

COMMUNITY ASSISTANCE
PLANNING REPORT NO. 247

**SANITARY SEWER SERVICE
AREA FOR THE TOWN OF
NORWAY SANITARY DISTRICT
NO. 1 AND ENVIRONS**

**RACINE AND
WAUKESHA COUNTIES
WISCONSIN**

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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Special acknowledgement is due SEWRPC Senior Planner
Timothy J. McCauley and SEWRPC Planner James P. Siegler
for their contributions to this report.

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AND ENVIRONS, RACINE AND WAUKESHA COUNTIES, WISCONSIN**

Prepared by the

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The preparation of this report was financed in part through a planning grant from the Wisconsin Department of Natural Resources.

June 1999

Inside Region \$2.50
Outside Region \$5.00

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TABLE OF CONTENTS

	Page		Page
Chapter I—INTRODUCTION	1	Service Area Delineation	11
Background.....	1	Proposed Sanitary Sewer Service Area as Set Forth in SEWRPC Planning	
Need for Refinement and Detailing of Local Sanitary Sewer Service Areas.....	1	Report No. 30.....	11
The Town of Norway Sanitary District No. 1 and Environs Sanitary Sewer Service Area Refinement Process	3	Refined Town of Norway Sanitary District No. 1 and Environs Sanitary Sewer Service Area.....	11
		Water Quality Impacts	15
Chapter II—STUDY AREA		Cost-Effectiveness Analysis of Sewage Conveyance and Treatment Alternatives	17
DESCRIPTION	5	Sewage Treatment Plant	
Location	5	Capacity Impact Analysis	17
Population.....	5	Public Reaction to the Refined Sanitary Sewer Service Area.....	17
Environmentally Significant Lands	5	Implementing Recommendations.....	18
Chapter III—PROPOSED SANITARY SEWER SERVICE AREA	11	Subsequent Refinements to the Sewer Service Area.....	18
Significance of Sanitary Sewer			

LIST OF APPENDICES

		Page
Appendix		
A	Minutes of Public Hearing	29
B	Written Materials Submitted Into the Record of the Public Hearing	31

LIST OF TABLES

		Page
Table		
	Chapter II	
1	Values Assigned to Natural Resource Base and Resource Base-Related Elements in the Process of Delineating Primary and Secondary Environmental Corridors.....	7

LIST OF MAPS

		Page
Map		
	Chapter I	
1	Recommended Sanitary Sewer Service Areas in the Region: December 1998.....	2
	Chapter II	
2	Study Area Identified for Purposes of Refining and Detailing the Town of Norway Sanitary District No. 1 and Environs Sanitary Sewer Service Area	6
3	Environmentally Significant Lands in the Town of Norway Sanitary District No. 1 and Environs Study Area.....	8

Chapter III

4	Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs as Defined in SEWRPC Planning Report No. 30	12
5	Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs: 2020	14
6	Anticipated Changes in the Environmentally Significant Lands in the Town of Norway Sanitary District No. 1 and Environs Study Area	16
7	Index of Maps Showing Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs	20
7-1	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs, U. S. Public Land Survey Sections 29, 30, 31, and 32, Township 5 North, Range 20 East	21
7-2	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs, U. S. Public Land Survey Sections 27, 28, 33, and 34, Township 5 North, Range 20 East	22
7-3	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs, U. S. Public Land Survey Sections 5, 6, 7, and 8, Township 4 North, Range 20 East	23
7-4	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs, U. S. Public Land Survey Sections 3, 4, 9, and 10, Township 4 North, Range 20 East	24
7-5	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs, U. S. Public Land Survey Sections 17, 18, 19, and 20, Township 4 North, Range 20 East	25
7-6	Environmentally Significant Lands and Planned Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs, U. S. Public Land Survey Sections 15, 16, 21, and 22, Township 4 North, Range 20 East	26

Chapter I

INTRODUCTION

BACKGROUND

On July 12, 1979, the Southeastern Wisconsin Regional Planning Commission formally adopted an areawide water quality management plan for Southeastern Wisconsin. The plan is aimed at achieving clean and wholesome surface waters within the seven-county Region, surface waters that are "fishable and swimmable."¹

The plan has five basic elements: 1) a land use element, consisting of recommendations for the location of new urban development in the Region and for the preservation of primary environmental corridors and prime agricultural lands; 2) a point source pollution abatement element, including recommendations concerning the location and extent of sanitary sewer service areas, the location, type, and capacity of, and the level of treatment to be provided at, sewage treatment facilities, the location and configuration of intercommunity trunk sewers, and the abatement of pollution from sewer system overflows and from industrial wastewater discharges; 3) a nonpoint source pollution abatement element, consisting of recommendations for the control of pollutant runoff from rural and urban lands; 4) a sludge management element, consisting of recommendations for the handling and disposal of sludges from sewage treatment facilities; and 5) recommendations for the establishment of continuing water quality monitoring efforts in the Region.

The plan was formally certified over the period July 23 to September 20, 1979, to all of the local units of government in the Region and to the concerned State and Federal agencies. The plan was formally endorsed by the Wisconsin Natural Resources Board on July 25, 1979. Such endorsement is particularly important because under State law and administrative rules, certain actions by the Wisconsin Department of Natural Resources (WDNR) must be found to be in accordance with the adopted and endorsed plan. These actions include, among others,

WDNR approval of waste discharge permits, WDNR approval of State and Federal grants for the construction of wastewater treatment and conveyance facilities, and WDNR approval of locally proposed sanitary sewer extensions.

