those necessary to meet the anticipated recreational needs of the regional population through the plan design year 2000. As previously noted, the outdoor recreation element of the regional park and open space plan includes proposals for the provision of additional large parks, recreation corridors, water access facilities, and urban

parks. While such development implies an alteration of natural conditions, the recreational improvements would conform to the resource amenities and overall character of the potential sites and would leave the sites in essentially open use. The most intensive development and commitment of resources would occur in efforts to provide the local parks required in urban areas of the Region. These parks would be heavily developed with intensive nonresource-oriented facilities such as baseball diamonds, basketball courts, tennis courts, and playfields.

Despite this more intense level of recreational development, urban parks are typically not entirely developed with recreational facilities but usually contain at least small natural open areas. If the urban park proposals are not implemented, it is very likely that the potential park land would be developed for intensive residential, commercial, industrial, or other urban uses, which would have a significantly greater adverse impact on the environment.



## AN HISTORIC PRESERVATION ASSESSMENT OF THE REGIONAL PARK AND OPEN SPACE PLAN

## ABSTRACT

The regional park and open space plan provides another element of the evolving comprehensive plan for the physical development of the 2,689-square-mile Southeastern Wisconsin Region. The purpose of the plan is to guide the preservation, acquisition, and development of land needed for outdoor recreation in the Region to the year 2000 and for the protection of the natural resource base and thereby the preservation of the overall quality of life within the Region. More specifically, the regional park and open space plan identifies the need for and recommends the location, size, and type of park and open space sites and facilities needed in the Southeastern Wisconsin Region to the year 2000. The plan contains data that can be used in county and local park and related open space planning and in private recreational development planning and is intended to promote coordination of public and private recreation facility development so that efforts in the two sectors complement rather than duplicate one another. Finally, the planning program is intended to qualify units and agencies of government in the Region for state and federal park and open space grants and to provide a basis for Commission review of federal and state grant applications for park and open space purposes.

Open Space Preservation Plan Element

The regional park and open space plan for southeastern Wisconsin consists of two basic plan elements, an open space preservation plan element and an outdoor recreation plan element. The open space preservation plan element seeks to assure the preservation of high quality open space lands for the protection of the underlying and sustaining natural resource base and the enhancement of the social and economic well being of the Region. The open space preservation plan element consists of recommendations for the preservation of primary environmental corridors and prime agricultural lands in the Region.

Primary Environmental Corridors: Primary environmental corridors are defined as elongated areas which encompass the best remaining elements of the natural resource base. The primary environmental corridors of southeastern Wisconsin generally lie along major stream valleys, around major lakes, and in the Kettle Moraine area. These primary environmental corridors contain almost all of the best remaining woodlands, wetlands, and wildlife habitat areas within the Region; all of the remaining bodies of surface water and associated undeveloped floodlands and shorelands; and important recharge areas for the groundwater aquifers underlying the Region. These corridors also contain the best remaining potential park sites and the most important sites having cultural and scientific value.

Primary environmental corridor lands, excluding the 66 square miles of surface area of lakes and streams, totaled 437 square miles in 1970. About 72 square miles, or 16 percent of this area, are presently in public ownership. The open space preservation plan element recommends public acquisition of additional 113 square miles, or an additional 26 percent of the primary environmental corridor lands. Including the 72 miles currently in public ownership, a total of 185 square miles of such lands, or about 42 percent of the primary environmental corridor lands and about 7 percent of the total area of the Region, would be permanently held in public trust upon full implementation of this plan element. In general primary environmental corridor lands which are recommended for public acquisition under the regional park and open space plan are those segments of the primary environmental corridor which are or may be expected to be threatened by urban encroachment and those corridor segments encompassed in duly adopted state, county, and local land use and park and open space plans.

Those areas of the primary environmental corridors which are not actually acquired by the public sector, including existing private outdoor recreation areas, would be kept in compatible, essentially natural open uses through the use of exclusive agricultural, floodland, shoreland, conservancy, and very low-density residential zoning. Properly applied and maintained, local land use controls can effectively preserve the corridors and obviate the need for public acquisition. In total, about 252 square miles, or about 58 percent of the primary environmental corridor lands in the Region, would be preserved through zoning.

