

A PARK AND OPEN SPACE PLAN FOR OZAUKEE COUNTY

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**A PARK AND OPEN SPACE PLAN
FOR OZAUKEE COUNTY**

Prepared by the

**Southeastern Wisconsin Regional Planning Commission
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Chapter I

INTRODUCTION

PLAN CONTEXT

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) is charged by law with the duty of preparing and adopting a comprehensive plan for the physical development of the seven-county Southeastern Wisconsin Region, which includes Ozaukee County. The regional plan, which is periodically updated, consists of a number of major elements, including land use, transportation, park and open space, and water quality management.

The regional land use plan sets forth the fundamental concepts which are intended to guide the development of the Region. The regional land use plan, the most recent version of which was adopted by the Commission in 1997, is documented in SEWRPC Planning Report No. 45, *A Regional Land Use Plan for Southeastern Wisconsin: 2020*. The three most important recommendations contained in the regional land use plan are: 1) the preservation of primary environmental corridors in essentially natural, open uses; 2) the maintenance of the best remaining farmland in long-term agricultural uses; and 3) encouragement of a more compact pattern of urban development, one that can be efficiently served by such essential public facilities and services as centralized sanitary sewerage, water supply, and mass transit. These three recommendations provide the basic framework within which other regional plan components, including park and open space plans, are developed.

A park and open space plan for Ozaukee County was included as part of the first regional park and open space plan,¹ which was adopted by the Regional Planning Commission on December 1, 1977. That plan identified existing and probable future park and open space needs within the Region and recommended a park system consisting of large resource-oriented parks and smaller nonresource-oriented urban parks, together with attendant recreational facilities. The regional park and open space plan also recommended the development of an approximately 440-mile network of hiking and bicycling trails within natural resource corridors of regional significance, including corridors along the Lake Michigan shoreline, through the Kettle Moraine, and along the riverine areas of the major streams and watercourses of the Region. The regional park and open space plan incorporated the regional land use plan recommendations concerning primary environmental corridors and farmland preservation. The regional park and open space plan as it relates to Ozaukee County was subsequently refined in 1978 as documented in SEWRPC Community Assistance Planning Report No. 23, *A Park and Recreation Plan for Ozaukee County*.

In 1984, the Ozaukee County Park and Planning Commission requested that the Regional Planning Commission assist the County in refining and updating the regional park and open space plan as it applied to

¹Documented in SEWRPC Planning Report No. 27, *A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000*.

Ozaukee County. The resulting plan is documented in the first edition of this report, SEWRPC Community Assistance Planning Report No. 133, *A Park and Open Space Plan for Ozaukee County*, July 1987. The plan, which has a design year of 2000, was adopted by the Ozaukee County Board of Supervisors on July 1, 1987, and by the Regional Planning Commission on September 14, 1987.

The 1987 County park and open space plan called for the development of one new major park, for a total of four major parks within the County. The new major park was to be acquired and developed by Ozaukee County west of the Village of Fredonia, along the proposed Milwaukee River Parkway in the northwestern portion of the County. In addition, the Wisconsin Department of Natural Resources was to acquire additional land at one existing major park, the Harrington Beach State Park. To date, five acres of a recommended six acres have been acquired by the Wisconsin Department of Natural Resources at the Harrington Beach State Park.

The 1987 plan also called for a combined total of 38 linear miles of trails in the Milwaukee River and Little Menomonee River recreation corridors in the County. To date, there are approximately six miles of existing trails associated with natural resource related outdoor recreation corridors. Other recommendations which have not yet been implemented include providing canoe access facilities along the Milwaukee River.

COUNTY REQUEST

On April 8, 1998, Ozaukee County requested that the Regional Planning Commission assist the County in the preparation of a new park and open space plan. The new plan is to be based upon updated information related to land use, population levels and distribution, anticipated growth and development, natural resources, and park and open space acquisition and development activities within the County. The new plan is further intended to

maintain County eligibility to apply for and receive Federal and State aids in partial support of the acquisition and development of park and open space sites and facilities. The new plan is documented in this report. The plan, which is based upon the recommended development pattern set forth in the year 2020 regional land use plan, is designed to extend the recommendations of the existing Ozaukee County park and open space plan to that design year.

OZAUKEE COUNTY PARK COMMISSION

The new County park and open space plan was prepared under the guidance of the Ozaukee County Park Commission. A complete membership list of the Park Commission is provided on the inside cover of this report. The Park Commission's recommendations were forwarded to the County Board of Supervisors for their consideration.

REPORT FORMAT

The findings and recommendations of the requested park and open space planning effort are set forth in this report. Following this introductory chapter, Chapter II of this report presents information about the County pertinent to park and open space planning, including information on the existing resident population, land use pattern, and natural resource base of the County. Chapter III provides information on existing park sites and facilities and open space lands within the County. Chapter IV presents the park and open space preservation, acquisition, and development objectives, principles, and supporting standards which served as the basis for the development of the park and open space plan for the County, and also presents an analysis of park and open space needs in the County. Chapter V sets forth the recommended park and open space plan and identifies the actions required to carry out the recommended plan. A summary of the plan is presented in Chapter VI.

Chapter II

INVENTORY FINDINGS

INTRODUCTION

The proper formulation of a park and open space plan necessitates the collection and collation of data related to existing demographic and economic characteristics, existing land uses, and natural resources. Such data provide an important basis for determining the need for additional park and open space sites and facilities and for designing a plan to meet those needs. The inventory findings are presented in this chapter.

DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

Population

The area that is now the Southeastern Wisconsin Region was first included in the Federal census in 1850. In that year, the Region had a resident population of about 113,400 persons, or about 37 percent of the total population of the State. By 1990, the year of the most recent decennial census, the Region population was about 1,810,400 persons, also comprising about 37 percent of the total population of the State. Historic population levels within Ozaukee County, the Region, and the State are provided in Table 1.

Population growth in Ozaukee County from 1860 to 1990 is graphically summarized by Figure 1. The County population was relatively stable until 1940, when the resident population stood at 19,000 persons. Since then, the County population has grown steadily—increasing by 4,400 persons during the 1940s, 15,100 persons during the 1950s, 16,000

persons during the 1960s, 12,500 persons during the 1970s, and 5,900 persons during the 1980s. The population of the County stood at 72,800 persons in 1990. The population of Ozaukee County was estimated at 81,758 persons in 2000—about 8,900 persons, or 12 percent, above the 1990 level.

The City of Mequon is the most populous community in the County, with 18,885 residents, or about 26 percent of the County's population, in 1990. The next most populous communities are the City of Cedarburg, with 10,086 residents in 1990, or about 14 percent of the County's population; and the Village of Grafton, with 9,340 residents in 1990, and the City of Port Washington, with 9,338 residents in 1990, each accounting for about 13 percent of the County's population.

Households

Trends in the number of households in the County and the Region are shown on Table 2. Both the County and Region experienced significant gains in the number of new households over the time period between 1970 and 1990. The rate of increase in the number of households has exceeded the rate of population increase in both cases. Between 1970 and 1990, the rate of increase in the number of households was 73 percent in the County and 26 percent in the Region, compared to a population increase of 34 percent in the County and 3 percent in the Region. With the number of households increasing at a faster rate than the population, the number of persons per household has decreased.

Table 1

**HISTORIC RESIDENT POPULATION LEVELS IN OZAUKEE COUNTY,
SOUTHEASTERN WISCONSIN, AND THE STATE OF WISCONSIN: 1850-1990**

Year	Ozaukee County			Southeastern Wisconsin			Wisconsin		
	Population	Change from Preceding Census		Population	Change from Preceding Census		Population	Change from Preceding Census	
		Absolute	Percent		Absolute	Percent		Absolute	Percent
1850	-- ^a	--	--	113,389	--	--	305,391	--	--
1860	15,682	--	--	190,409	77,020	67.9	775,881	470,490	154.1
1870	15,564	-118	-0.8	223,546	33,137	17.4	1,054,670	278,789	35.9
1880	15,461	-103	-0.7	277,119	53,573	24.0	1,315,497	260,827	24.7
1890	14,943	-518	-3.4	386,774	109,655	39.6	1,693,330	377,833	28.7
1900	16,363	1,420	9.5	501,808	115,034	29.7	2,069,042	375,712	22.2
1910	17,123	760	4.6	631,161	129,353	25.8	2,333,860	264,818	12.8
1920	16,355	-768	-4.6	783,681	152,520	24.2	2,632,067	298,207	12.8
1930	17,394	1,039	6.5	1,006,118	222,437	28.4	2,939,006	306,939	11.7
1940	18,985	1,591	9.1	1,067,699	61,581	6.1	3,137,587	198,581	6.8
1950	23,361	4,376	23.0	1,240,618	172,919	16.2	3,434,575	296,988	9.5
1960	38,441	15,080	64.6	1,573,614	332,996	26.8	3,951,777	517,202	15.1
1970	54,461	16,020	41.7	1,756,083	182,469	11.6	4,417,821	466,044	11.8
1980	66,981	12,520	23.0	1,764,796	8,713	0.5	4,705,642	287,821	6.5
1990	72,831	5,850	8.7	1,810,364	45,568	2.6	4,891,769	186,127	4.0

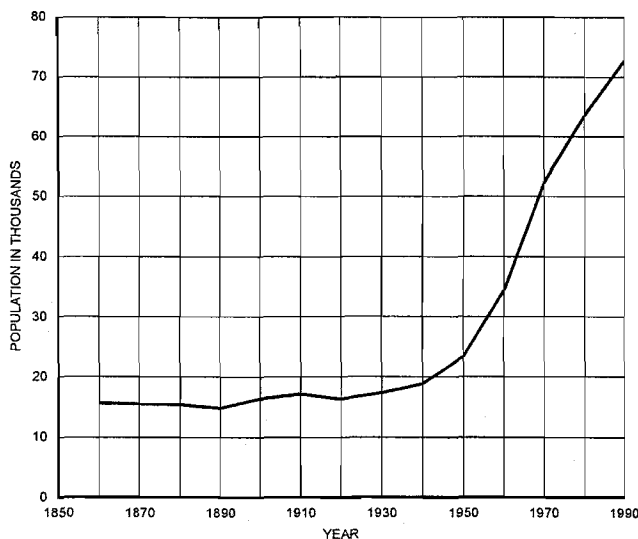
NOTE: The State estimated population level of Ozaukee County in 2000 was 81,758 persons.

^aIn 1853, seven Towns (Begium, Cedarburg, Fredonia, Grafton, Mequon, Port Washington, and Saukville) and the Village of Port Washington, then in Washington County, and which contained a resident population of 8,281 in 1850, were detached from the remainder of Washington County to form Ozaukee County.

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

Figure 1

**HISTORIC POPULATION LEVELS
IN OZAUKEE COUNTY: 1860-1990**



Source: SEWRPC.

The number of households is of particular importance in land use and public facility planning, because it greatly influences the demand for converting rural land to urban use to accommodate additional residential development. It is also an important component in creating demand for transportation and other facilities and services, including parks and recreational facilities.

Age Distribution

The age distribution of the population may be expected to influence the location and type of recreational areas and facilities provided within the County. The age distribution of the population of the County and Region in 1970, 1980, and 1990 is set forth in Table 3. The total population of the County moderately increased between 1970 and 1990, with significant increases in the number of adults aged 25 to 44, 45 to 64, and those 65 and over. Conversely, the population aged 5 to 17 decreased in number.

Table 2

**NUMBER OF HOUSEHOLDS IN
OZAUKEE COUNTY AND THE SOUTHEASTERN
WISCONSIN REGION: CENSUS YEARS 1970-1990**

Year	Ozaukee County			Southeastern Wisconsin		
	Number of Households	Change from Previous Census		Number of Households	Change from Previous Census	
		Number	Percent		Number	Percent
1970	15,339	--	--	536,486	--	--
1980	22,520	7,181	46.8	627,955	91,469	17.0
1990	26,482	3,962	17.6	676,107	48,152	7.7

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

Table 3

**AGE DISTRIBUTION OF THE POPULATION OF
OZAUKEE COUNTY AND THE SOUTHEASTERN
WISCONSIN REGION: CENSUS YEARS 1970-1990**

Ozaukee County								
Age Group	1970		1980		1990		Change 1970-1990	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent
Under 5	5,074	9.3	4,771	7.1	5,334	7.3	260	5.1
5-17	17,165	31.5	16,174	24.1	14,408	19.8	-2,757	-16.1
18-24	4,573	8.4	7,495	11.2	6,031	8.3	1,458	31.9
25-44	13,715	25.2	19,351	28.9	23,531	32.3	9,816	71.6
45-64	9,925	18.3	13,528	20.2	15,450	21.2	5,525	55.7
65 and Older	3,969	7.3	5,662	8.5	8,077	11.1	4,108	103.5
All Ages	54,421	100.0	66,981	100.0	72,831	100.0	18,410	33.8
Southeastern Wisconsin								
Age Group	1970		1980 ^a		1990		Change 1970-1990	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent
Under 5	153,243	8.7	128,085	7.3	138,286	7.7	-14,957	-9.8
5-17	472,342	26.9	375,653	21.3	339,722	18.8	-132,620	-28.1
18-24	193,211	11.0	234,264	13.3	181,211	10.0	-12,000	-6.2
25-44	412,831	23.5	482,615	27.3	590,955	32.6	178,124	43.1
45-64	354,845	20.2	349,008	19.8	333,818	18.4	-21,027	-5.9
65 and Older	169,415	9.7	195,294	11.0	226,372	12.5	56,957	33.6
All Ages	1,755,887	100.0	1,764,919	100.0	1,810,364	100.0	54,477	3.1

^aThe 1980 regional population of 1,764,919 includes 123 persons who were subtracted from this number after the conduct of the 1980 census but were not allocated to the various age group categories.

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

Table 4

**NUMBER OF JOBS IN OZAUKEE COUNTY AND THE
SOUTHEASTERN WISCONSIN REGION: 1970-1990**

Year	Ozaukee County			Southeastern Wisconsin		
	Number of Jobs	Change from Previous Time Period		Number of Jobs	Change from Previous Time Period	
		Number	Percent		Number	Percent
1970	21,181	--	--	784,136	--	--
1980	28,079	6,898	32.6	945,186	161,050	20.5
1990	36,435	8,356	29.8	1,067,202	122,016	12.9

NOTE: The estimated number of jobs in Ozaukee County in 1999 was 53,500.

Source: U.S. Bureau of Economic Analysis and SEWRPC.

This trend is similar to that of the Region as a whole, which experienced significant increases in the number of adults aged 25 to 44 and those 65 and over, and a significant decrease in those aged 5 to 17. The trend in Ozaukee County differed from the Region in relation to the number of adults aged 45-64, where the Region experienced a slight decrease.

Employment

Trends in job growth in the County and Region are set forth in Table 4. The jobs are enumerated at their location and the data thus reflect the number of jobs within the County and Region, including both full- and part-time jobs. An increase in the number of jobs may be expected to attract additional residents to the County, thus influencing population growth.

As indicated in Table 4, employment growth was significant in the County between 1970 and 1990, with the number of jobs increasing from 21,200 to 36,400. The 72 percent rate of increase in the number of jobs in the County exceeded the rate of increase in the Region during the same period, which experienced an increase of 283,100 jobs, or about 36 percent. The number of jobs in Ozaukee County was estimated at 53,500 in 1999, about 17,100, or 47 percent, above the 1990 level.

**HISTORIC URBAN GROWTH
AND EXISTING LAND USES**

Land use is an important determinant of both the supply of, and the demand for, outdoor recreation and related open space facilities. Accordingly, an

understanding of the amount, type, and spatial distribution of urban and rural land uses within the County, as well as the historic conversion of rural lands to urban use, is essential to the development of a sound park and open space plan. This section presents a description of the historic urban development and existing land uses in the County.

Historic Urban Growth

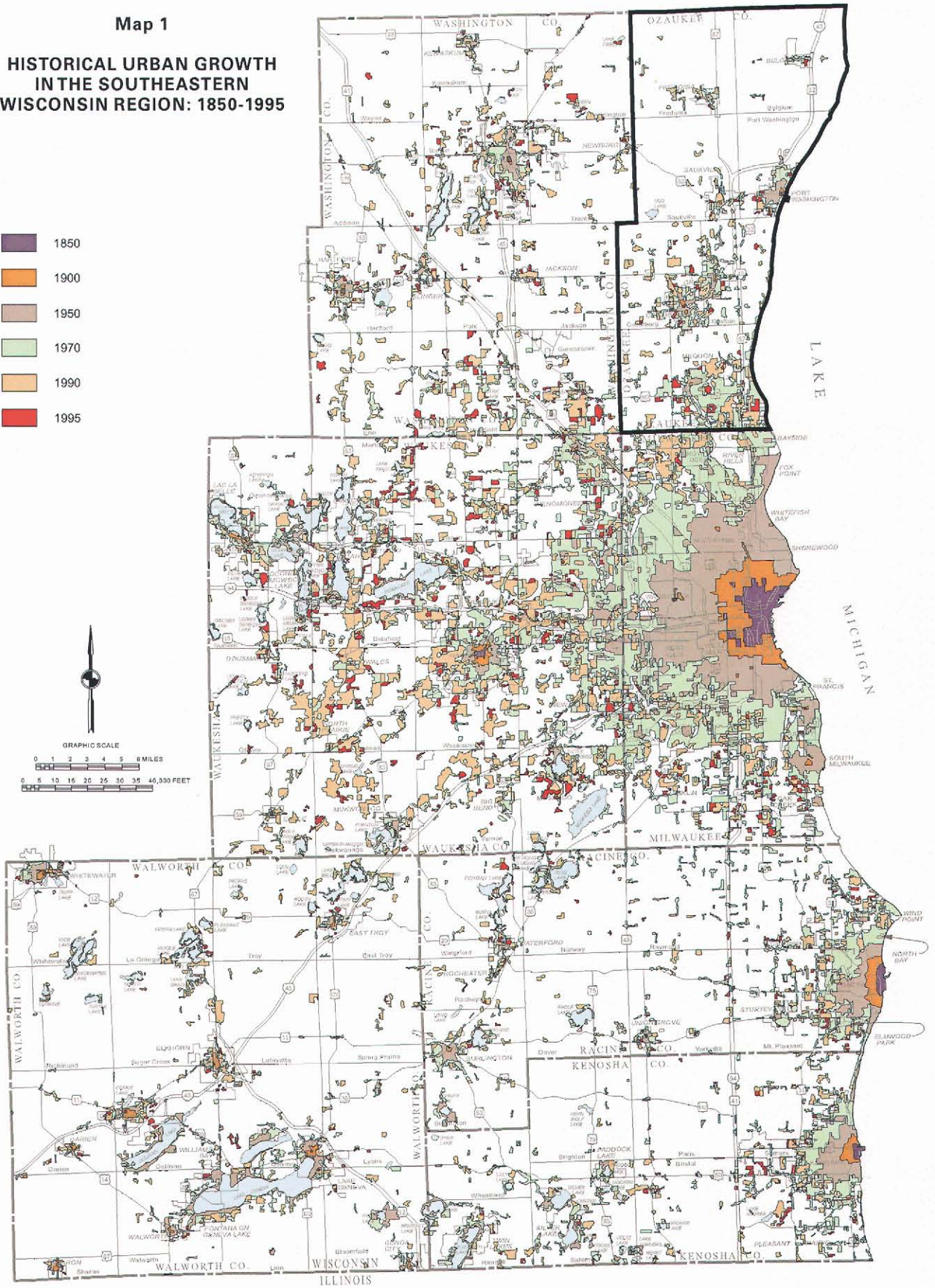
The historic urban development of Ozaukee County during this century is presented on Map 1. Prior to 1950, urban development in the County had generally occurred around the established communities of Belgium, Cedar-burg, Fredonia, Grafton, Port Washington, Saukville, and Thiensville, and in the Mequon area. The period between 1950 and 1970 saw a significant increase in urban development within the County, a portion of which occurred in scattered enclaves throughout the County rather than adjacent to the established urban centers. Since 1970, land development for urban uses has continued both adjacent to existing urban areas and in a generally scattered pattern outside of established urban centers, particularly in the southern half of the County. Providing urban services and facilities, including public parks, to scattered, low density urban development in outlying areas can be inefficient and costly.

Despite significant urbanization, large tracts of agricultural and other open space lands remain intact, relatively free of encroachment by urban development particularly in the northern half of the County. This situation has important implications for park and open space planning in the County. Ozaukee County has

Map 1

**HISTORICAL URBAN GROWTH
IN THE SOUTHEASTERN
WISCONSIN REGION: 1850-1995**

- 1850
- 1900
- 1950
- 1970
- 1990
- 1995



Source: SEWRPC.

Table 5

LAND USES IN OZAUKEE COUNTY: 1995

Land Use Category	Square Miles	Percent of Subtotal	Percent of County
Urban^a			
Single-Family Residential	25.0	51.7	10.6
Multi-Family Residential ^b	1.3	2.7	0.6
Commercial	1.4	2.9	0.6
Industrial	1.5	3.1	0.6
Government and Institutional	2.0	4.1	0.9
Recreational.....	3.6	7.4	1.5
Transportation, Communications, and Utilities.....	13.6	28.1	5.8
Subtotal	48.4	100.0	20.6
Rural			
Agricultural	134.3	71.9	57.1
Woodlands.....	10.7	5.7	4.6
Wetlands.....	25.6	13.7	10.9
Water.....	3.3	1.8	1.4
Landfill and Extractive	1.1	0.6	0.5
Other Open Lands	11.7	6.3	4.9
Subtotal	186.7	100.0	79.4
Total	235.1	--	100.0

^aParking lots are included with the associated use.

^bIncludes two-family residential.

Source: SEWRPC.

the opportunity to continue to plan for widespread preservation of agricultural and other open space lands.

Existing Land Uses

Land uses in Ozaukee County in 1995 are set forth on Map 2 and in Table 5. In 1995, urban land uses—consisting of residential, commercial, industrial, governmental and institutional, recreational, and transportation, communication and utility uses—encompassed about 48.4 square miles, or 21 percent of the total area of the County. Residential land comprised the largest urban land use category, encompassing 26.3 square miles, or about 54 percent of all urban land use and 11 percent of the total area of the County.

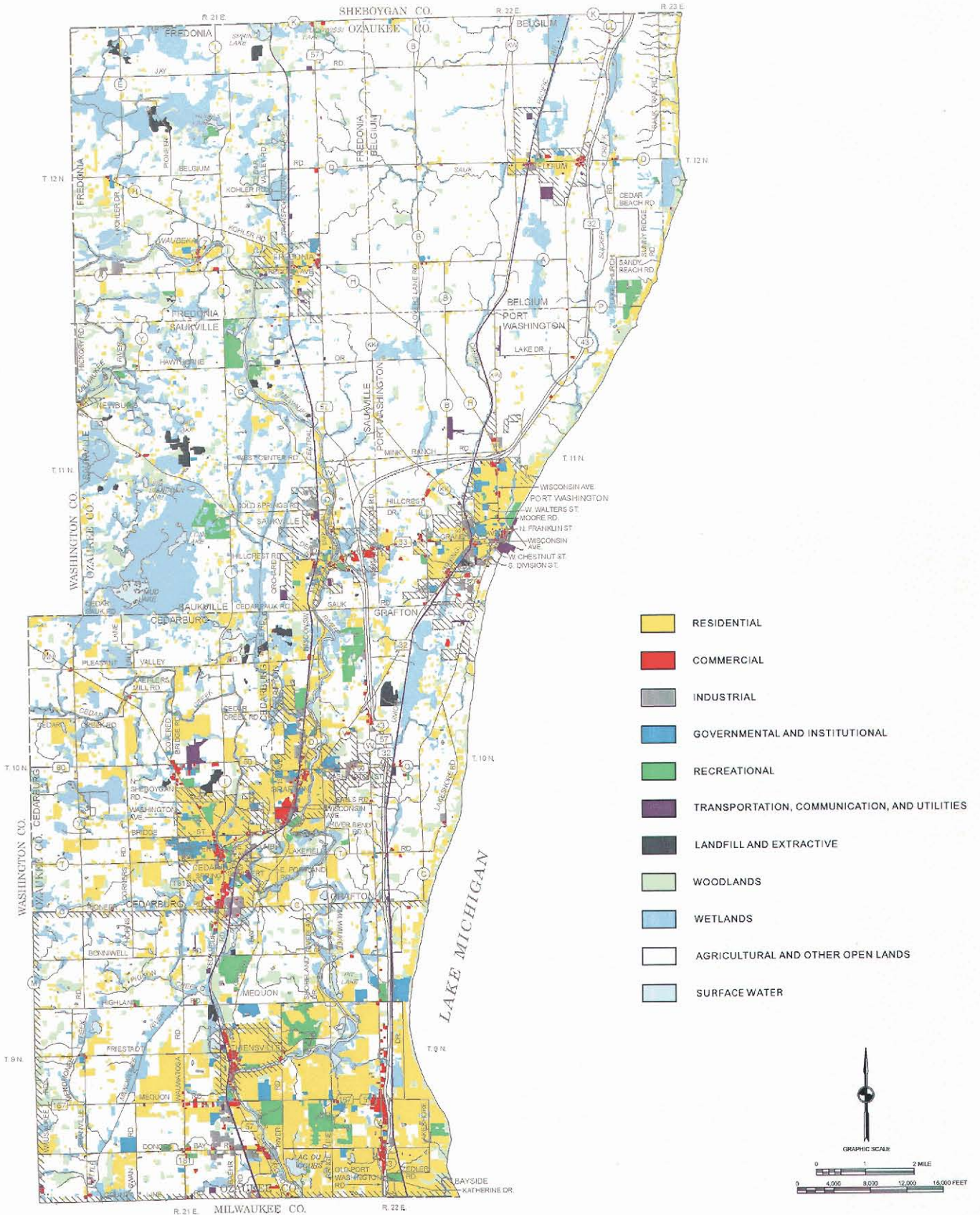
Land uses categorized as transportation, communications, and utilities constituted the second largest urban land use category in 1995, encompassing

about 13.6 square miles, or about 28 percent of all urban land and about 6 percent of the total area of the County. Streets and highways occupied about 12.0 square miles, or over 88 percent of the uses in this category. Major arterial highways serving the County include, IH 43, which traverses the County in a generally north-south direction; and State Trunk Highways 32, 33, 57, 60, 167, and 181. Other uses in the transportation, communications, and utilities category within the County include two railway freight service lines—one operated by the Union Pacific Railroad, and one by the Wisconsin Central Transportation Corporation.

Recreational land uses constituted the third largest urban land use category within the County in 1995, encompassing about 3.6 square miles, or about 7 percent of all urban land and about 2 percent of the total area of the County. These figures include only those

Map 2

GENERALIZED LAND USE IN OZAUKEE COUNTY: 1995



Source: SEWRPC.

areas that are developed for intensive recreational use, such as tennis courts, baseball diamonds, playfields, and accessory uses. Areas used for passive recreational purposes, such as hiking and nature study, are generally designated as open lands or woodlands. A description of park and open space sites within the County is presented in Chapter III.

About 186.7 square miles, or about 79 percent, of the approximately 235.1 square miles within the County in 1995 were rural lands, including agricultural lands, wetlands, woodlands, surface water, landfill and extractive, and other open lands. Agriculture was the largest single land use in the County, accounting for about 134.3 square miles, or about 57 percent of the area of the County.

NATURAL RESOURCES

An important recommendation of the adopted regional land use and park and open space plans is the preservation of the most important elements of the natural resource base of the Region. Since the preparation and adoption of the year 2000 Ozaukee County park and open space plan in 1987, additional inventory information concerning the location and extent of natural resources has been collected. This section presents such information as it relates to Ozaukee County.

Surface Water Resources

Surface water resources, consisting of streams and lakes, form a particularly important element of the natural resource base. Surface water resources provide recreational opportunities, influence the physical development of the County, and enhance its aesthetic quality. Major streams and lakes within the County are shown on Map 3.

Lakes and streams are readily susceptible to degradation through improper land use development and management. Water quality can be degraded by excessive pollutant loads, including nutrient loads, which enter from malfunctioning and improperly located onsite sewage disposal systems, from sanitary sewer overflows, from construction and other urban runoff, and from careless agricultural practices. The water quality of lakes and streams may also be adversely affected by the excessive development of riparian areas and by the filling of peripheral wetlands, which remove valuable nutrient and sediment traps while adding nutrient and sediment sources. It is important that existing and

future development in riparian areas be managed carefully to avoid further water quality degradation and to enhance the recreational and aesthetic values of surface water resources.

Major streams are defined as those which maintain, at a minimum, a small continuous flow throughout the year except under unusual drought conditions. There are approximately 94 miles of such streams in Ozaukee County. The County includes portions of four major watersheds: the Menomonee River, Milwaukee River, Sauk Creek, and Sheboygan River watersheds. The Lake Michigan direct drainage area may be considered to compose a fifth watershed. Major streams in the Menomonee River watershed, which generally includes the area in the southwestern corner of the County, include the Little Menomonee Creek and Little Menomonee River. Major streams in the Milwaukee River watershed, which generally includes the area in the western half of the County, includes the Cedar Creek and Milwaukee River. The major stream in the Lake Michigan direct drainage area, which includes the area in the eastern portion of the County, is the Sucker Creek. The major stream in the Sauk Creek watershed, which generally includes the area in the north-central portion of the County is the Sauk Creek. The major stream in the Ozaukee County portion of the Sheboygan River watershed is Belgium Creek, which is a tributary to the Onion River in Sheboygan County.

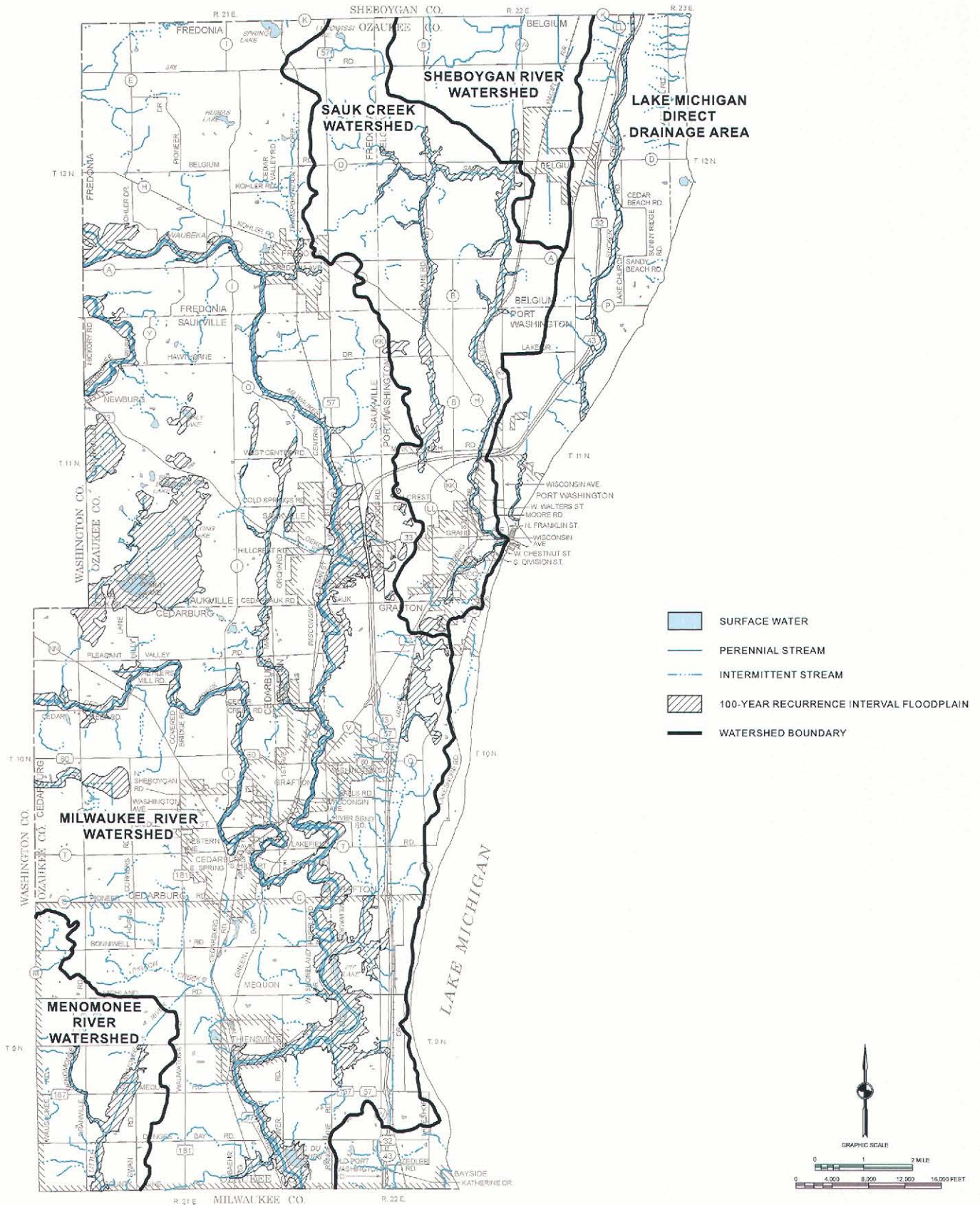
There are two major lakes—that is, lakes of 50 or more acres—located entirely within Ozaukee County: Lac du Cours and Mud Lake. Both are located in the Milwaukee River watershed. One other major lake in the Milwaukee River watershed, Spring Lake, is located partially within Ozaukee County. Together, these major lakes have a combined surface area of about 360 acres in Ozaukee County.