NEED FOR REFINEMENT AND DETAILING OF LOCAL SANITARY SEWER SERVICE AREAS

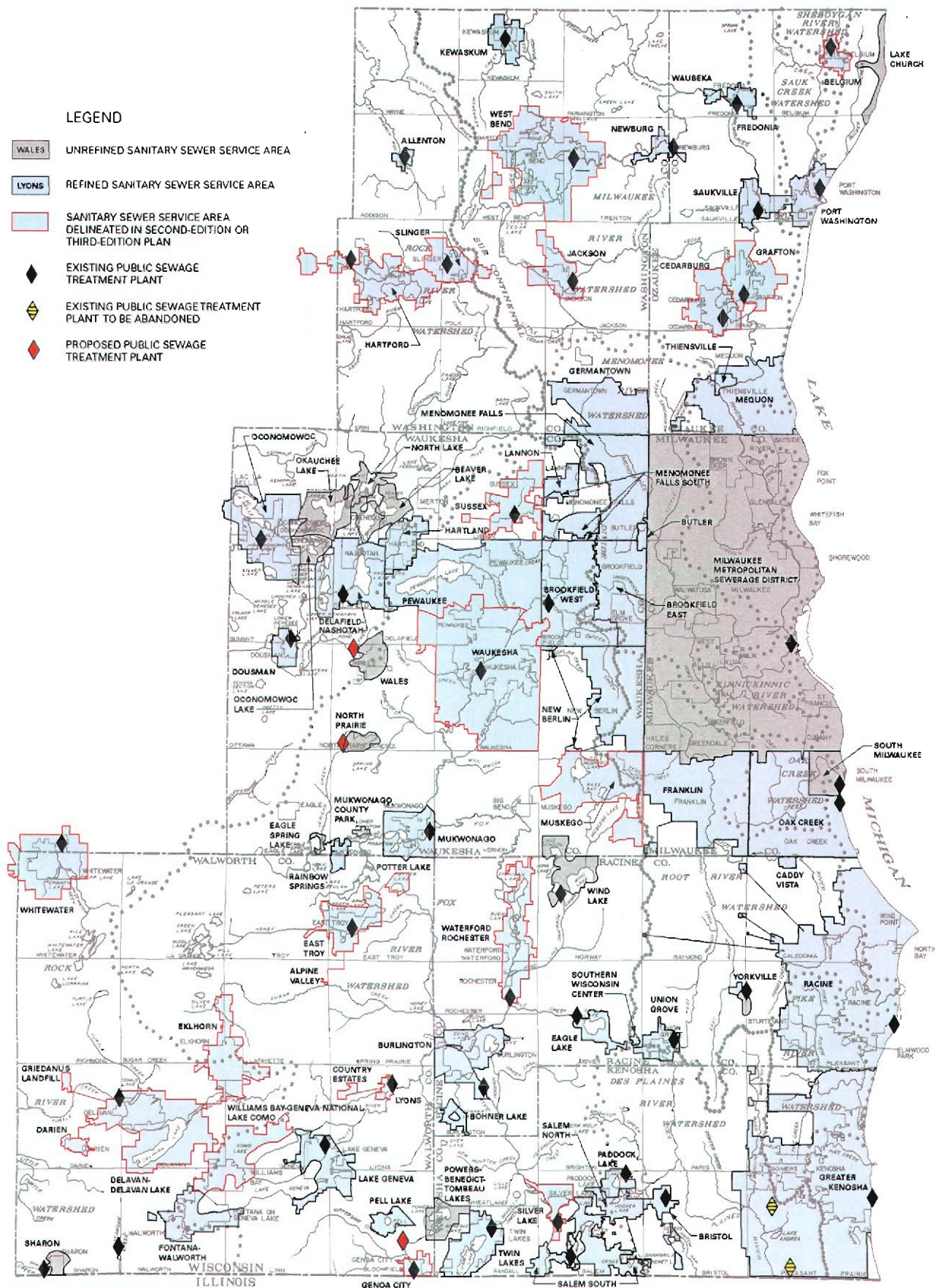
The adopted regional water quality management plan includes recommended sanitary sewer service areas attendant to each recommended sewage treatment facility (see Map 1). There were in the plan, as initially adopted, a total of 85 such identified sanitary sewer service areas. The initially recommended sanitary sewer service areas were based upon the urban land use configuration identified in the Commission-adopted regional land use plan for the year 2000.² As such, the delineation of the areas was necessarily general, and may not have reflected detailed local planning considerations. Section NR 110.08(4) and Section Comm 82.20(4) of the Wisconsin Administrative Code require that the Wisconsin Department of Natural Resources, with respect to public sanitary sewers, and the Wisconsin Department of Commerce, with respect to private sanitary sewers, make a finding that all proposed sanitary sewer extensions be in conformance with adopted areawide water quality management plans and the sanitary sewer service areas identified in such plans. These Departments, in carrying out their responsibilities in this respect, require that the Southeastern Wisconsin Regional Planning Commission, as the designated areawide water quality management planning agency for the Southeastern Wisconsin Region, review and comment on each proposed sewer extension as to its relationship to the approved plan and sewer service areas. In order to properly reflect local, as well as areawide planning concerns in the execution of this review responsibility, the Regional Planning Commission, in

¹The adopted areawide water quality management plan is documented in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative Plans; and Volume Three, Recommended Plan.

²See SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation System Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; and Volume Two, Alternative and Recommended Plans.

MAP 1

RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION: MARCH 1999



Source: SEWRPC

adopting the areawide water quality management plan, recommended that steps be taken to refine and detail each of the 85 sanitary sewer service areas delineated in the plan in cooperation with the local units of government concerned. The refinement and detailing process consists of the following seven steps:

1. Preparation of a base map at an appropriate scale for each sanitary sewer service area identified in the areawide water quality management plan.
2. The delineation on that base map of a sanitary sewer service area consistent with the objectives set forth in the adopted regional water quality management plan.³
3. The conduct of intergovernmental meetings involving the local or areawide unit or units of government concerned. At these meetings, the initial sanitary sewer service area delineation is to be presented and discussed and the positions of each of the units of government concerned solicited.
4. The preparation of modifications to the initially proposed sanitary sewer service area to reflect concerns expressed at the intergovernmental meetings. These modifications would meet, to the fullest extent practicable, the objectives expressed both in the adopted areawide water quality management and regional land use plans and in any adopted local land use and sanitary sewerage system plans.
5. The holding of a public hearing jointly by the Commission and the local or areawide unit or units of government concerned to obtain public reaction to site-specific sewer service area issues that might be raised by the proposed sewer service area delineation.
6. The preparation of a final sanitary sewer service area map and accompanying report.
7. Adoption of the final sewer service area map by the Commission and certification of the map to the

³The sewer service areas in the water quality management plan were based upon the urban land use configurations as set forth in the Commission's design year 2000 land use plan. The Commission has since completed and adopted a design year 2020 land use plan, which plan served as the point of departure in the delineation of the sewer service area set forth in this report.

Wisconsin Department of Natural Resources and the U.S. Environmental Protection Agency as an amendment to the adopted areawide water quality management plan. Desirably, such adoption by the Commission would follow endorsement of the map by the local or areawide unit or units of government concerned. While such a consensus by the local governments concerned will always be sought by the Commission, it is recognized that in some cases unanimous support of the refined and detailed sanitary sewer service areas may not be achieved. In those cases, the Commission will have to weigh the positions of the parties concerned and make a final determination concerning the issues involved.

THE TOWN OF NORWAY SANITARY DISTRICT NO. 1 AND ENVIRONS SANITARY SEWER SERVICE AREA REFINEMENT PROCESS

By letter dated July 28, 1989, the Town of Norway requested that the Regional Planning Commission undertake the refinement and detailing of the proposed year 2000 sanitary sewer service area tributary to the Town of Norway Sanitary District No. 1 sewage treatment facility⁴. Shortly after the sewer service area planning process was initiated, landowners, residents, and local officials raised concerns regarding the identification of environmentally sensitive lands in the area as delineated by the Commission staff. In addition, the manner in which such lands would be proposed for protection or accommodation of new development under a sanitary sewer service area plan was brought into question. A special study to address this issue was undertaken over an ensuing five-year period and is documented in SEWRPC Community Assistance Planning Report No. 215, An Environmentally Sensitive Lands Preservation Plan for the Town of Norway Sanitary District No. 1, dated June 1996. The special study was requested by the Town of Norway and Racine County in part to provide a necessary framework for completion of a refined sanitary sewer service area plan for the Town of Norway Sanitary District No. 1.

By letter dated November 14, 1996, the City of Muskego requested that lands within the southern portion of the City of Muskego, in addition to the Lake Denoon area currently served by the Town of Norway Sanitary District No. 1

⁴This area is referred to as the "Wind Lake" unrefined sanitary sewer service area in the regional water quality management plan and the regional land use plan.

sewerage system, be added to the sanitary sewer service area. The agreed-upon addition of 135 acres in the City of Muskego was determined at an April 9, 1998, interagency meeting involving representatives from the Town of Norway Sanitary District No. 1, the Town of Norway, the City of Muskego, the Regional Planning Commission, and the Wisconsin Department of Natural Resources, and is reflected in the refined sanitary sewer service area set forth in Chapter III of this report.