Prime Agricultural Lands: Prime agricultural lands in the Region have been defined by the Commission as lands which are highly productive for agricultural purposes on the basis of soils; the size and extent of the areas farmed; the investment made in drainage, irrigation, and soil conservation facilities; and the historic capability of the area to produce better than average crop yields. The open space preservation plan element recommends the preservation through exclusive agricultural zoning of 733 square miles of prime agricultural lands, or about 98 percent of the existing prime agricultural acreage in the Region, to protect this invaluable natural resource. An additional 40 square miles of other agricultural lands also are recommended to be kept in agricultural use to provide a desirable open space setting around major park and scientific sites. A total of 773 square miles of agricultural land, or about 51 percent of the total agricultural land and about 29 percent of the total area of the Region, would be preserved in agricultural use.

### Outdoor Recreation Plan Element

The outdoor recreation plan element consists of two components: a resource-oriented outdoor recreation plan component which includes recommendations for the number and location of large parks, proposed recreation corridors to accommodate trail-oriented activities, and water access facilities to facilitate the use of rivers, inland lakes, and Lake Michigan; and an urban outdoor recreation plan component which provides recommendations for the number and distribution of local parks and facilities required in urban areas of the Region.

Resource-Oriented Outdoor Recreation Plan Component: Under the resource-oriented outdoor recreation plan component, the acreage of large parks within the Region would be increased 48 percent from 11,610 acres in 1973 to about 17,200 acres by the plan design year 2000. About 4,180 acres, or 75 percent of the proposed 5,590 acre increase, would result from the public acquisition and development of 20 new large—greater than 100 acre—parks and the expansion of existing large parks. The remaining 1,410 acres would result from the development of existing park lands.

Under the recommended plan, all additional resource-oriented recreation facilities would be developed at existing or proposed large parks. Facility development proposals include the provision of five more public swimming beaches along Lake Michigan and five more inland swimming beaches; almost 220 additional public campsites; 12 new golf facilities; about 2,200 new picnic tables; eight more public nature study areas; and two new public downhill skiing areas in the Region.

The resource-oriented recreation plan component proposes the development of a recreation corridor network with a total length of about 437 linear miles. This network would accommodate trails for biking and hiking, horseback riding, and ski touring and would connect many of the existing and proposed large parks, thereby enhancing the integrity of the regional park and open space system. Biking and hiking trails would be developed throughout the entire 437 miles of proposed corridor, while the corridor network would accommodate 113 miles of horseback riding trails, 45 miles of nature study trails, and 48 miles of ski touring trails.

The resource-oriented recreation plan component recommends new or improved small boat water access points on 18 major inland lakes in the Region. Two of these access points—access points on Pine Lake in Waukesha County and Wind Lake in Racine County—would be intended to accommodate fast boating activities, while the remaining 16 access points would be intended to accommodate slow boating activities such as fishing and canoeing. Recreational boat access to rivers in the Region would be expanded under the recommended plan through the provision of five canoe access points on the Milwaukee River and four canoe access points on the Fox River. Finally, the resource-oriented recreation plan component proposes over 1,300 additional boat mooring slips and 19 additional boat launch ramps within harbors of refuge

along the Lake Michigan shoreline within the Southeastern Wisconsin Region to meet the existing and anticipated future needs for recreational water access facilities on Lake Michigan.

Urban Outdoor Recreation Plan Component: The urban outdoor recreation plan component seeks to provide the quantity of local recreational sites—sites less than 100 acres in area—and intensive nonresource-oriented outdoor recreation facilities, including baseball diamonds, basketball goals, ice skating rinks, playfields, playgrounds, tennis courts, and swimming pools, sufficient to meet the overall demand with the urban areas of the Region through the plan design year. Under this plan component, about 3,158 acres of additional local public recreation lands within almost 250 parks and school recreation sites would be provided by the plan design year. About 673 acres, or 21 percent of this total increment, would be provided through subdivision dedication; about 230 acres, or about 7 percent of the total increment, may be expected to be provided through school expansion; and about 748 acres, or 24 percent of the increment, would be provided through the development of existing publicly owned, undeveloped park sites. In addition, this plan component would require the public acquisition and development of 1,333 acres of existing open lands and the public acquisition, clearance, and redevelopment for park purposes of about 174 acres of lands currently in urban use. Park study analysis indicated that urban sites and facilities are often most needed in densely populated and already built-up areas of the Region. Clearance and redevelopment are, however, notably expensive in such areas. Accordingly, the plan calls for only enough clearance and redevelopment to allow each resident of an urban area to have access—within one-half mile—to a public outdoor recreation site.