Floodlands

Floodlands are the wide, gently sloping areas contiguous to, and usually lying on both sides of, a stream channel. For planning and regulatory purposes, floodlands are normally defined as the areas, excluding the stream channel, subject to inundation by the 100-year recurrence interval flood event. This is the flood that may be expected to be reached or exceeded in severity once in every 100 years, or stated another way, there is a 1 percent chance of this event being reached or exceeded in severity in any given year. Floodland areas are generally not well suited to urban development, not only because of the flood hazard, but also because of the presence of high water tables and,

Map 3

SURFACE WATER RESOURCES AND FLOODLANDS IN OZAUKEE COUNTY



Source: SEWRPC.

generally, of soils poorly suited to urban uses. Floodland areas often contain important natural resources, such as high-value woodlands, wetlands, and wildlife habitat and, therefore, constitute prime locations for parks and open space areas. Every effort should be made to discourage incompatible urban development on floodlands, while encouraging compatible park and open space uses.

Floodlands, identified by the Commission and by the Federal Emergency Management Agency, are shown on Map 3. Approximately 8.3 square miles, or about 4 percent of the total area of the County, were located within the 100-year recurrence interval flood hazard area.

Wetlands

The location and extent of wetlands in the County in 1995, as delineated by the Regional Planning Commission, are shown on Map 2. At that time, wetlands covered about 25.6 square miles, or about 11 percent of the County.

Wetlands are important resources for the ecological health and diversity of the County. They provide essential breeding, nesting, resting, and feeding grounds and provide escape cover for many forms of fish and wildlife. Wetlands also contribute to flood control, because such areas naturally serve to store excess runoff temporarily, thereby tending to reduce peak flows. Wetlands may also serve as groundwater recharge and discharge areas. In addition, wetlands help to protect downstream water resources from siltation and pollution by trapping sediments, nutrients, and other water pollutants.

In view of the important natural functions of wetland areas, and their recreational value for hunting, fishing, and wildlife viewing, continued efforts should be made to protect these areas by discouraging wetland draining, filling, and urbanization, which can be costly in both monetary and environmental terms.

Woodlands

Woodlands are defined as those upland areas one acre or more in size having 17 or more deciduous trees per acre, each measuring at least four inches in diameter at breast height, and having 50 percent or more tree canopy coverage. Coniferous tree plantations and reforestation projects are also classified as woodlands.

Woodlands provide an attractive natural resource of immeasurable value. Under good management, wood-

lands can serve a variety of beneficial functions. In addition to contributing to clean air and water and regulating surface water runoff, the maintenance of woodlands within the County can contribute to sustaining a diversity of plant and animal life. The existing woodlands in the County, which required a century or more to develop, can be destroyed through mismanagement within a comparatively short time. The deforestation of hillsides contributes to rapid stormwater runoff, the siltation of lakes and streams, and the destruction of wildlife habitat.

Woodlands, as shown on Map 2, occur in scattered locations throughout the County, with some of the largest concentrations found along the Milwaukee River. In 1995, woodland areas covered about 10.7 square miles, or about 5 percent of the County. These woodlands should be maintained for their scenic, wildlife habitat, recreational, and air and water quality protection values.

Natural Areas, Critical Species Habitat, and Geological Sites

A comprehensive inventory of natural and geological resources in the County was conducted by the Regional Planning Commission in 1994 as part of the natural areas and critical species habitat protection and management plan prepared by the Commission.¹ The inventory systematically identified all remaining high-quality natural areas, critical species habitat, and sites having geological significance within the Region. Recommendations developed through that program for the protection and management of identified natural areas, critical species habitat, and geological sites have been incorporated into this park and open space plan.

Natural Areas

Natural areas are tracts of land or water so little modified by human activity, or sufficiently recovered from the effects of such activity, that they contain intact native plant and animal communities believed to be representative of the landscape before European settlement. Natural areas sites are classified into one of three categories: natural areas of statewide or greater significance (NA-1), natural areas of county-wide or regional significance (NA-2), and natural

¹*SEWRPC Planning Report No. 42, A Regional Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin, September 1997.*

areas of local significance (NA-3). Classification of an area into one of these three categories is based upon consideration of the diversity of plant and animal species and community types present; the structure and integrity of the native plant or animal community; the extent of disturbance from human activity, such as logging, agricultural use, and pollution; the commonness of the plant and animal community; unique natural features; the size of the site; and the educational value.

A total of 48 natural areas, encompassing about 7,358 acres, or about 5 percent of the County, were identified in Ozaukee County in 1994. Of the 48 identified sites, five are classified as NA-1 sites and encompass about 2,282 acres, 12 are classified as NA-2 sites and encompass about 2,088 acres, and 31 are classified as NA-3 sites and encompass about 2,988 acres. Map 4 depicts the locations of natural areas identified in 1994. Table 6 sets forth a description of each natural area.

Critical Species Habitat

Critical species habitat sites are those areas, outside of natural areas, where the chief value lies in their ability to support rare, threatened, or endangered species. Such areas constitute "critical" habitat that is important to ensure survival of a particular species or group of species of special concern.

A total of seven sites supporting threatened or rare plant or bird species have been identified in Ozaukee County. These sites, which together encompass an area of about 294 acres, are shown on Map 5 and described in Table 7. A total of 29 aquatic sites supporting threatened or rare fish, herptile, or mussel species have also been identified in the County (see Map 5 and Table 8). There are 67.5 stream miles and 413 lake acres of critical aquatic habitat in Ozaukee County.

Geological Sites

A total of 16 sites of geological importance, including one glacial feature and 15 bedrock geology sites, were identified in the County in 1994. The geological sites included in the inventory were selected on the basis of scientific importance, significance in industrial history, natural aesthetics, ecological qualities, educational value, and public access potential. The 16 sites selected in Ozaukee County include five sites of statewide significance (GA-1), six sites of countywide or regional significance (GA-2), and five sites of local significance (GA-3). Together, these sites encompass

about 274 acres in Ozaukee County. Map 6 depicts the locations of geological sites identified in 1994. Table 9 sets forth a description of each site.

Environmental Corridors and Isolated Natural Resource Areas

One of the most important tasks completed under the regional planning program for southeastern Wisconsin has been the identification and delineation of those areas in the Region in which concentrations of the best remaining elements of the natural resource base occur. The preservation of such areas in essentially natural, open uses is vital to maintaining a high level of environmental quality in the Region, protecting its natural heritage and beauty, and providing recreational opportunities in scenic outdoor settings.

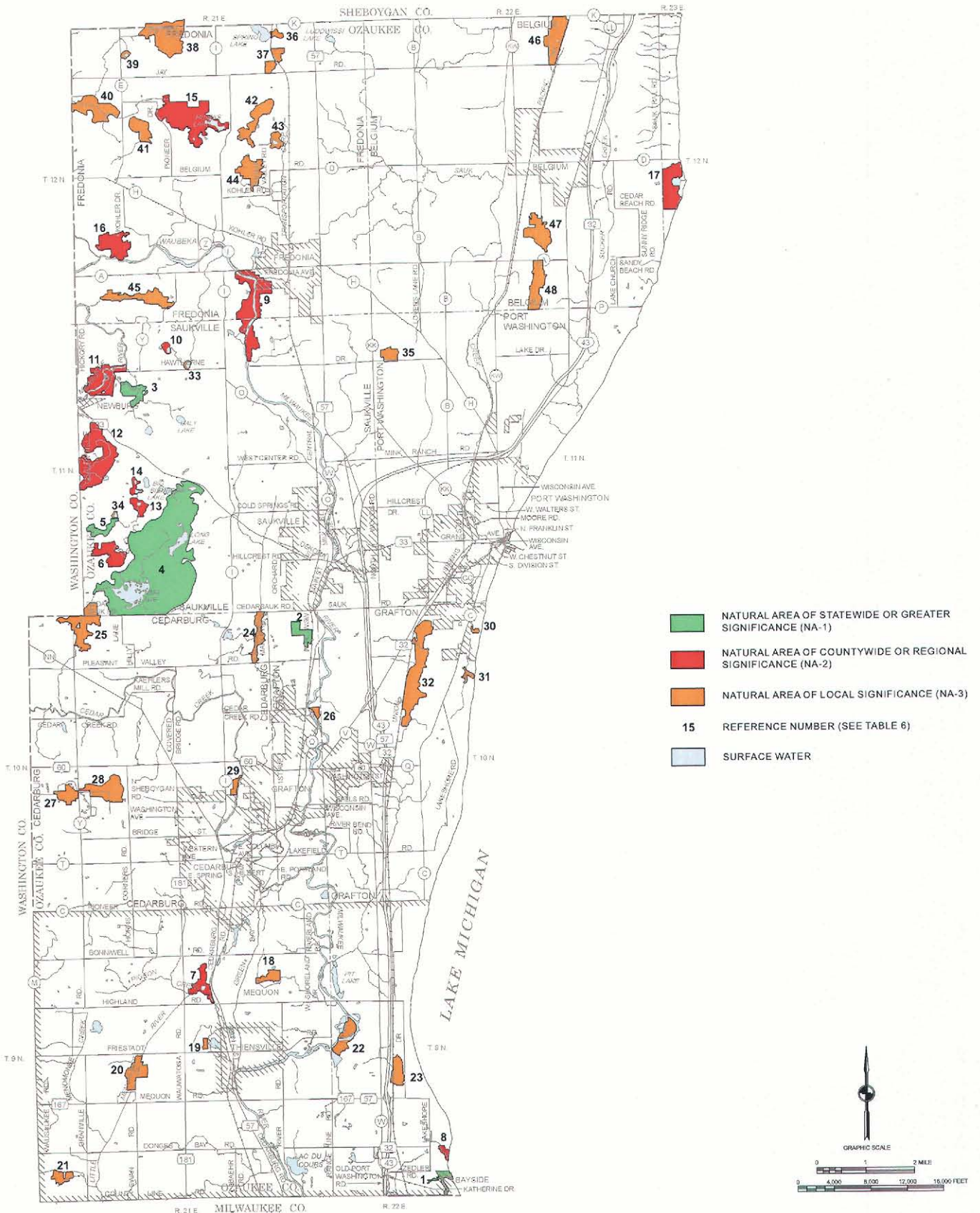
Identification of environmental corridors is based upon the presence of one or more of the following important elements of the natural resource base: 1) rivers, streams, lakes and associated shorelands and floodlands; 2) wetlands; 3) woodlands; 4) prairies; 5) wildlife habitat areas; 6) wet, poorly drained, and organic soils; and 7) rugged terrain and high relief topography. The presence of elements that are closely related to the natural resource base, including park and open space sites, natural areas, historic sites, and scenic viewpoints, are also considered in the delineation of environmental corridors. Many of the natural resource elements which form the basis for corridor delineation have been described in the preceding sections of this chapter.

The delineation on a map of the natural resource and resource-related elements specified above results in an essentially linear pattern of relatively narrow, elongated areas which have been termed "environmental corridors" by the Regional Planning Commission.² Primary environmental corridors are a minimum of 400 acres in size, two miles in length, and 200 feet in width. Secondary environmental corridors connect with the primary environmental corridors and are at least 100 acres in size and one mile in length. Areas at least five acres in size which contain important natural resource base elements but are separated physically from primary and secondary environmental corridors by intensive urban or agricultural land uses have also been identified and have been termed "isolated natural

²A detailed description of the process of refining the delineation of environmental corridors in Southeastern Wisconsin is presented in SEWRPC Technical Record, Vol. 4, No. 2 (March 1981), pp. 1-21.

Map 4

NATURAL AREAS IN OZAUKEE COUNTY: 1994



Source: SEWRPC.

Table 6

NATURAL AREAS IN OZAUKEE COUNTY: 1994

Number on Map 4	Area Name	Classification Code ^a	Location	Ownership	Size (acres)	Description and Comments
1	Fairy Chasm State Natural Area	NA-1 (SNA, RSH)	T9N, R22E Sections 32, 33 City of Mequon T8N, R22E Sections 4, 5 Village of Bayside	The Nature Conservancy and other private	47 (plus 33 in Milwaukee County)	An 80- to 100-foot-deep wooded ravine which extends approximately 1.25 miles west from its confluence with Lake Michigan. The steep slopes support white pine, white cedar, and yellow birch on the north-facing slopes and dry-mesic hardwoods on the more exposed south-facing slopes. The ravine has special significance because cold air drainage enables several plant species with more northerly affinities to occur this far south. The flora includes the State-designated endangered pine-drops (<i>Pterospora andromedea</i>). The area extends south into Milwaukee County
2	Kurtz Woods State Natural Area	NA-1 (SNA, RSH)	T10N, R21E Section 1 Town of Grafton	The Nature Conservancy and other private	70	A mature southern mesic hardwoods that is a remnant of the once-extensive pre-settlement forest which covered this part of the Region. Dominated by sugar maple, beech, and white ash, with a moderately rich ground flora. Several small, dry kettle depressions are present. The woods have been undisturbed for at least 60 years. The younger woods to the southeast are important as a buffer
3	Riveredge Creek and Ephemeral Pond State Natural Area	NA-1 (SNA, RSH)	T11N, R21E Sections 7, 8 Town of Saukville	Riveredge Nature Center and other private	97	Second-order streams of exceptionally high water quality, fed by three first-order branches, all of which are spring-fed. Contains a stable, well-balanced, diverse fauna. Surrounding vegetation is a complex of second-growth northern wet-mesic forest, conifer swamp, shrub-carr, alder thicket, and young maple-beech and aspen woods. Contains a good population of the forked aster (<i>Aster furcatus</i>), a State-designated threatened species
4	Cedarburg Bog State Natural Area	NA-1 (SNA, RSH)	T11N, R21E Sections 19, 20, 21, 28, 29, 30, 31, 32, 33 Town of Saukville	Department of Natural Resources, University of Wisconsin-Milwaukee, and private	2,009	One of the largest and least disturbed bogs in eastern Wisconsin, containing an extensive conifer swamp forest, open bog, a shallow hard-water drainage lake, and mesic woods on isolated islands. A portion of the area contains a string bog, characterized by noticeable ridges running perpendicular to water flow. This is the southernmost example in the world. The very high species diversity includes a large number of regionally rare species, many of which are northern relicts. A National Natural Landmark
5	Sapa Spruce Bog State Natural Area	NA-1 (SNA, RSH)	T11N, R21E Section 30 Town of Saukville	University of Wisconsin-Milwaukee and private	59	High-quality acid bog dominated by black spruce at one of its southernmost locations in Wisconsin. The rich, diverse flora includes at least six species of sphagnum moss
--	Subtotal	NA-1	5 sites	--	2,282	--
6	Cedarburg Beech Woods State Natural Area	NA-2 (SNA, RSH)	T11N, R21E Section 30 Town of Saukville	University of Wisconsin-Milwaukee and private	130	Good-quality, mature, beech- and sugar maple-dominated southern mesic forest in a moraine area of low gravelly hills and kettle holes. Disturbance, including past selective logging and grazing, appears to be minimal. Grades into lowland forest to north and northeast. Historically a site of scientific research
7	Pigeon Creek Low and Mesic Woods	NA-2 (RSH)	T9N, R21E Section 10 City of Mequon	Private	81	A combination of lowland hardwoods, wet-mesic woods, and upland mesic woods, much of which borders the cold, clear, fast waters of Pigeon Creek. On the grounds of a former fox farm. Contains the State-designated endangered heart-leaved plantain (<i>Plantago cordata</i>), as well as the State-designated threatened snow trillium (<i>Trillium nivale</i>) and forked aster (<i>Aster furcatus</i>)

Table 6 (continued)

Number on Map 4	Area Name	Classification Code ^a	Location	Ownership	Size (acres)	Description and Comments
8	Donges Bay Gorge	NA-2 (RSH)	T9N, R22E Section 33 City of Mequon	Private	22	A deep, steep-sided clay ravine on the Lake Michigan shore, containing a white pine and beech forest. Northern relict species are present. The area has suffered from erosion, encroaching residential development, and overgrazing by deer
9	Milwaukee River Mesic Woods	NA-2 (RSH)	T11N, R21E Section 3 Town of Saukville T12N, R21E Section 34 Town of Fredonia	Ozaukee County, Girl Scouts of Milwaukee Area, Inc., and other private	382	Morainal deposits along a two-mile stretch of the Milwaukee River support moderate- to good-quality upland mesic woods, with lowland hardwoods in depressions. Species diversity is generally good throughout
10	Ducks Limited Bog	NA-2	T11N, R21E Section 5 Town of Saukville	Ducks Limited and other private	21	Good-quality sphagnum bog on north side of a shallow lake and bordered by a deep moat. Typical acid-bog species present include leatherleaf, round-leaved sundew, snake-mouth orchid, grass-pink orchid, bog rosemary, blueberry, winterberry, pitcher plant, and cranberry. Area south of lake is more disturbed
11	Riveredge Mesic Woods	NA-2 (RSH)	T11N, R21E Sections 6, 7 Town of Saukville	Riveredge Nature Center and other private	212	Good-quality regenerating stand of mesic woods and lowland hardwoods bordering the Milwaukee River. Trees are medium-aged. A variety of habitats supports a rich species complement, including several uncommon species. Disturbed by highway and residences in the southern portion of the woods. Area north of Milwaukee River is wetter and more disturbed. Much of woods owned by Riveredge Nature Center
12	Kinnamon Conifer Swamp	NA-2 (RSH)	T11N, R21E Sections 18, 19 Town of Saukville	Private	382	A large wooded lowland, containing a combination of good-quality northern wet-mesic forest of white cedar and northern hardwoods swamp of black ash. Low glacial ridges within the swamp support mesic upland woods. Past disturbance appears, overall, to be minimal. The good, diverse northern understory includes a number of regionally uncommon species
13	South Conifer Swamp	NA-2	T11N, R21E Section 20 Town of Saukville	Private	52	Good-quality conifer swamp containing typical northern species. One of the few sites in the Region in which black spruce is present. Small lake is bordered by a narrow cattail fringe. Contains headwaters of Cedarburg Bog
14	Max's Bog	NA-2 (RSH)	T11N, R21E Section 20 Town of Saukville	Private	30	Two small, undeveloped, shallow lakes surrounded by good-quality bog mats. The area contains a number of species with more northern affinities
15	Huiras Lake Woods and Bog	NA-2	T12N, R21E Sections 8, 9, 10, 16 Town of Fredonia	Milwaukee Jewish Welfare Fund and other private	435	Large lowland and upland forested area that has been relatively undisturbed since last cut. A bog is located in the southern portion. Good diversity of tree and ground-layer species. The small, landlocked seepage lake is valuable for waterfowl migration and nesting. A number of northern relict species are present
16	Janik's Woods	NA-2 (RSH)	T12N, R21E Sections 29, 30 Town of Fredonia	Private	163	A relatively large, good-quality woodlot that is recovering from past disturbance. Southern portion is an upland containing medium-aged red oak, sugar maple, and basswood, with a diverse ground flora. Lowland hardwoods to the north contain scattered conifers
17	Harrington Beach Lacustrine Forest	NA-2	T12N, R23E Section 19 Town of Belgium	Department of Natural Resources	178	Moderate- to good-quality mature second-growth northern wet-mesic forest, located just west of the shoreline beach ridge. Dominant trees include green and black ashes, basswood, and white cedar. This is a regionally rare community type, heavily used by migratory birds
--	Subtotal	NA-2	12 sites	--	2,088	--

Table 6 (continued)

Number on Map 4	Area Name	Classification Code ^a	Location	Ownership	Size (acres)	Description and Comments
18	Highland Road Woods	NA-3	T9N, R21E Section 11 City of Mequon	Private	53	Mesic woods of moderate quality dominated by sugar maple, beech, and basswood. Low areas contain ephemeral ponds
19	Pigeon Creek Maple Woods	NA-3 (RSH)	T9N, R21E Section 15 City of Mequon	Private	13	A small but good-quality mesic woods on sloping uplands above Pigeon Creek. Ground flora is very rich and diverse, including a large population of twinleaf (<i>Jeffersonia diphylla</i>), a State-designated special concern species
20	Solar Heights Low Woods	NA-3	T9N, R21E Sections 20, 21 City of Mequon	Private	114	Disturbed floodplain forest dominated by red and silver maples and yellow birch. Changing water levels and Dutch elm disease have altered the canopy. Native species diversity is low, and exotic species are proliferating
21	Triple Woods	NA-3	T9N, R21E Section 31 City of Mequon	Private	51	Upland mesic forest of sugar maple and beech. Despite past logging, the spring flora is relatively diverse. Offers protection to tributaries of the Little Menomonee River
22	Ville du Parc Riverine Forest	NA-3	T9N, R22E Sections 18, 19 City of Mequon	City of Mequon and private	111	One of the last remnants of riverine forest along this portion of the Milwaukee River. Contains old river channels. The woods is mostly second-growth, with a mixture of upland and lowland species
23	Mequon Wetland	NA-3	T9N, R22E Section 20 City of Mequon	Private	77	A mixed wetland area consisting of deep and shallow marsh, fresh (wet) meadow, shrub-carr, and young wet to wet-mesic lowland hardwoods. Wetland filling and water-level changes due to ditching and channel realignment have disturbed the area
24	Mole Creek Swamp	NA-3 (RSH)	T10N, R21E Section 2 Town of Cedarburg	City of Cedarburg, Town of Cedarburg, and private	89	Primarily a disturbed, low, wooded area bordering Mole Creek, dominated by green ash, alder, and red-osier dogwood
25	Cedar-Sauk Low Woods	NA-3	T10N, R21E Sections 5, 6 Town of Cedarburg T11N, R21E Section 31 Town of Saukville T11N, R20E Section 36 Town of Trenton	Private	204 (plus 14 in Washington County)	Lowland hardwood forest of silver maple, green and black ash, and American elm, with evidence of abundant past disturbances, including grazing, power-line right-of-way, and two highways. Stream flows through area from Cedarburg Bog
26	Grafton Woods	NA-3 (RSH)	T10N, R21E Sections 13, 18 Town of Grafton	Private	18	Small mesic woods on east side of Milwaukee River. Despite history of grazing and selective cutting, has a good species diversity, including American gromwell (<i>Lithospermum latifolium</i>), a State-designated special concern species
27	Sherman Road Woods	NA-3	T10N, R21E Section 19 Town of Cedarburg	Private	72	Lowland hardwood forest with much second growth due to past grazing
28	Five Corners Swamp	NA-3	T10N, R21E Section 20 Town of Cedarburg	Private	173	A large lowland hardwood forest that is suffering from disturbance, including selective cutting and a network of wide trails. Dominant trees are red and silver maples and cottonwood. A windstorm in June 1991 snapped or uprooted a large number of mature trees
29	Cedar Creek Forest	NA-3 (RSH)	T10N, R21E Section 23 Town of Cedarburg	Private	23	Sugar maple and beech woods on west bank of Cedar Creek. Threatened by encroaching residential development
30	Cedar Heights Gorge	NA-3	T10N, R22E Section 3 Town of Grafton	Private	9	Disturbed, narrow, steep-sided gorge leading to Lake Michigan. Almost complete dominance by white cedar

Table 6 (continued)

Number on Map 4	Area Name	Classification Code ^a	Location	Ownership	Size (acres)	Description and Comments
31	Lions Den Gorge	NA-3	T10N, R22E Section 10 Town of Grafton	Private	20	Deep ravine on Lake Michigan shore. Dominated by white cedar and hardwoods, with a relatively good-quality herb layer, including a few northern relicts
32	Ulao Lowland Forest	NA-3	T10N, R22E Sections 4, 5, 8, 9, 17 Town of Grafton	Private	347	A large lowland hardwoods area, dominated by red and silver maples and black ash. Adversely affected by changing water levels, selective cutting, and Dutch elm disease, which have opened the canopy. Marshy stands occur throughout
33	Hansen's Lake Wetland	NA-3	T11N, R21E Section 4 Town of Saukville	Private	13	Small but good-quality lake surrounded by cattails, shrub-carr, and lowland hardwoods, with scattered tamaracks. Lake is stocked with bluegills
34	Knollwood Road Bog	NA-3	T11N, R21E Section 19 Town of Saukville	Private	9	Small lake surrounded by a sphagnum mat, shallow marsh, and lowland hardwoods
35	Hawthorn Drive Forest	NA-3	T11N, R22E Section 6 Town of Port Washington	Private	54	Wet-mesic red maple and American elm forest, with an upland forest of red oak, beech, and basswood to the south. Canopy has been opened by disease and logging
36	Spring Lake Marsh	NA-3	T12N, R21E Section 2 Town of Fredonia	Private	19	Good-quality wetland complex bordering a clear, shallow lake. Good habitat diversity includes shrub-carr, sedge meadow, shallow marsh, and cedar-tamarack swamp
37	Spring Lake Beech Forest	NA-3	T12N, R21E Section 2 Town of Fredonia	Private	65	Small mesic hardwood forest dominated by small- to medium-sized beech, sugar maple, basswood, and white ash, with a long history of selective cutting
38	County Line Low Woods	NA-3	T12N, R21E Sections 4, 5 Town of Fredonia T13N, R21E Sections 32, 33 Town of Sherman	Private	214 (plus 58 in Sheboygan County)	Large but mostly young lowland hardwoods of mixed composition and having history of disturbance. Many openings in canopy allow dense undergrowth. Extends north into Sheboygan County
39	Beekeeper Bog	NA-3	T12N, R21E Section 5 Town of Fredonia	Ozaukee County and private	15	Good example of a typical kettle-hole bog with shallow water, shrub-carr, and northern wet-mesic white cedar forest. The southeastern portion has been ditched. Contains a good number of species with more northerly affinities
40	Department of Natural Resources Lowlands	NA-3	T12N, R21E Section 7 Town of Fredonia	Department of Natural Resources and private	186	Primarily a disturbed lowland hardwood forest with streams. Ponds have been dredged by Department of Natural Resources
41	Pioneer Road Lowlands	NA-3	T12N, R21E Sections 8, 17 Town of Fredonia	Private	94	A low, wet woodlot with a history of disturbance. North half contains a dense stand of tamarack, cedar, and black ash, with some large individual trees. South half has large scattered trees and thick undergrowth
42	Cedar Valley Swamp	NA-3	T12N, R21E Sections 10, 11, 15 Town of Fredonia	Private	141	An irregularly shaped lowland area disturbed by Dutch elm disease, logging, and water-level changes. Dominated by black ash, red maple, and white cedar, with small areas of tamarack. A small upland island in the center contains mature trees
43	Evergreen Road Bog	NA-3 (RSH)	T12N, R21E Section 14 Town of Fredonia	Private	44	Good-quality tamarack-cedar bog, with a large sedge-shrub area to the north and upland hardwoods to the southeast. Threatened by residential development
44	Kohler Road Woods	NA-3	T12N, R21E Sections 15, 22 Town of Fredonia	Private	124	Primarily a low, wet woods of medium-aged red and silver maples, yellow birch, and black ash. South half is younger, with many cut stumps

Table 6 (continued)

Number on Map 4	Area Name	Classification Code ^a	Location	Ownership	Size (acres)	Description and Comments
45	Waubeka Low Woods	NA-3	T12N, R21E Sections 31, 32 Town of Fredonia	Ozaukee County and private	161	Primarily a wooded lowland of tamarack, black ash, and yellow birch, but with glacial ridges containing upland trees. There is a history of disturbance
46	Cedar Grove Swamp	NA-3	T12N, R22E Sections 2, 3 Town of Belgium	Private	177	Extensive second-growth forest on ditched lacustrine flats with clayey soils. Dominated by red and silver maple, black ash, yellow birch, American elm, and swamp white oak. Repeatedly logged and encroached on by agriculture and ditching
47	Belgium Swamp—North	NA-3	T12N, R22E Section 27 Town of Belgium	Private	150	An extensive, but young, lacustrine forest 2.5 miles from Lake Michigan, with American elm, black ash, and red and silver maples. Disease, logging, and windthrow have opened the canopy, permitting a brushy understory to develop
48	Belgium Swamp—South	NA-3	T12N, R22E Section 34 Town of Belgium	Private	148	Low, flat, wet forested area of black ash and silver and red maples, with some yellow birch and basswood. Old wind-falls and dead standing trees are common. There is a history of disturbance, resulting in a very open and brushy appearance
--	Subtotal	NA-3	31 sites	--	2,988	--
--	Total	All Natural Areas	48 sites	--	7,358	--

^aNA-1 identifies Natural Area sites of statewide or greater significance.

NA-2 identifies Natural Area sites of countywide or regional significance.

NA-3 identifies Natural Area sites of local significance.

SNA, or State Natural Area, identifies those sites officially designated as State Natural Areas by the State of Wisconsin Natural Areas Preservation Council.

RSH, or Rare Species Habitat, identifies those sites which support rare, threatened, or endangered animal or plant species officially designated by the Wisconsin Department of Natural Resources.

Source: Wisconsin Department of Natural Resources and SEWRPC.

resource areas.” Environmental corridors and isolated natural resource areas within Ozaukee County in 1995 are shown on Map 7. At that time, such areas encompassed about 45.6 square miles or about 19 percent of the County.

In any consideration of environmental corridors and isolated natural resource areas, it is important to note that the preservation of such resources serves many beneficial purposes in addition to protecting the important natural resources that make up the corridors. Corridor lands provide areas for the storage of flood waters away from homes and other developed areas; help to protect water quality by filtering sediment and fertilizer from runoff before it enters surface waters; provide wildlife habitat and corridors for the movement of animals; and contribute to the scenic beauty of the Region.

Excluding urban development from environmental corridors helps to prevent problems such as water pollution, wet and flooded basements, and building and pavement failures.

In addition, because of the many interacting relationships between living organisms and their environment, the destruction or deterioration of any one element of the natural resource base may lead to a chain reaction of deterioration and destruction. The draining and filling of wetlands, for example, may destroy fish spawning grounds, wildlife habitat, groundwater recharge or discharge areas, and the natural filtration action and floodwater storage functions which contribute to maintaining high levels of water quality and stable streamflows and lake stages in a watershed. The resulting deterioration of surface water quality may, in turn, lead to the deterioration of

Map 5

CRITICAL SPECIES HABITAT SITES AND CRITICAL AQUATIC HABITAT AREAS IN OZAUKEE COUNTY: 1994

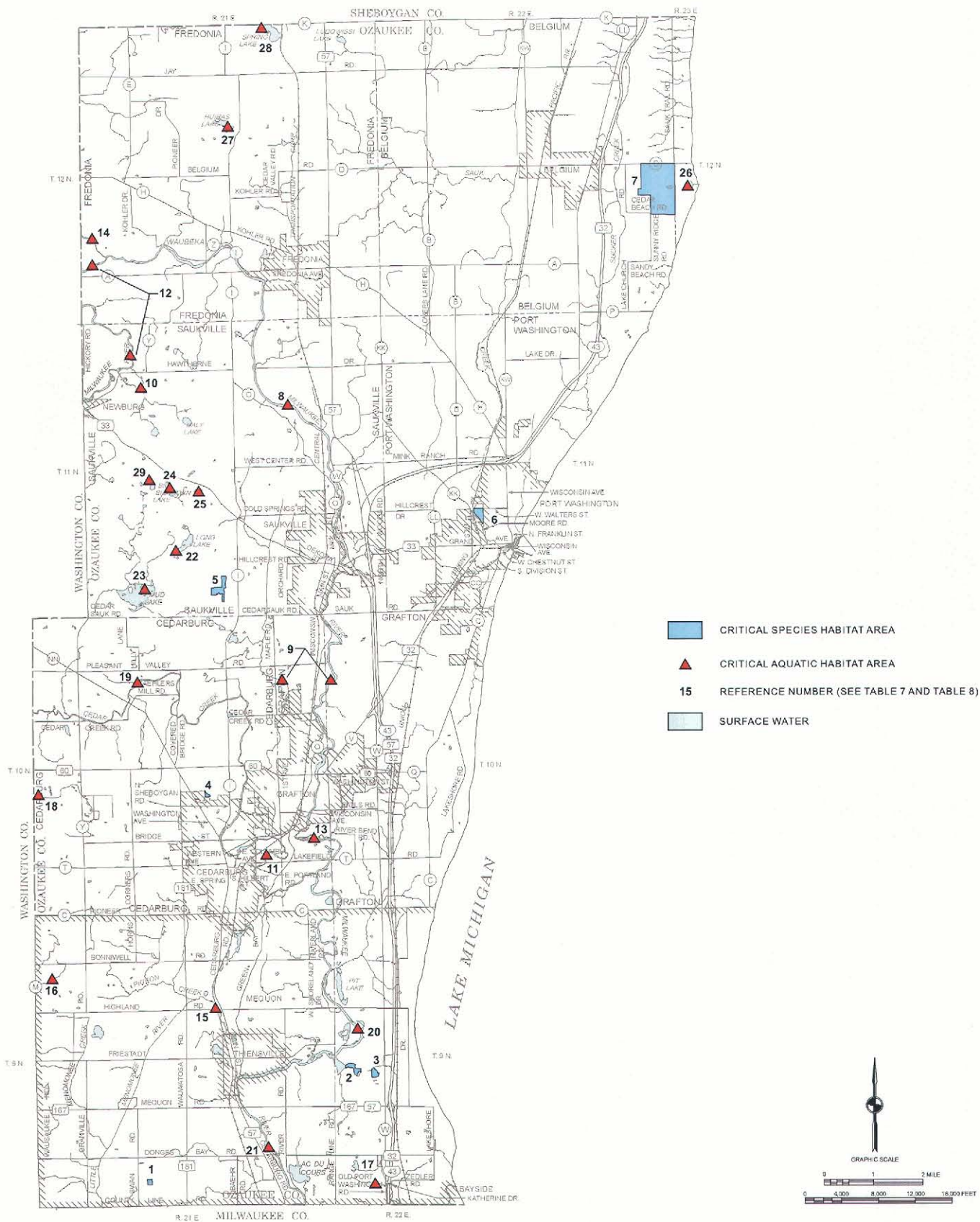


Table 7

CRITICAL SPECIES HABITAT SITES LOCATED OUTSIDE NATURAL AREAS IN OZAUKEE COUNTY: 1994

Number on Map 5	Site Name and Classification Code ^a	Location	Ownership	Size (acres)	Species of Concern ^b
1	Strauss Woods (CSH-P)	T9N, R21E, Section 33 City of Mequon	Private	7	American gromwell (<i>Lithospermum latifolium</i>) (R)
2	Pecard Sedge Meadow (CSH-P)	T9N, R22E, Section 19 City of Mequon	Private	13	Yellowish gentian (<i>Gentiana alba</i>) (T)
3	Eastbrook Road Woods (CSH-P)	T9N, R22E, Section 19 City of Mequon	Private	8	Forked aster (<i>Aster furcatus</i>) (T)
4	Cedarburg Woods—West (CSH-P)	T10N, R21E, Section 22 Town of Cedarburg	Private	4	Goldenseal (<i>Hydrastis canadensis</i>) (R)
5	Cedar-Sauk Upland Woods (CSH-P)	T11N, R21E, Section 33 Town of Saukville	Private	38	American gromwell (<i>Lithospermum latifolium</i>) (R)
6	Sauk Creek Nature Preserve (CSH-P)	T11N, R22E, Section 29 City of Port Washington	Ozaukee County	22	Forked aster (<i>Aster furcatus</i>) (T)
7	Harrington Beach State Park Old Fields (CHS-B)	T12N, R22E, Section 24 Town of Belgium	Department of Natural Resources	202	Upland sandpiper (<i>Bartramia longicauda</i>) (R)
Total	--	--	--	294	--

^aCSH-P identifies a critical plant species habitat site; CSH-B identifies a critical bird species habitat site.