Finally, a sewerage facilities plan was completed for the Town of Norway Sanitary District No. 1 in June, 1998, providing recommendations as to the best means of upgrading and expanding the District's sewage treatment plant. Preparation of a draft sanitary sewer

service area report was thus initiated in July 1998. Copies of the draft report setting forth the preliminary revised sanitary sewer service area plan were provided to the Town of Norway Sanitary District No. 1; the Town of Norway; the City of Muskego; Racine and Waukesha Counties; and the Wisconsin Department of Natural Resources for review and comment prior to the public hearing held on May 13, 1999. The public reaction to the proposed sanitary sewer service area plan, as documented in the minutes contained in Appendix A, is summarized later in this report. The final revised sanitary sewer service area attendant to the Town of Norway Sanitary District No. 1 sewage treatment facility is described in Chapter III of this report.

Chapter II

STUDY AREA DESCRIPTION

LOCATION

The study area considered for determining the refined Town of Norway Sanitary District No. 1 and environs sanitary sewer service area is shown on Map 2. The area consists of a portion of the Town of Norway, in Racine County, and a portion of the City of Muskego, in Waukesha County. The total study area is 19.8 square miles in extent, of which 6.1 square miles, or 31 percent, lie within the City of Muskego, and 13.7 square miles, or 69 percent, lie within the Town of Norway. These areas are based upon 1998 civil division boundaries. Also shown on Map 2 is the boundary of the Town of Norway Sanitary District No. 1, along with a portion of the City of Muskego surrounding Lake Denoon which is currently provided with public sanitary sewer service on a contractual basis by the Town of Norway Sanitary District No. 1.

POPULATION

The resident population of the study area in 1995 was estimated at 6,450 persons, not including about 300 seasonal residents. Of the year-round resident population, it is estimated that about 5,850 persons were served by public sanitary sewers. The remaining 600 year-round residents of the study area were served by onsite sewage disposal systems. All of the seasonal housing units in the study area were served by public sanitary sewers.

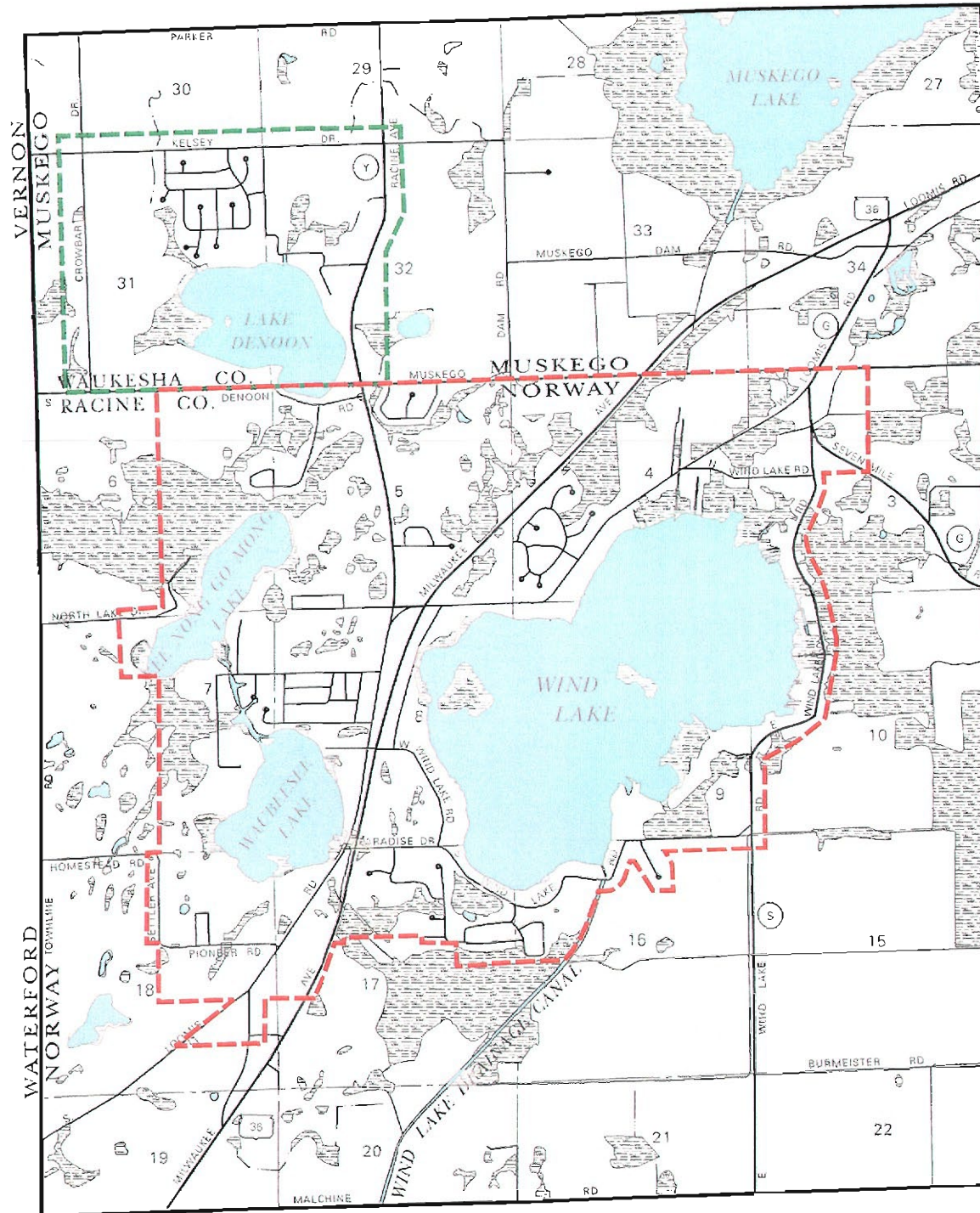
The forecast of probable future resident population levels for small geographic areas such as the Town of Norway Sanitary District No. 1 and environs study area is a difficult task, accompanied by uncertainties and subject to periodic revision as new information becomes available. To accommodate unforeseen changes in social and economic conditions, an "alternative futures" approach is utilized by the Regional Planning Commission to project a range of population growth which may be expected to occur over the period 1990 to 2020. The preparation of the Commission's year 2020 regional land use plan incorporated a consideration of two alternative scenarios for regional growth and change, involving different assumptions regarding population lifestyles and economic conditions. The high-growth scenario is intended to represent the upper extreme of possible future regional growth and change, while the intermediate future is considered to be the most likely scenario.

The Commission's year 2020 regional land use plan also considered alternative development patterns for accommodating the incremental population and employment levels envisioned under the aforementioned growth scenarios. Two development patterns were considered in the preparation of the alternative land use plans. The first, a centralized development pattern, accommodates increases in population and economic activity by promoting a more compact regional settlement pattern, moderating to the extent practicable the current trend toward diffusion of population, employment, and attendant urban development, similar to previously adopted regional land use plans. The second, a decentralized development pattern, accommodates the continued diffusion of population and employment levels historically evident in the Region, but in a manner consistent with the protection of the natural resource base of the Region.

The intermediate-growth centralized land use plan, which is the adopted regional land use plan, would accommodate a year 2020 resident population level of about 7,400 persons in the study area. Under a high-growth decentralized alternative, the population level within the study area could be as high as 11,200 persons by the year 2020.