### HISTORIC SITES INVENTORY

Historic sites comprise an important element of the unique cultural heritage of the Region, providing a tangible link with the past. A historic sites inventory identifying both marked and unmarked sites with historic, other cultural, or scientific value was conducted by the Commission in 1973 as part of the regional park and open space planning program. The historic sites inventory includes sites listed in the National Register of Historic Places as well as historic sites identified by the State Historical Society, county historical societies in the Region, and local surveys of historic sites. The identified sites have been located on a regional base map at a scale of 1" = 8,000 feet and descriptive information concerning each site has been entered into a computer file.

The 1973 inventory indicated 781 sites of historic significance within the Region, including 61 sites listed on the National Register of Historic Places at that time. Of the total of 781 historic sites, 187 sites, or 24 percent, were marked while the balance was unmarked. Cultural features accounted for 235, or 30 percent of the identified historic sites. Most cultural sites within the Region are related to Indian or early European settlements and

include old plank roads, early trails, burial grounds, and cemeteries. Natural features accounted for an additional 84 sites, or 11 percent of the identified historic sites. Natural features consist primarily of those wetland, woodland, and water areas which support plant and animal communities or contain geological features having potential importance for teaching or research. The balance of the historic sites—462 sites, or 59 percent of the total—are structures, the majority of them located in the urbanized areas of the Region, particularly in Milwaukee County. Historic homes, churches, inns, and schools predominate in this category, which also includes government buildings, mills, and museums.

## PLAN IMPACTS ON HISTORIC SITES

As urbanization continues in southeastern Wisconsin, many historic sites and structures which provide distinctive, authentic links to the past can be expected to be threatened with destruction. Once destroyed, such sites and structures cannot be replaced. Implementation of the regional park and open space plan would serve to significantly preserve and enhance the historic sites of the Region, reducing the chances of careless destruction. The impacts of the various elements of the regional park and open space plan on historic sites in the Region are discussed below.

### Open Space Preservation Plan Element—

#### Primary Environmental Corridors

The open space preservation plan element proposes to preserve through a combination of public acquisition and the application of public land use controls all remaining primary environmental corridors in southeastern Wisconsin. Primary environmental corridors are elongated areas representing a composite of the best of the individual elements of the natural resource base of the Region. In the deliberation of the regional primary environmental corridors, consideration was given to the location of the individual elements of the natural resource base such as wetlands, woodlands, and wildlife habitat areas. In addition, consideration was given to the location of elements which are closely related to or centered on the natural resource base, including historic sites and structures. Many primary environmental corridors lie along stream valleys in which the earliest development in the Region took place. As might be expected, the regional primary environmental corridors contain many of the sites identified in the Commission's historic sites inventory. Thus, a total of 252 historic sites, including 18 sites in the National Register of Historic Places, are situated within the primary environmental corridors. The combination of public acquisition and appropriate zoning of the regional primary environmental corridors, which is recommended under the open space preservation plan element, would ensure preservation of the environmental corridors and protection from urban encroachment of the historic sites which they contain.

### Open Space Preservation Plan Element—

#### Prime Agricultural Lands

The open space preservation plan element recommends the preservation through exclusive agricultural zoning

of 733 square miles of prime agricultural lands, the most productive remaining agricultural lands in the Region. The plan further recommends preservation of 40 square miles of other agricultural lands around major park and scientific sites. Under the plan, then, a total of 773 square miles, or about 29 percent of the total area of the Region, would be preserved in agricultural use.

Scattered within these prime agricultural areas is a variety of historic sites, many of which provide a link to early rural life in southeastern Wisconsin. A total of 50 historic sites are located within the prime agricultural lands which are recommended to be preserved. The application of zoning restrictions, as recommended under the open space preservation plan element, would not only ensure the preservation in open use of valuable prime agricultural lands but would also contribute to the protection of these historic sites.