^b"R" refers to species designated as rare or special concern; "T" refers to species designated as threatened.

Source: SEWRPC.

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 may result in soil erosion and stream siltation, more rapid stormwater runoff and attendant increased flood flows and stages, 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 will eventually create serious environmental and developmental problems. The need to maintain the integrity of the remaining environmental corridors and isolated natural resource areas thus becomes apparent.

Primary Environmental Corridors

As shown on Map 7, the primary environmental corridors in Ozaukee County are located along the major rivers and their tributaries, along Lake Michigan, around the major lakes in the County, and in large wetland areas. In 1995, about 32.4 square

miles, comprising about 14 percent of the total area of the County, were encompassed within the primary environmental corridors.

The primary environmental corridors contain almost all of the best remaining woodlands, wetlands, and wildlife habitat areas in the County and are, in effect, a composite of the best remaining elements of the natural resource base. Such areas have immeasurable environmental and recreational value. The protection of the primary environmental corridors from additional intrusion by incompatible land uses, and thereby from degradation and destruction, is one of the principal objectives of this park and open space planning program.

Secondary Environmental Corridors and Isolated Natural Resource Areas

As shown on Map 7, secondary environmental corridors in Ozaukee County are located chiefly along the small perennial and intermittent streams within the

Table 8

CRITICAL AQUATIC HABITAT AREAS IN OZAUKEE COUNTY: 1994

Streams				
Number on Map 5	Stream	Size (stream miles)	Rank ^a	Description ^b and Comments
8	Milwaukee River main stem upstream from STH 33	11.1 miles	AQ-1 (RSH)	Important reservoir for critical fish species, including the striped shiner, an endangered fish species, and three threatened fish species
9	Milwaukee River downstream from STH 33 to STH 57 (includes Mole Creek)	8.7 miles	AQ-1 (RSH)	Important reservoir for the striped shiner; good overall fish population and diversity
10	Riveredge Creek	1.6 miles	AQ-1 (RSH)	A slow, cold, spring-fed stream, with excellent water quality; contains a very diverse invertebrate assemblage; a designated State Natural Area
11	Cedar Creek downstream from STH 60	6.7 miles	AQ-2 (RSH)	Good fish population and diversity, including three critical fish species; good assemblage of mussel species
12	Milwaukee River downstream from STH 33 to main stem	4.3 miles ^c	AQ-2 (RSH)	Excellent Biotic Index Rating, ^d critical fish species present; good assemblage of mussel species
13	Milwaukee River downstream from STH 57 to CTH C	4.5 miles	AQ-2 (RSH)	Critical fish species present, including the striped shiner; Biotic Index Rating ^d of Good
14	North Branch, Milwaukee River	0.8 mile ^c	AQ-2 (RSH)	Good overall fish population and diversity, including critical fish species; Biotic Index Rating ^e of Good to Excellent
15	Pigeon Creek	2.4 miles	AQ-2 (RSH)	Good overall fish population and diversity, including critical fish species; critical plant species adjacent to and within the channel
16	North Branch, Menomonee River upstream from STH 145	0.8 mile ^c	AQ-3	Bisects identified Natural Areas
17	Fish Creek	1.0 miles ^c	AQ-3	Bisects Fairy Chasm State Natural Area
18	Cedar Creek downstream from Little Cedar Creek inflow to CTH M	0.5 mile ^c	AQ-3	Good fish population and diversity; bisects Jackson Swamp, an identified Natural Area
19	Cedar Creek downstream from CTH M to STH 60	8.8 miles ^c	AQ-3	Good fish population and diversity; good mussel species assemblage
20	Milwaukee River downstream from CTH C to Mequon Road	13.4 miles	AQ-3 (RSH)	Good fish population and diversity and mussel species richness
21	Milwaukee River downstream from Mequon Road to Brown Deer Road	2.9 miles ^c	AQ-3 (RSH)	Biotic Index Rating ^d of Good; critical fish species present
--	Total (14 stream reaches)	67.5 miles	--	--
Lakes				
Number on Map 5	Lake	Size (acreage)	Rank ^a	Description ^b and Comments
22	Long Lake	34 acres	AQ-1 (RSH)	A shallow seepage lake with an undeveloped shoreline and wilderness character within the Cedarburg Bog State Natural Area; a variety of plant communities surrounds the Lake; critical herptile habitat
23	Mud Lake	245 acres	AQ-1 (RSH)	A shallow, undeveloped seepage lake within the Cedarburg Bog State Natural Area; a variety of plant communities surrounds the lake
24	Big Bienborn Lake (Horn Lake)	12 acres	AQ-2 (RSH)	A seepage lake adjacent to the Cedarburg Bog State Natural Area

Table 8 (continued)

Lakes				
Number on Map 5	Lake	Size (acreage)	Rank ^a	Description ^b and Comments
25	Watts Lake	7 acres	AQ-2	A deep spring lake within the Cedarburg Bog State Natural Area; an undeveloped shoreline
26	Quarry Lake	19 acres	AQ-3	An abandoned limestone quarry which is an identified Geological Area site adjacent to an identified Natural Area, Harrington Beach Lacustrine Forest
27	Huiras Lake	26 acres	AQ-3	An undeveloped seepage lake encompassed by an identified Natural Area, Huiras Lake Woods and Bog
28	Spring Lake	57 acres ^c	AQ-3	A seepage lake with adjacent wetlands important for breeding and feeding habitat for wildlife
29	Unnamed lake	13 acres	AQ-3 (RSH)	A seepage lake with suitable habitat for Blanding's turtle, a threatened species
--	Total (8 lakes)	413 acres	--	--

^aAQ-1 identifies Aquatic Area sites of statewide or greater significance.

AQ-2 identifies Aquatic Area sites of countywide or regional significance.

AQ-3 identifies Aquatic Area sites of local significance.

RSH, or Rare Species Habitat, identifies those aquatic areas which support rare, endangered, threatened, or "special concern" species officially designated by the Wisconsin Department of Natural Resources.

^b"Seepage lakes" are lakes which have no inlet or outlet and whose main source of water is direct precipitation and runoff supplemented by groundwater."

"Spring lakes" are lakes which have no inlet but do have an outlet and whose main source of water is groundwater flowing directly into the basin and from the immediate drainage area.

^cLake or stream is located partially within Ozaukee County. Number refers to acreage or stream miles located within the County.

^dBased upon the Hilsenhoff Biotic Index (HBI) discussed in Wisconsin Department of Natural Resources Technical Bulletin No. 132, Using a Biotic Index to Evaluate Water Quality in Streams, 1982.

^eBased upon the Index of Biotic Integrity (IBI) discussed in U.S. Department of Agriculture, Forest Service, General Technical Report NC-149, Using the Index of Biotic Integrity (IBI) to Measure Environmental Quality in Warmwater Streams of Wisconsin, April 1992.

Source: Wisconsin Department of Natural Resources and SEWRPC.

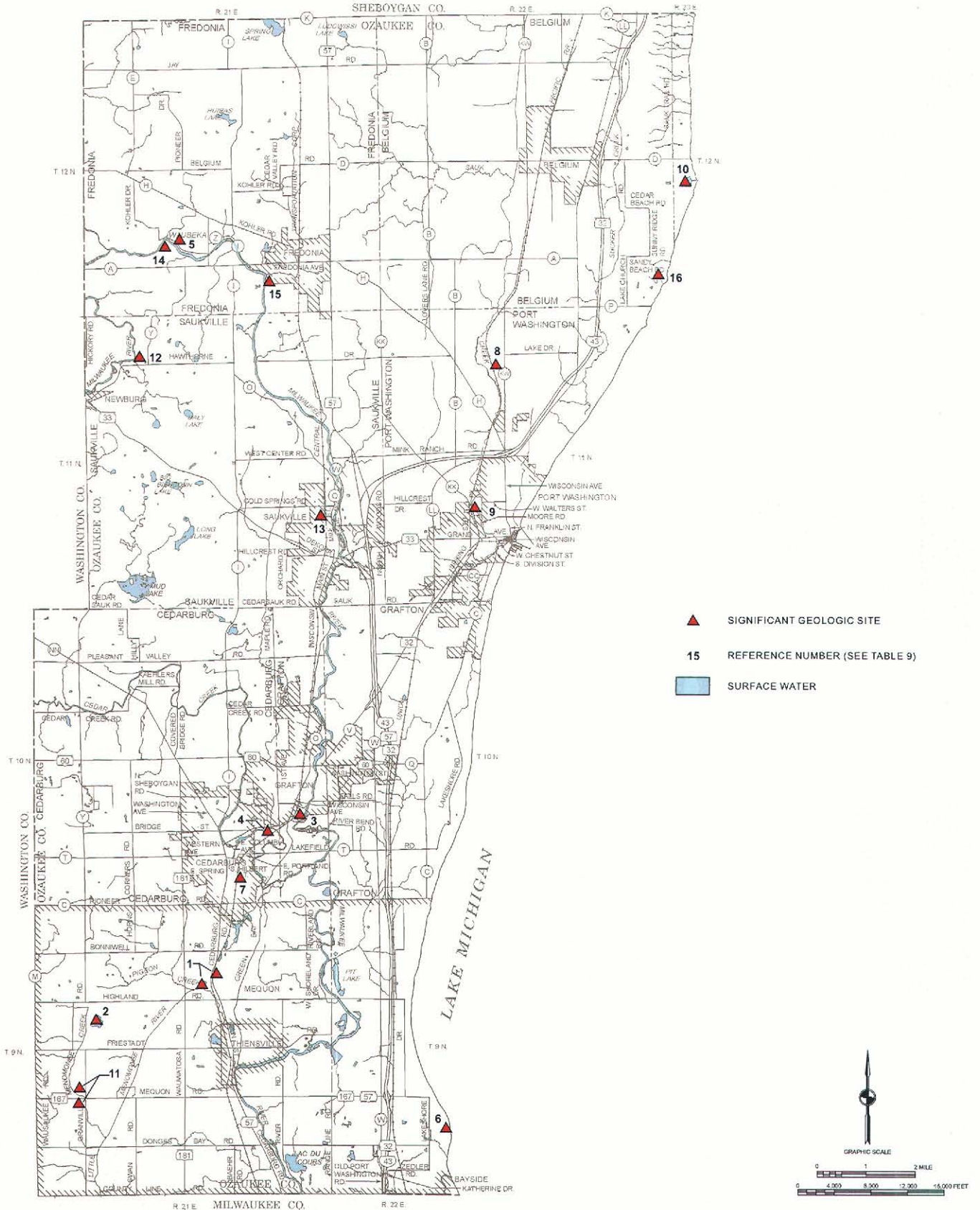
County. About 7.9 square miles, comprising about 3 percent of the County, were encompassed within secondary environmental corridors in 1995. Secondary environmental corridors contain a variety of resource elements and are often remnant resources from primary environmental corridors that have been developed with intensive agricultural or urban uses. Secondary environmental corridors facilitate surface water drainage and provide corridors for the movement of wildlife and for the dispersal of seeds for a variety of plant species. Such corridors should be considered for preservation in natural, open use or incorporated as drainage ways, stormwater detention

or retention areas, or as local parks or recreation trails, in developing areas.

As also shown on Map 7, isolated natural resource areas within Ozaukee County include a geographically well-distributed variety of isolated wetlands, woodlands, and wildlife habitat; in 1995, these areas encompassed about 5.3 square miles, or about 2 percent of the County. Isolated natural resource areas may provide the only available wildlife habitat in an area, provide good locations for local parks and nature areas, and lend aesthetic character and natural diversity to an area. Such areas should be preserved

Map 6

SIGNIFICANT GEOLOGIC SITES IN OZAUKEE COUNTY: 1994



Source: SEWRPC.

Table 9

SIGNIFICANT GEOLOGIC SITES IN OZAUKEE COUNTY: 1994

Number on Map 6	Site Name	Classification Code ^a	Site Area (acres)	Location	Ownership	Description
1	Thiensville Roadcut and Quarry	GA-1	9	T9N, R21E, Section 10 City of Mequon	Ozaukee County and private	Road cut and small old quarry provide only sizable exposure of the Devonian Thiensville Formation anywhere
2	Ozaukee Buried Forest	GA-1	32	T9N, R21E, Section 17 City of Mequon	Private	Old water-filled sand quarry contains remnants of ancient forest
3	Milwaukee River-Grafton Outcrops and Lime Kiln Park	GA-1	57	T10N, R21E, Section 24 Village of Grafton	Ozaukee County and private	Undisturbed, 40-foot-high rock outcrops along the Milwaukee River, containing the best and most extensive exposures of Silurian Racine Dolomite in the Region. Historically used for scientific research
4	Cedar Creek-Anschuetz Quarries	GA-1	5	T10N, R21E, Section 26 Town of Cedarburg	Private	Outcrops and abandoned quarries along Cedar Creek that were main supply of stone for area buildings
5	Phyllocarid Quarry	GA-1	4	T12N, R21E, Section 29 Town of Fredonia	Private	Small, partially water-filled quarry in Upper Silurian Waubakee Dolomite. Only site in Wisconsin where Silurian phyllocarid fossils have been found
6	Virmond Park Clay Banks	GA-2	10	T9N, R22E, Section 28 City of Mequon	Ozaukee County	Clay banks along Lake Michigan shoreline
7	Groth Quarry	GA-2	7	T10N, R21E, Section 35 City of Cedarburg	City of Cedarburg	One of the more important geological sites in the area because of its prominence in the fossil reef studies of eminent geologists. Contains unique reef fossil biota
8	Druecker's Lime Kiln	GA-2	1	T11N, R22E, Section 9 Town of Port Washington	Private	Nineteenth-century patented lime kiln, possibly only remaining example
9	Sauk Creek	GA-2	3	T11N, R22E, Section 29 Town of Port Washington	Private	Unquarried riverbank and low falls exhibiting natural outcrops of Silurian Racine Dolomite
10	Harrington Beach State Park Quarry	GA-2	25	T12N, R23E, Section 19 Town of Belgium	Department of Natural Resources	Large, water-filled quarry and restored pot kiln, and extensive exposures of Devonian rock containing abundant, highly diverse marine fossils
11	Little Menomonee River Reef District	GA-2	1	T9N, R21E, Sections 19, 20, 30 City of Mequon	Private	Silurian Racine Dolomite reef rock exposures. Has considerable importance in scientific research. Contains a wide variety of reef features
12	Riveredge Bluff	GA-3	1	T11N, R21E, Section 6 Town of Saukville	Riveredge Nature Center	Rock bluff of massive Racine Dolomite on south bank of Milwaukee River

Table 9 (continued)

Number on Map 6	Site Name	Classification Code ^a	Site Area (acres)	Location	Ownership	Description
13	Saukville Reef	GA-3	3	T11N, R21E, Section 26 Town of Saukville	Private	Small quarries exposing Racine Dolomite reef
14	Waubeka Quarry	GA-3	2	T12N, R21E, Section 29 Town of Fredonia	Private	Small, abandoned quarry exhibiting an uncommonly exposed type section
15	Fredonia Quarries	GA-3	6	T12N, R21E, Section 34 Town of Fredonia	Private	Two small, undisturbed mid-19th-century quarries and several outcrops of Racine Dolomite
16	Belgium Abandoned Shoreline	GA-3	108	T12N, R22E, Section 36 Town of Belgium	Private	Gravel and sand beaches and wind-cut cliffs and terraces indicating higher ancient lake levels
Total	--	--	274	--	--	--

^aGA-1 identifies Geological Area sites of statewide or greater significance; GA-2 identifies Geological Area sites of countywide or regional significance; and GA-3 identifies Geological Area sites of local significance.

Source: Wisconsin Department of Natural Resources, Wisconsin Geological and Natural History Survey, and SEWRPC.

in natural open uses insofar as practicable, being incorporated for use as parks and open space reservations or stormwater detention or retention areas where appropriate.

Prime Agricultural Land

In 1995, approximately 134.3 square miles, or 57 percent of Ozaukee County, were in agricultural use. For planning purposes, it is useful to distinguish between prime agricultural lands and other farming areas. Prime agricultural lands are those lands, which in terms of soil characteristics, are best suited for the production of food and fiber. Such lands were identified under the Ozaukee County farmland preservation plan, adopted by the Ozaukee County Board in 1983³. Under that plan, prime agricultural land was defined as consisting of farm units meeting the following criteria: 1) individual farm unit must be at least 35 acres in size; 2) at least

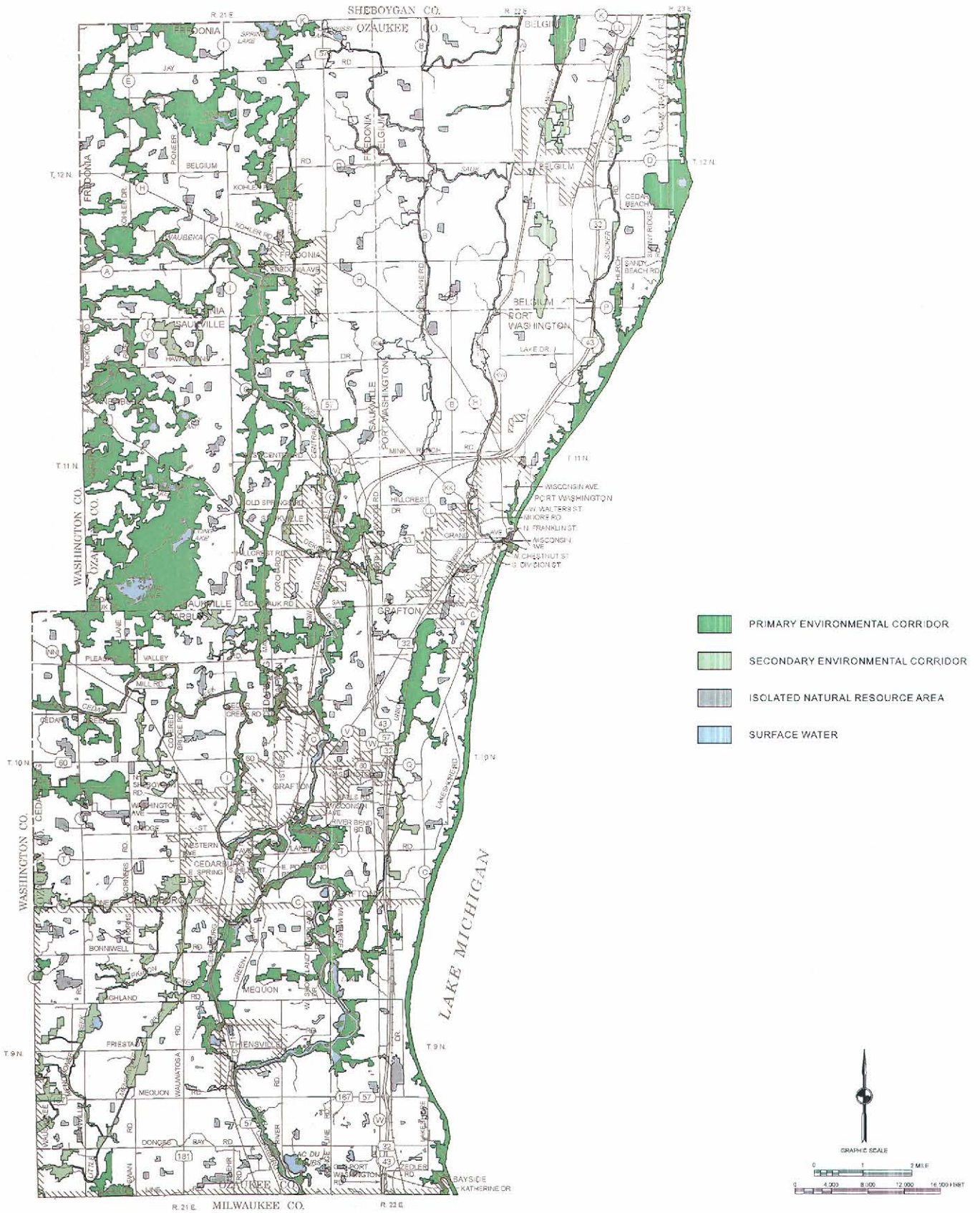
one-half of the individual farm unit must be covered by soils meeting U.S. Natural Resources Conservation Service criteria for prime farmland or farmland of statewide importance; and 3) the individual farm units must occur in a farming area of at least 100 acres in size. In 1995, these areas encompassed about 109.0 square miles, or about 81 percent of all agricultural land, and about 46 percent of the County. Map 8 shows those lands which were identified as prime agricultural land under the Ozaukee County farmland preservation plan, and which still met the criteria and remained in agricultural use in 1995.

A number of important public purposes are served through the preservation of prime agricultural lands. These include the maintenance of agricultural reserves, the maintenance of open space, the control of public costs for providing urban services, the preservation of the local economic base, and the preservation of a rural lifestyle.

³SEWRPC Planning Report No. 87, A Farmland Preservation Plan for Ozaukee County, Wisconsin, 1983.

Map 7

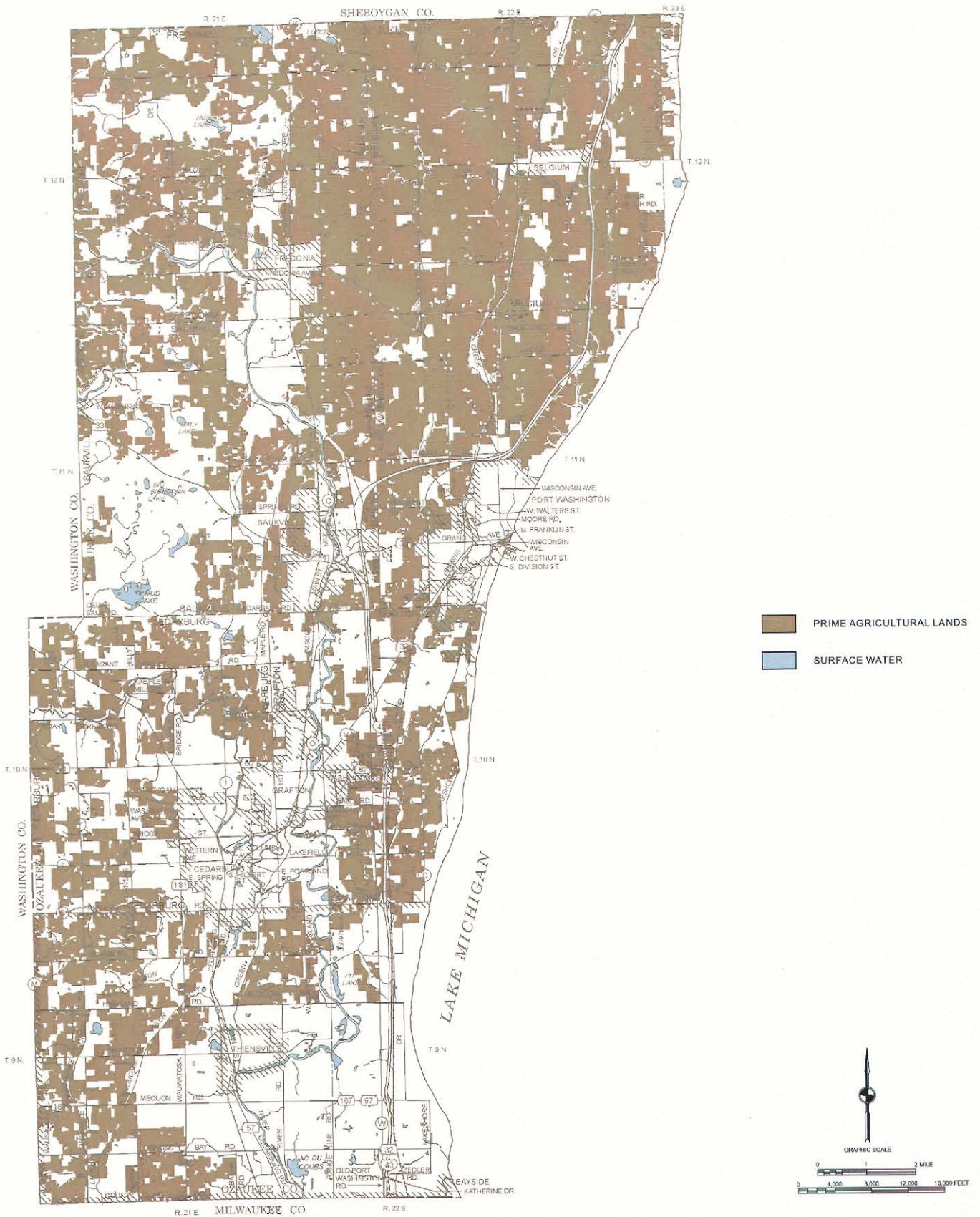
ENVIRONMENTALLY SENSITIVE LANDS IN OZAUKEE COUNTY: 1995



Source: SEWRPC.

Map 8

PRIME AGRICULTURAL LANDS IN OZAUKEE COUNTY: 1995



Source: SEWRPC.

SUMMARY

This chapter has presented data related to existing demographic and economic characteristics, land use, and natural resources for Ozaukee County. The key components of the chapter are as follows:

1. The resident population of Ozaukee County in 1990, the year of the most recent U.S. Census, was about 72,800, an increase of 34 percent over 1970. During the same period, households increased by about 11,100, or about 73 percent. With the number of households increasing at a faster rate than the population, the number of persons per household has decreased. The 2000 Ozaukee County population, based on estimates by the Wisconsin Department of Administration, was about 81,758 persons. This represents an increase of about 8,900 persons, or about 12 percent over 1990.
2. An inventory of land use in 1995 indicated 48.4 square miles, or about 21 percent of the County, was developed with urban uses, while the remaining 186.7 square miles, or about 79 percent of the County, was devoted to rural uses.
3. There are 94 miles of major streams and 360 acres of major lakes within the County. There are approximately 8.3 square miles, or about 4 percent of the County, located within the 100-year recurrence interval flood hazard area of the major streams.
4. The County encompasses a number of significant natural resource base features including wetland areas which in 1995 occupied about 25.6 square miles, or about 11 percent of the County; and woodlands, which occupied about 10.7 square miles, or about 5 percent of the County. The County also contained 48 sites identified as natural areas—areas which contain native plant and animal communities believed to be representative of the pre-European settlement landscape; and seven critical species habitat sites—other sites which support rare, threatened, or endangered plants or animals.
5. The most important element of the natural resource base and features closely related to that base—including wetlands, woodlands, wildlife habitat, major lakes and streams and associated shorelands and floodlands, and outdoor recreation sites—when combined, result in an essentially linear pattern in the landscape referred to by the Regional Planning Commission as environmental corridors. Primary environmental corridors include a wide variety of important natural resource and resource based elements and are, by definition, at least 400 acres in size, two miles long, and 200 feet wide. In 1995, primary environmental corridors encompassed about 32.4 square miles, or about 14 percent of the County.

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Chapter III

EXISTING PARK AND OPEN SPACE SITES

INTRODUCTION

A comprehensive areawide inventory of park and open space sites was conducted in 1973 under the initial regional park and open space planning program,¹ and updated in 1985 for use in preparing the year 2000 County park and open space plan. The inventory of park and open space sites in the County was updated again in 2000 for use in preparing this new County park and open space plan. The findings of the 2000 inventory are presented in this chapter.

The 2000 inventory identified all park and open space sites owned by a public agency, including Federal, State, County, or local units of government and school districts. The inventory also included privately owned resource-oriented outdoor recreation sites such as golf courses, campgrounds, ski hills, boating access sites, swimming beaches, hunting clubs, and group camps such as Scout or YMCA camps, and special use outdoor recreation sites of regional significance. The inventory of private outdoor recreation sites focused on resource-oriented sites because the County park and open space plan is most directly concerned with the provision of sites and facilities for such activities. The inventory also identified such other resources of recreational significance as existing trails and bicycle ways and historic sites listed on the National Register of Historic Places.

¹The regional park and open space plan is documented in SEWRPC Planning Report No. 27, A Regional Park and Open Space Plan for South-eastern Wisconsin: 2000, November 1977.

EXISTING PARK AND OPEN SPACE SITES

Park and Open Space Sites Owned by Ozaukee County

Park and open space sites owned by Ozaukee County in 2000 are shown on Map 9 and listed on Table 10. In 2000, Ozaukee County owned 10 such sites, encompassing a total of 814 acres, or less than 1 percent of the total area of the County.

The 10 existing County parks are: Carlson Park/Ozaukee Ice Center, Mee-Kwon County Park, and Virmond Park, all in the City of Mequon; Covered Bridge Park in the Town of Cedarburg; Ozaukee County Fairgrounds in the City of Cedarburg; Hawthorne Hills County Park, Tendick Nature Park, and Ehlers County Park, all in the Town of Saukville; a wayside in the Town of Port Washington; and Waubedonia Park in the Town of Fredonia.

Selected outdoor recreation facilities within the County park system in 2000 are listed in Table 11. As indicated in that table, three parks within the County system currently provide playfields, two parks provide golf courses, six parks provide picnic areas, one park provides a boat launch, and two parks provide campsites.