ENVIRONMENTALLY SIGNIFICANT LANDS

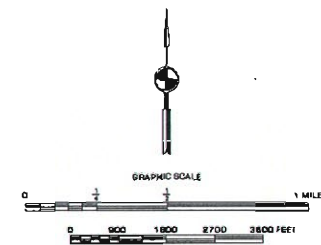
Environmental corridors are defined as linear areas in the landscape containing concentrations of natural resource and resource-related amenities. These corridors generally lie along the major stream valleys, around major lakes, and in the Kettle Moraine area of southeastern Wisconsin. Almost all the remaining high-value wetlands, woodlands, wildlife habitat areas, major bodies of surface water, and delineated floodlands and shorelands are contained within these corridors. In addition, significant groundwater recharge and discharge areas, many of the most important recreational and scenic areas, and the best remaining potential park sites are located within the environmental corridors. Such corridors are, in effect, a composite of the most important individual elements of the natural resource base in southeastern Wisconsin, and have immeasurable environmental, ecological, and recreational value.



Map 2

**STUDY AREA IDENTIFIED FOR PURPOSES
OF REFINING AND DETAILING THE TOWN
OF NORWAY SANITARY DISTRICT NO. 1 AND
ENVIRONS SANITARY SEWER SERVICE AREA**

- BOUNDARY OF TOWN OF NORWAY
SANITARY DISTRICT NO. 1
- PORTION OF THE CITY OF MUSKEGO PROVIDED WITH
PUBLIC SANITARY SEWER SERVICE UNDER CONTRACT
WITH THE TOWN OF NORWAY SANITARY DISTRICT NO. 1



Source: SEWRPC.

The land use element of the adopted regional water quality management plan recommends that lands identified as primary environmental corridors not be developed for intensive urban use. Accordingly, the plan further recommends that sanitary sewers not be extended into such corridors for the purpose of accommodating urban development in the corridors. It was recognized in the plan, however, that it would be necessary in some cases to construct sanitary sewers across and through primary environmental corridors, and that certain land uses requiring sanitary sewer service could be properly located within the corridors, including park and outdoor recreation facilities and certain institutional uses. In some cases, extremely low density residential development at a density not to exceed one housing unit per five acres of upland corridor, compatible with the preservation of the corridors in essentially natural, open uses, may also be permitted to occupy corridor lands, and it may be desirable to extend sewers into the corridors to serve such uses. Basically, however, the adopted regional land use plan seeks to ensure that the primary environmental corridor lands are not destroyed through conversion to intensive urban uses.

One of the first steps in refining the Town of Norway Sanitary District No. 1 and environs sanitary sewer service area was to map in detail the environmentally significant lands in the study area. Accordingly, Commission inventories were reviewed and updated as necessary with respect to the following elements of the natural resource base: lakes, streams, and associated shorelands and floodlands; wetlands; woodlands; wildlife habitat areas; areas of rugged terrain and high-relief topography; wet, poorly drained, and organic soils; and remnant prairies. In addition, inventories were reviewed and updated as necessary with respect to such natural resource-related features as existing parks, potential park sites, sites of historic and archaeological value, areas offering scenic vistas or viewpoints, and areas of scientific value.

Each of these natural resource and resource-related elements was mapped on one inch equals 400 feet scale ratioed and rectified aerial photographs. A point system for value rating the various elements of the resource base was established (see Table 1). The primary environmental corridors were delineated using this rating system. To qualify for inclusion in a primary environmental corridor, an area must exhibit a point value of 10 or more. In addition, a primary environmental corridor must be at least 400 acres in size, be at least two miles long, and have a minimum width of 200 feet. This environmental corridor refinement process is more fully described in SEWRPC Technical Record, Vol. 4, No. 2, in an article entitled, "Refining the Delineation of Environmental Corridors in

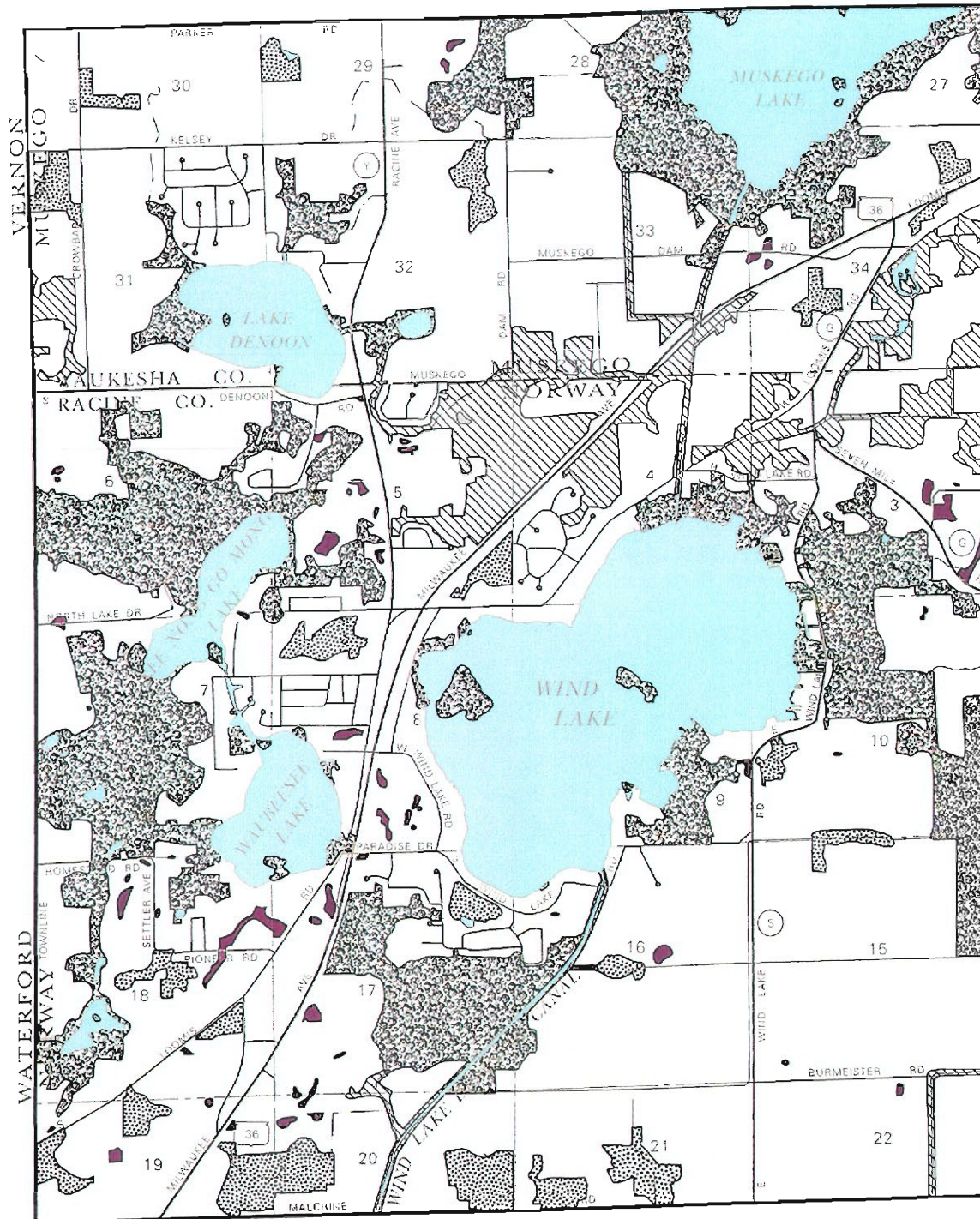
Table 1

**VALUES ASSIGNED TO NATURAL RESOURCE BASE
AND RESOURCE BASE-RELATED ELEMENTS IN
THE PROCESS OF DELINEATING PRIMARY AND
SECONDARY ENVIRONMENTAL CORRIDORS**

Resource Base or Related Element	Point Value
Natural Resource Base	
Lake	
Major (50 acres or more)	20
Minor (5-49 acres)	20
Rivers or Streams (perennial)	10
Shoreland	
Lake or Perennial River or Stream	10
Intermittent Stream	5
Floodland (100-year recurrence interval)	3
Wetland	10
Wet, Poorly Drained, or Organic Soil	5
Woodland	10
Wildlife Habitat	
High-Value	10
Medium-Value	7
Low-Value	5
Steep Slope	
20 Percent or More	7
13-19 Percent	5
Prairie	10
Natural Resource Base-Related	
Existing Park or Open Space Site	
Rural Open Space Site	5
Other Park and Open Space Site	2
Potential Park Site	
High-Value	3
Medium-Value	2
Low-Value	1
Historic Site	
Structure	1
Other Cultural	1
Archaeological	2
Scenic Viewpoint	5
Scientific Area	
State Scientific Area	15
State Significance	15
County Significance	10
Local Significance	5





Source: SEWRPC.