### Resource-Oriented Outdoor Recreation Plan Component

The resource-oriented component of the outdoor recreation plan element includes recommendations concerning the provision of large parks, recreation corridors to accommodate trail-oriented activities, and recreational water access facilities. It should be recognized that the resource-oriented recreation plan component proposes general locations for future large parks and recreation corridors and is not site specific in nature. The selection of specific sites and the design of detailed site plans is part of the local planning process which refines the generalized regional plan.

**Large Parks:** For purposes of the regional park and open space plan, large parks are defined as parks of at least 100 acres which have a countywide or multicommunity service area. Large parks rely for recreational value and character on natural resource amenities and usually contain large natural open areas. The resource-oriented component of the outdoor recreation plan element proposes the provision of an additional 5,590 acres of large parks in the Region by the year 2000. Of this total, 4,180 acres, or 75 percent, would be provided through the acquisition and development of 20 new parks or the expansion of existing parks, and the remainder would be provided through the development of existing public lands.

Large parks may be developed to include points having historic, other cultural, or scientific value, thereby enhancing such points of interest and, in some cases, increasing their accessibility to the regional population. The development of a large park to include a historic site permanently preserves that site and provides the open space setting which is often desirable.

The provision of large parks implies the development of various resource-oriented recreational facilities, roads, parking areas, and other improvements. Such improvements should be undertaken in a manner which enhances any historic site within the proposed park, and the park should be designed to highlight any significant historic sites which are present. Improvements within large parks which have an adverse impact on historic sites would be

inconsistent with the regional park and open space plan. It should be noted that park site selection and site design processes, however, remain local rather than regional park planning functions. Rather than proposing specific sites for development as new large parks, the regional plan, with two exceptions, identifies general areas in which large parks should be developed.<sup>1</sup> Frequently these areas contain several high value potential park sites which could be developed to accommodate the required facilities.

**Recreation Corridors:** Recreation corridors are defined as publicly owned ribbons of land of at least 15 miles in length located through areas of scenic, scientific, historic, or other cultural interest, which contain trails marked and maintained for such activities as hiking, biking, horseback riding, and ski touring. The resource-oriented component of the outdoor recreation plan element proposes the development of a system of recreation corridors with a total length of 437 linear miles. Implicit in the very concept of the recreation corridor is the notion that the recreation corridor would be developed to include a variety of historic sites, making them more accessible to the regional population. By incorporating points of historic interest, the recreation corridor would enhance the historic sites and ensure their lasting preservation.

The recreation corridor network would be located almost entirely within the regional primary environmental corridors. As indicated above, a total of 252 historic sites, including 16 sites in the National Register of Historic Places, are situated within the primary environmental corridor. Local park planning efforts which determine the exact location of recreation trails within the primary environmental corridors should attempt to incorporate these historic sites into the recreation corridor system to the maximum extent possible. Local planning efforts which refine the regional recreation corridor plan should also attempt to "tie in" to the recreation corridor system significant points of historic interest which lie outside the primary environmental corridor but which could be readily reached by short spurs from the recreation corridor. Park study analyses indicated a total of 334 historic sites which are located distances up to one mile away from the primary environmental corridor; many of these sites could be "tied in" to the recreation corridor network in this manner.<sup>2</sup> In urban areas of the

---

<sup>1</sup> The exceptions are the two major parks—parks of over 250 acres—recommended under the regional park and open space plan: the Paradise Valley park site in Washington County and the Sugar Creek park site in Walworth County. While preliminary site boundaries have been recommended by the Commission for each of these sites, the Commission has not prepared detailed site designs for these sites.

<sup>2</sup> Each of the 781 sites identified in the Commission's historic sites inventory has been assigned a numeric rating which indicates its recreational value and suitability for inclusion in a public recreation corridor or other outdoor recreation site.

Region where concentrations of historic structures exist, historic sites could be a major determinant of the exact trail route, resulting in a virtual walking tour of historic buildings.