Park and Open Space Sites Owned by the State of Wisconsin

As indicated in Table 12 and shown on Map 9, in 2000 there were six State-owned park and open space sites in Ozaukee County, encompassing 2,602 acres, or about 2 percent of the total area of the County. Of these six sites, four sites encompassing 2,305 acres

Map 9

OZAUKEE COUNTY, STATE OF WISCONSIN, AND FEDERAL PARK AND OPEN SPACE SITES: 2000

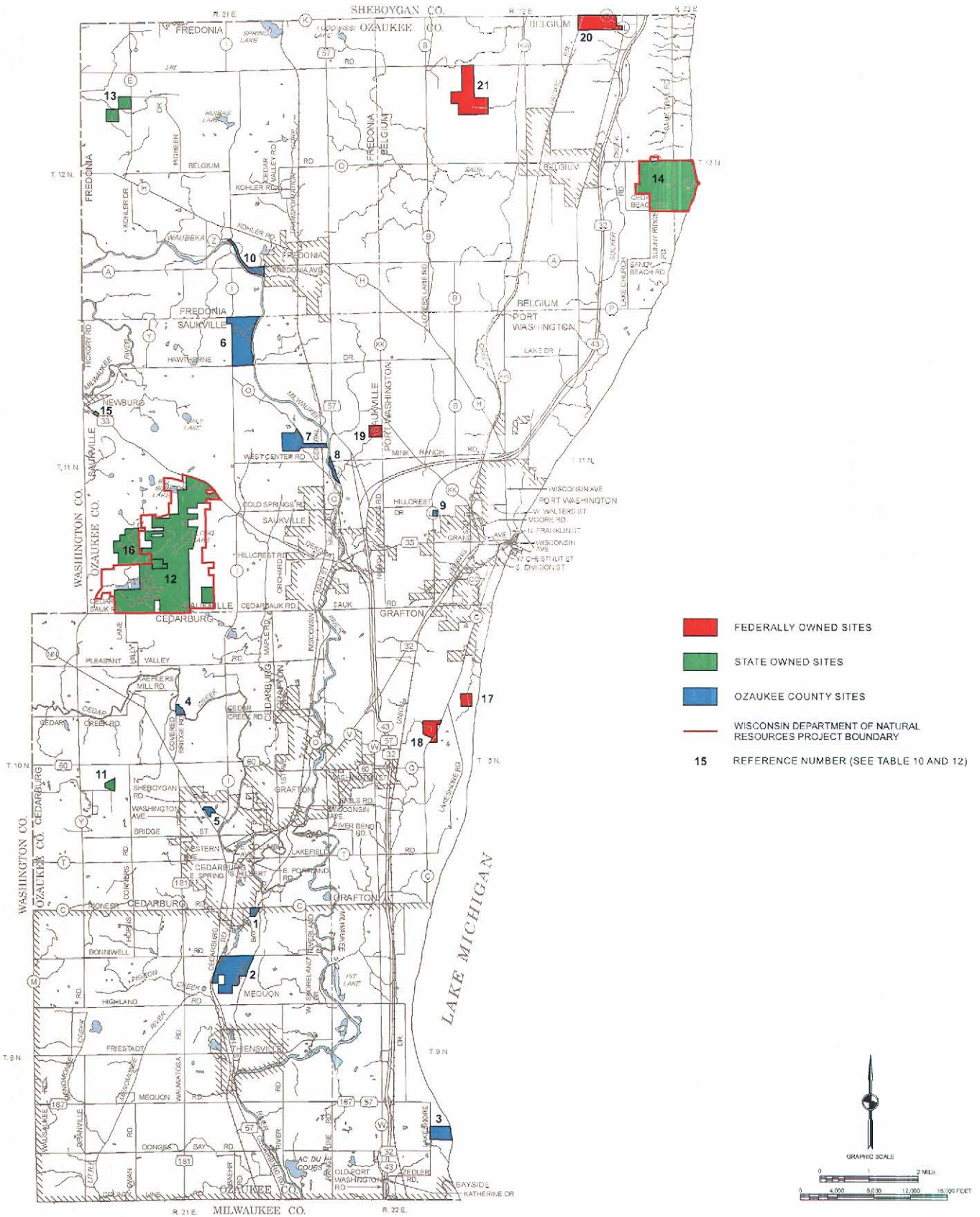


Table 10

PARK AND OUTDOOR RECREATION SITES OWNED BY OZAUKEE COUNTY: 2000

Number on Map 9	Site Name	Location ^a	Size (acres)
1	Carlson Park/Ozaukee Ice Center	T9N, R21E, Section 2	12
2	Mee-Kwon County Park	T9N, R21E, Sections 10, 11	239
3	Virmond Park	T9N, R22E, Section 28	66
4	Covered Bridge Park	T10N, R21E, Section 10	12
5	Ozaukee County Fairgrounds	T10N, R21E, Sections 22, 27	18
6	Hawthorne Hills County Park	T11N, R21E, Sections 3, 4	290
7	Tendick Nature Park	T11N, R21E, Section 14	123
8	Ehlers County Park	T11N, R21E, Sections 13, 14, 23, 24	11
9	Wayside	T11N, R22E, Section 29	1
10	Waubedonia Park	T12N, R21E, Sections 27, 34	42
--	Total -10 Sites	--	814

^aIndicates location given in U.S. Public Land Survey Township, Range, and Section.

Source: SEWRPC.

Table 11

SELECTED OUTDOOR RECREATION FACILITIES WITHIN OZAUKEE COUNTY PARKS: 2000

Number on Map 9	Site Name	Size (acres)	Playfield	Golf Course	Picnic Area	Swimming Beach	Trails	Boat Launch	Campsites
1	Carlson Park/Ozaukee Ice Center	12	--	--	--	--	--	--	--
2	Mee-Kwon County Park	239	X	X	X	--	--	--	--
3	Virmond Park	66	X	--	X	--	--	--	--
4	Covered Bridge Park	12	--	--	X	--	--	--	--
5	Ozaukee County Fairgrounds	18	--	--	--	--	--	--	--
6	Hawthorne Hills County Park	290	--	X	X	--	--	--	X
7	Tendick Nature Park	123	--	--	--	--	--	--	--
8	Ehlers County Park	11	--	--	X	--	--	--	--
9	Wayside	1	--	--	--	--	--	--	--
10	Waubedonia Park	42	X	--	X	--	--	X	X
--	Total - 10 Sites	814	3	2	6	--	--	1	2

Source: SEWRPC.

were owned by the Wisconsin Department of Natural Resources; one site, encompassing two acres was owned by the Wisconsin Department of Transportation; and one site, encompassing 295 acres, was owned by the University of Wisconsin.

Wisconsin Department of Natural Resources

The Wisconsin Department of Natural Resources has acquired large areas of park and open space lands in Ozaukee County for a variety of resource

protection and recreational purposes. Sites acquired for natural resource preservation and limited recreational purposes include the Cedarburg Habitat Preservation, Cedarburg Bog Scientific Area, and one scattered wetland.

One Department-owned site, Harrington Beach State Park, is associated with more intensive recreational activities. The site provides swimming, picnicking, trail facilities, and a wildlife refuge.

Table 12

STATE OF WISCONSIN AND FEDERAL RECREATION AND OPEN SPACE LANDS IN OZAUKEE COUNTY: 2000

Number on Map 9	Site Name	Location ^a	Size (acres)
11	Department of Natural Resources Sites		
	Cedarburg Habitat Preservation	T10N, R21E, Section 20	21
12	Cedarburg Bog Scientific Area.....	T11N, R21E, Sections 20, 21, 28, 29, 31, 32	1,568
13	Scattered Wetland	T12N, R21E, Section 7	80
14	Harrington Beach State Park.....	T12N, R22E, Section 24 T12N, R23E, Section 19	636
--	Subtotal - 4 Sites	--	2,305
15	Department of Transportation Site		
	Wayside	T11N, R21E, Section 7	2
--	Subtotal - 1 Site	--	2
16	University of Wisconsin Site		
	UW Cedarburg Bog Arboretum	T11N, R21E, Sections 29, 30	295
--	Subtotal - 1 Site	--	295
17	U.S. Fish and Wildlife Service Sites		
	U.S. Fish and Wildlife Service.....	T10N, R22E, Section 9	40
18	U.S. Fish and Wildlife Service.....	T10N, R22E, Section 16	55
19	U.S. Fish and Wildlife Service.....	T11N, R21E, Section 13	40
20	U.S. Fish and Wildlife Service.....	T12N, R22E, Section 2	128
21	U.S. Fish and Wildlife Service.....	T12N, R22E, Sections 8, 9	280
--	Subtotal - 5 Sites	--	543
--	Total - 11 Sites	--	3,145

^aIndicates location given in U.S. Public Land Survey Township, Range, and Section.

Source: SEWRPC.

Map 9 also reflects project boundaries approved by the Wisconsin Natural Resources Board for State forests, parks, and wildlife areas within the County. Lands within the approved project boundaries have been identified by the Board as appropriate additions to adjacent forests, natural areas, or wildlife areas and are intended to be acquired by the Department of Natural Resources, on a “willing seller-willing buyer” basis, for recreational or open space purposes as funding permits.

Wisconsin Department of Transportation

The Wisconsin Department of Transportation in 2000 owned one wayside in the Town of Saukville.

University of Wisconsin

In 2000 there was one open space site affiliated with the University of Wisconsin-Milwaukee. The UW Cedarburg Bog Arboretum encompasses about 295 acres and is located in the Town of Saukville.

Federally-Owned Park and Open Space Sites

Map 9 and Table 12 also identifies five open space sites in Ozaukee County owned by the U.S. Fish and Wildlife Service, encompassing 543 acres, or less than 1 percent of the total area of the County. Four of the open space sites, were purchased for the primary purpose of preserving and improving habitat for

breeding, raising, and, eventually, releasing waterfowl in Wisconsin.

Park and Open Space Sites Owned by Local Governments or Public School Districts

In addition to the County-, State-, and Federally-owned park and open space sites in Ozaukee County, in 2000 there was a total of 135 sites owned by local units of government or public school districts. Those sites, listed on Table A-1 and shown on Map A-1 in Appendix A, encompass 1,724 acres, or about 1 percent of the total area of the County. Local governments own 113 park and open space sites, and public school districts own 22 sites. The acreage attributed to school district sites includes only those portions of the site used for recreational or open space purposes.

Private and Public-Interest Resource-Oriented Park and Open Space Sites

The 2000 inventory of park and open space sites also identified a total of 26 privately owned resource-oriented recreation sites and seven sites owned by private organizations for natural resource protection purposes. Those 33 sites are listed on Table A-2 and shown on Map A-2 in Appendix A. Together they encompassed 2,689 acres, or about 2 percent of the total area of the County.

The 26 privately owned recreation sites encompass 1,992 acres and include two hunting clubs, nine golf courses, six boat access sites, two group camps, one family campground, two swimming beaches, and four open-space areas. The seven sites owned for resource preservation purposes encompass 697 acres and include Birding Habitat-2 Ponds West, Ducks Unlimited, Kurtz Woods, Ozaukee County Fish and Game Recreation Preserve, Ozaukee Washington Land Trust Inc., Riveredge Nature Center, and Tamarack Retreat Inc.

LAKE AND RIVER ACCESS SITES

Lakes and rivers constitute a particularly valuable part of the natural resource base of the County. Lakes and rivers enhance the aesthetic quality of the County and are focal points for water-related recreational activities, including such active uses as swimming, boating, and fishing, and passive uses such as walking, or viewing along the water's edge. Boat access sites, both public and non-public, provide opportunities for persons who do not own land on a body of water to participate in water-related recrea-

tional activities. The regional park and open space plan recommends that rivers and major lakes, defined as lakes with a surface area of 50 acres or more, be provided with adequate public access, including carry-in-boating and motor-boat access, consistent with safe and enjoyable participation in water-related activities. There are three major lakes located entirely or partially within the County: Lac du Cours, Mud Lake, and Spring Lake.

Publicly owned access sites for motor-boating purposes in Ozaukee County were not provided on any of the aforementioned major lakes in 2000. There was one publicly owned access site for motor-boating provided to Lake Michigan. There were numerous sites which provide access to Cedar Creek and the Milwaukee River for other recreational activities and passive uses.

TRAILS AND BICYCLE WAYS

The regional park and open space plan, adopted in 1977, recommended the development of an approximately 440-mile network of hiking and bicycling trails. Most of the trails recommended in the regional plan were proposed to be located in areas having natural resource values of regional significance, such as the Lake Michigan shoreline, the Kettle Moraine, and the riverine areas of the Milwaukee, Fox, and Root Rivers. The regional park and open space plan, including the recreation trail component, was subsequently refined through the preparation and adoption of park and open space plans by each of the counties in the Region.

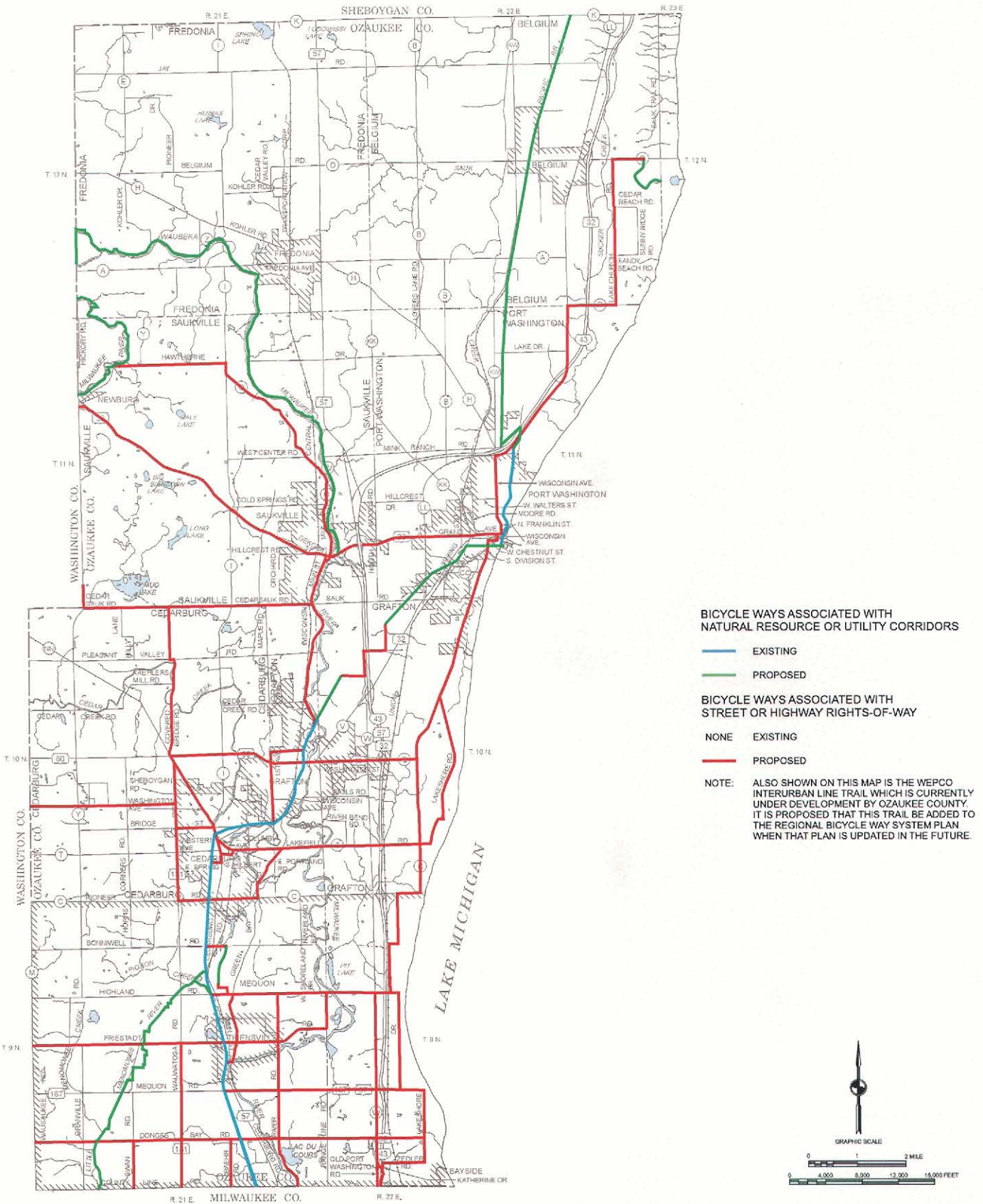
The year 2000 park and open space plan for Ozaukee County recommended that a total of 38 miles of trails be provided along the Little Menomonee River and along the Milwaukee River by Ozaukee County. Of the 38 miles of trails to be provided, about 12 miles currently exist in Ozaukee County as part of the Milwaukee River recreation corridor.

The regional bicycle and pedestrian plan² adopted by the Commission in 1995 recommends a network of on- and off-street bicycle ways within the County. Map 10 depicts the regional bicycle and pedestrian plan as that plan pertains to Ozaukee County. Since

²*Documented in SEWRPC Planning Report No. 43, A Regional Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin—2010, January 1995.*

Map 10

ADOPTED YEAR 2010 BICYCLE WAY SYSTEM PLAN FOR SOUTHEASTERN WISCONSIN AS IT RELATES TO OZAUKEE COUNTY



Source: SEWRPC.

that plan, portions of the proposed bike trails have been developed by Ozaukee County and are reflected on the map as existing bike trails.

For purposes of this report, the term "trails" refers to off-street paths and the term "bicycle way" refers to facilities for bicycle travel associated with street rights-of-way, including signed bicycle routes, striped and signed bicycle lanes, and separate bicycle paths within a highway right-of-way. Bicycle paths generally accommodate both foot and bicycle travel, while on-street bicycle routes and lanes generally accommodate bicycle travel only.

Bicycle use can and does legally occur on many public roadways in the Region that are not specifically designated for such use. State law permits bicycle use on all public roadways, except expressways and freeways, and on those roadways where the local government concerned has acted to prohibit bicycle use by ordinance.

HISTORIC SITES

Historic sites in Ozaukee County often have important recreational, educational, and cultural value. A number of inventories and surveys of potentially significant historic sites have been conducted by various units and agencies of government in Ozaukee County since the completion of the regional park and open space plan in 1977. The results of these inventories and surveys, on file at such agencies as The State Historical Society of Wisconsin, indicate that there are more than 500 historic sites in Ozaukee County.

Certain sites of known historic significance are listed on the National Register of Historic Places. In 2000, there were 25 individual sites and four historic districts³ within the County listed on the National Register. The location of sites and districts in Ozaukee County listed on the National Register of Historic Places in 2000 are presented on Table 13 and on Map 11, respectively.

³A historic district is a geographically definable area, urban or rural, that contains a concentration of significant historic sites or structures from the same period of time.

SUMMARY

This chapter has presented the findings of an inventory of existing outdoor recreation and open space sites in Ozaukee County, including existing parks, other open space sites, lake and river access sites, recreation trails and bicycle ways, and historic sites. The key findings are as follows:

1. In 2000, Ozaukee County owned 10 park and open space sites, which collectively encompassed 814 acres, or less than 1 percent of the total area of the County.
2. The State of Wisconsin owned six park and open space sites, encompassing 2,602 acres, or about 2 percent of the total area of the County. Of these six sites, four sites encompassing 2,305 acres were owned by the Wisconsin Department of Natural Resources; one site encompassing two acres was owned by the Wisconsin Department of Transportation; and one site, encompassing 295 acres, was owned by the University of Wisconsin.
3. There were five open space sites in Ozaukee County owned by the U.S. Fish and Wildlife Service, encompassing 543 acres, or less than 1 percent of the total area of the County.
4. Local units of government and school districts owned 135 park and open space sites, encompassing 1,724 acres, or about 1 percent of the total area of the County.
5. In 2000, a total of 33 privately owned resource-oriented recreation and natural resource protection sites encompassing 2,689 acres were located in Ozaukee County.
6. Boating access was available on Lake Michigan and along the Cedar Creek and Milwaukee River in Ozaukee County.
7. In 2000, 25 individual sites and four historic districts in Ozaukee County were listed on the National Register of Historic Places.

Table 13

**HISTORIC SITES AND DISTRICTS IN OZAUKEE COUNTY
ON THE NATIONAL REGISTER OF HISTORIC PLACES: 2000**

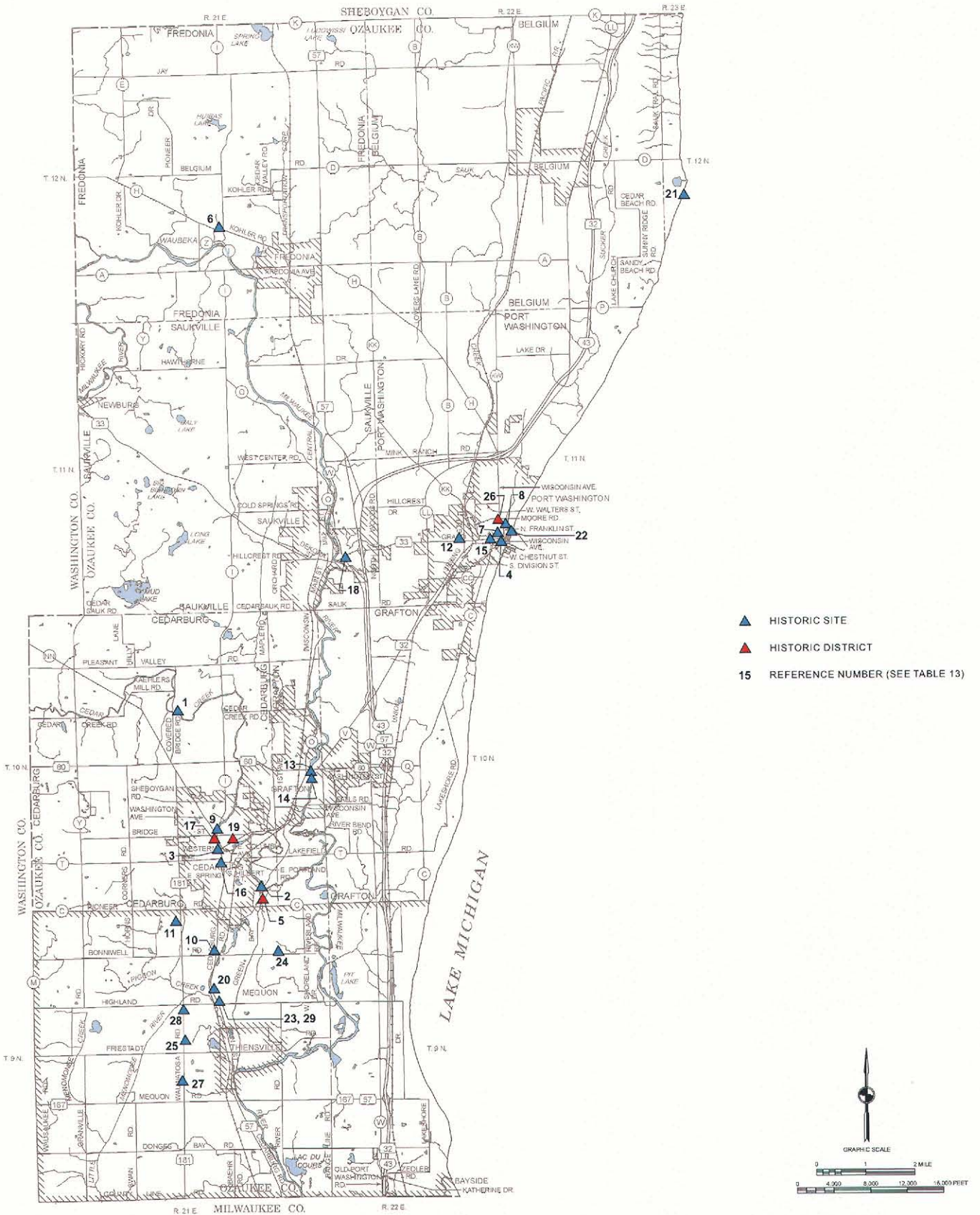
Number on Map 11	Site Name	Location ^a	Civil Division	Year Listed
1	Covered Bridge	T10N, R21E, Section 10	Town of Cedarburg	1973
2	Concordia Mill	T10N, R21E, Section 35	Town of Cedarburg	1974
3	Cedarburg Mill	T10N, R21E, Section 27	City of Cedarburg	1974
4	Edward Dodge House.....	T11N, R22E, Section 28	City of Port Washington	1975
5	Hamilton Historic District.....	T10N, R21E, Section 35	Town of Cedarburg	1976
6	Stony Hill School.....	T12N, R21E, Section 28	Town of Fredonia	1976
7	Old Ozaukee County Courthouse.....	T11N, R22E, Section 28	City of Port Washington	1976
8	St. Mary's Roman Catholic Church.....	T11N, R22E, Section 28	City of Port Washington	1977
9	Hilgen and Wittenberg Woolen Mill	T10N, R21E, Section 27	City of Cedarburg	1978
10	Jonathan Clark House	T09N, R21E, Section 3	City of Mequon	1982
11	John Reichert Farmhouse	T09N, R21E, Section 4	City of Mequon	1982
12	Harry W. Bolens House	T11N, R22E, Section 29	City of Port Washington	1983
13	Grafton Flour Mill	T10N, R21E, Section 24	Village of Grafton	1983
14	Cedarburg Woolen Company Worsted Mill	T10N, R21E, Section 24	Village of Grafton	1983
15	Hoffman House Hotel.....	T11N, R22E, Section 28	City of Port Washington	1984
16	Wayside House	T10N, R21E, Section 34	City of Cedarburg	1986
17	Washington Avenue Historic District.....	T10N, R21E, Section 27	City of Cedarburg	1986
18	Payne Hotel.....	T11N, R21E, Section 25	Village of Saukville	1991
19	Columbia Historic District	T10N, R21E, Section 26	City of Cedarburg	1992
20	Edwin J. Neiman Sr. House	T09N, R21E, Section 10	City of Mequon	1996
21	Steamer (Niagara)	T11N, R23E, Section 19	Town of Belgium	1996
22	Port Washington Light Station.....	T11N, R22E, Section 28	City of Port Washington	1999
23	Mequon Town Hall and Fire Department.....	T09N, R21E, Section 10	City of Mequon	2000
24	Bigelow School.....	T09N, R21E, Section 1	City of Mequon	2000
25	William F. Jahn Farmstead	T09N, R21E, Section 15	City of Mequon	2000
26	Port Washington Downtown Historic District	T11N, R22E, Section 28	City of Port Washington	2000
27	Jacob Voigt House	T09N, R21E, Section 21	City of Mequon	2000
28	O'Brien-Peuschel Farmstead	T09N, R21E, Section 16	City of Mequon	2000
29	Isham Day House (Yankee Settler's Cottage).....	T09N, R21E, Section 10	City of Mequon	2000

^aIndicates location given in U.S. Public Land Survey Township, Range, and Section.

Source: The State Historical Society and SEWRPC.

Map 11

HISTORIC SITES AND DISTRICTS IN OZAUKEE COUNTY ON THE NATIONAL REGISTER OF HISTORIC PLACES: 2000



Source: SEWRPC.

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Chapter IV

OBJECTIVES, PRINCIPLES, AND STANDARDS AND PARK AND OPEN SPACE NEEDS ANALYSIS

INTRODUCTION

Planning is a rational process for formulating objectives and meeting those objectives through the preparation and implementation of plans. Objectives guide the preparation of plans and, when converted to specific measures of plan effectiveness, termed standards, provide the structure for evaluating how well the plan meets the objectives.

This chapter sets forth the objectives, principles, and standards used in the preparation of this park and open space plan for Ozaukee County, and applies the standards to the anticipated year 2020 population to help determine the need for major park sites and such outdoor recreation facilities as golf courses, campgrounds, swimming beaches, lake access sites, and hiking and biking trails. Needs identified through the application of the standards are addressed in Chapter V, which sets forth the recommended park and open space plan for Ozaukee County.

OBJECTIVES, PRINCIPLES, AND STANDARDS

The Commission Technical and Citizen Advisory Committee on Regional Park and Open Space Planning, as part of the regional park and open space planning program completed in 1977, formulated a set of park and open space preservation, acquisition, and development objectives and accompanying principles and standards. The regional standards were

based on standards previously developed by the National Recreation and Park Association. The Advisory Committee compared the national standards to recreational preferences and demands of the Region as determined by surveys of recreation site managers and users, and modified the standards as necessary to meet park and open space demands within the Region.

The regional park and open space preservation objectives, principles, and standards were incorporated directly into the year 2000 Ozaukee County park and open space plan. Those objectives, principles, and standards have been reaffirmed in this year 2020 Ozaukee County park and open space plan, with certain modifications. These modifications include: the incorporation of the guidelines set forth in Chapter NR 1.91 of the *Wisconsin Administration Code* relating to the standards for boating access; and the addition of a principle and standard for the preservation of natural areas and critical species habitat sites. The plan objectives are set forth below:

1. To provide an integrated system of public general use outdoor recreation sites and related open space areas which will allow the resident population of the County adequate opportunity to participate in a wide range of outdoor recreation activities.
2. To provide sufficient outdoor recreation facilities to allow the resident population of the County adequate opportunity to participate in

intensive nonresource-oriented outdoor recreation activities.

3. To provide sufficient outdoor recreation facilities to allow the resident population of the County adequate opportunity to participate in intensive resource-oriented outdoor recreation activities.
4. To provide sufficient outdoor recreation facilities to allow the resident population of the County adequate opportunity to participate in extensive land-based outdoor recreation activities.
5. To provide sufficient access areas to allow the resident population of the County adequate opportunities to participate in extensive water-based outdoor recreation activities on the major inland lakes and rivers which are consistent with enjoyable surface water use and the maintenance of adequate water quality.
6. To preserve 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 County.
7. To provide for the efficient and economical satisfaction of outdoor recreation and related open space needs meeting all other objectives at the lowest possible cost.

Each of these objectives, together with its supporting principle and standards, is set forth in Appendix B. Each set of standards serves to facilitate the identification of park and open space needs for plan design and evaluation.

It should be noted that while the attainment of all objectives is considered desirable to provide the residents of the County with needed opportunities for high-quality recreational experiences, the responsibility for providing the necessary parks, open space lands, and associated recreational facilities, is shared among the various levels, units, and agencies of government. Under the adopted regional park and open space plan and the new County plan presented herein, the responsibility for the provision of large resource-oriented parks, resource-oriented recreational facilities, and areawide recreation trails is delegated primarily to the State and County levels of govern-

ment, while the responsibility for the provision of smaller community and neighborhood parks and associated intensive nonresource-oriented recreational facilities is delegated primarily to local units of government. The protection of important natural resource features, including primary environmental corridors and natural areas, is considered the responsibility of all levels of government.

PARK AND OPEN SPACE NEEDS

Existing and Forecast Population Size and Distribution

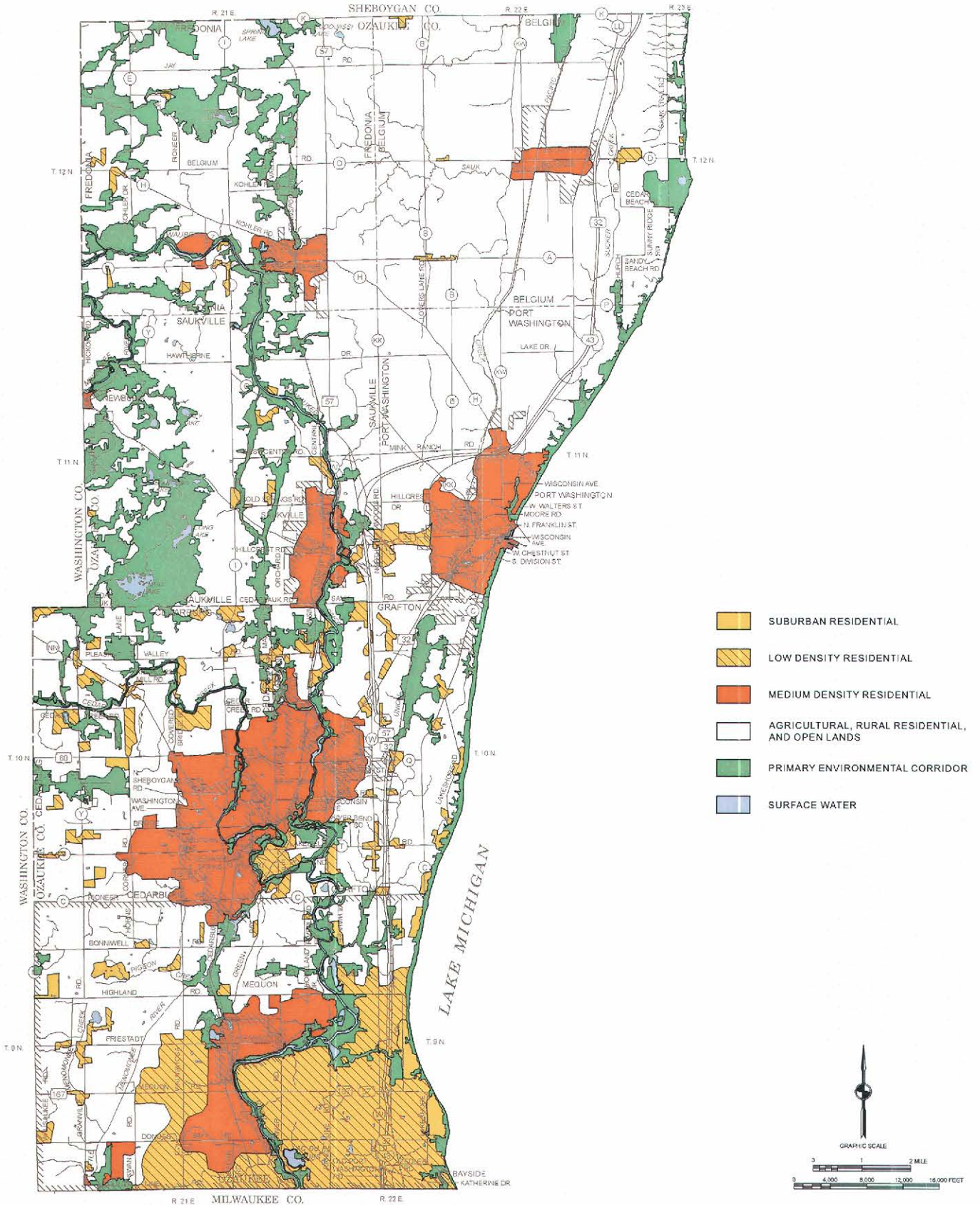
The need for outdoor recreation sites and facilities within the County is determined by applying the standards set forth in Appendix B for the size, number, and spatial distribution of public parks and outdoor recreation facilities to the existing and anticipated future resident population levels and distribution within the County, and comparing the probable demand for such sites and facilities, as indicated through application of the standards, to the existing supply of recreation sites and facilities.

As noted in Chapter II of this report, the 2000 County population, based on estimates by the Wisconsin Department of Administration, was 81,800 persons. The number of County residents anticipated by the year 2020 based upon forecasts developed by the Regional Planning Commission for the year 2020 regional land use plan would range from 91,700 persons under the adopted regional plan to as high as 111,000 under the high-growth alternative.