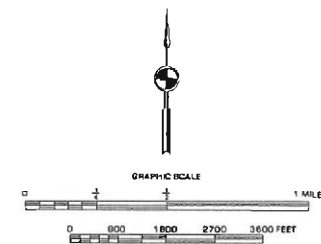
Southeastern Wisconsin." The primary environmental corridors, along with secondary environmental corridors and isolated natural resource areas, as delineated in the Town of Norway Sanitary District No. 1 and environs study area, are shown on Map 3. The secondary environmental corridors should be considered for preservation as the process of urban development proceeds, because such corridors often provide economical drainageways, as well as needed "green" space, through developing residential neighborhoods. To qualify for inclusion in a secondary environmental corridor, an area



Map 3

**ENVIRONMENTALLY SIGNIFICANT LANDS
IN THE TOWN OF NORWAY SANITARY
DISTRICT NO. 1 AND ENVIRONS STUDY AREA**

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE



Source: SEWRPC.

must exhibit a point value of 10 or more, and have a minimum area of 100 acres and a minimum length of one mile.

Isolated natural resource areas generally consist of those natural resource base elements that have value, such as wetlands, woodlands, wildlife habitat areas, and surface water areas, but are separated physically from the primary and secondary environmental corridors by intensive urban or agricultural land uses. Since isolated natural resource areas may provide the only available wildlife habitat in an area, provide good locations for local parks and nature study areas, and lend aesthetic character and natural diversity to an area, they should also be protected and preserved in a natural state to the extent practicable. An isolated natural resource area must be at least five acres in size.

In addition, wetlands less than five acres in size, located outside of primary environmental corridors, secondary environmental corridors and isolated natural resource areas, are shown on Map 3. Under Section 23.32 of the Wisconsin Statutes, a wetland is defined as, "an area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions." It should be noted the information presented on Map 3 does not represent an exhaustive inventory of wetlands in the study area. The identified wetlands are based upon the 1984 Wisconsin Wetlands Inventory, the special environmentally sensitive lands study for the Town of Norway Sanitary District No. 1, and interpretation of 1995 aerial photographs.¹

Lands and surface water encompassed within the primary environmental corridors of the Town of Norway Sanitary District No. 1 and environs study area in 1995 totaled 5.8 square miles, or about 29 percent of the total study area. Lands and surface water encompassed within the secondary environmental corridors totaled about 0.9 square mile, or about 5 percent of the study area. Lands and surface water encompassed within isolated natural resource areas totaled about 0.6 square mile, or about 3 percent of the study area. About 80 acres, or less than 1 percent of the study area, was encompassed within wetlands and surface

water areas less than five acres in size. Thus, all environmentally significant lands in the study area encompassed about 7.4 square miles, or about 37 percent of the study area.

While the adopted regional water quality management plan places great emphasis upon the protection of the lands identified as primary environmental corridors in essentially natural, open uses, it recognizes that there may be situations in which the objective of preserving the corridor lands directly conflicts with other legitimate regional and local development objectives. For example, the regional plan recognizes that if a community were to determine the need for a strategic arterial street extension through the primary environmental corridor lands in order to service an important local development project, the street extension may be considered to be of greater community benefit than the preservation of a small segment of the primary environmental corridor. When such conflicts in legitimate community development objectives occur, it is important that they be resolved sensitively and that any damage to the natural environment in the corridors be minimized.

While a portion of the delineated floodlands in the Town of Norway Sanitary District No. 1 and environs study area are contained within the environmental corridors, there are areas of the floodlands utilized for agricultural or other open space uses located outside such corridors. The Regional Planning Commission recognizes that such floodlands are generally unsuitable for intensive urban development owing to poor soil conditions and periodic flood inundation. The Commission thus recommends that, as development of lands located within urban areas and adjacent to these floodland areas occurs, such floodland areas should be preserved in essentially natural, open space uses, and over time become part of the adjacent environmental corridors.

In addition, the adopted regional water quality management plan recognizes that certain secondary environmental corridors, isolated natural resource areas, and wetlands less than five acres in size may be converted to urban uses over the plan design period. However, current Federal, State, and local regulations may effectively preclude development of such areas. Of particular importance in this regard are natural resource protection regulations dealing with wetlands, floodplains, shorelands, stormwater runoff, and erosion control. Therefore, it is important that the developer or local unit of government concerned determine if it is necessary to obtain any applicable Federal, State, or local permits prior to any proposed disturbance of wetlands, floodplains, or other regulated lands.

¹*Precise delineation of such small wetlands as well as other environmentally significant lands, including primary and secondary environmental corridors and isolated natural resource areas, can only be determined through field investigation.*

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Chapter III

PROPOSED SANITARY SEWER SERVICE AREA

SIGNIFICANCE OF SANITARY SEWER SERVICE AREA DELINEATION

As noted earlier in this report, changes in the Wisconsin Department of Natural Resources (WDNR) and Wisconsin Department of Commerce rules governing the extension of sanitary sewers have made the delineation of local sanitary sewer service areas an important process for local units of government and private land developers. Prior to the rule changes, review and approval of locally proposed sanitary sewer extensions by the WDNR and the Department of Commerce was confined primarily to engineering considerations and was intended to ensure that the sewers were properly sized and constructed. The rule changes significantly expanded the scope of the State review process to include water quality-oriented land use planning considerations. Before the two State agencies concerned can approve a locally proposed sanitary sewer extension, they must make a finding that the lands to be served by the proposed extension lie within an approved sanitary sewer service area. Such areas are identified in the Commission's adopted areawide water quality management plan and any subsequent amendments thereto. If a locally proposed sanitary sewer extension is designed to serve areas not recommended for sewer service in an areawide water quality management plan, the State agencies concerned must deny approval of the extension. Consequently, it is important that an intergovernmental consensus be reached in the delineation of proposed sanitary sewer service areas.