**Water Access Facilities:** The resource-oriented recreation plan component recommends new or improved small boat water access points on 18 major inland lakes in the Region, primarily for slow boating activities, as well as provision of five canoe access points on the Milwaukee River and four canoe access points on the Fox River. This plan component also proposes over 1,300 additional boat mooring slips and 19 additional boat launch ramps within harbors of refuge along the Lake Michigan shoreline within the Southeastern Wisconsin Region.

Plan recommendations concerning additional inland water and Lake Michigan recreational boat access facilities are generalized in nature; specific sites for additional water access facilities were not identified. Other planning activities which refine the water access proposals of the regional plan should attempt to provide access facilities in a manner which does not adversely affect historic sites in the Region. Efforts to provide the recommended water access facilities which adversely impact on historic sites would be inconsistent with the regional park and open space plan.

#### Urban Outdoor Recreation Plan Component

The urban outdoor recreation plan component proposes the provision of 3,158 additional acres of local park land within urban areas of the Region by the year 2000. The plan recommends a total of 30 Type III parks, which range in size from 25 to 99 acres, and 212 Type IV parks and school recreation sites, which are less than 25 acres in area. A small portion of the proposed increase in local park lands—174 acres, or 6 percent—would be provided through acquisition, clearance, and redevelopment for park purposes of land currently in urban use.

Similar to large parks, local parks in urban areas of the Region may be designed to include points of historic interest. Such development can serve to permanently preserve, in expanding urban areas, historic sites which might otherwise be lost to urban development. Local park development which incorporates points of historic interest enhances the historic sites by providing the suitable open space setting and, in addition, makes the historic site more accessible to the population.

While most additional local park land proposed under the plan would be developed on existing open land, the plan also recommends acquisition and clearance of 174 acres of land which is currently in urban use for redevelopment as local parks. Such redevelopment would occur in the central portions of the Cities of Kenosha, Milwaukee, and Racine in areas dominated by deteriorating residential structures having little remaining economic life. The regional plan indicates generalized locations within which redevelopment for park purposes should take place; however, exact sites are not identified. Local efforts which attempt to redevelop deteriorating areas for park purposes should identify all historic sites in the proposed

redevelopment area, utilizing the Commission's historic sites inventory as a point of departure. To the maximum extent possible, any identified historic sites should be preserved and incorporated as unique features of the new parks.

#### ALTERNATIVE PARK AND OPEN SPACE PLANS

Frequently Commission plan preparation activities are complicated by having to consider a wide spectrum of alternative plan elements. The regional park and open space plan was comparatively simple in this respect. The open space preservation element—because of its direct relationship to the natural resource base—and the urban component of the outdoor recreation plan element—because of its direct relationship to the urban areas identified in the adopted regional land use plan—required no alternative plan proposals. The resource-oriented component of the outdoor recreation plan element did, however, generate two alternative plan proposals from which a choice had to be made. Of these two plan proposals—an accessibility based alternative and a resource based alternative—each includes recommendations for large parks which would accommodate needed facilities for intensive resource-oriented activities; recreation corridors which would accommodate needed facilities for trail-oriented activities; and proposed water access facilities which would accommodate use of rivers, major inland lakes, and Lake Michigan for extensive water based activities.

Both alternative plan components were designed to meet the identified need for resource-oriented outdoor recreation sites and facilities within the Region by the plan design year. The accessibility based alternative would attempt to meet existing and anticipated outdoor recreation requirements by locating future sites in the areas readily accessible to population centers of the Region. Under this alternative plan, a large portion of the proposed public recreation corridor network would be developed in locations that provide convenient access to residents of the Kenosha, Milwaukee, and Racine urbanized areas. In addition, individual recreation corridor segments in outlying areas of the Region would provide convenient access to residents of smaller urban centers including Whitewater, Oconomowoc, Hartford, and West Bend. Nine of the 19 new large parks proposed under the accessibility alternative would be located within 20 miles of the central business district of the City of Milwaukee. Of the remaining 10 large parks proposed under this alternative plan, two could be located in eastern Kenosha County to provide space for resource-oriented facilities for residents of the Kenosha urbanized area, and eight would be located in the outlying portions of the Region to provide space required for resource-oriented facilities for residents of the rural and outlying urban areas of the Region.