In addition to information on the overall size of the anticipated future population of the County, information on future population distribution is important to a determination of existing and probable future outdoor recreation needs. The regional park and outdoor recreation standards call for a major park to be provided within four miles of residents of urban areas having a population of 40,000 or greater and within ten miles of residents of smaller urban areas and rural areas. The planned urban service areas delineated in the adopted year 2020 regional land use plan served as the basis for the identification of planned urban areas within the County. The year 2020 regional land use plan, as it applies to Ozaukee County, is shown on Map 12. Planned urban service areas, which are divided into three levels of residential density on Map 12, are associated with the Cities of Cedarburg, Mequon, and Port Wash-

Map 12

REGIONAL LAND USE PLAN AS IT PERTAINS TO OZAUKEE COUNTY: 2020



Source: SEWRPC.

ington; and the Villages of Belgium, Fredonia, Grafton, Saukville, and Thiensville.

Per Capita and Accessibility Standards

Two types of standards—per capita and accessibility standards—are used to help estimate the number and distribution of outdoor recreation sites and facilities needed to serve the anticipated future population of the County. The per capita standards are intended to help estimate the total number of acres of land needed to satisfy requirements for park and recreational land and related facility requirements based on the anticipated future resident population of the County.

For purposes of analyzing future park site and future park facility needs, the population level anticipated under the high-growth scenario—111,000 persons—was considered. This recognizes the need to identify and reserve sufficient high-quality sites which may be required under conditions of more rapid population growth through the year 2020, as well as the need to serve the County population beyond the year 2020.

The accessibility—or service radius—standards are intended to insure that public parks are spatially distributed in a manner that is convenient and efficient for the population they are intended to serve. It should be recognized that in some situations, while per capita standards may be met, a need may still exist for additional sites or facilities because of the relative inaccessibility or distance of an existing site or facility to some residents of the County. It should also be noted that for certain facilities, the accessibility standard for some residents of the County may be met by facilities located in adjacent counties.

Standards for Major Park Sites

Per capita and service area standards for major parks are set forth under Objective No. 1 in Appendix B. As indicated in Chapter III, major parks are defined as large, publicly owned outdoor recreation sites containing significant natural resource amenities which provide opportunities for resource-oriented activities and which are generally 100 acres or more in size. Application of the per capita standards for major park sites to the existing 2000 and anticipated year 2020 County population levels¹ indicates that no

¹*In the balance of this chapter, the determination of future per capita park site and facility needs is based upon the application of the per capita standards to the 111,000 persons anticipated for the year 2020 under the regional land use plan's high-growth scenario.*

additional park land in major park sites is needed. This calculation is based on the acreage of the following major parks: Harrington Beach State Park, owned by the Wisconsin Department of Natural Resources; and Mee-Kwon County Park, Hawthorne Hills County Park, and Tendick Nature Park, owned by Ozaukee County. Application of the 10-mile service radius standard indicates that all residents in Ozaukee County are within the recommended service area of a major park.

Standards for Intensive Resource-Oriented Recreation Facilities

The standards in Objective No. 3 set forth per capita and service area standards for the provision of such resource-oriented recreational facilities as camping, golfing, picnicking, and beach swimming. Separate per capita standards have been established for public and nonpublic facilities. The per capita standards were applied to both the 2000 and anticipated year 2020 County population levels, and need estimates were generally prepared for both public and nonpublic facilities. This recognizes 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 these recreation facilities which would otherwise have to be met by the public sector.

Service area standards for campsites, golf courses, picnic areas, and swimming beaches were applied only to public facilities. This recognizes that all residents should have good access to facilities, which, by virtue of their public ownership, are available for use by all.

Campsites

Public campsites in the County are currently provided at Hawthorne Hills County Park, as part of the Herb Peters Youth Camp, and Waubedonia Park. Campsites are also available to the public (for a fee) at the privately owned Badger Camp Site.

Application of the per capita standards for campsites indicates that there is a need for an additional 32 publicly owned campsites and an additional 155 privately owned campsites to serve the anticipated 2020 population. The standards call for public campsites to be located within 25 miles of each County resident. This standard is met by the existing public campgrounds in the County.

Golf Courses

Within the County there are currently two publicly owned 18-hole regulation golf courses, Hawthorne Hills County Park, and Mee-Kwon County Park, both owned by Ozaukee County, and one publicly owned three-hole golf course, River Island Golf Course, owned by the Village of Grafton. There are three privately owned courses with 18 holes open to the public: Country Club of Wisconsin, Squires Country Club, and The Bog Golf Course. In addition, there are three privately owned nine-hole golf courses in the County open to the public, Baehmann's Golf Course, Edgewater Golf Course, and Missing Links Golf. There are also three privately owned courses with 18 holes or more not open to the public: North Shore Country Club (27 holes), Ozaukee Country Club (18 holes), and Mequon Country Club (27 holes).

Application of the per capita standard for golf courses to both the existing 2000 and anticipated year 2020 population indicates the need for public golf courses in the County is met by the existing courses. Application of the recommended 10-mile service radius to the existing public golf courses indicates that all residents in the County are within the recommended service area for a public golf course. The need for private golf courses is met by the existing facilities.

Picnicking

Public picnic areas in the County are currently provided at three major parks, Harrington Beach State Park, Hawthorne Hills County Park, and Mee-Kwon County Park.

Application of the per capita standard for picnicking facilities at major parks indicates that a need exists for approximately 340 additional picnic tables at major parks to serve the anticipated year 2020 population. It should be noted, however that picnicking is available at four other County parks: Covered Bridge Park, Ehlers County Park, Virmond Park, and Waubedonia Park. These facilities may serve to meet some of the needs identified in the application of this standard. Application of the recommended 10-mile service radius standard for public picnicking facilities indicates that residents in the County are adequately served by picnicking facilities within a major park.

Swimming Beaches

A publicly owned swimming beach is provided at Harrington Beach State Park on Lake Michigan.

There are no publicly owned inland beaches in the County. There is one privately owned inland beach on Lac du Cours; however, it is not accessible to the general public.

Separate per capita standards have been established for inland and Lake Michigan beaches. Application of the per capita standards for inland swimming beaches indicates that 550 linear feet of publicly owned beaches and 850 linear feet of privately owned beaches should be provided to adequately serve the anticipated year 2020 population. The per capita Lake Michigan beach swimming standard was not applied herein, since that standard is intended to be applied and evaluated on a regional, rather than county-by-county, basis.

The standard under Objective No. 3 indicates a 10-mile service radius for public inland beaches. While there are no public inland beaches in Ozaukee County, a portion of the County does fall within the service area of Sandy Knoll Park in Washington County, Menomonee Park in Waukesha County, and Random Lake in Sheboygan County, which provide public swimming beaches.

Given the limited number, type, and location of inland lakes in the County, it may not be reasonable to consider the development of public swimming beaches on those lakes. Consequently, it may be necessary to consider the development of swimming beach areas on Lake Michigan as an alternative to meet the identified need for these facilities.

Standards for Trail Facilities

Objective No. 1 sets forth a standard for the provision by the public sector of sufficient open space lands to accommodate a system of resource-oriented recreation corridors to meet the resident demand for trail-oriented recreation activities. For the purposes of this report, 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 trails marked and maintained for such activities as hiking, biking, horseback riding, nature trails, and cross-country skiing.

Objective No. 4 sets forth recommended per capita standards for the aforementioned trail activities in association with recreation corridors. While segments of potential recreation corridors currently exist in Ozaukee County along the Milwaukee River and

along the Little Menomonee River, neither area meets the aforementioned definition. Consequently, trails for the various activities should be provided in conjunction with the acquisition and development of a public recreation corridor system. It should be noted that while recreation corridors 15 miles in length or more are most desirable, the development of trail facilities under 15 miles should also be encouraged to meet local trail needs.

Objective No. 4 includes standards for trails within recreation corridors for hiking, bicycling, horseback riding, nature study, and ski touring. In some cases, particularly in urban areas where they are subject to more intensive use, the trail facilities may be paved. Where they are paved, the trails may also provide opportunities for rollerblading and roller-skiing, as well as opportunities for use by individuals in wheelchairs.

The standards under Objective No. 4 also contain a recommendation for the provision of trails for snowmobiling. Approximately 87 miles of designated trails exist on public lands and on private lands open to the public. This adequately serves both the existing and anticipated 2020 population. Objective No. 4 also contains a recommendation that each county have a public nature study center. A public nature study center does not currently exist in Ozaukee County. However, a private nature study center, the Riveredge Nature Center, located in the Town of Saukville, is open for public use.

Standards for Lake Access Sites

The Wisconsin Department of Natural Resources, in keeping with State Statutes which seek to assure that all Wisconsin residents have access to publicly owned inland waters, recently adopted revised rules regarding lake access. Those rules, set forth in Chapter NR 1.91 of the *Wisconsin Administrative Code*, require public boating access sites, including boat launching and parking facilities, to be provided on inland lakes, with the number of parking spaces varying depending on the size of the lake. Minimum public boating access requirements must be met for the department to provide natural resource enhancement services for a body of water. The *Administrative Code* requires that launch facilities and at least one car-trailer parking space, and a combined total of five car-trailer and automobile parking spaces, be provided at boating access sites on lakes 50 acres to 99 acres in size. The required number of car-trailer parking spaces increases as the size of the lake increases.

One additional parking space, in addition to the minimum specified in the *Administrative Code*, must also be provided for use by disabled persons. The regulations also specify a maximum number of parking spaces to be provided, which also varies according to the size of the lake, in recognition that too many boats on a lake may threaten both the safety of lake users and the environmental quality of the lake. Table 14 sets forth the requirements for public boating access for major lakes in Ozaukee County under the Department rules. Public boating access fails to meet State requirements at Spring Lake.

The *Administrative Code* also requires that public canoeing access points with parking should be provided on major streams every 10 miles. Major streams in Ozaukee County are the Cedar Creek and the Milwaukee River. Public canoe access is currently provided at Veteran's Memorial Park, Villa Grove Park, and Waubedonia Park, along the Milwaukee River.

Other Recreational Needs

As noted earlier, the responsibility of intensive nonresource-oriented recreation facilities is delegated primarily to local units of government. The standards for these types of facilities are set forth under Objective No. 2 and include outdoor ice-skating rinks. While the park and open space plan does not specifically address this type of facility, the plan envisions that outdoor ice-skating would continue to be accommodated at certain County parks and at community and neighborhood parks throughout the County during winter months. Recent years have seen an increase in the popularity of participation in ice hockey, figure skating, and casual skating at indoor ice arenas. Indoor ice arenas generally serve large geographic areas and may be considered facilities of countywide significance. In 2000, there was one such facility in Ozaukee County, the Carlson Park/Ozaukee Ice Center. A study was undertaken in 2000 by the Ozaukee County Ice Center Expansion Committee, which resulted in a proposal to expand the existing County facility to meet increased demand. Since the Ozaukee County Park Commission supported the proposed expansion of the Carlson Park/Ozaukee Ice Center, this recommendation is included in the County park and open space plan.

Standards for Open Space Preservation

Objective No. 6 calls for the preservation of sufficient high-quality open space lands for protection of the underlying and sustaining natural resource base

Table 14

BOAT-ACCESS SITE REQUIREMENTS UNDER THE WISCONSIN ADMINISTRATIVE CODE^a FOR MAJOR LAKES IN OZAUKEE COUNTY: 2000

Major Lake ^b	Minimum Number of Parking Spaces	Maximum Number of Parking Spaces	Comment
Lac du Cours	Combination of five car and car-trailer spaces	Five car-trailer spaces	Access requirements not applicable ^c
Mud Lake	Eight car-trailer spaces	16 car-trailer spaces	Access requirements not applicable ^d
Spring Lake ^e	Combination of five car and car-trailer spaces	Five car-trailer spaces	No access provided which meets NR 1.91 requirements

^aPublic boating access standards are set forth in Section NR 1.91 of the Wisconsin Administrative Code.

^bMajor lakes are those having 50 or more acres of surface area.

^cThe Wisconsin Department of Natural Resources requirements are not applicable to private, man-made lakes.

^dThe Wisconsin Department of Natural Resources typically waives access requirements for lakes associated with sensitive natural areas.

^eLake is partially within Ozaukee and Sheboygan County. Boat-access site requirements apply to the total acreage of lake.

Source: Wisconsin Department of Natural Resources and SEWRPC.

and enhancement of the social and economic well-being and environmental quality of the County. These high-quality open space lands include primary environmental corridors, natural areas and critical species habitat sites, and prime agricultural lands. The preservation of such lands is based upon the location and composition of existing natural resources, rather than the application of development standards.

Primary environmental corridors contain many of the best remaining woodlands, wetlands, and wildlife habitat areas within the County. The standard under Objective No. 6 indicates that primary environmental corridors should be preserved in essentially natural, open use. Although not specifically addressed in Objective No. 6, secondary environmental corridors and isolated natural resource areas should be considered for preservation based upon local needs and concerns. While secondary environmental corridors and isolated natural resource areas may serve as an attractive setting for well-planned residential developments, they also can serve as economical drainage-ways and stormwater detention basins, and can provide needed open space in developing urban areas.

Natural areas and critical species habitat sites contain rare, threatened, and endangered animal and plant species within the County. The standard under Objective No. 6 indicates that natural areas and critical species habitat sites should be preserved and managed to maintain their natural value.

Prime agricultural lands are lands best suited for the production of food and fiber. In addition to their agricultural value, such lands supply significant wildlife habitat. The standard under Objective No. 6 indicates that prime agricultural lands should be preserved to the extent practicable for agricultural use.

SUMMARY

This chapter presents a set of park and open space planning principles, objectives, and standards for Ozaukee County, and identifies existing and probable future park and open space needs within the County. The need for outdoor recreation sites and facilities within the County is determined by applying the standards for the size, number, and spatial distribution of public parks and outdoor recreation facilities to the anticipated future resident population levels and distribution within the County, and com-

paring the probable future demand for such sites and facilities, as indicated through application of the standards, to the existing supply of recreation sites and facilities. Two types of standards, per capita and accessibility standards, are used to help estimate the number and location of outdoor recreation sites and facilities needed to serve the anticipated future population of the County.

For purposes of analyzing future park site and future park facility needs, the population level anticipated under the high-growth scenario—111,000 persons—was considered. This recognizes the need to identify and reserve sufficient high-quality sites which may be required under conditions of more rapid population growth through the year 2020, as well as the need to serve the County population beyond the year 2020. The findings of the recreation site and facility needs analysis are summarized below:

1. Application of the per capita and 10-mile service radius standards for major park sites indicates that no additional park land in major park sites is needed in the County.
2. Application of the standards for resource-oriented recreational facilities indicate a need for: additional publicly and privately owned campsites; additional picnicking facilities at

major parks; and additional publicly and privately owned swimming beaches.

3. Application of the standards for trails within recreation corridors indicate a need for hiking, biking, horseback riding, nature study, and ski touring trails in conjunction with the acquisition and development of a public recreation corridor system.
4. Application of Wisconsin Department of Natural Resources lake access standards would require that access facilities be provided at Spring Lake.
5. The County park and open space plan objectives also address open space preservation needs. The need to protect the natural resources of the County cannot be related to per capita or accessibility requirements, since the achievement of the open space preservation objective is essentially independent of a population level or distribution, but relates, rather, to the location, character, and extent of remaining natural resources. Standards under Objective No. 6 indicate that primary environmental corridors and natural areas and critical species habitat sites should be preserved for natural uses, while prime agricultural lands should be preserved to the extent practicable for agricultural use.

Chapter V

RECOMMENDED PARK AND OPEN SPACE PLAN

INTRODUCTION

This park and open space plan for Ozaukee County consists of two major elements. The first is an open space preservation element, which sets forth recommendations related to the protection of environmental corridors; natural areas and related resources; lands within State parks, forests, and wildlife areas and associated project boundaries; and prime agricultural land. The second element addresses the need for new County parks, park facilities, lake and river access areas and facilities, and trails.

PUBLIC INFORMATIONAL MEETINGS

The recommended park and open space plan for Ozaukee County was presented in preliminary form at public informational meetings held at the County Administration Building in Port Washington on February 8, 2001, and at the Fredonia Town Hall and the Cedarburg City Hall on March 8, 2001. The purpose of the meetings were to acquaint public officials and interested citizens with the key recommendations of the plan and to receive comments on and answer questions pertaining to the plan.

While public comment on the draft County park and open space plan was quite diverse, two recurring issues, which were accompanied by significant discussion, were raised at all three informational meetings. These issues concerned the potential impact on future landowner rights of the recommended public acquisition of specific open space sites and the

identification of the Milwaukee River recreation corridor trail.

Based on comments received at the public informational meetings and upon the careful consideration of those comments by the Ozaukee County Park Commission, the preliminary plan was adjusted to shift the general location of the proposed Milwaukee River Recreation Corridor trail in the Town of Fredonia from the Milwaukee River to CTH A.

This change was incorporated into the recommended park and open space plan for Ozaukee County. The recommended plan is described in the following section of this chapter.

RECOMMENDED OPEN SPACE PRESERVATION ELEMENT

The open space preservation element consists of four major components. The first is the preservation of primary environmental corridors, secondary environmental corridors, and isolated natural resource areas. The preservation of natural areas, critical species habitat sites, and geological and archeological areas in accordance with the recommendations set forth in the regional natural areas protection and management plan¹ is the second component. The third component calls for the protection of open space lands

¹*Documented in SEWRPC Planning Report No. 42, A Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin.*

located within established Department of Natural Resources project boundaries, which in Ozaukee County include the Cedarburg Bog Scientific Area and Harrington Beach State Park. The final component calls for the protection of prime agricultural land.

Recommended actions with respect to the preservation of open space lands, other than prime agricultural lands, are graphically summarized on Map 13. It is recommended that a total of 28,069 acres of open space lands, or about 19 percent of Ozaukee County, be protected through a combination of public or nonprofit conservation organization ownership² or through the application of protective zoning. These 28,069 acres include planned primary and secondary environmental corridors, planned isolated natural resource areas, and areas outside corridors but within the Department of Natural Resources project boundaries. All natural areas and critical species habitat sites recommended to be preserved are contained within the planned primary or secondary environmental corridors or the planned isolated natural resource areas.

Of the total 28,069 acres of recommended open space lands, 4,962 acres, or about 18 percent, were in public ownership, nonprofit conservation organization ownership, or in compatible private outdoor recreation uses such as golf courses or camps in 2000. These areas are recommended to be preserved in current ownership or, for lands in compatible private outdoor recreation use, maintained in recreational or open space uses. It is recommended that an additional 5,313 acres, or about 19 percent of proposed open space lands, be acquired by public agencies for natural resource protection preservation purposes or for public park or trail use. The estimated cost of acquiring such lands is about \$11.2 million. A summary of the existing and proposed public and nonprofit conservation organization ownership of open space lands, and associated acquisition costs, is presented in Table 15.

The remaining 17,794 acres of open space lands should be placed in protective zoning districts to prevent incompatible development. Such protective zoning districts include floodland, lowland conservancy and, for upland portions of the corridor, upland conservancy which limits development to rural

residential development with an overall density of no more than one dwelling unit per five acres. It should be noted that Ozaukee County only has zoning authority within shoreland areas in unincorporated areas within the County. Local zoning ordinances are the principal zoning ordinances in effect within the cities, villages, and towns of Ozaukee County. Consequently, the responsibility for implementing this recommendation will be at the discretion of the individual communities in the County.

Each component of the open space preservation plan element is discussed separately below. There is considerable overlap between these components, and, accordingly, between the acreages cited in conjunction with each component. For example, all of the natural areas and critical species habitat areas identified and recommended for public interest acquisition under the natural areas plan component are also recommended for acquisition under the environmental corridor preservation plan component. The tabular summary of the open space preservation plan element (Table 15) thus represents the composite of the environmental corridor, natural area, and DNR project area plan components, which are described individually below.

Environmental Corridor and Isolated Natural Resource Area Plan Component ***Primary Environmental Corridors***

The primary environmental corridors contain almost all of the best remaining woodlands, wetlands, wildlife habitat, lakes and streams, and associated shoreland and floodland areas remaining in the County. The protection of the primary environmental corridors from additional intrusion by urban development, thereby preserving such lands in natural, open uses for resource protection, scenic value, and outdoor recreation and education purposes, is one of the primary objectives of this plan. The planned extent and location of primary environmental corridors in Ozaukee County under the adopted 2020 regional land use plan are shown on Map 13. The permanent preservation of the primary environmental corridors in essentially natural, open space uses is most certain when the corridor lands are acquired in the public interest for resource preservation or compatible outdoor recreation uses. The following measures should be taken to protect the primary environmental corridors:

1. Primary environmental corridors that contain natural area sites or critical species habitat sites should be acquired by a public agency or nonprofit conservation organization.

²Public ownership includes lands owned by a Federal, state, county, or local unit of government, school districts, or lake districts.

OPEN SPACE PRESERVATION ELEMENT OF THE
OZAUKEE COUNTY PARK AND OPEN SPACE PLAN: 2020

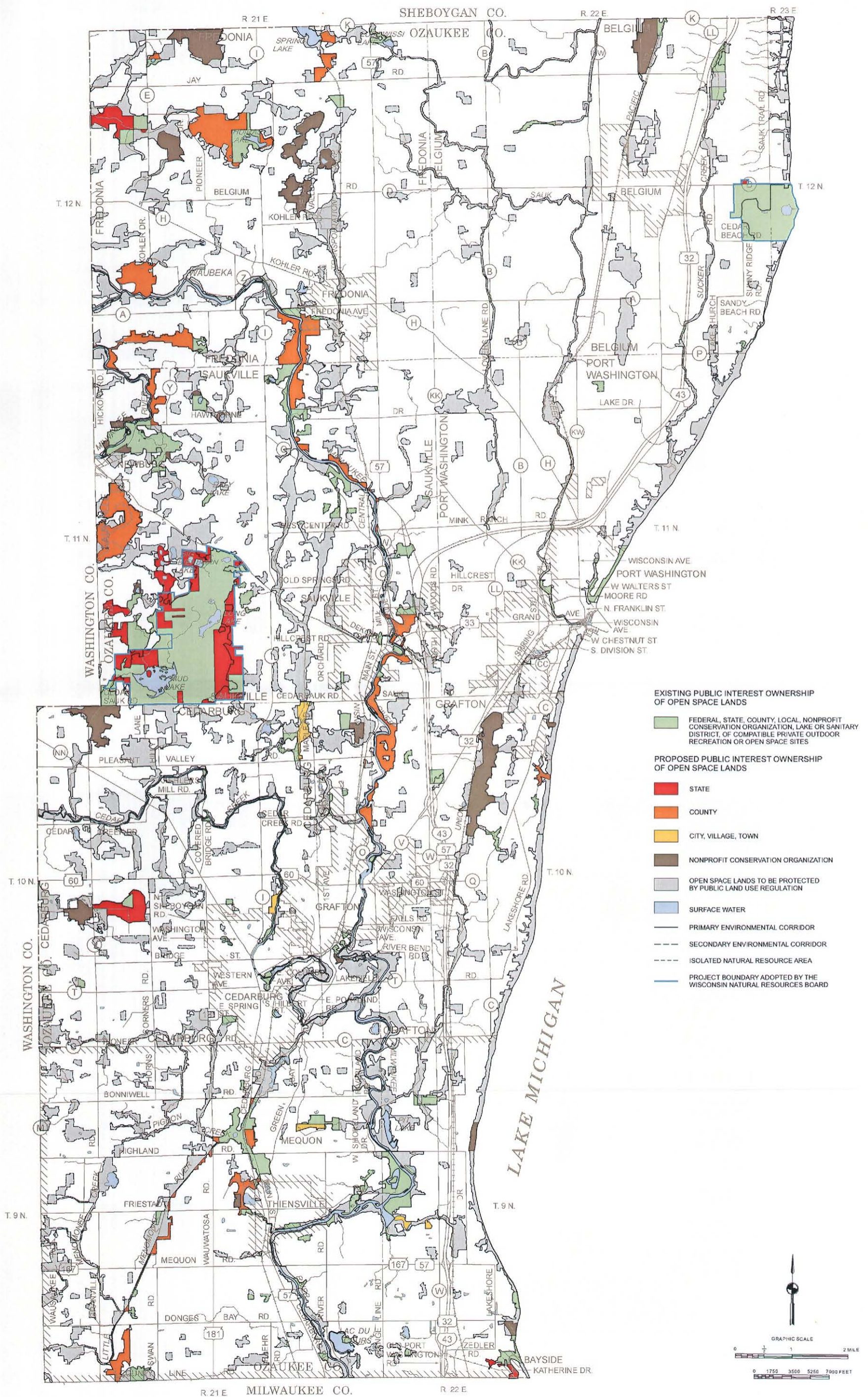


Table 15

**PROPOSED OWNERSHIP OF OPEN SPACE LANDS UNDER
THE PARK AND OPEN SPACE PLAN FOR OZAUKEE COUNTY^a**

Ownership	Existing ^b (acres)	Plan (acres)	Planned Change (acres)	Estimated Acquisition Cost ^c
Federal.....	78	78	0	\$ 0
State of Wisconsin	2,594	3,895	1,301	2,322,700
Ozaukee County	306	2,520	2,214	5,467,600
Local Government ^d	585	743	158	421,800
Nonprofit Conservation Organization	1,042	2,682	1,640	2,984,600
Compatible Private Recreation Use.....	357	357	0	0
Total	4,962	10,275	5,313	\$11,196,700

NOTE: Cost estimates are expressed in 2000 dollars.

^aIncludes planned primary environmental corridors, planned secondary environmental corridors, planned isolated natural resource areas, and lands within a Wisconsin Department of Natural Resources project boundary. These figures do not include associated surface water areas.

^bIncludes existing ownership in 2000.

^cUnit costs used to estimate acquisition costs were \$1,200 per acre of wetlands, \$5,000 per acre of woodlands, and \$2,000 per acre of other open lands.

^dIncludes cities, villages, towns, school districts, and lake and sanitary districts.

Source: SEWRPC.

2. Primary environmental corridors needed to accommodate parks or trail facilities proposed under the recommended outdoor recreation plan element described later in this chapter should be acquired in public ownership.
3. Primary environmental corridors that are in existing private recreational uses should be maintained in such uses.

Primary environmental corridors located outside natural area sites or critical species habitat sites, corridors which are not needed for future park or trail development, and corridors which are developed with compatible recreational uses, should be protected through appropriate zoning.

A total of 18,897 acres of land are encompassed in the planned primary environmental corridors. Map 13 depicts those primary environmental corridors which

are currently in, and are recommended to remain in, public or nonprofit conservation organization ownership. Such areas currently encompass a total of 3,828 acres, or about 20 percent of planned primary environmental corridors. Additional such areas recommended for acquisition in the public interest are also shown on Map 13, and encompass a total of 5,055 acres, or about 27 percent of planned primary environmental corridors. An additional 285 acres, or about 2 percent of planned primary environmental corridors, are in compatible private recreational use. The remaining 9,729 acres of planned primary environmental corridors, or about 51 percent, are proposed to be protected through zoning.

In addition to specific recommendations above, the plan includes the following general recommendations with respect to the public acquisition of primary environmental corridors:

1. Should primary environmental corridor lands not specifically recommended for acquisition in this plan become available for acquisition and use for public open space purposes, it is recommended that the appropriate public agency consider the acquisition of such lands.
2. Those primary environmental corridor lands located within the identified urban service areas in the County not recommended for acquisition by the County or State should be acquired for park and open space purposes by the appropriate city or village park agency, as determined in local park and open space plans.
3. Should urban development not proposed or envisioned to occur under this plan threaten to destroy or degrade natural resources located within the primary environmental corridors, an appropriate public agency should consider the acquisition of, or other protective measures for, such lands for resource preservation and open space purposes.

Secondary Environmental Corridors and Isolated Natural Resource Areas

It is recommended that secondary environmental corridors be considered for preservation in natural, open use, or incorporated as drainageways, stormwater detention or retention areas, or as local parks or recreation trail corridors, in developing areas. It is also recommended that isolated natural resource areas be preserved in natural open uses insofar as practicable, being incorporated for use as parks and open space reservations or stormwater detention or retention areas as appropriate. This plan further recommends that all secondary environmental corridors or isolated natural resource areas containing natural area or critical species habitat sites be protected through acquisition by a public agency or nonprofit conservation organization.

A total of 4,921 acres of land are encompassed in the planned secondary environmental corridors, and 3,222 are encompassed in the planned isolated natural resource areas, for a combined total of 8,143 acres. Map 13 depicts those secondary environmental corridors and isolated natural resource areas which are currently in, and are recommended to remain in, public or nonprofit conservation organization ownership. Such areas currently encompass a total of 395 acres, or about 5 percent of planned secondary environmental corridors and isolated natural resource

areas. An additional 72 acres, or less than 1 percent of secondary environmental corridors and isolated natural resource areas, are in existing compatible outdoor recreation use.

Additional secondary environmental corridors and isolated natural resource areas recommended for acquisition in the public interest are shown on Map 13. Such areas encompass a total of 91 acres, or about 1 percent of secondary environmental corridors and isolated natural resource areas, including 86 acres of planned secondary environmental corridors and five acres of planned isolated natural resource areas.

The remaining 7,585 acres, or 93 percent, of planned secondary environmental corridors and isolated natural resource areas are not anticipated to be needed for future park or trail development, and do not encompass natural area or critical species habitat sites. These areas may be retained in private ownership, but should be placed in a zoning district that would prevent their conversion to urban use. However, should such lands be needed for local park or recreation purposes or for another public purpose, such as stormwater detention, it is recommended that the appropriate public agency consider the acquisition of such lands.

Natural Areas and Critical Species Habitat Protection and Management Plan Component

The regional natural areas protection and management plan sets forth a number of recommendations related to the preservation of identified natural areas, critical species habitat sites, and important geological and archeological sites. The plan also set forth recommendations for the reestablishment of tracts of grasslands and forest interior to provide additional bird habitat areas. Pertinent recommendations from that plan have been incorporated into this park and open space plan, and are described in the following paragraphs.

As noted in Chapter II, a total of 48 natural areas were identified in Ozaukee County in 1994 as part of the regional natural areas management plan. Five of the sites, encompassing about 2,282 acres, are classified as natural areas of statewide or greater significance (NA-1). An additional 12 sites, encompassing about 2,088 acres, are classified as natural areas of countywide or regional significance (NA-2). The remaining 31 sites, encompassing about 2,988 acres, are classified as natural areas of local

significance (NA-3). In addition, a total of seven critical species habitat sites, located completely or partially outside a natural area, were identified. These sites together encompassed about 294 acres.

Combined, there are 55 natural areas and critical species habitat sites identified in the County, with a total area of 7,652 acres. It is recommended that 47 of these areas, which encompass 7,060 acres in 42 natural areas and five critical species habitat sites, be protected through ownership by public agencies or by nonprofit conservation organizations. Sites proposed to be acquired are shown on Map 14.

Natural areas and critical species habitat sites recommended to be protected through acquisition meet one of the following criteria: 1) the site lies within a primary environmental corridor; 2) the site supports rare, threatened, or endangered plant, bird, or mammal species; and 3) the site is already at least partially in public interest ownership.

Table 16 lists each natural area site and critical species habitat site proposed to be preserved through protective ownership and the proposed acquisition agency. In all, these sites encompass 7,060 acres, including 6,811 acres within natural areas and 249 acres within critical species habitat sites. Of the total 7,060 acres to be preserved, about 2,661 acres, or about 38 percent, are under existing public or nonprofit conservation organization ownership. An additional 4,399 acres, or about 62 percent, are proposed for public or nonprofit conservation organization ownership or management. All of these areas are encompassed by the planned primary or secondary environmental corridor or by planned isolated natural resource areas. The cost of acquiring these areas is included in Table 15.

The recommendations made in this plan differ somewhat from those made in the regional natural areas protection and management plan. The regional plan anticipated that such refinements would be made when the County park and open space plans were updated. Specifically, the proposed acquisition agency differs for the following natural area sites in Table 16: Pigeon Creek Low and Mesic Woods (Site No. 6), Donges Bay Gorge (Site No. 7), Pigeon Creek Maple Woods (Site No. 18). These sites are recommended in this plan to be acquired by a private conservancy organization, rather than by Ozaukee County. The following additional sites on Table 16 also differ in the proposed acquisition agency: Spring

Lake Marsh (Site No. 26), Spring Lake Beech Forest (Site No. 27), Lions Den Gorge (Site No. 38). These sites are recommended in this plan to be acquired by Ozaukee County, rather than by a private conservancy organization. Adoption of the County park and open space plan by Ozaukee County and the Regional Planning Commission will amend the regional natural areas protection and management plan in these respects.

Reestablishment of Forest Interior Sites

In addition to setting forth recommendations for the protection of existing areas with important biological resources, the regional natural areas protection and management plan also recommends that efforts be made to reestablish relatively large tracts of grasslands and forest interiors in the Region. Reestablishment of such tracts would serve to provide additional habitat for bird populations, which have been adversely affected by loss of habitat due to development in the Region.

One site in Ozaukee County was identified for reestablishment of forest interior. This site is located entirely within the existing Harrington Beach State Park property and is shown on Map 15. It is envisioned that the forest interior site would eventually encompass about 400 acres, with the Wisconsin Department of Natural Resources being responsible for site management. As this plan recommendation is refined and implemented, it could result in an enlargement of the primary environmental corridor in this vicinity.