PROPOSED SANITARY SEWER SERVICE AREA AS SET FORTH IN SEWRPC PLANNING REPORT NO. 30

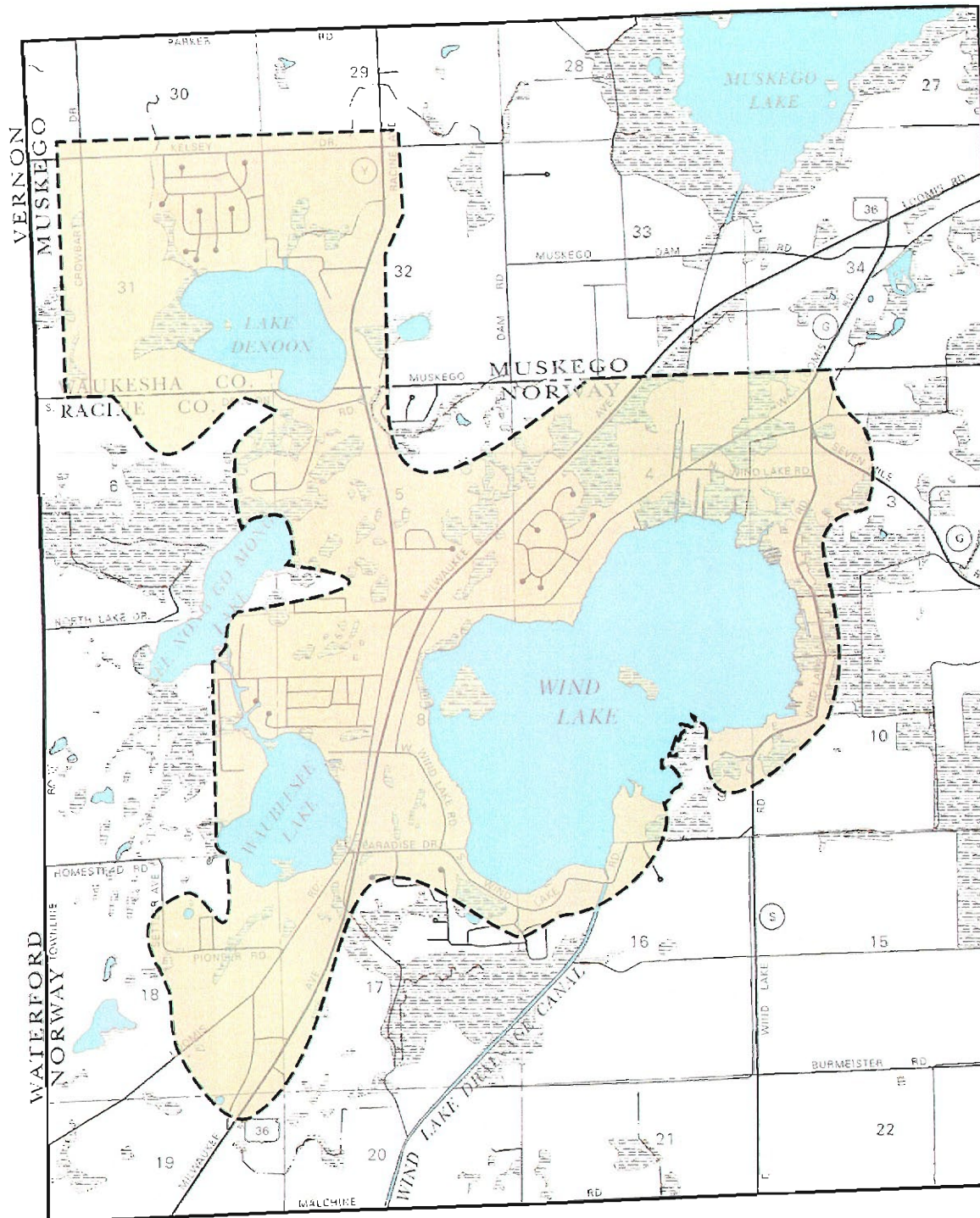
A number of important factors were taken into account in the initial generalized delineation of the Wind Lake sanitary sewer service area as set forth in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000. These factors also comprised an important consideration in the development of the adopted regional land use plan. These factors included, among others, the location, type, and extent of existing urban development; the location of areas where onsite soil absorption sewage disposal systems

were known to be failing; the location and extent of gravity drainage areas tributary to existing major sewerage system pumping stations or to sewage treatment plants; the location and capacity of existing and planned trunk sewers; and certain pertinent aspects of the natural resource base, including the location and extent of soils suitable for urban development, the location and extent of primary environmental corridors, and the location and extent of prime agricultural lands.

The planned year 2000 sanitary sewer service area tributary to the Town of Norway Sanitary District No. 1 sewage treatment facility as delineated under the adopted regional water quality management plan is shown on Map 4. That service area encompasses about 8.2 square miles, or 41 percent of the total study area of 19.8 square miles, and includes about 1,300 acres of surface water associated with Kee Nong Go Mong Lake, Lake Denoon, Muskego Lake, Waubeesee Lake, and Wind Lake.

REFINED TOWN OF NORWAY SANITARY DISTRICT NO. 1 AND ENVIRONS SANITARY SEWER SERVICE AREA

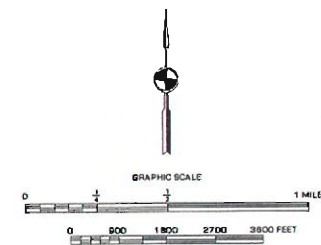
The purpose of this refinement effort is to comprehensively review the sewer service needs of lands envisioned to be tributary to the Town of Norway Sanitary District No. 1 sewage treatment facility and to specify the sewer service area boundaries to accommodate the design year 2020 population levels envisioned for this service area. Factors taken into account in the delineation of the refined sanitary sewer service area included the existing boundaries of the Town of Norway Sanitary District No. 1 and the portion of the City of Muskego currently served by the District; the environmentally sensitive lands study set forth in SEWRPC Community Assistance Planning Report No. 215, An Environmentally Sensitive Lands Preservation Plan for the Town of Norway Sanitary District No. 1, Racine County, Wisconsin, dated June 1996; the design year 2020 regional land use plan documented in SEWRPC Planning Report No. 45, A Regional Land Use Plan for Southeastern Wisconsin: 2020, dated December 1997 and adopted by the Regional Planning Commission in 1997; and a recently completed wastewater facilities plan for the Town of Norway Sanitary District No. 1.



Map 4

**SANITARY SEWER SERVICE AREA FOR THE
TOWN OF NORWAY SANITARY DISTRICT
NO. 1 AND ENVIRONS AS DEFINED IN
SEWRPC PLANNING REPORT NO. 30**

 GENERALIZED SANITARY SEWER SERVICE
AREA DEFINED IN THE REGIONAL WATER
QUALITY MANAGEMENT PLAN IN 1979



Source: SEWRPC.

The refinement effort considered the location, type, and extent of existing urban development; the location of areas where onsite soil-absorption sewage disposal systems were known to be failing; the location and extent of gravity drainage areas tributary to planned sewage treatment facilities; the location and capacity of planned trunk sewers; the location of existing property ownership boundaries; and certain pertinent aspects of the natural resource base, including the location and extent of soils suitable for urban development, the location and extent of primary and secondary environmental corridors, and the location and extent of prime agricultural lands.

As previously noted, the Commission, as part of its regional planning program, including the delineation of sanitary sewer service areas and the subsequent refinements thereof, utilizes the "alternative futures" concept to deal with the uncertainties regarding factors affecting future growth and development within the Region. The sewer service area refinement effort for the Town of Norway Sanitary District No. 1 and environs thus incorporates a range of resident population levels, with the most reasonable lower end of the population range based upon the Commission's intermediate-growth centralized land use plan and with the most reasonable upper end of the population range based upon the Commission's high-growth decentralized plan.