The second alternative plan component, the resource based alternative, would address the identified needs for public resource-oriented recreation sites and facilities in the Region through a design which, in comparison

to the accessibility based alternative, places greater emphasis in the location of parks on site quality and less emphasis on the overall accessibility of recreation sites and facilities to the regional population. In general, the resource based alternative proposes to meet existing and anticipated future resource-oriented outdoor recreation requirements by developing the needed facilities at the best remaining potential recreation sites in the Region. Under this alternative, public recreation corridors, which would accommodate trail facilities for hiking, biking, and other trail activities, would be located primarily in primary environmental corridors situated within the Kettle Moraine, along the Lake Michigan shoreline, and along the Milwaukee River, Fox River, Root River, Sugar Creek, and Turtle Creek corridors. Under this alternative, many of the proposed large park sites would be situated in outlying areas of the Region where natural resource amenities with high recreational value are relatively abundant. Only four new large parks proposed under this alternative would be located within 20 miles of the central business district of the City of Milwaukee.

After detailed review and evaluation of the degree to which the accessibility based alternative and the resource based alternative plan components would meet park and open space development standards, the Technical and Citizen Advisory Committee on Regional Park and Open Space Planning chose the resource based alternative for incorporation into the recommended park and open space plan for southeastern Wisconsin. Selection of the resource based alternative reflected the finding that this alternative would provide a higher quality of recreational experience than the accessibility based alternative because it incorporated more high value potential park sites. Moreover, the resource based alternative would contribute more significantly to the protection and wise use of the natural resource base of the Region than the accessibility based alternative.

Both alternative plan components would provide large parks and recreation corridor networks which would preserve and enhance historic sites in the Region. Owing to the location of the proposed large parks and recreation corridors, the resource based alternative would preserve more historic sites in the outlying areas of the Region while the accessibility based alternative would preserve more points of historic interest in the urban areas of the Region. This locational difference notwithstanding, there would be no significant difference between the two alternative plan components in their overall impact on historic sites in the Region.

#### PLAN IMPACTS ON LONG-TERM MAINTENANCE AND ENHANCEMENT OF HISTORIC SITES

The impacts on historic sites in the Region of the open space preservation plan element and the outdoor recreation plan element—including the resource-oriented component and the urban component—have been described above. Implementation of the land acquisition and development proposals of the regional park and open



space plan would permanently preserve and enhance a variety of National Register and other identified historic sites in the Region. Implementation of plan recommendations concerning the application of land use controls for open space preservation also would contribute to the preservation of many historic sites. In general, implemen-

tation of the regional park and open space plan would have an overriding positive impact on the preservation and enhancement of historic sites in the Region. Park acquisition and development activities which would negatively impact on historic sites in the Region would be inconsistent with the regional park and open space plan.

## Appendix V

### MODEL PLAN ADOPTION RESOLUTIONS

#### Appendix V-1

#### MODEL RESOLUTION FOR ADOPTION OF THE REGIONAL PARK AND OPEN SPACE PLAN FOR SOUTHEASTERN WISCONSIN BY COUNTY BOARDS

WHEREAS, the Southeastern Wisconsin Regional Planning Commission, which was duly created by the Governor of the State of Wisconsin in accordance with Section 66.945(2) of the Wisconsin Statutes on the 8th day of August 1960 upon petition of the Counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha, has the function and duty of making and adopting a master plan for the physical development of the Region; and

WHEREAS, the Southeastern Wisconsin Regional Planning Commission has:

1. Collected, compiled, processed, and analyzed various types of demographic, economic, land use, natural resource base, and park and open space data and other materials pertaining to the development of the Region.
2. Prepared objectives, principles, and standards for regional park and open space preservation, acquisition, and development.
3. Prepared forecasts of regional growth and change as related to population and recreation activity demand.
4. Developed, compared, and evaluated alternative park and open space plans for the Region.
5. Selected and adopted on the 1st day of December 1977 a regional park and open space plan; and

WHEREAS, the aforementioned inventories, analyses, objectives, principles, standards, forecasts, alternative plans, and adopted plan are set forth in a report entitled SEWRPC Planning Report No. 27, A Regional Park and Open Space Plan for Southeastern Wisconsin—2000; and