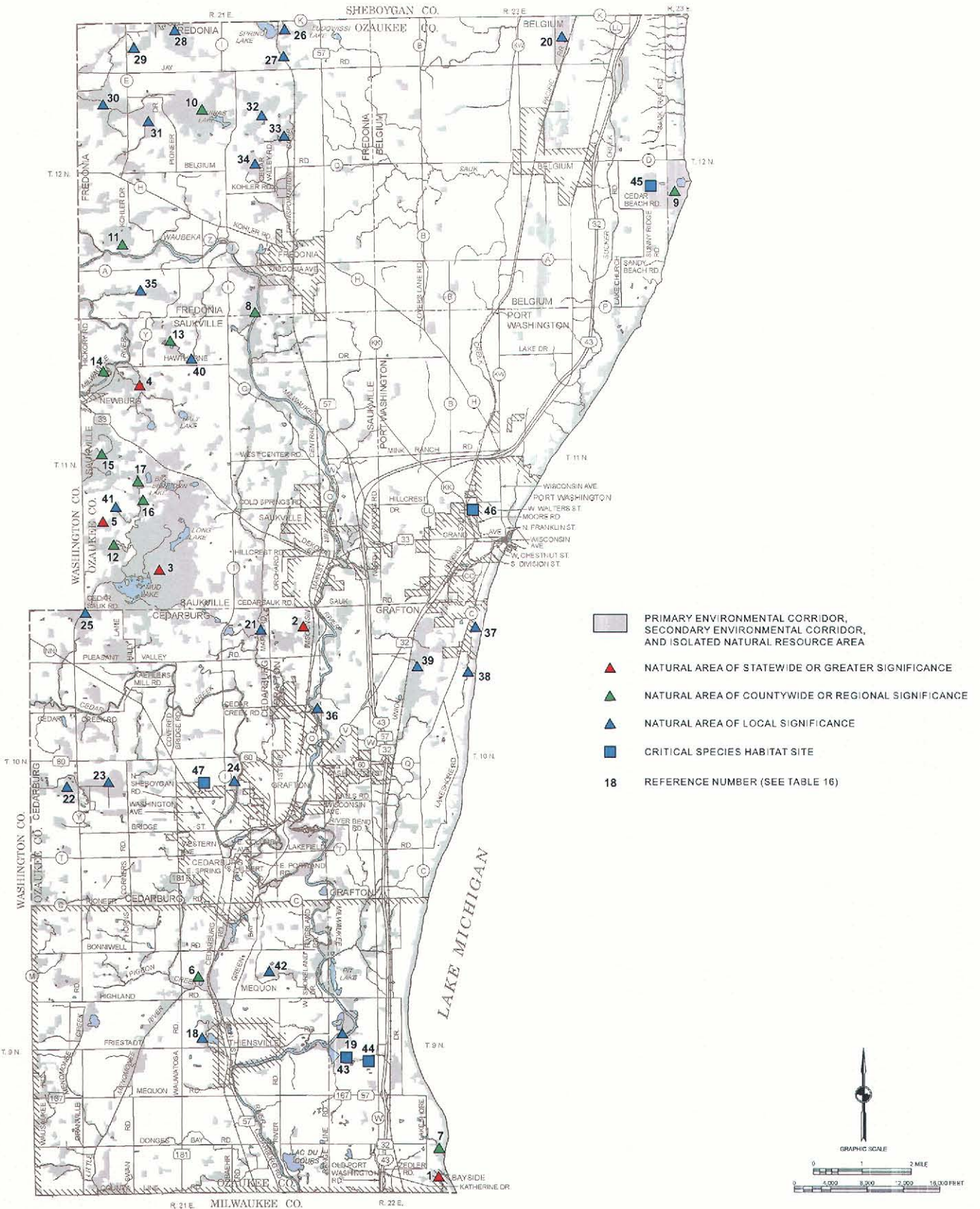
Protection of Geological Areas

The inventory of geological areas identified as part of the regional natural areas protection and management plan and reported in Chapter II identified 16 sites of geological importance in the County, including 15 bedrock geology sites and one glacial feature. The 16 sites include five sites of statewide significance (GA-1), six sites of regional or county significance (GA-2), and five sites of local significance (GA-3).

Map 16 shows the general location of geological areas recommended to be preserved through public agency or nonprofit conservation organization acquisition. Table 17 lists each site and the proposed acquisition agency. It is recommended that 11 of the 16 geological area sites be preserved. Together, the 11 areas encompass 158 acres. Of this total, 99 acres are within existing public ownership, with a remaining 59 acres,

Map 14

NATURAL AREAS AND CRITICAL SPECIES HABITAT SITES IN OZAUKEE COUNTY PROPOSED TO BE PROTECTED THROUGH PUBLIC ACQUISITION



Source: SEWRPC.

Table 16

PROTECTION OF NATURAL AREA AND CRITICAL SPECIES HABITAT SITES IN OZAUKEE COUNTY

Site Identification				Site Area (acres)			Proposed Acquisition Agency
Number on Map 14	Civil Division(s)	Name	Classification ^a	Already under Protective Ownership ^b	Proposed to be Acquired	Total	
1	City of Mequon ^c	Fairy Chasm State Natural Area	NA-1	21	59	80	The Nature Conservancy
2	Town of Grafton	Kurtz Woods State Natural Area	NA-1	31	39	70	The Nature Conservancy
3	Town of Saukville	Cedarburg Bog State Natural Area	NA-1	1,572	437	2,009	Wisconsin Department of Natural Resources
4	Town of Saukville	Riveredge Creek and Ephemeral Pond State Natural Area	NA-1	75	22	97	Riveredge Nature Center
5	Town of Saukville	Sapa Spruce Bog State Natural Area	NA-1	22	37	59	University of Wisconsin-Milwaukee
6	City of Mequon	Pigeon Creek Low and Mesic Woods	NA-2	--	81	81	Private conservancy organization
7	City of Mequon	Donges Bay Gorge	NA-2	--	22	22	Private conservancy organization
8	Village of Fredonia Town of Saukville Town of Fredonia	Milwaukee River Mesic Woods	NA-2	67	315	382	Ozaukee County
9	Town of Belgium	Harrington Beach Lacustrine Forest	NA-2	178	--	178	Wisconsin Department of Natural Resources
10	Town of Fredonia	Huiras Lake Woods and Bog	NA-2	22	413	435	Ozaukee County
11	Town of Fredonia	Janik's Woods	NA-2	--	163	163	Ozaukee County
12	Town of Saukville	Cedarburg Beech Woods State Natural Area	NA-2	87	43	130	University of Wisconsin-Milwaukee
13	Town of Saukville	Ducks Limited Bog	NA-2	13	8	21	Ducks Limited
14	Town of Saukville	Riveredge Mesic Woods	NA-2	158	54	212	Riveredge Nature Center
15	Town of Saukville	Kinnamon Conifer Swamp	NA-2	--	382	382	Ozaukee County
16	Town of Saukville	South Conifer Swamp	NA-2	3	49	52	Wisconsin Department of Natural Resources
17	Town of Saukville	Max's Bog	NA-2	6	24	30	Wisconsin Department of Natural Resources
18	City of Mequon	Pigeon Creek Maple Woods	NA-3	--	13	13	Private conservancy organization
19	City of Mequon	Villa du Parc Riverine Forest	NA-3	49	62	111	City of Mequon
20	Town of Belgium	Cedar Grove Swamp	NA-3	--	177	177	Private conservancy organization
21	Town of Cedarburg	Mole Creek Swamp	NA-3	22	67	89	Town of Cedarburg
22	Town of Cedarburg	Sherman Road Woods	NA-3	--	72	72	Private conservancy organization
23	Town of Cedarburg	Five Corners Swamp	NA-3	19	154	173	Wisconsin Department of Natural Resources

Table 16 (continued)

Number on Map 14	Site Identification			Site Area (acres)			Proposed Acquisition Agency
	Civil Division(s)	Name	Classification ^a	Already under Protective Ownership ^b	Proposed to be Acquired	Total	
24	Town of Cedarburg	Cedar Creek Forest	NA-3	--	23	23	City of Cedarburg
25	Town of Cedarburg Town of Saukville Town of Trenton	Cedar-Sauk Low Woods	NA-3	--	218	218 ^d	Private conservancy organization
26	Town of Fredonia	Spring Lake Marsh	NA-3	3	16	19	Ozaukee County
27	Town of Fredonia	Spring Lake Beech Forest	NA-3	--	65	65	Ozaukee County
28	Town of Fredonia	County Line Low Woods	NA-3	--	214	214	Private conservancy organization
29	Town of Fredonia	Beekeeper Bog	NA-3	9	6	15	Ozaukee County
30	Town of Fredonia	Department of Natural Resources Lowlands	NA-3	45	141	186	Wisconsin Department of Natural Resources
31	Town of Fredonia	Pioneer Road Lowlands	NA-3	--	94	94	Private conservancy organization
32	Town of Fredonia	Cedar Valley Swamp	NA-3	--	141	141	Private conservancy organization
33	Town of Fredonia	Evergreen Road Bog	NA-3	5	39	44	Private conservancy organization
34	Town of Fredonia	Kohler Road Woods	NA-3	--	124	124	Private conservancy organization
35	Town of Fredonia	Waubeka Low Woods	NA-3	21	140	161	Ozaukee County
36	Town of Grafton	Grafton Woods	NA-3	--	18	18	Ozaukee County
37	Town of Grafton	Cedar Heights Gorge	NA-3	--	9	9	Private conservancy organization
38	Town of Grafton	Lions Den Gorge	NA-3	--	20	20	Ozaukee County
39	Town of Grafton	Ulao Lowland Forest	NA-3	--	347	347	Private conservancy organization
40	Town of Saukville	Hansen's Lake Wetland	NA-3	5	8	13	Private conservancy organization
41	Town of Saukville	Knollwood Road Bog	NA-3	4	5	9	Private conservancy organization
42	City of Mequon	Highland Road Woods	NA-3	--	53	53	City of Mequon
43	City of Mequon	Pecard Sedge Meadow	CSH	--	13	13	City of Mequon
44	City of Mequon	Eastbrook Road Woods	CSH	--	8	8	City of Mequon
45	Town of Belgium	Harrington Beach State Park Old Fields	CSH	202 ^e	--	202 ^e	Wisconsin Department of Natural Resources
46	Town of Port Washington	Sauk Creek Nature Preserve	CSH	22	--	22	Ozaukee Land Trust
47	Town of Cedarburg	Cedarburg Woods-West	CSH	--	4	4	City of Cedarburg
--	Total: 47 Sites	--	--	2,661	4,399	7,060	--

NOTE: This table is a refinement of the recommendations made in SEWRPC Planning Report No. 42, *A Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin*.

^aNA-1 identifies natural areas of statewide or greater significance, NA-2 identifies natural areas of countywide or regional significance, NA-3 identifies natural areas of local significance, and CSH identifies critical species habitat sites.

Footnotes for Table 16 (continued)

^bBased on 1994 data.

^cSite partly located in Milwaukee County.

^dIncludes 204 acres in Ozaukee County and 14 acres in Washington County. It is recommended that the entire Natural Area be acquired by a private conservancy organization.

^eDoes not include 178 acres of this Critical Species Habitat site located within Harrington Beach Lacustrine Forest Natural Area.

Source: SEWRPC.

or about 37 percent, proposed for acquisition by a public agency or private conservancy organization.

Recommendations relating to the acquisition of geological areas were based on the following considerations. First, some sites overlap in whole or in part with identified natural area sites and critical species habitat sites, and would be protected and preserved under prior recommendations. Second, many geological area sites are either already in public ownership, or would be brought under public ownership upon implementation of existing State, regional, and county plans. Third, some of the sites lie within primary environmental corridors and are deserving of protection and preservation for that reason.

Department of Natural Resources Site Plan Component

The open space preservation element of this plan includes lands which have been acquired or which are proposed to be acquired by the Wisconsin Department of Natural Resources, within the project boundaries of the Cedarburg Bog Scientific Area and Harrington Beach State Park. Project boundaries for both of these areas have been approved by the Wisconsin Natural Resources Board and are reflected on Map 13. It is recommended that the Department continue to acquire additional land within the approved project boundaries for open space or outdoor recreation purposes. Currently, the Department owns about 359 acres outside planned primary or secondary environmental corridors or isolated natural resource areas, but within the approved project boundaries. An additional 314 acres of such areas are proposed to be acquired.

It should be noted that one natural area is located partially within an existing State project boundary. This site is the Cedarburg Bog State Natural Area

and encompasses about 17 acres outside the existing State project boundary. It is recommended that the Department of Natural Resources consider expanding existing project boundaries to include this site when the master plan for the Cedarburg Bog Scientific Area is updated.

Prime Agricultural Land Plan Component

Under this plan, it is recommended that Ozaukee County and local units of government preserve to the extent practicable prime agricultural lands recommended for preservation under the Ozaukee County farmland preservation plan.³ Prime agricultural lands recommended to be preserved are shown on Map 17.

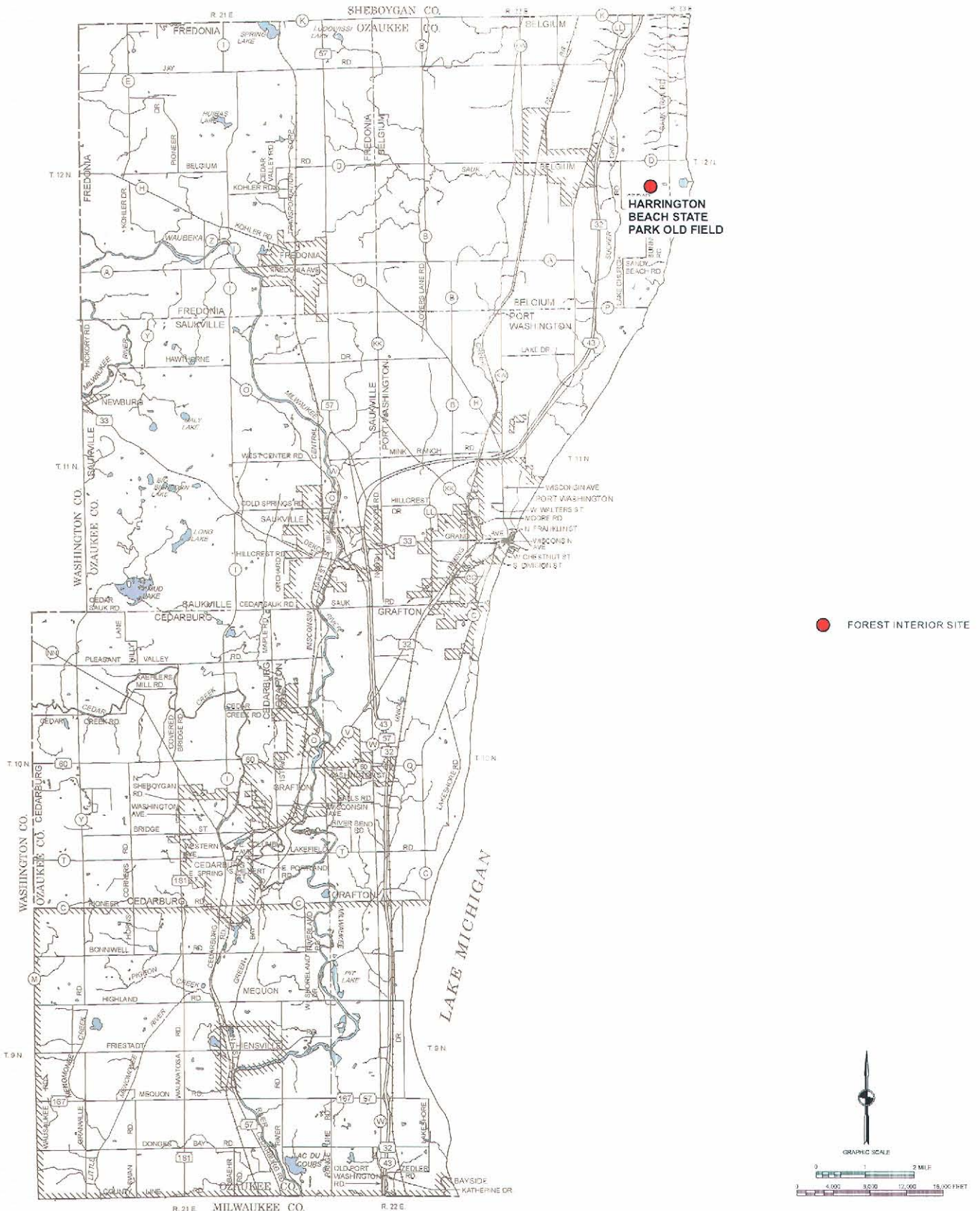
Planning for the preservation of agricultural lands and protection of such lands through zoning received impetus in 1977 with the passage of the Wisconsin Farmland Preservation Program, a program that combines planning and zoning provisions with tax incentives for the purpose of ensuring the preservation of farmland. The program is intended to help counties and local units of government preserve farmland through local plans and zoning and to provide tax relief, in the form of State income-tax credits, to farmland owners who participate in the program.

It is important to note that the exclusive agricultural zoning required as a condition for receipt of tax credits under the Farmland Preservation Program

³SEWRPC Planning Report No. 87, A Farmland Preservation Plan for Ozaukee County, Wisconsin, 1983.

Map 15

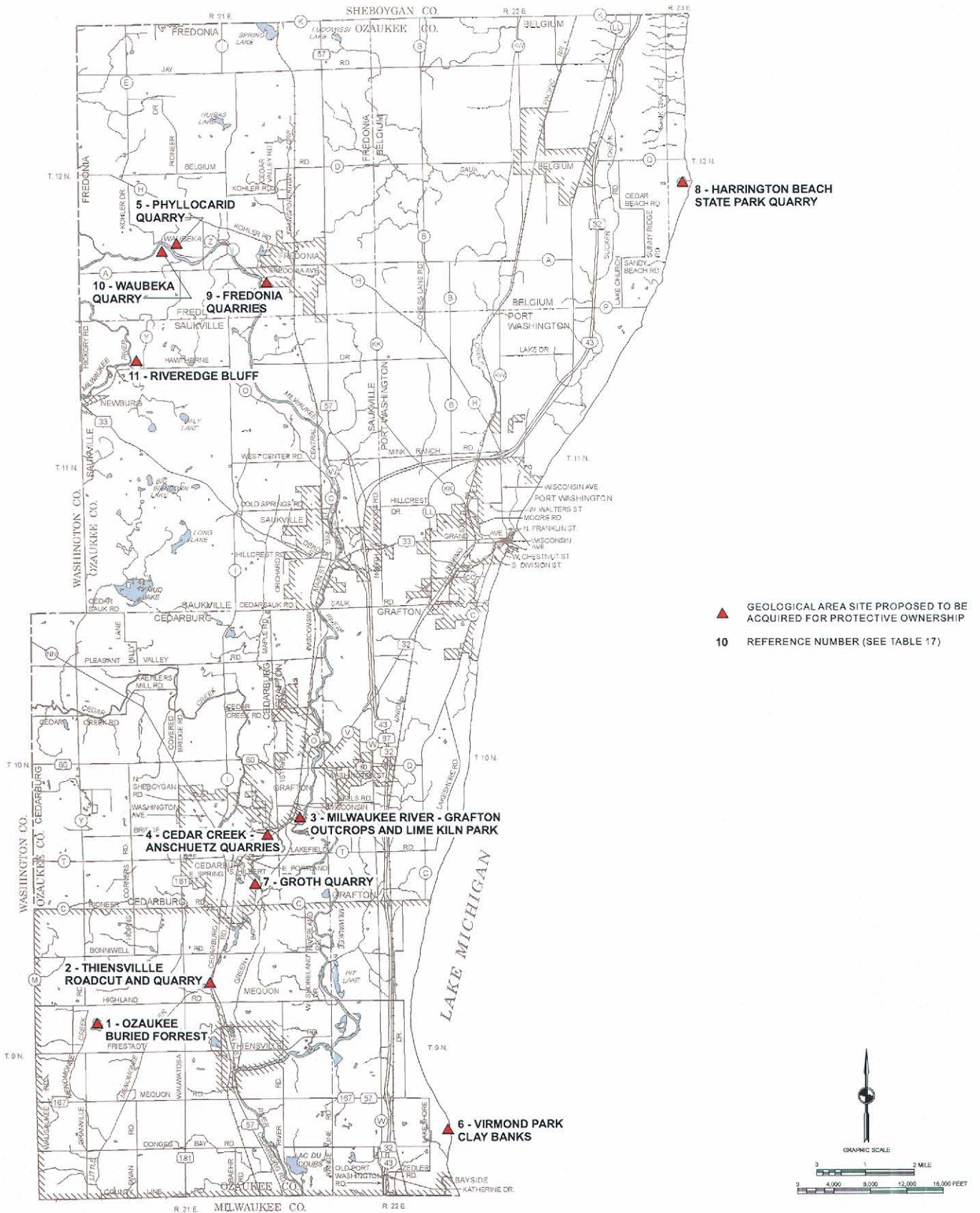
LOCATION OF RECOMMENDED SITE TO REESTABLISH FOREST INTERIOR IN OZAUKEE COUNTY



Source: SEWRPC.

Map 16

RECOMMENDED ACQUISITION AND OWNERSHIP OF SELECTED GEOLOGICAL AREAS IN OZAUKEE COUNTY



Source: SEWRPC.

Table 17

**GEOLOGICAL AREAS IN OZAUKEE COUNTY RECOMMENDED
TO BE FULLY OR SUBSTANTIALLY PRESERVED THROUGH ACQUISITION**

Type of Geological Area	Site Identification				Total Site Area (acres)	Portion of Area to Be Acquired for Protective Ownership	Responsible Agency	Remarks
	Civil Division	Name	Geological Area Class	Number on Map 16				
Glacial	City of Mequon	Ozaukee Buried Forest	GA-1	1	32	32	Wisconsin Department of Natural Resources	--
Bedrock	City of Mequon	Thiensville Roadcut and Quarry	GA-1	2	9	4	Ozaukee County	About five acres, or 56 percent, of this site are within Mee-Kwon County Park. The remainder of the Geological Area is surrounded by a Natural Area of countywide or regional significance
	Village of Grafton Town of Grafton	Milwaukee River-Grafton Outcrops and Lime Kiln Park	GA-1	3	57	10	Village of Grafton	About 47 acres, or 82 percent, of the site are in existing Village ownership. The entire area is located within the Milwaukee River Parkway recommended for acquisition in the Village park plan
	Town of Cedarburg	Cedar Creek-Anschuetz Quarries	GA-1	4	5	1	City of Cedarburg	About four acres, or 80 percent, of the site are in existing park or parkway ownership. The balance of the site lies within the proposed Cedar Creek Parkway
	Town of Fredonia	Phyllocarid Quarry	GA-1	5	4	4	Ozaukee County	The entire site is located within the Milwaukee River Parkway recommended for acquisition in the County park plan
	City of Mequon	Virmond Park Clay Banks	GA-2	6	10	--	Ozaukee County	The entire site is located within Virmond Park, a County park
	City of Cedarburg	Groth Quarry	GA-2	7	7	--	City of Cedarburg	The entire area is located within an existing City park
	Town of Belgium	Harrington Beach State Park Quarry	GA-2	8	25	--	Wisconsin Department of Natural Resources	The entire area is located within Harrington Beach State Park and within an identified Critical Species Habitat site
	Town of Fredonia	Fredonia Quarries	GA-3	9	6	6	Ozaukee County	The entire area is located within the proposed Milwaukee River Parkway and a Natural Area of countywide or regional significance

Table 17 (continued)

Type of Geological Area	Site Identification				Total Site Area (acres)	Portion of Area to Be Acquired for Protective Ownership	Responsible Agency	Remarks
	Civil Division	Name	Geological Area Class	Number on Map 16				
Bedrock (continued)	Town of Fredonia	Waubeka Quarry	GA-3	10	2	2	Ozaukee County	The entire area is located within the Milwaukee River Parkway recommended for acquisition in the County park plan
	Town of Saukville	Riveredge Bluff	GA-3	11	1	--	Riveredge Nature Center	The entire area is located within the Riveredge Nature Center
Total	--	--	--	--	158	59	--	--

Source: SEWRPC.

does not ensure the preservation of land held by participating farmers. Landowners can petition the concerned county or local unit of government for a change in zoning to accommodate development, although those who have claimed a tax credit would be liable to pay back at least a portion of the credits. Thus, even with the Farmland Preservation Program, the effectiveness of preserving farmland through exclusive agricultural zoning is dependent upon the level of commitment of the county and local units of government to such zoning.

In 1995, the Wisconsin Legislature took an additional action to lessen the property tax burden on farmers by mandating the "use-value" assessment of agricultural land. Under this system, agricultural land is assessed based solely on its value for farming, without regard for its development potential. The legislation froze the assessed value of agricultural land at 1995 levels through 1997, and provided for a phased reduction to "use" values over a ten-year period. In 1999, the Wisconsin Department of Revenue adopted an emergency rule which fully implements use-value assessments beginning in 2000.

Under the 1995 legislation, agricultural land is assessed at use-value, regardless of existing zoning. Landowners who sell their land after owning the

land for less than five years are required to pay a modest penalty to the Wisconsin Department of Revenue, an amount equal to five percent of the difference between the sale price and the use-value during the last year of ownership. Thus, while the new program may be expected to provide substantial property tax relief to owners of farmland, it will do so without attaching any additional restrictions to the land, so that there is no guarantee that the land will not be converted to urban use.

RECOMMENDED PARK AND OUTDOOR RECREATION ELEMENT

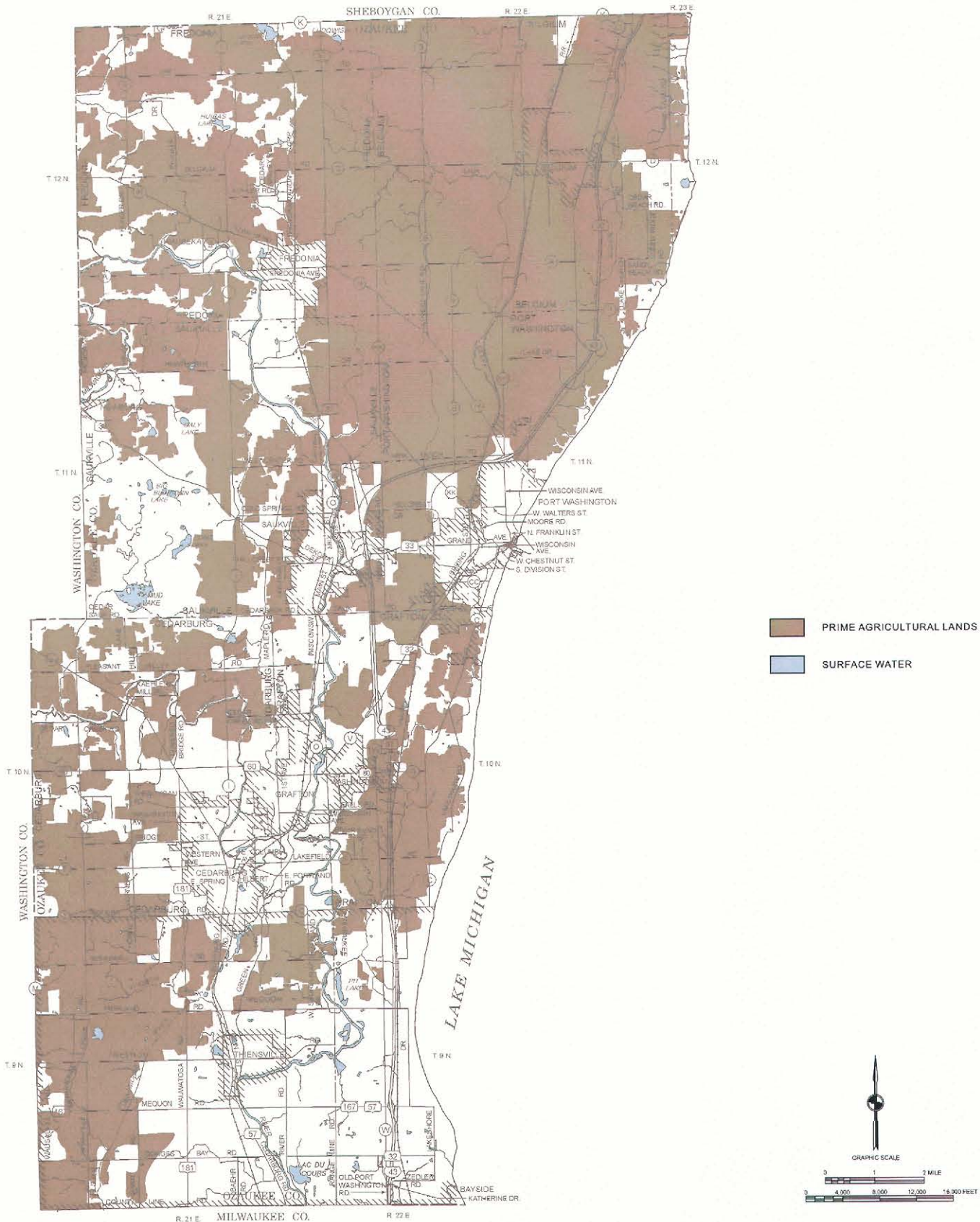
The outdoor recreation sites and trail facilities recommended under the County park and open space plan are shown on Map 18. The sites and facilities proposed to be provided include major parks and resource-oriented recreational facilities, trails, and boat access facilities. The recommended recreation sites and facilities are intended to meet the need for such sites and facilities in the County through the year 2020, as identified in Chapter IV. A description of the recommended sites and facilities follows.

Major Parks

Under the park and open space plan for Ozaukee County, four major parks would be provided. All four

Map 17

PRIME AGRICULTURAL LANDS IN OZAUKEE COUNTY: 2020



Source: SEWRPC.

major parks are existing parks in Ozaukee County. The four existing major parks are: Harrington Beach State Park, owned by the Wisconsin Department of Natural Resources; and Hawthorne Hills County Park, Mee-Kwon County Park, and Tendick Nature Park, owned by Ozaukee County.

Under this plan, the Wisconsin Department of Natural Resources would continue to acquire lands at Harrington Beach State Park. Ozaukee County would continue to maintain Hawthorne Hills County Park, and would develop additional facilities at Mee-Kwon County Park and Tendick Nature Park.

Major recommendations for outdoor recreational facilities at the County parks include the development of additional formal picnic areas at Hawthorne Hills County Park and Tendick Nature Park; the development of a fairway/practice area expansion at Mee-Kwon County Park; and the development of nature study and trail facilities, and canoe access at Tendick Nature Park.

Specific recommendations for each of the major parks are presented below.

- **Harrington Beach State Park**
Harrington Beach State Park presently consists of 636 acres, and is located in the Town of Belgium along Lake Michigan. Under the plan, it is recommended that the State acquire an additional six acres of land within the project area and continue to develop components of the master plan including family camping facilities, picnicking and necessary support facilities, and trails.
- **Hawthorne Hills County Park**
Hawthorne Hills County Park presently consists of 290 acres, and is located in the Town of Saukville. The plan recommends that the County provide additional picnic areas and necessary support facilities.
- **Mee-Kwon County Park**
Mee-Kwon County Park, located in the City of Mequon, presently consists of 239 acres. Under the plan, it is recommended that the County provide trails and a fairway/practice area expansion.
- **Tendick Nature Park**
Tendick Nature Park is an undeveloped park located in the Town of Saukville, and presently consists of 123 acres. Proposed facility devel-

opment at this site includes picnic areas and necessary support facilities, nature study and trail facilities, and canoe access facilities along the Milwaukee River.

Other County Park and Outdoor Recreation Sites

In addition to the three major parks owned by the County, seven other park and outdoor recreation sites were owned by Ozaukee County in 2000 (see Map 18). Under the recommended plan, Ozaukee County would continue to maintain all of these sites and provide additional facilities as needed.

Specific recommendations for other Ozaukee County parks include the expansion of the Carlson Park/Ozaukee Ice Center as proposed by the Ozaukee County Ice Center Expansion Committee and endorsed by the Ozaukee County Park Commission. This does not preclude an alternative site for a future ice rink.

Acquisition and Development Costs—County Parks

The acquisition and development costs related to County owned parks envisioned under the plan are presented in Table 18. As indicated in Table 18, such costs are estimated at about \$6.8 million. Since the plan does not recommend that the County acquire any additional park land, all \$6.8 million would be required for the development of existing park lands.

Areawide Recreation Trails

Under the recommended plan, about 36 miles of recreation trails would be provided to enable participation in such activities as bicycling, hiking, nature study, and ski touring. The recommended trails, which are shown on Map 18, are part of a larger, regionwide trail system. The recommended trail system within Ozaukee County is comprised of two trails, including 12 miles of existing trails and 24 miles of proposed new trails. The trail locations shown on Map 18 are general in nature and are subject to refinement based on detailed facility planning and on negotiations with landowners to purchase land for the trails.