Local sanitary sewer service area and sewerage facility planning work should also consider a range of possible future population levels in the evaluation of alternative facility plans in order to identify alternatives which perform well under a reasonable range of possible future conditions. Construction of certain facilities and mechanical and electrical components of sewage treatment facilities such as pumps, compressors, and chemical-feed equipment are typically based upon relatively short-term population and loading forecasts. These facilities are often replaced or rebuilt at intervals of 10 to 15 years and are amenable to expansion in a staged manner. Accordingly, capital investments in such facilities are often limited to those relatively certain to be needed over a 15 to 20-year design period. The use of the intermediate population forecast may thus be most appropriate for use in the design of such facilities.

Consideration of a high-growth population forecast, however, may be appropriate in delineating a service area and in the design of certain components of the sewerage system that have a longer life, including gravity-flow conveyance facilities and such treatment plant components as hydraulic conduits and tanks. With respect to the size of the service area, the high-growth population forecast may

be the most logical to use since the Commission forecasting methodology analyses indicate that such a level is indeed potentially achievable within the Southeastern Wisconsin Region. A sanitary sewer service area size based upon that level may also be desirable in order to provide flexibility to communities in determining the spatial distribution of anticipated new urban development and to facilitate the operation of the urban land market. With respect to the design of certain components of the sewerage system, the use of the high-growth population forecast may also be desirable where the physical life of the facilities is substantially greater than 20 years. Thus, facility construction based upon the high-growth forecast and loading levels may be warranted where the physical life of the facilities extends beyond the 20-year planning period.

Under the foregoing conditions, the resident population levels of the area anticipated to be tributary to the Town of Norway Sanitary District No. 1 sewage treatment facility would, by the design year 2020, range from about 6,700 persons under the Commission's intermediate-growth centralized plan, or the Commission's adopted regional land use plan, to about 10,500 persons under the Commission's high-growth decentralized plan¹.

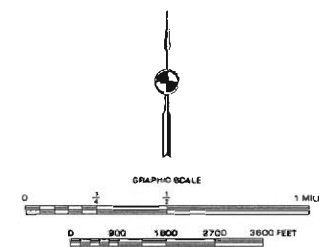
The refined year 2020 Town of Norway Sanitary District No. 1 and environs sanitary sewer service area anticipated to be tributary to the Town of Norway Sanitary District No. 1 sewage treatment facility, together with environmentally significant areas and trunk sewers, as submitted to public hearing, is shown on Map 5. The gross refined sanitary sewer service area encompasses 8.3 square miles, or 42 percent of the total study area of 19.8 square miles. This gross sewer service area includes about 3.2 square miles of primary environmental corridor, 0.5 square mile of secondary environmental corridor, 0.2 square mile of isolated natural resource areas, and 35 acres of wetlands and surface water areas less than five acres in size. Therefore, a total of about 3.9 square miles, or 47 percent of the sewer service area, would encompass environmentally significant areas, consisting of primary environmental corridors, secondary environmental corridors, isolated natural resource areas, and wetlands and surface water areas less than five acres in size. It should be noted that the area of primary environmental corridor as

¹Includes 7,900 persons in the Town of Norway portion of the proposed sewer service area and 2,600 persons in the City of Muskego portion of the sewer service area. Does not include about 300 persons living in seasonal use or part-time housing units in the Town of Norway.

Map 5

SANITARY SEWER SERVICE AREA FOR THE TOWN OF NORWAY SANITARY DISTRICT NO. 1 AND ENVIRONS: 2020

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
-  LANDS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA INELIGIBLE FOR SEWER SERVICE
-  EXISTING AREA SERVED BY PUBLIC SANITARY SEWER SYSTEM: 1995
-  PLANNED SANITARY SEWER SERVICE AREA: 2020
-  PLANNED SANITARY SEWER SERVICE AREA BOUNDARY
-  EXISTING PUBLIC SEWAGE TREATMENT FACILITY
-  EXISTING TRUNK SEWER
-  EXISTING FORCE MAIN
-  EXISTING PUMPING STATION



Source: SEWRPC.

stated above includes about 2.1 square miles of surface water associated with Denoon, Kee Nong Go Mong, Waubeesee, and Wind Lakes.

Also shown on Map 5 are lands within the planned sanitary sewer service area that are ineligible for sewer service. These areas include all primary environmental corridor, as well as wetlands, floodplains, shorelands, and steeply sloped areas within secondary environmental corridors and isolated natural resource areas.

It should be noted that the areal extent of environmentally significant lands would increase somewhat between 1995 and 2020 under the refined sanitary sewer service area plan. As shown by the green-shaded areas on Map 6, 45 acres of land located within the 100-year recurrence interval flood hazard area, located in four separate areas within the sewer service area, are currently undeveloped and lie adjacent to primary environmental corridor lands. An additional 120 acres of land, shaded in blue on Map 6, located within the 100-year recurrence interval flood hazard area, and lying within the northeastern portion of sewer service area, are currently undeveloped and lie adjacent to secondary environmental corridor lands. It is anticipated that over time, these lands will be withdrawn from open space uses and re-vegetated to possess the characteristics of, and added to, the adjacent environmental corridors.

Also under the recommended sanitary sewer service area plan, certain wetlands would not be preserved. The red-shaded areas on Map 6 indicate 10 acres of wetlands that are recommended to be filled and developed under the environmentally sensitive lands preservation plan for the Town of Norway Sanitary District No. 1. These areas are platted subdivision lots where filling has already been permitted by the Wisconsin Department of Natural Resources, or where it has been determined that filling would likely be permitted under the standards of Chapter NR 103 of the Wisconsin Administrative Code.

As indicated by the gold-shaded areas on Map 6, there are 2,230 acres of additional land located within 100-year recurrence interval flood hazard areas within the study area, but lying outside of the proposed Town of Norway Sanitary District No. 1 and environs sewer service area. These floodplain areas would be added to adjacent environmental corridors should the sewer service area be expanded into those areas.

The refined sanitary sewer service area tributary to the Town of Norway Sanitary District No. 1 sewage treatment facility would accommodate a year-round resident and

seasonal population of about 10,800 persons, assuming full development of vacant lands within the sewer service area as envisioned by the City of Muskego and the Town of Norway within their respective territories. This population level lies within the range of population levels envisioned for the sewer service area under Commission alternative regional land use plans for the year 2020. The population and housing unit levels envisioned in the sewer service area would be accommodated at an overall density of about 1.9 dwelling units per net residential acre. This density lies within the recommended density range for the Lake Denoon and Wind Lake areas as identified in the Commission-adopted regional land use plan for the year 2020.²











WATER QUALITY IMPACTS

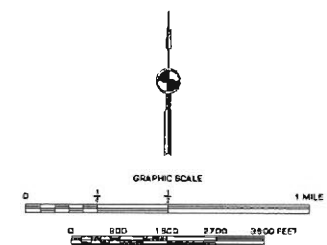
Under the adopted regional water quality management plan and the refined sanitary sewer service area plan herein set forth, it is envisioned that all urban lands within the planned urban service area would receive sanitary sewer service. It is also envisioned that all lands identified as primary environmental corridor would not be developed for intensive urban use. It is recognized, however, that certain land uses requiring sanitary sewer service could be properly located in the primary environmental corridors, including park and outdoor recreation facilities, certain institutional uses, and in some cases, extremely low-density residential development at a density not to exceed one housing unit per five acres of upland corridor land, compatible with the preservation of the corridors in essentially natural, open uses. These plans also recognize that certain secondary environmental corridors and isolated natural resource areas may be converted to urban uses over the plan design period. However, current Federal, State, and local regulations may effectively preclude development of such areas. Of particular importance in this regard are natural resource protection regulations dealing with wetlands, floodplains, shorelands, stormwater runoff, and erosion control. Therefore, it is important that the developer or local unit of government concerned determine

²Net residential density in the refined Town of Norway Sanitary District No. 1 and environs sanitary sewer service area is determined by dividing the total number of dwelling units anticipated in the sewer service area in the design year by the net residential land area anticipated within that area. The total number of dwelling units anticipated in the Norway sewer service area in the design year (3,280 units) divided by the net residential land within the sewer service area (1,750 acres) results in an overall net residential density of 1.9 dwelling units per acre.