WHEREAS, the \_\_\_\_\_ County Board of Supervisors has supported, participated in the financing of, and generally concurred in the regional planning programs undertaken by the Southeastern Wisconsin Regional Planning Commission and believes that the regional park and open space plan prepared by the Commission is a sound and valuable guide not only to the development of the Region but also of the County, and the adoption of such plan by the \_\_\_\_\_ County Board of Supervisors will assure a common understanding by the various governmental units and agencies concerned and enable the various units and agencies of government within the County to program the necessary applicable plan implementation measures.

NOW, THEREFORE, BE IT HEREBY RESOLVED that pursuant to Section 66.945(12) of the Wisconsin Statutes, the \_\_\_\_\_ County Board of Supervisors on the \_\_\_\_ day of \_\_\_\_\_, 197\_\_, hereby adopts the regional park and open space plan previously adopted by the Southeastern Wisconsin Regional Planning Commission as set forth in SEWRPC Planning Report No. 27 as the county park and open space plan.

BE IT FURTHER HEREBY RESOLVED that the County Clerk transmit a certified copy of this resolution to the Southeastern Wisconsin Regional Planning Commission and to the Secretary of the Wisconsin Department of Natural Resources.

\_\_\_\_\_  
(County Board Chairman)

ATTESTATION:

\_\_\_\_\_  
(County Clerk)

Appendix V-2

MODEL RESOLUTION FOR ADOPTION OF THE REGIONAL  
PARK AND OPEN SPACE PLAN FOR SOUTHEASTERN WISCONSIN

WHEREAS, the Southeastern Wisconsin Regional Planning Commission, which was duly created by the Governor of the State of Wisconsin in accordance with Section 66.945(2) of the Wisconsin Statutes on the 8th day of August 1960 upon petition of the Counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha, has the function and duty of making and adopting a master plan for the physical development of the Region; and

WHEREAS, the Southeastern Wisconsin Regional Planning Commission has:

1. Collected, compiled, processed, and analyzed various types of demographic, economic, land use, natural resource base, and park and open space data and other materials pertaining to the development of the Region.
2. Prepared objectives, principles, and standards for regional park and open space preservation, acquisition, and development.
3. Prepared forecasts of regional growth and change as related to population and recreation activity demand.
4. Developed, compared, and evaluated alternative park and open space plans for the Region.
5. Selected and adopted on the 1st day of December 1977 a regional park and open space plan; and

WHEREAS, the aforementioned inventories, analyses, objectives, principles, standards, forecasts, alternative plans, and adopted plan are set forth in a report entitled SEWRPC Planning Report No. 27, A Regional Park and Open Space Plan for Southeastern Wisconsin—2000; and

WHEREAS, the (name of local governing body) has supported, participated in the financing of, and generally concurred in the regional planning programs undertaken by the Southeastern Wisconsin Regional Planning Commission and believes that the regional park and open space plan prepared by the Commission is a sound and valuable guide not only to the development of the Region but also of the (name of local governing body), and the adoption of such plan by the (name of local governing body) will assure a common understanding by the various governmental units and agencies concerned and enable these various units and agencies of government to program the necessary applicable plan implementation measures.

NOW, THEREFORE, BE IT HEREBY RESOLVED that pursuant to Section 66.945(12) of the Wisconsin Statutes, the (name of local governing body) on the \_\_\_\_ day of \_\_\_\_\_, 197\_\_, hereby adopts the regional park and open space plan previously adopted by the Southeastern Wisconsin Regional Planning Commission as set forth in SEWRPC Planning Report No. 27 as a guide for park and open space preservation, acquisition, and development.

BE IT FURTHER HEREBY RESOLVED that the \_\_\_\_\_ Clerk transmit a certified copy of this resolution to the Southeastern Wisconsin Regional Planning Commission and to the Secretary of the Wisconsin Department of Natural Resources.

\_\_\_\_\_  
(President, Mayor, or Chairman  
of the Local Governing Body)

ATTESTATION:

\_\_\_\_\_  
(Clerk of the Local Governing Body)