All 36 miles of the recommended trail system would be provided by Ozaukee County as part of the following trails: the Little Menomonee River Corridor, which would connect with the Little Menomonee River Corridor segment of the Milwaukee County parkway system in Milwaukee County on the south and with the Milwaukee River Corridor in Ozaukee County on the north; and the Milwaukee River Corridor, which would connect with the

OUTDOOR RECREATION ELEMENT OF THE
OZAUKEE COUNTY PARK AND OPEN SPACE PLAN: 2020

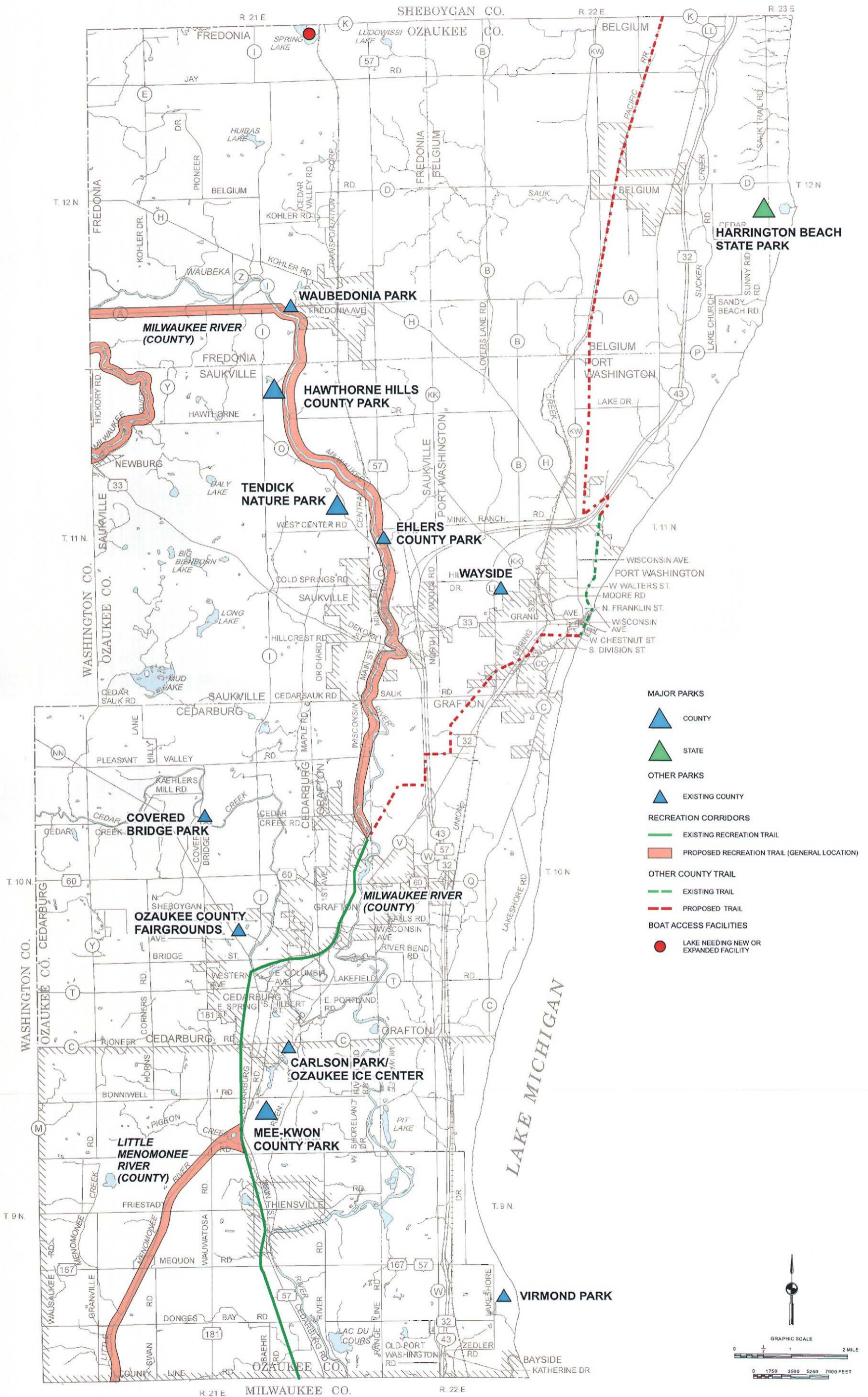


Table 18

ESTIMATED ACQUISITION AND DEVELOPMENT COSTS FOR COUNTY PARKS AS SET FORTH BY THE RECOMMENDED PARK PLAN

County Park	Proposed Acquisition (acres)	Acquisition Cost	Proposed Facility Development	Development Cost	Total Cost
Major Parks					
Hawthorne Hills County Park	--	--	Picnicking	\$ 25,000	\$ 25,000
Mee-Kwon County Park	--	--	Trails	9,000	59,000
			Fairway/practice area expansion	50,000	
Tendick Nature Park	--	--	Picnicking	190,000	613,000
			Nature study and trails	65,000	
			Canoe access	15,000	
			General development ^a	343,000	
Subtotal – 3 Sites	--	--	--	\$ 697,000	\$ 697,000
Other County Parks					
Carlson Park/Ozaukee Ice Center	--	--	Expansion to include additional sheet of ice	\$4,000,000	\$4,000,000
Subtotal–1 Site	--	--	--	\$4,000,000	\$4,000,000
Trails					
Milwaukee River Recreation Corridor	..b	..b	18 miles of trails	\$ 950,000	\$ 950,000
Little Menomonee River Recreation Corridor	..b	..b	6 miles of trails	317,000	317,000
Subtotal–2 Corridors	--	--	--	\$1,267,000	\$1,267,000
Other County Trail					
WEPCO Interurban Line Trail	--	--	16 miles of trails and the development of two bridges	\$ 900,000	\$ 900,000
Subtotal–1 Trail	--	--	--	\$ 900,000	\$ 900,000
Total	--	--	--	\$6,864,000	\$6,864,000

NOTE: Cost estimates are expressed in 2000 dollars.

^aGeneral development includes landscaping, parking areas and access drives, park maintenance building, development of areas for activities such as disk golf, archery and ice skating, and such furnishings as benches, waste containers, and signs.

^bThe Milwaukee River and Little Menomonee River recreation corridors are generally proposed to be developed within primary environmental corridor lands. The cost for acquiring such lands is included in Table 15.

Source: SEWRPC.

Milwaukee River Corridor in Milwaukee County on the south and in Washington County on the west.

The development by Ozaukee County of 24 miles of trails in the Little Menomonee and Milwaukee River corridors within the County is estimated to cost about \$1.3 million.

Other County Trails

As shown on Map 18, Ozaukee County is also responsible for the development and maintenance of one other trail—the WEPCO Interurban Line Trail.

This trail, while not associated with a recreation corridor described above, provides connections to these recreation corridors. This trail is envisioned to include a total of about 18 miles (including two existing miles). The development of the remaining 16 miles of trails is estimated to cost about \$900,000.

Lake and River Access

Boat access sites, both public and non-public, provide opportunities for individuals who do not own land contiguous to a body of water to participate in such water-related recreation activities as motor boating,

consistent with safe and enjoyable participation in various boating activities. The Wisconsin Department of Natural Resources, in keeping with State *Statutes* and regulations which seek to assure that all Wisconsin residents have access to publicly owned inland waters, recently adopted revised rules regarding lake access, and surveyed all the major lakes in the State to determine if adequate public access to each was provided and maintained. Table 14 in Chapter IV lists the major lakes in the County and indicates whether or not public access is provided which meets Department requirements. As indicated in the table, in 2000, Spring Lake in Ozaukee County had no access provided which met Department standards. Under this plan, then, as shown on Map 18, it is recommended that a public boat access site at Spring lake be acquired and developed as appropriate by the Wisconsin Department of Natural Resources. The total estimated acquisition and development cost for the recommended lake access site is about \$250,000.

It is recommended that public canoe access points with parking should be provided on major streams every 10 miles in Ozaukee County. Major streams in Ozaukee County are the Cedar Creek and the Milwaukee River. Public canoe access is currently provided at Veteran's Memorial Park, Villa Grove Park, and Waubedonia Park along the Milwaukee River and is recommended in the plan in the development of Tendick Nature Park. Public canoe access with parking is not currently provided along the Cedar Creek.

In addition to boating and canoeing, the County park plan recognizes the popularity of such activities as beach swimming, shore fishing, and other lake-oriented activities and the need for general public access to lakeshore areas for such pursuits. Lakeshore areas, including Lake Michigan, capable of accommodating additional outdoor recreational development are scarce in Ozaukee County. As lakeshore property, either developed or undeveloped, becomes available in the years ahead, Ozaukee County, or the appropriate municipality, should evaluate their recreational potential and consider their acquisition for public recreational use as appropriate.

Local Park and Outdoor Recreation Plan Element

In addition to meeting resource-oriented outdoor recreation needs, a park plan must seek to provide sites and facilities for nonresource-oriented activities, such as baseball, tennis, and playground activities.

In comparison to the resource-oriented outdoor recreation sites and facilities, sites and facilities for nonresource-oriented activities 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, responsibility for providing such sites and facilities generally rests with city, village, and town governments.

Within urban areas of the County, it is recommended that a full range of community and neighborhood park sites and facilities be provided. Recommendations for the provision of local park sites and facilities should be identified through the preparation and adoption of local park and open space plans. As of the end of 2000, the Wisconsin Department of Natural Resources, which certifies local park and open space plans for purposes of reviewing applications for state Stewardship Fund and other recreational grant programs, had certified local park and open space plans for the City of Cedarburg, and the Villages of Grafton and Thiensville.

Within the rural areas of the County, it is generally recommended that one town-owned park and associated outdoor recreation facilities be provided in each town to serve the needs of town residents for local civic events and for organized recreational activities, such as softball and picnicking. As the community recreational facility, the town park should be located in conjunction with another community facility that serves as a focal point for town residents, such as a town hall, school, or fire station. Towns which currently lack park and outdoor recreation facilities should have the opportunity to acquire and develop, with available Federal and State grant-in-aid support, one town park and associated recreation facilities.

PLAN IMPLEMENTATION

The recommended park and open space plan for Ozaukee County consists of an outdoor recreation element providing recommendations for parks and other outdoor recreation sites and facilities, and an open space preservation element providing recommendations for the protection of important natural resources. The recommended plan described in the preceding sections of this chapter provides a design for the attainment of the park acquisition and development objectives and the open space preservation objectives presented in Appendix B of this report. In a practical sense, however, the recom-

mended park and open space plan for the County is not complete until the steps required to implement the plan have been specified. This section is intended to serve as a guide for use in the implementation of the recommended plan, including a description of those actions required by the Wisconsin Department of Natural Resources and by Ozaukee County. Also included is a description of the acquisition and development costs and priorities associated with the implementation of the recommended plan.

Wisconsin Department of Natural Resources

The Wisconsin Department of Natural Resources has authority and responsibility for park development, natural resource protection, water quality control, and water use regulations. Because of this broad range of authority and responsibility, certain Department functions have particular importance in the implementation of the County park and open space plan. The Department has the obligation to prepare comprehensive statewide conservation and water resource plans; the authority to protect, develop, and regulate the use of state parks, forests, fish and game, lakes and streams, certain plant life, and other resources; and the authority to acquire conservation and scenic easements. 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 actions, shoreland and floodplain zoning ordinances. The Department also has the authority to administer the Federal grant program known as the Land and Water Conservation (LAWCON) Fund program within the State, and administers the State Stewardship Fund, which provides funding for county and local park and open space land acquisition and development.

It is important that the Wisconsin Department of Natural Resources: 1) approve and certify the Ozaukee County park and open space plan in order to maintain the eligibility of the County to receive available State and Federal outdoor recreation grants in support of plan implementation; 2) use available regulatory authority to guide urban development in a way that protects important natural resources; 3) be directly responsible for the maintenance of existing State-owned recreation and open space sites in the County; 4) be responsible for the acquisition and development of lands within established State project boundaries in the County; 5) be responsible for the acquisition of resource preservation sites, including natural areas and critical species habitat

sites as recommended in this plan; 6) be responsible for the acquisition and development of boat access sites. A summary of the costs associated with recommendations directed to the Department is included in Table 19.

It should be noted that in 2000 the Department was conducting a North Branch Milwaukee River Wildlife and Farming Heritage Area Feasibility Study relating to a proposed State project area. The proposed project area includes lands in the Town of Fredonia. This project area, when refined and detailed, will facilitate the implementation of the County park and open space plan as it relates to the preservation of environmental corridors, natural areas, and prime agricultural lands within the project area.

Ozaukee County

The authority and responsibility for the provision of areawide resource-oriented park and open space sites and facilities in the County rests primarily with the Ozaukee County Park Commission and the County Board of Supervisors. A summary of the park acquisition and development and open space preservation recommendations for the County is also included in Table 19.

Under the recommended park and open space plan presented in this chapter, Ozaukee County should develop additional facilities, at existing major park sites—Hawthorne Hills County Park, Mee-Kwon County Park, and Tendick Nature Park—and at Carlson Park/Ozaukee Ice Center. It is further recommended that Ozaukee County pursue the acquisition and development of lands to provide the opportunity for public lake access for other recreational activities, such as beach swimming, shore fishing, and other passive uses, as opportunities become available.

Under the open space plan element recommendations, the County should acquire additional land to assure the preservation of important natural resources in the County, including the acquisition of an additional 2,142 acres of primary environmental corridors, about 67 acres of secondary environmental corridors, and about three acres of isolated natural resource areas. In addition to woodlands, wetlands, and other natural resources, the land recommended to be acquired by the County contain natural areas and critical species habitat sites providing habitat for rare plant and animal species.

Table 19

SUMMARY OF PROPOSED OWNERSHIP OF PARK AND OPEN SPACE LAND AND ESTIMATED ACQUISITION AND DEVELOPMENT COSTS UNDER THE RECOMMENDED OZAUKEE COUNTY PARK AND OPEN SPACE PLAN

Ownership	Planned Open Space Acquisition		Planned Park Land Acquisition		Total Planned Acquisition		Development Cost	Total Acquisition and Development Cost
	Area (acres)	Cost	Area (acres)	Cost	Area (acres)	Cost		
State of Wisconsin	1,295	\$ 2,309,900	6	\$12,800	1,301	\$ 2,322,700	\$ 134,000	\$ 2,456,700
Ozaukee County	2,214	5,467,600	--	--	2,214	5,467,600	6,864,000	12,331,600
Local Governments ^a	158	421,800	-- ^b	--	158	421,800	--	421,800
Nonprofit Conservation Organizations	1,640	2,984,600	--	--	1,640	2,984,600	--	2,984,600
Total	5,376	\$11,183,900	6	\$12,800	5,313	\$11,196,700	\$6,998,000	\$18,194,700

NOTE: Cost estimates are expressed in 2000 Dollars.

^aIncludes city, village, and town governments, school districts, and lake and sanitary districts.

^bAdditional local government park lands should be determined through the preparation and adoption of local park and open space plans.

Source: SEWRPC.

The plan recommends the development by the County of about six miles of trail along the Little Menomonee River. The proposed trail would connect with the Little Menomonee River Corridor segment of the Milwaukee County parkway system in Milwaukee County on the south and with the Milwaukee River Corridor in Ozaukee County on the north. It is also recommended that Ozaukee County develop an additional 18 miles of trail along the Milwaukee River. The proposed trail would connect with the existing Milwaukee River Corridors in Ozaukee County on the south and in Washington County on the west. The plan also recommends the development by the County of about 16 miles of the WEPCO Interurban Line trail. Ozaukee County should work cooperatively with the associated communities to identify and establish appropriate on- and off-street routes to connect these trails, including the implementation of the year 2010 regional bicycle and pedestrian plan as shown on Map 10 in Chapter III, and provide proper signing and improvements such as safe drainage grates and improved railway crossings where necessary.

Local Units of Government

While the provision of major parks, areawide trails, water access facilities, and certain important natural resource features are proposed to be County or State responsibilities, local units of governments

should consult with the State and County to identify specific lands required for areawide park and open space preservation purposes. Once such lands are identified, local units of government should utilize their zoning and official map powers to reserve the needed lands for park and open space use. Further, it may be appropriate for local units of government to accept in dedication certain lands identified for State or County acquisition as the land subdivision process proceeds, and then transfer ownership of such lands to the County or State. Similarly, it would be appropriate for the County or State to assume the responsibility for the development of trail facilities in local park lands, as needed, to assure continuity and uniformity in the proposed continuous regionwide system of recreation trails.

In addition to maintaining and developing local park sites and facilities, local units of government should also support efforts relating to preservation of historic sites as identified in Chapter III.

ACQUISITION CONSIDERATIONS

It is the intent of the plan that all land acquisitions occur on a willing-seller, willing-buyer basis and that landowners receive fair market value for their property. Each transaction should follow the Wis-

consin Department of Natural Resources acquisition procedures, which include an appraisal by the Department for all acquisitions undertaken by governmental units using Department grants.

The recommended acquisition may occur in full fee simple interest or in less-than-fee-simple interest, such as through the purchase of conservation easements. Where a conservation easement is utilized, the landowner retains title to the property; the easement typically precludes mowing or other disturbance of the area by the owner and provides access for site management purposes, such as the removal of woody vegetation which may shade out desired plant species and removal of other nuisance vegetation.

The recommended acquisition may also occur through land subdivision dedication as well as through donations of fee simple title or of conservation easements. Donations may yield income-tax advantages to those who donate, since the value of the land or easement donated generally may be deducted from taxable income as an itemized deduction for Federal income-tax purposes and may be considered in calculating the itemized deduction credit for State income-tax purposes.

As already noted, the associated costs for the acquisition and development of County park and open space sites, as set forth in Table 19, are estimated at about \$12.3 million. This amount distributed over the 20-year planning implementation period would approximate an expenditure of about \$617,000 per year. Under the assumption that the population of the County would approximate 111,000 persons by the year 2020, the average annual acquisition and development costs would be about \$6.40 per capita⁴ per year. It should be noted that, to the extent that such costs are reduced through the use of alternative methods of land acquisition, and through the use of available State funds for acquisition and development, the costs to the County could be significantly reduced.

⁴The average annual per capita costs were estimated by dividing the estimated average annual costs by the average annual population over the 20-year plan implementation period. The average population was determined by calculating the average of the 2000 population estimate by the Wisconsin Department of Administration of about 81,800 persons and the plan design year 2020 population of about 111,000 persons, which is 96,400 persons.

ACQUISITION AND DEVELOPMENT PRIORITIES FOR OZAUKEE COUNTY

Priorities for the park and open space acquisition and development projects proposed for implementation by Ozaukee County are presented in this section. It is necessary to establish priorities for park and open space acquisition and development because public financial resources available for acquisition and development are limited, and because implementation of the recommended plan will, as a practical matter, occur gradually over time.

It is recommended that the County give top priority to acquiring land for open space preservation purposes. Land acquisition is particularly important given the increasing urbanization occurring within the County. As urbanization occurs, development pressures inevitably cause an increase in property values, thus making land acquisition significantly more costly. Ozaukee County should establish a fund to acquire park and open space lands at a reasonable cost before their development for urban uses. It is recommended that priority for land acquisition be given first to lands within the Little Menomonee and Milwaukee River recreation corridors; and then by acquisition of other environmental corridor lands.

A summary of recommended acquisition and development activities for Ozaukee County parks during the 20-year period between 2000 and 2020 are set forth in Table 19. These actions would allow the County to meet its long term goals of providing sites and facilities for outdoor recreation and for preserving important natural resource areas in Ozaukee County.

Maintenance Impact

In addition to recommendations relating to the provision of new park sites and facilities, this plan anticipates the maintenance in continued recreational use of existing publicly owned recreation sites within the County. Maintenance activities at these sites should include, as necessary, such activities as the provision, paving, and resurfacing of parking lots and walkways; resurfacing of volleyball, basketball, and tennis court areas; provision, repair, or replacement of such support facilities as park benches, picnic tables, and drinking fountains; provision, repair, or replacement of restroom facilities, water supply facilities, maintenance buildings, and picnic shelters; and the maintenance of lawns and other landscape plantings. Maintenance activities also include, importantly,

the retrofitting of facilities where necessary to accommodate access by persons with disabilities.

The Federal Americans with Disabilities Act, adopted by the U.S. Congress in 1990, requires that "reasonable accommodation" be made to provide persons with disabilities equal opportunities for access to jobs, transportation, public facilities, and services—including access to recreational facilities. All new or renovated park and recreation facilities within the County must be designed and constructed to comply with the requirements of the Act. Existing public park and recreation facilities should be evaluated by the unit of government concerned to determine if improvements are needed to meet Federal accessibility requirements.

SUMMARY

This Chapter has presented the recommended park and open space plan for Ozaukee County, consisting of an open space preservation element and an outdoor recreation element. The key recommendations of these plan elements are summarized below.

Open Space Preservation Element

The open space preservation element consists of four major components: preservation of primary environmental corridors, secondary environmental corridors, and isolated natural resource areas; preservation of natural areas and critical species habitat sites; protection of open space lands located within the Department of Natural Resources project boundaries for the Cedarburg Bog Scientific Area and Harrington Beach State Park; and protection of prime agricultural lands.

- Overall, the open space plan element recommends the preservation of environmentally significant open space lands encompassing a total of 28,069 acres—including primary environmental corridors, secondary environmental corridors, isolated natural resources, and certain adjacent lands. Of this total, 4,962 acres, or about 18 percent, were in public ownership, nonprofit conservation organization ownership, or in compatible private outdoor recreation use in 2000, and are recommended to be preserved in current ownership. It is recommended that an additional 5,313 acres, or about 19 percent of proposed open space lands, be acquired by public agencies or nonprofit conservation organizations for natural resource

protection or open space preservation purposes or for public park or trail use. Of the total of 5,313 acres, 1,301 acres would be acquired by the Wisconsin Department of Natural Resources; 2,214 acres by Ozaukee County; 158 acres by local governments; and 1,640 by nonprofit conservation organizations.

- The plan recommends that 17,794 acres of environmentally significant lands be placed in protective zoning districts to prevent incompatible development. Such protective zoning districts include floodland, lowland conservancy, and upland conservancy with an overall density of no more than one dwelling unit per five acres.
- The open space preservation element incorporates the recommendations of the regional natural areas protection and management plan as it applies to Ozaukee County. Thus, the open space element recommends the preservation, through public-interest ownership, of 42 natural areas, five critical species habitat sites, and 11 geological areas.
- The open space preservation element also envisions the continued acquisition of land by the Wisconsin Department of Natural Resources for natural resource protection and recreational purposes—including lands located outside planned primary or secondary environmental corridors or isolated natural resource areas, but within approved project boundaries for the Cedarburg Bog Scientific Area and Harrington Beach State Park.
- Under this open space preservation element, it is further recommended that the County and local units of government protect existing prime agricultural lands. Specifically, it is recommended that all prime agricultural lands identified in the farmland preservation plan for Ozaukee County be preserved insofar as practicable in agricultural use.

Outdoor Recreation Plan Element

The outdoor recreation plan element seeks to provide sites and facilities needed to meet anticipated outdoor recreation site and facility needs in the County throughout the year 2020.

- Under the outdoor recreation element of the plan, four major parks would be provided within Ozaukee County. The four major parks are: Harrington Beach State Park, owned by the Wisconsin Department of Natural Resources; and Hawthorne Hills County Park, Mee-Kwon County Park, and Tendick Nature Park, owned by Ozaukee County.
- The plan also recommends the development of picnicking facilities at Harrington Beach State Park, Hawthorne Hills County Park, and Tendick Nature Park; trails at Harrington Beach State Park, Mee-Kwon County Park, and Tendick Nature Park; a fairway/practice area expansion at Mee-Kwon County Park; family camping at Harrington Beach State Park; and a canoe access and nature study facilities at Tendick Nature Park.
- Under the recommended plan, a 36-mile system of recreation trails would be provided within the County to enable participation in such activities as bicycling, hiking, nature study, and ski touring by Ozaukee County as part of the six-mile Little Menomonee River Corridor, and the 30-mile Milwaukee River Corridor. In addition, the County would also develop the 18-mile WEPCO Interurban Line trail.
- Under the plan, it is recommended that a public boat access site be acquired and developed by the Department of Natural Resources on Spring Lake. It is further recommended that Ozaukee County pursue opportunities to provide access to Lake Michigan and inland lakes for beach swimming, shore fishing, and passive recreational activities, as such opportunities arise.

Plan Implementation

- Implementation of the County park and open space plan would involve the acquisition by

public agencies and nonprofit conservation organizations of a total of about 5,313 acres of land. Of this total, 1,301 acres, or 24 percent, would be acquired by the Wisconsin Department of Natural Resources; 2,214 acres, or 42 percent by Ozaukee County; 158 acres, or 3 percent, by local units of government in the County; and 1,640 acres, or 31 percent, by nonprofit conservation organizations (see Table 19).

- The total cost of implementing the park and open space plan is estimated to be \$18.2 million, including \$11.2 million for land acquisition and \$7.0 million for recreational facility development. Of the total plan implementation cost, about \$2.5 million, or 14 percent, would be borne by the Department of Natural Resources; \$12.3 million, or 68 percent, would be borne by Ozaukee County; \$422,000, or 2 percent, would be borne by local units of government; and \$3.0 million, or 16 percent, would be borne by nonprofit conservation organizations.
- The total cost to Ozaukee County of \$12.3 million includes \$5.5 million for land acquisition and \$6.8 million for facility development. This amount distributed over the 20-year plan implementation period would approximate about \$617,000 per year. These costs may be offset through grants provided for recreational and open space purposes by the Wisconsin Department of Natural Resources. The acquisition and development costs for recreational and open space lands and facilities may also be offset by donations, land dedications, or by revenues generated by existing parks and recreational facilities.

Chapter VI

SUMMARY

INTRODUCTION

A park and open space plan for Ozaukee County was included in the 1977 regional park and open space plan for the seven-county Southeastern Wisconsin Region. The regional plan called for a system of large parks with natural resource amenities, such as lakes and wooded areas, to provide hiking trails and swimming beaches, as well as to accommodate uses such as camping, picnicking, and golfing. The plan also called for the development of smaller community and neighborhood parks for more intensive recreational activities, such as baseball, basketball, and tennis and for playgrounds. Under the regional park plan, responsibility for acquiring and developing large, resource-oriented parks was assigned to the state and county levels of government, and responsibility for acquiring and developing community and neighborhood parks was assigned to cities, villages, and towns.

In addition to a system of parks, the regional park plan also recommended a network of recreational trails along major rivers, the Lake Michigan shoreline, and the Kettle Moraine; and further recommended that areas with concentrations of important natural resources, which are referred to as primary environmental corridors, be preserved through a combination of protective zoning and public ownership. The plan also recommended that adequate public access to major lakes and streams for boating and fishing be provided.

In 1984, the Ozaukee County Park and Planning Commission requested that SEWRPC assist the County in refining and updating the regional park and open space plan as it applied to Ozaukee County. The resulting plan was documented in SEWRPC Community Assistance Planning Report No. 133, *A Park and Open Space Plan for Ozaukee County*, July 1987. That plan, which has a design year of 2000, was adopted by the Ozaukee County Board of Supervisors on July 1, 1987.

On April 8, 1998, Ozaukee County requested the assistance of the Southeastern Wisconsin Regional Planning Commission in the preparation of a new County park and open space plan. This plan is designed to extend the recommendations of the existing Ozaukee County park and open space plan to the design year 2020. The plan is based on updated information related to land use, population levels and distribution, anticipated growth and development, natural resources, and park and open space acquisition and development activities within the County. The plan is further intended to maintain County eligibility to apply for and receive Federal and State aids in partial support of the acquisition and development of park and open space sites and facilities.

EXISTING CONDITIONS

A description of the population and employment levels, natural resources, and land use within Ozaukee

County is presented in Chapter II. A summary of conditions in the County follows.

Population and Employment Levels

The population of the County in 1990, the most recent year for which data from the U.S. Census are available, was about 72,800. The population level increased by about 9,000 persons, to a level of 81,800 persons in 2000, about 12 percent greater than the 1990 level, according to State population estimates.

In 1990, there were about 26,500 households in Ozaukee County, representing an increase of about 73 percent, from 1970. With the number of households increasing at a faster rate than population, the number of persons per household has decreased.

There were about 36,400 employment opportunities, or jobs, in Ozaukee County in 1990. The County has experienced a 72 percent increase in employment over the past two decades, with the number of jobs increasing by about 15,200 between 1970 and 1990.

Natural Resource Base

The location and extent of various elements of the natural resource base, including wetlands, woodlands, and surface water resources and associated shorelands and floodplains, were inventoried and mapped under the planning program. The most significant of these features lie within areas referred to as environmental corridors and isolated natural resource areas.

Primary environmental corridors include a wide variety of important natural resource and resource-related elements and are, by definition, at least 400 acres in size, two miles in length, and 200 feet in width. Primary environmental corridors are located throughout the County. Such corridors in 1995 encompassed about 32.4 square miles, or about 14 percent of the County. The preservation of these corridors in essentially natural, open use is important to the overall quality of the environment and natural beauty of Ozaukee County. Since these corridors are generally poorly suited for urban development, their preservation also helps to avoid the creation of new environmental and developmental problems.

Secondary environmental corridors, often remnants of primary corridors that have been partially converted to intensive urban or agricultural use, also contain a variety of resource elements. By definition, secondary environmental corridors are at least one

mile long and 100 acres in area. In 1995, these corridors encompassed about 7.9 square miles, or about 3 percent of the County. Maintenance of these corridors in open uses can facilitate natural surface water drainage, and provide corridors for the movement of wildlife.

Isolated natural resource areas represent smaller concentrations of natural resource features that have been separated from the environmental corridors. Such areas, which are by definition at least five acres in size, in combination encompassed about 5.3 square miles, or about 2 percent of the County, in 1995. These areas sometimes serve as the only available wildlife habitat in an area, and may function as storm water retention areas.

Land Use

In 1995, urban land uses—consisting primarily of residential, commercial, industrial, governmental and institutional, recreational and transportation, communication, and utility uses—encompassed about 48.4 square miles, or about 21 percent of the total area of the County. Residential land comprised the largest share of the urban land area, encompassing 26.3 square miles, or about 54 percent of all urban land and 11 percent of the total area of the County.

In 1995, nonurban land uses—including agricultural lands, wetlands, woodlands, surface water, landfill and extractive, and other open lands—encompassed about 186.7 square miles, or about 79 percent of the County. Agricultural land comprised the largest share of the nonurban land area, accounting for about 134.3 square miles, or about 57 percent of the total area of the County.

INVENTORY OF PARK AND OPEN SPACE SITES

An inventory of existing public park and open space sites in Ozaukee County in 2000 found that the County owned a total of 10 park and outdoor recreation sites encompassing 814 acres. There are an additional six park and open space sites, encompassing 2,602 acres, owned by the State of Wisconsin; five Federally owned sites, encompassing 543 acres; and 135 sites, encompassing 1,724 acres, owned by local units of government and school districts for outdoor recreation or natural resource preservation purposes. An additional 26 sites, encompassing 1,992 acres, are developed for private resource-oriented outdoor recreational use, and seven sites, encom-

passing 697 acres, are owned by private organizations for resource protection purposes.

One publicly owned access site for motor-boating is provided to Lake Michigan. There are numerous sites which provide access to Cedar Creek and the Milwaukee River for other recreational activities and passive uses.

Existing trails in Ozaukee County include a 12-mile segment of the Milwaukee River recreation corridor, and a 2-mile segment of the WEPCO Interurban Line Trail.

RECOMMENDED PARK AND OPEN SPACE PLAN

The recommended park and open space plan for Ozaukee County is intended to guide the acquisition and development of lands to protect existing natural resources and to provide sites and facilities for outdoor recreation. The plan consists of two elements, an open space preservation element and an outdoor recreation element.

Open Space Preservation Element

The open space preservation element consists of four components: 1) The preservation of primary environmental corridors, secondary environmental corridors, and isolated natural resource areas; 2) the preservation of natural areas, critical species habitat sites, and geological and archeological areas in accordance with the recommendations set forth in the regional natural areas protection and management plan;¹ 3) the protection of open space lands located within established Wisconsin Department of Natural Resources project boundaries, which in Ozaukee County include the Cedarburg Bog Scientific Area and Harrington Beach State Park; and 4) the preservation of prime agricultural lands.

It is recommended that a total of 28,069 acres of open space lands, or about 19 percent of Ozaukee County, be protected through a combination of public or nonprofit conservation organization ownership, or through the application of protective zoning. These 28,069 acres include planned primary and secondary environmental corridors, planned isolated

natural resource areas, and areas outside corridors but within the Department of Natural Resources project boundaries. All natural areas and critical species habitat sites recommended to be preserved are contained within the planned primary or secondary environmental corridors or the planned isolated natural resource areas.

Of the total 28,069 acres of recommended open space lands, 4,962 acres, or about 18 percent, were in public ownership, nonprofit conservation organization ownership, or in compatible private outdoor recreation use in 2000, and are recommended to be preserved in such ownership. It is recommended that an additional 5,313 acres, or about 19 percent of proposed open space lands be acquired by public agencies for natural resource protection or open space preservation purposes or for public park or trail use. The remaining 17,794 acres of open space lands should be placed in protective zoning districts to prevent incompatible development. Such protective zoning districts include floodland and lowland and upland conservancy zoning. Upland conservancy zoning should limit residential development to an overall density of no more than one dwelling unit per five acres, in areas outside steep slopes.

Prime farmlands are identified in the Ozaukee County farmland preservation plan as farm units at least 35 acres in size, consisting predominantly of soils meeting the U.S. Natural Resources Conservation Service criteria for prime farmland or farmland of statewide importance, and occurring in a farming area of at least 100 acres in size. Under the plan, it is recommended that all prime agricultural lands identified in the farmland preservation plan for Ozaukee County be preserved in agricultural use.

Outdoor Recreation Element

The outdoor recreation element of the plan recommends new facilities and improvements at existing major parks; the development of areawide trails; and the provision of a boat access facility on Spring Lake.

Under the outdoor recreation element of the plan, four major parks would be provided within the County. All four major parks are existing parks in Ozaukee County. The four existing major parks are: Harrington Beach State Park, owned by the Wisconsin Department of Natural Resources; and Hawthorne Hills County Park, Mee-Kwon County Park, and Tendick Nature Park, owned by Ozaukee County.

¹ Documented in SEWRPC Planning Report No. 42, A Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin, September 1997.

Under the new County park plan, the Wisconsin Department of Natural Resources would continue to acquire lands and develop additional facilities at Harrington Beach State Park. Ozaukee County would continue to maintain Hawthorne Hills County Park and develop additional facilities at Mee-Kwon County Park and Tendick Nature Park.

In addition to the three major County parks, specific recommendations were made for the Carlson Park/Ozaukee Ice Center under the new plan. It is recommended that Ozaukee County expand the Carlson Park/Ozaukee Ice Center as proposed by the Ozaukee County Ice Center Expansion Committee and endorsed by the Ozaukee County Park Commission. This does not preclude an alternative site for a future ice rink.

The plan also recommends that two major trails be provided within the County. About 36 miles (including 12 existing miles) would be provided by Ozaukee County: the Little Menomonee River Corridor, which would connect with the Little Menomonee River Corridor segment of the Milwaukee County Parkway system on the south, and with the Milwaukee River Corridor in Ozaukee County on the north; and the Milwaukee River Corridor, which would connect with the Milwaukee River Corridor in Milwaukee County on the south, and in Washington County on the west.

In addition to the two recreation corridors, one other County trail, the WEPCO Interurban Line Trail, will be provided by the County. This trail, while not associated with a recreation corridor described above, provides connections to these recreation corridors. This trail is envisioned to include a total of about 18 miles (including two existing miles).

The plan also recommends the development of boat access points on major lakes in accordance with State policy to provide public motor boat access to lakes of 50 acres or more. Such access provides opportunities for those individuals who do not own land contiguous to a body of water to participate in such water-related recreation activities as motor

boating, waterskiing, fishing, and canoeing. Under the plan, it is recommended that a public boat access site at Spring Lake be acquired and developed as appropriate by the Wisconsin Department of Natural Resources.

CONCLUDING REMARKS

The primary purpose of the park and open space plan for Ozaukee County is to guide the acquisition and development of lands and facilities needed to satisfy the outdoor recreation needs of the existing and probable future year 2020 resident population of the County, and to protect existing natural resources. Implementation of the recommended plan would assure the protection and preservation of important natural resources within environmental corridors and isolated natural resource areas in the County. The plan is also designed to provide a variety of park and open space sites and facilities geographically well distributed throughout the County to meet the existing and probable future recreation needs of County residents.

Under the plan, 5,313 acres, representing about 4 percent of the total area of the County, would be acquired for park and open space purposes at an estimated cost of \$11.2 million. Ozaukee County would be responsible for acquiring about 2,214 acres of that total, at an estimated cost of \$5.5 million. Development costs would total about \$7.0 million, with Ozaukee County responsible for about \$6.8 million of that amount.

The total estimated cost for implementing the County park and open space plan, is about \$18.2 million. The estimated cost to Ozaukee County is about \$12.3 million, or about 68 percent of the total. The costs associated with implementation of the County park plan may be offset through grants provided for recreational and open space purposes by the Wisconsin Department of Natural Resources. The acquisition and development costs for recreational and open space lands and facilities may also be offset by donations, land dedications, or by revenues generated by existing parks and recreational facilities.

APPENDICES

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Appendix A

Table A-1

PARK AND OPEN SPACE SITES OWNED BY CITIES, VILLAGES, TOWNS, OR SCHOOL DISTRICTS IN OZAUKEE COUNTY: 2000

Number on Map A-1	Site Name	Ownership ^a	Location ^b	Acreage
1	Pioneer Park	04	092103	2
2	Mequon Rotary Park	04	092112	95
3	Prinz Site.....	04	092114	10
4	Highland Woods	04	092115	85
5	Little Menomonee Nature Preserve	04	092121	20
6	Village Park Land	05	092122	1
7	Mequon City Park.....	04	092122	13
8	Village Park.....	05	092123	14
9	Settlers Park	04	092123	1
10	Homestead High School	08	092123	44
11	Riverview Park.....	04	092124	11
12	Villa Grove Park.....	04	092124	5
13	Scout Park	04	092124	12
14	H.C. Steffen and Wilson Avenue School.....	08	092127	14
15	Lily Lane Nature Preserve.....	04	092127	12
16	School District Site.....	08	092128	105
17	"West Side Park" Area.....	04	092132	41
18	River Barn Park.....	04	092135	37
19	Oriole Lane School.....	08	092207	15
20	Shoreland Nature Preserve	04	092218	19
21	Willow Bay Nature Preserve.....	04	092218	19
22	Riverforest Nature Preserve	04	092218	57
23	Mequon Park Corporation	04	092230	24
24	Lakeshore Middle School and Range Line Schools	08	092230	14
25	Donges Bay School.....	08	092231	4
26	Grasslyn Nature Preserve.....	04	092231	15
27	K. Kearney Carpenter Park.....	04	092232	38
28	Pleasant Valley Nature Park.....	06	102102	88
29	ABC Kids Care Inc.	08	102110	7
30	Krohn Park.....	06	102110	11
31	Heritage Settlement Park.....	05	102112	17
32	Meadowbrook Park-Family Aquatic Center	05	102113	7
33	Woodview Elementary and John Long Middle School.....	08	102113	18
34	Mole Creek Park	05	102132	1
35	River Island Golf Course	05	102113	6
36	Cedar Creek Farms Canoe Launch	06	102114	4
37	Harrison Park.....	04	102122	1
38	Willowbrooke Park.....	04	102122	9
39	Wildwood Park.....	05	102123	4
40	Keup Road Park.....	05	102123	16
41	Cedar Hedge Park.....	04	102123	11
42	Cedar Highlands Open Space.....	05	102123	2
43	Thorson School.....	08	102123	12
44	Veteran's Memorial Park	05	102124	3
45	Riverfront Park	05	102124	1
46	3 rd Avenue Park.....	05	102124	1
47	Grafton Multipurpose Senior Center	05	102124	1
48	Pine Street Park.....	05	102124	1
49	Dellwood Park	05	102124	1
50	Kennedy School	08	102124	4
51	Timothy Wooden Community Center.....	05	102124	1
52	Village Land.....	05	102125	7
53	Lime Kiln Park	05	102125	28
54	Acorn Park.....	05	102126	1

Table A-1 (continued)

Number on Map A-1	Site Name	Ownership ^a	Location ^b	Acreage
55	Georgetown Walking Paths Park.....	04	102126	3
56	Woodland Park.....	04	102126	4
57	Georgetown Park.....	04	102126	2
58	Cedar Creek Park Complex.....	04	102126	25
59	Highland Bridge Park.....	04	102126	1
60	Beckmann Park.....	04	102126	1
61	Mayor E. Stephan Fischer Park.....	04	102127	1
62	Parkview School.....	08	102127	7
63	Maple Manor Park.....	04	102127	2
64	Centennial Park.....	04	102127	23
65	Cedarburg Junior and Senior High School.....	08	102127	38
66	Boy Scout Park.....	04	102127	1
67	Doctor's Park.....	04	102127	1
68	Founders Cemetary Park.....	04	102127	3
69	School District Site.....	08	102130	20
70	Westlawn Park No. 2.....	04	102134	1
71	Westlawn Woods Park.....	04	102134	3
72	Wurthmann Park.....	04	102134	1
73	Westlawn Lot No. 1.....	04	102134	1
74	Westlawn School.....	08	102134	3
75	Hillcrest Park.....	04	102134	1
76	Cedar Point Park.....	04	102134	8
77	Cedar Point Conservancy.....	04	102134	13
78	City Entrance.....	04	102134	1
79	Herman A. Zuenert Park.....	04	102135	20
80	Cedars Park.....	04	102135	2
81	Beechwood Park.....	04	102135	5
82	Hamilton Park.....	06	102135	1
83	Undeveloped Community Park.....	05	102219	27
84	Grafton Elementary and High School.....	08	102219	19
85	Centennial Park.....	05	102219	27
86	Zahn Soccer Park.....	08	102230	12
87	Newburg Village Park.....	05	112107	2
88	Schowalter Park.....	05	112125	43
89	Saukville Elementary School.....	08	112125	10
90	Grady Park.....	05	112126	11
91	West Riverside Park.....	05	112135	5
92	Quade Park.....	05	112135	11
93	East Riverside Park.....	05	112135	12
94	Triangle Park.....	05	112136	1
95	Penninsula Park.....	05	112136	11
96	Birchwood Hills Nature Area.....	04	112221	22
97	Municipal Softball Field.....	04	112221	60
98	City Land.....	04	112221	4
99	Norport Park/Antoine Park.....	04	112221	8
100	Lions Park.....	04	112221	1
101	Lincoln Elementary School.....	08	112221	6
102	Thomas Jefferson Middle School.....	08	112221	15
103	Kolbach Park.....	04	112221	3
104	Hales Trail and Kaiser Dr.....	04	112221	6
105	Whitefish Park.....	04	112221	8
106	Veteran's Memorial Park.....	04	112228	5
107	Upper Lake Park.....	04	112228	66
108	Webster Street Park.....	04	112228	1
109	Port Washington School.....	08	112228	2

Table A-1 (continued)

Number on Map A-1	Site Name	Ownership ^a	Location ^b	Acreage
110	City Athletic Field and Community Waterpark	04	112228	27
111	Columbia Park	04	112228	1
112	Rotary Park	04	112228	4
113	Gilson Park	04	112228	1
114	Fisherman's Park	04	112228	1
115	Hill School Park	04	112229	1
116	Boerner Park	04	112229	3
117	Dunwiddie School	08	112229	5
118	Schanen Acres Park	04	112229	1
119	West Side Park	04	112229	1
120	Bley Estate's Park	04	112230	3
121	Oakland Avenue Greens	04	112233	2
122	Ozaukee Middle and High Schools	08	122126	27
123	Veterans Park	05	122126	1
124	Stony Creek Park	05	122126	5
125	Maple Lawn Park	05	122126	4
126	Marie Kraus Park	05	122134	28
127	Oak Park	05	122135	3
128	Fireman's Park	05	122135	3
129	Community Park	05	122215	6
130	Well Park	05	122221	1
131	Tower Park	05	122222	1
132	Well #3 Park	05	122222	11
133	Bares Memorial Park	05	122222	1
134	Lake Hills Park	05	122223	2
135	Lift Station Park	05	122223	1
--	Total: 135 Sites	--	--	1,724 acres

^aThe ownership code numbers signify the following: 04-City, 05-Village, 06-Town, and 08-School District.

^bThe location numbers represent the U.S. Public Land Survey Township, Range, and Section in which the site is located.

Source: SEWRPC.

Map A-1

PARK AND OPEN SPACE SITES OWNED BY CITIES, VILLAGES, TOWNS, OR SCHOOL DISTRICTS IN OZAUKEE COUNTY: 2000

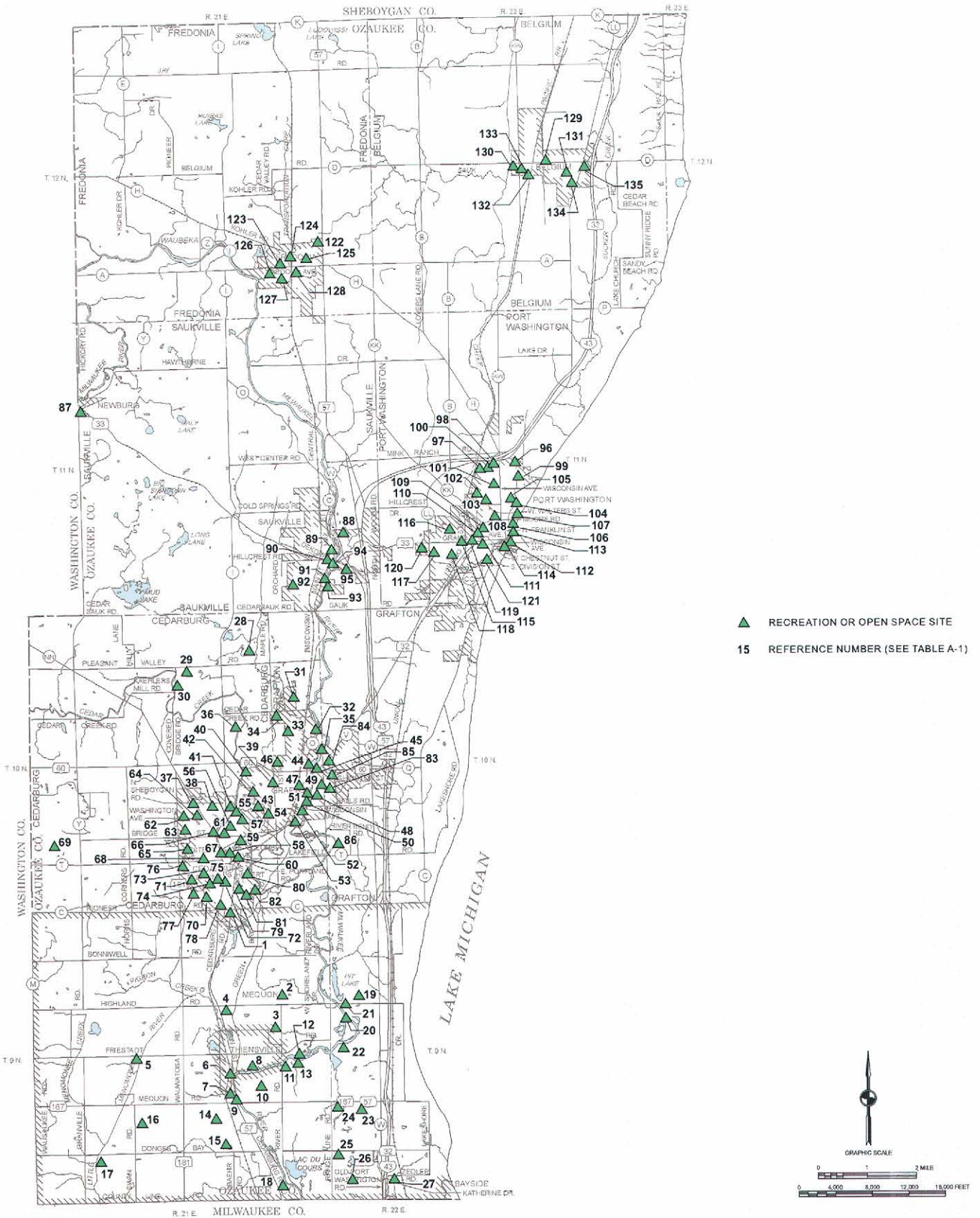


Table A-2

PRIVATE OUTDOOR RECREATION AND OPEN SPACE SITES IN OZAUKEE COUNTY: 2000

Number on Map A-2	Site Name	Ownership ^a	Location ^b	Acreage
1	Mequon Country Club.....	12	092113	366
2	North Shore Country Club.....	12	092125	235
3	Ozaukee Country Club	12	092126	155
4	Subdivision Park 1	12	092136	7
5	Open Space	12	092136	14
6	Range Line Valley.....	12	092136	27
7	Missing Links Golf.....	11	092208	47
8	River Oaks Park	12	092218	1
9	Fairy Chasm.....	10	092233	14
10	Kurtz Woods.....	10	102101	31
11	Moldenhauer Lake Access	12	102111	1
12	Edgewater Golf Course.....	12	102112	61
13	Baehmann's Golf Center.....	11	102122	54
14	River Park Leased Land.....	11	102125	1
15	Grafton Dells	11	102125	14
16	Birding Habitat-2 Ponds West	10	102130	40
17	Country Club of Wisconsin.....	10	102206	218
18	Camp Will O Rill	10	112103	104
19	Ducks Unlimited	10	112105	40
20	Riveredge Nature Center	10	112107	301
21	Saukville Rifle and Pistol Club.....	10	112108	58
22	Deerfield Subdivision Dedication.....	12	112115	8
23	The Bog Golf Course.....	12	112121	295
24	Tamarack Retreat, Inc.	10	112131	110
25	Badger Camp Site	12	122101	12
26	Rheingans Boat Access.....	12	122103	6
27	Ozaukee Washington Land Trust Inc.....	10	122109	113
28	Random Lake Rod and Gun Club	10	122111	51
29	JCC Rainbow Day Camp.....	10	122116	96
30	VFW Park	10	122128	2
31	Pfeiffers Paradise	12	122128	1
32	Ozaukee County Fish and Game Recreation Preserve	10	122132	62
33	Squires Country Club.....	11	122223	144
--	Total : 33 Sites	--	--	2,689 acres

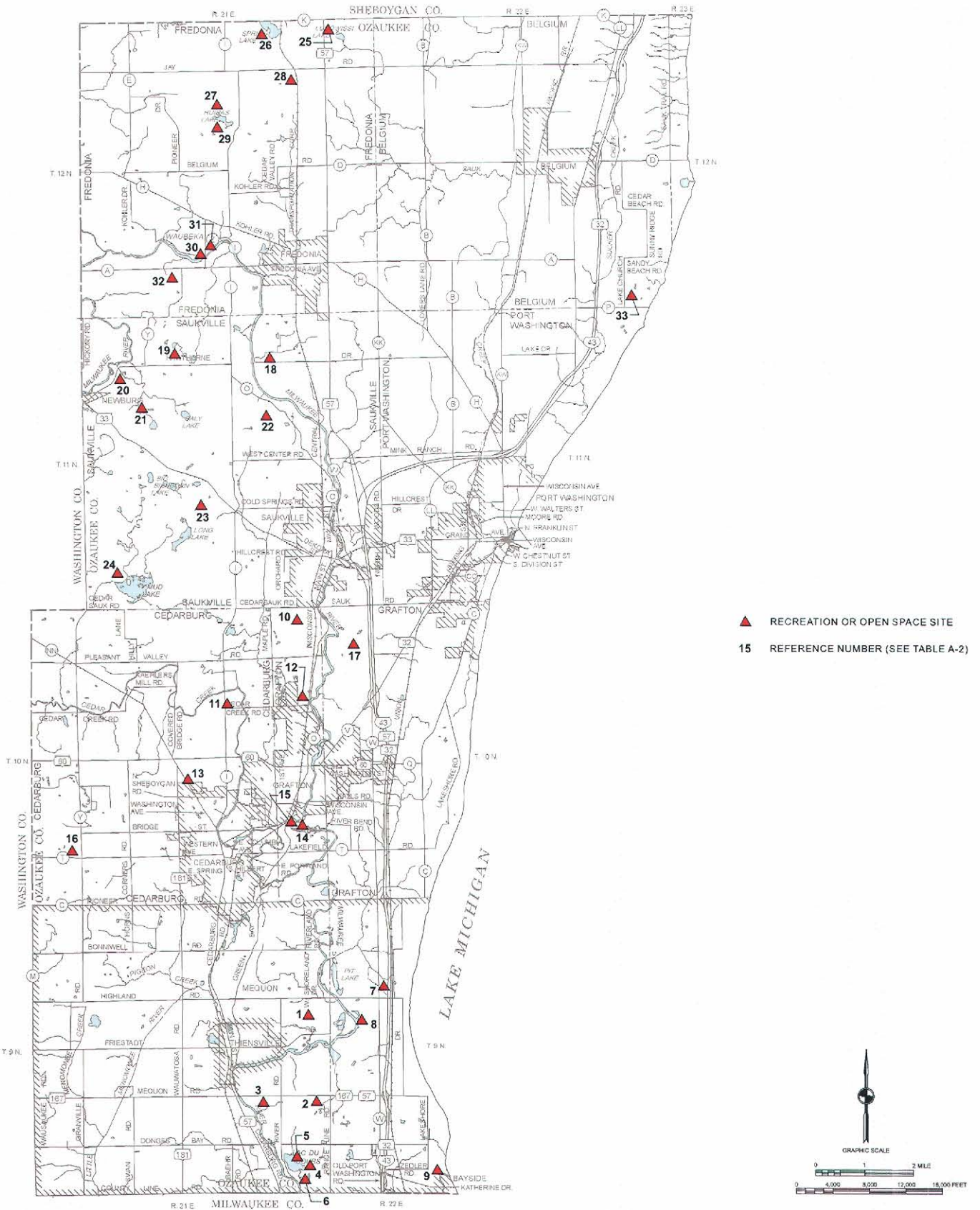
^aThe ownership code numbers signify the following: 10-Organizational; 11-Commercial; 12-Private.

^bThe location numbers represent the U.S. Public Land Survey Township, Range and Section in which the site is located.

Source: SEWRPC.

Map A-2

PRIVATE OUTDOOR RECREATION AND OPEN SPACE SITES
IN OZAUKEE COUNTY: 2000



Source: SEWRPC.

Appendix B

OUTDOOR RECREATION AND OPEN SPACE PLANNING OBJECTIVES, PRINCIPLES, AND STANDARDS FOR OZAUKEE COUNTY

OBJECTIVE NO. 1

The provision of an integrated system of public general-use outdoor recreation sites and related open space areas which allow the resident population of the County 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 County. 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 County by lending form and structure to urban development patterns.

A. PUBLIC 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 such 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 Park and School Sites							
		Minimum per Capita Public Requirements (acres per 1,000 persons) ^d	Parks Typical Facilities	Maximum Service Radius (miles) ^b		Minimum per Capita Public Requirements (acres per 1,000 persons) ^d	Schools ^a Typical Facilities	Maximum Service Radius (miles) ^c	
				Urban ^e	Rural			Urban ^e	Rural
I ^g Regional	250 or more	5.3	Campsites, swimming beach, picnic areas, golf course, ski hill, ski-touring trail, boat launch, nature study area, playfield, softball diamond, passive-activity area ^h	10.0	10.0	--	--	--	--
II ⁱ Multi-Community	100-249	2.6	Campsites, 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 ^h	4.0 ^j	10.0 ^j	--	--	--	--
III ^k Community	25-99	2.2	Swimming pool or beach, picnic areas, boat launch, nature study area, softball and/or baseball diamonds, soccer fields and other playfields, tennis courts, passive-activity area ^h	2.0 ^l	--	0.9	Playfield, baseball diamond, softball diamond, tennis court	0.5-1.0 ^m	--
IV ⁿ	Less than 25	1.7	Wading pool, picnic areas, softball and/or baseball diamonds, soccer fields and other playfields, tennis court, playground, basketball goal, ice-skating rink, passive-activity area ^h	0.5-1.0 ^o	--	1.6	Playfield, playground, baseball diamond, softball diamond, tennis court, basketball goal	0.5-1.0 ^m	--

2. Public general use outdoor recreation sites should, as much as possible, be located within the designated primary environmental corridors of the County.

B. RECREATION RELATED OPEN SPACE

PRINCIPLE

Effective satisfaction of recreation demands within the County 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 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, 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 miles of recreation related open space consisting of linear recreation corridors^P should be provided for each 1,000 persons in the County.
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 the use of:
 - a. Primary environmental corridors as locations for trail-oriented recreation activities.
 - b. Outdoor recreation facilities provided at existing public park sites.
 - c. Existing trail-type facilities within the County.

OBJECTIVE NO. 2

The provision of sufficient outdoor recreation facilities to allow the resident population of the County adequate opportunity to participate in intensive nonresource-oriented outdoor recreation activities.

PRINCIPLE

Participation in intensive nonresource-oriented outdoor recreation activities including basketball, baseball, ice-skating, soccer, 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 or her 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 County. To achieve this standard, the following per capita requirements and design criteria for various facilities should be met as indicated below:

Minimum per Capita Facility Requirements ^Q				Design Standards					Service Radius of Facility (miles) ^T
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 ^S	Types II, III and IV general use site	2.8 acres per diamond	Parking (30 spaces per diamond) Night lighting Concessions and bleachers [†] 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 ^U -- 0.15	Type IV general use site	0.30 acre per rink minimum	Warming house	0.05 acre	0.35 minimum	0.5
Soccer Fields or Playfields	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

Minimum per Capita Facility Requirements ^Q				Design Standards					Service Radius of Facility (miles) ^T
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)	
Softball	Diamond	Public Nonpublic Total	0.53 0.07 0.60	Type II, III, and IV general use site	1.70 acre per diamond	Parking (20 spaces per diamond) Nighttime lighting Buffer	0.18 acre per diamond -- 0.80 acre per diamond	2.68	1.0
Swimming	Pool	Public Nonpublic Total	0.015 ^V -- 0.015	Type II and III general use site	0.13 acre 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	Type II, III, and IV general use site	0.15 acre per court	Parking (2.0 spaces per court) Nighttime lighting 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 County 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 County. To meet this standard, the following per capita requirements and design criteria for various facilities should be met as indicated below:

Minimum per Capita Facility Requirement ^W				Design Standards						Service Radius of Facility (miles) ^X
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	Campsite	Public Nonpublic Total	0.35 1.47 1.82	Type I and II general use sites	0.33 acre per campsite	Rest rooms-showers Utility hookups Natural area backup lands	-- -- 1.5 acres per campsite	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	Type I and II general use sites	135 acres per course	Clubhouse, parking, maintenance Practice area Woodland or water areas Buffer	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 ^Y 2.39 8.74	Type 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	Type I, II, 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 acre 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 6 12 18 Lake Michigan 16 -- 16	Type I, II, III general use sites	40 square feet per linear foot (average)	Parking Bathhouse concessions Buffer areas	0.2 acre per acre of beach 0.10 acre minimum 10 square feet per linear foot	-- ^Z	Natural beach Good water quality	10.0

OBJECTIVE NO. 4

The provision of sufficient outdoor recreation facilities to allow the resident population of the County adequate opportunity to participate in extensive land-based outdoor recreation activities.

PRINCIPLE

Participation in extensive land-based outdoor recreation activities including biking, 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 biking, 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 land-based outdoor recreation activities should be provided throughout the County. Public facilities provided for these activities should be located within the linear resource-oriented recreation corridors identified in Objective No. 1. To meet this standard, the following per capita standards and design criteria should be met as indicated below:

Minimum per Capita Public Facility Requirements ^{3a}			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 Trail	-.00 0.16	Scenic roadways Recreation corridor	-- 1.45	Route markers 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	Type I, II, III 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 Type I, II, III 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	-.00	Scenic roadways recreation corridor	--	Route markers	--	--
Ski-touring	Trail	0.02	Recreation corridor Types I and II 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 sufficient access areas to allow the resident population of the County adequate opportunity to participate in extensive water-based outdoor recreation activities on the major inland lakes and rivers and on Lake Michigan which are consistent with enjoyable surface water use and the maintenance of adequate water quality.

PRINCIPLE

The major inland lakes and rivers of the County and Lake Michigan accommodate participation in extensive water-based recreation activities, including canoeing, fishing, ice fishing, motorboating, 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. Access sites available for use by the general public on streams and major lakes, that is, lakes of 50 acres or larger, should be provided in accordance with the requirements established by the Wisconsin Department of Natural Resources in Sections NR 1.90 and NR 1.91 of the Wisconsin Administrative Code.
2. Access sites providing parking should be provided on major streams throughout the County. The maximum interval between access points on major canoeable streams^{dd} should be 10 miles.

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, environmental quality, and biodiversity^{ee} of the County.

PRINCIPLE

Ecological balance and natural beauty within the County 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 County. Preservation of the most significant aspects of the natural resource base, that is, primary environmental corridors, natural areas and critical species habitat sites, and prime agricultural lands, contributes to the maintenance of ecological balance, natural beauty, and economic well being of the County.

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, 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, biological diversity preserved, and continued opportunities provided for scientific, educational, and recreational pursuits.

STANDARD

1. All remaining nonurban lands within the designated primary environmental corridors in the County should be preserved in essentially natural open uses.

B. NATURAL AREAS AND CRITICAL SPECIES HABITAT SITES

PRINCIPLE

Natural areas and critical species habitat sites contain rare, threatened, and endangered animal and plant species which are important components of the biodiversity of the County. Maintenance of this biodiversity requires the preservation of the habitats concerned.

STANDARDS

1. All natural areas of Statewide or greater significance (NA-1) should be preserved and managed to maintain their natural value.
2. All natural areas of Countywide or regional significance (NA-2) and natural areas of local significance (NA-3) lying within primary environmental corridors or containing Federal or State-designated rare, threatened, or endangered animal or plant species habitat should be preserved and managed to maintain their natural value.
3. All critical species habitat sites within primary environmental corridors should be preserved and managed to maintain their natural value.

C. PRIME AGRICULTURAL LANDS

PRINCIPLE

Prime agricultural lands constitute the most productive farm lands in the County and, in addition to providing food and fiber, 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 Ozaukee County.

STANDARDS

1. All prime agricultural lands should be preserved for agricultural use.
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. These lands should be considered for preservation to provide a buffer between such resources and urban development.

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 County 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.

Footnotes

^aIn urban areas facilities for intensive nonresource-oriented recreational activities are commonly located in Type III or Type IV school outdoor recreation sites. These facilities often provide a substitute for facilities usually located in parks by providing opportunities for participation in intensive nonresource-oriented activities. It is important to note, however, that school outdoor recreation sites do not generally contain natural areas which provide space for passive recreational use.

^bThe 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 County has ready access to the variety of outdoor recreation facilities commonly located in parks, including space and facilities for both active and passive outdoor recreational use.

^cThe identification of a maximum service radius for each school site is intended to assist in the determination of active outdoor recreation facility requirements and to assure that each urban resident has ready access to the types of active intensive nonresource-oriented facilities commonly located in school recreation areas.

^dFor Type I and Type II parks, which generally provide facilities for resource-oriented outdoor recreation activities for the total population of the County, the minimum per capita acreage requirements apply to the total resident population of the County. 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 County residing in urban areas.

^eUrban 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.

^fFor 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 County residing in urban areas.

^gType I sites are defined as large outdoor recreation sites with a multi-county service area. Such sites rely heavily for their recreational value and character on natural resource amenities and provide opportunities for participation in a wide variety of resource-oriented outdoor recreation pursuits.

^hA 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 are generally located in parks or in urban open space sites, and usually consist of a landscaped area with mowed lawn, shade trees, and benches.

ⁱType II sites are defined as intermediate size sites having a countywide or multi-community 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 recreational facilities and have smaller areas devoted to any given activity.

^jIn general, each resident of the County 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.

^kType III sites are defined as intermediate size sites having a multi-neighborhood service area. Such sites rely more on the development characteristics of the area to be served than on natural resource amenities for location.

^lIn urban areas the need for a Type III park is met by the presence of a Type II or Type I park. 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.

^mThe service radius of school outdoor recreation sites, for park and open space planning purposes, is governed primarily by individual outdoor recreation facilities within the school site. For example, school outdoor recreation sites which provide such facilities as playfields, playgrounds, and basketball goals typically have a service radius of one-half mile, which is the maximum service radius assigned to such facilities (see standards presented under Objective 2). As another example school outdoor recreation sites which provide tennis courts and softball diamonds typically have a service radius of one mile, which is the maximum service radius assigned to such facilities (see standards presented under Objective 2). It is important to note that areas which offer space for passive

recreational use are generally not provided at school outdoor recreation sites and therefore Type III and Type IV school sites generally do not meet Type III and Type IV park accessibility requirements.

ⁿType 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. 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.

^oThe maximum service radius of Type IV parks is governed primarily by the population density 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 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 radius 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 multi-use parks five acres or greater in area should be considered as satisfying the maximum service radius requirement. Such park sites generally provide areas which offer space for passive recreational uses, as well as facilities which provide opportunities for active recreational uses.

^pA 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 recreational activities especially through the provision of trails designated for such activities as biking, hiking, horseback riding, nature study, and ski-touring.

^qFacilities 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 County.

^rFor each facility for intensive nonresource-oriented activity, the service radius indicates the maximum distance a participant should have to travel from his or her place of residence to participate in the corresponding activity.

^sEach urban area having a population of 2,500 or greater should have at least one baseball diamond.

^tSupport 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 an adequate buffer between such support facilities and surrounding neighborhood residences.

^uEach urban area should have at least one ice-skating rink.

^vEach urban area having a population of 7,500 or greater should have one public swimming pool or beach.

^wFacilities for intensive resource-oriented activities serve both rural and urban residents of the County. The minimum per capita requirements for facilities for intensive resource-oriented activities, therefore, apply to the total resident population of the County.

^xParticipants in intensive resource-oriented recreational activities 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 or her place of residence to participate in the corresponding activity.

^yThe 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 County to be located in Type I and Type II parks to meet the resource-oriented picnicking needs of the County and 2.55 tables per thousand residents of urban areas in the County to be located in Type III and Type IV parks to meet local picnicking needs in urban areas of the County.

^zA 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.

^{aa}Both urban and rural residents of the County 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 County.

^{bb}Bike routes are located on existing public roadways; therefore, no requirement is indicated.

^{cc}*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.*

^{dd}*Major canoeable streams are defined as those streams which have a minimum width of 50 feet over a distance of at least 10 miles.*

^{ee}*Biodiversity refers to the number and abundance of animal and plant species, their genetic composition and variability, and the ecological connection between and among species.*

Source: SEWRPC.