Map 6

ANTICIPATED CHANGES IN THE ENVIRONMENTALLY SIGNIFICANT LANDS IN THE TOWN OF NORWAY SANITARY DISTRICT NO. 1 AND ENVIRONS STUDY AREA

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE
-  WETLANDS ANTICIPATED TO BE FILLED AND DEVELOPED
-  FLOODLANDS PROPOSED TO REMAIN UNDEVELOPED AND ADDED TO THE PRIMARY ENVIRONMENTAL CORRIDOR
-  FLOODLANDS PROPOSED TO REMAIN UNDEVELOPED AND ADDED TO THE SECONDARY ENVIRONMENTAL CORRIDOR
-  FLOODLANDS LOCATED OUTSIDE THE NORWAY SEWER SERVICE AREA WHICH WOULD BE ADDED TO THE ADJACENT ENVIRONMENTAL CORRIDOR SHOULD THE SEWER SERVICE AREA BE EXPANDED
-  PLANNED SANITARY SEWER SERVICE AREA: 2020
-  PLANNED SANITARY SEWER SERVICE AREA BOUNDARY



Source: SEWRPC.

if it is necessary to obtain any applicable Federal, State, or local permits before any proposed disturbance of wetlands, floodplains, or other regulated lands.³ In addition, the provision of public sanitary sewer service to those lands within the planned sanitary sewer service area which are currently developed and served by onsite sewage disposal systems may be expected to reduce the pollutant loadings from the existing onsite sewage disposal systems to both surface and ground waters.

Accordingly, assuming that any applicable Federal, State, and local permits are obtained and that proper site development and construction practices are employed, there should be no significant adverse water quality impacts attributable to the development of the planned sanitary sewer service area.

COST-EFFECTIVENESS ANALYSIS OF SEWAGE CONVEYANCE AND TREATMENT ALTERNATIVES

The planned Town of Norway Sanitary District No. 1 and environs sanitary sewer service area set forth in this report is about 0.1 square miles, or about one percent larger than the currently adopted sewer service area set forth in the regional water quality management plan as shown on Map 4. All lands proposed to be added to the refined sewer service area lie adjacent to the currently adopted sewer service area. The sewerage facilities needed to serve the planned sewer service area have already been installed. The nearest other public sanitary sewer systems are the City of Muskego sewerage system tributary to the Milwaukee Metropolitan Sewerage District, generally located about two miles northwest of the Town of Norway Sanitary District No. 1 and environs sewer service area, and the Western Racine Sewerage District System, located about two miles west of the sewer service area. Consequently, no further analyses were deemed to be required to conclude that the planned sanitary sewer service area would be most cost effectively served by the Town of Norway Sanitary District No. 1 sewerage system.

³*It should be noted that the sanitary sewer service area map set forth herein, particularly the environmental corridors and isolated natural resource areas shown thereon, are a representation of conditions at the time of map preparation and that such physical features may change over time from natural or human causes. Therefore, the presence and location of wetlands, navigable water, floodplains, and similar site features should be verified by developers, and applicable permits obtained prior to any land disturbing activity.*

SEWAGE TREATMENT PLANT CAPACITY IMPACT ANALYSIS

The Town of Norway Sanitary District No. 1 sewage treatment facility currently has a design hydraulic loading capacity of 0.75 million gallons per day (mgd) on an average daily flow basis. The average hydraulic loading exceeds the design capacity by a small margin. However, the plant consistently meets current effluent requirements. The Town of Norway Sanitary District No. 1 recently completed a sewerage system facility plan which provides recommendations as to the best means of upgrading and expanding the District's sewage treatment plant. That plan is documented in a report entitled Engineering Report, Wastewater Facilities Plan, Town of Norway Sanitary District No. 1, dated September 1997, and amended by a June 16, 1998, letter report.

The District is now proceeding with detailed design of the proposed sewage treatment plant modifications. The new plant will be designed to serve a planned population level of 10,800 persons, including 8,200 persons in the Town of Norway and 2,600 persons in the City of Muskego. The sewer service area used in the facilities plan as amended is identical to the planned sewer service area set forth herein. The new plant will have a design hydraulic capacity of 1.6 mgd on an average annual basis.

Since the Town of Norway Sanitary District No.1 sewage treatment plant will be specifically designed to serve the sewer service area and population provided for herein, adequate plant capacity will be available to treat sewage flows from the proposed sewer service area.

PUBLIC REACTION TO THE REFINED SANITARY SEWER SERVICE AREA

A public hearing was held on May 13, 1999, at the Norway Town Hall to receive public comment on and reaction to the proposed refinement of the Town of Norway Sanitary District No. 1 and environs sanitary sewer service area. The hearing was sponsored by the Town of Norway Sanitary District No. 1 and the Regional Planning Commission. Summary minutes of the public hearing are presented in Appendix A

A summary of the findings and recommendations of the sanitary sewer service area update and refinement effort was presented prior to receiving public comment. Topics specifically addressed in the summary presentation included the rationale for refining Town of Norway Sanitary District No. 1 and environs sewer service area, the

importance of the delineation of the outer boundaries of the sewer service area, the importance of the delineation of the environmentally significant lands within the service area, and the significance of these lands insofar as the future extension of sewer service is concerned. The probable impact of planned development within the revised sanitary sewer service area on the capacity of the Town of Norway Sanitary District No. 1 sewage treatment plant was also summarized. Comments on the refined plan were then solicited. It was announced that the record of the public hearing would be kept open for written comments through May 24, 1999.

No substantive concerns were raised at the public hearing regarding the delineation of the external boundaries of the refined sanitary sewer service area or the delineation of the environmentally significant lands within that area. The City of Muskego submitted written comments for entry into the public hearing record in a letter to the Regional Planning Commission dated May 18, 1999 (see Appendix B). In its comments, the City suggested a significant expansion of the sewer service area within the City limits beyond the area shown on Map 5.

The portion of the City of Muskego recommended by the City for inclusion in the sewer service area as shown on Map 5 attempts to take into consideration the needs and objectives of both the Town of Norway Sanitary District No. 1 and the City of Muskego, and reflects agreements between the City and the Sanitary District reached at interagency meetings held on this matter in 1998. The Commission staff and the Town of Norway Sanitary District No. 1 concurred that the issue of expanding the refined sewer service area into certain areas of the City of Muskego had been specifically addressed earlier in the planning process, and that reconsideration of the sewer service area boundary at present would not be warranted. Accordingly, no changes were made to the sanitary sewer service area plan for the Town of Norway Sanitary District No. 1 and environs as presented at the public hearing and as reflected on Map 5. On June 10, 1999, the Commission of the Town of Norway Sanitary District No. 1 acted to approve the new sanitary sewer service area plan for the the Town of Norway Sanitary District No. 1 and environs as shown on Map 5.

Detailed delineations of the refined sanitary sewer service area, and of the environmentally significant lands within that area, are shown on a series of aerial photographs reproduced as Map 7, beginning on page 20 and continuing through page 26 of this report.

IMPLEMENTING RECOMMENDATIONS

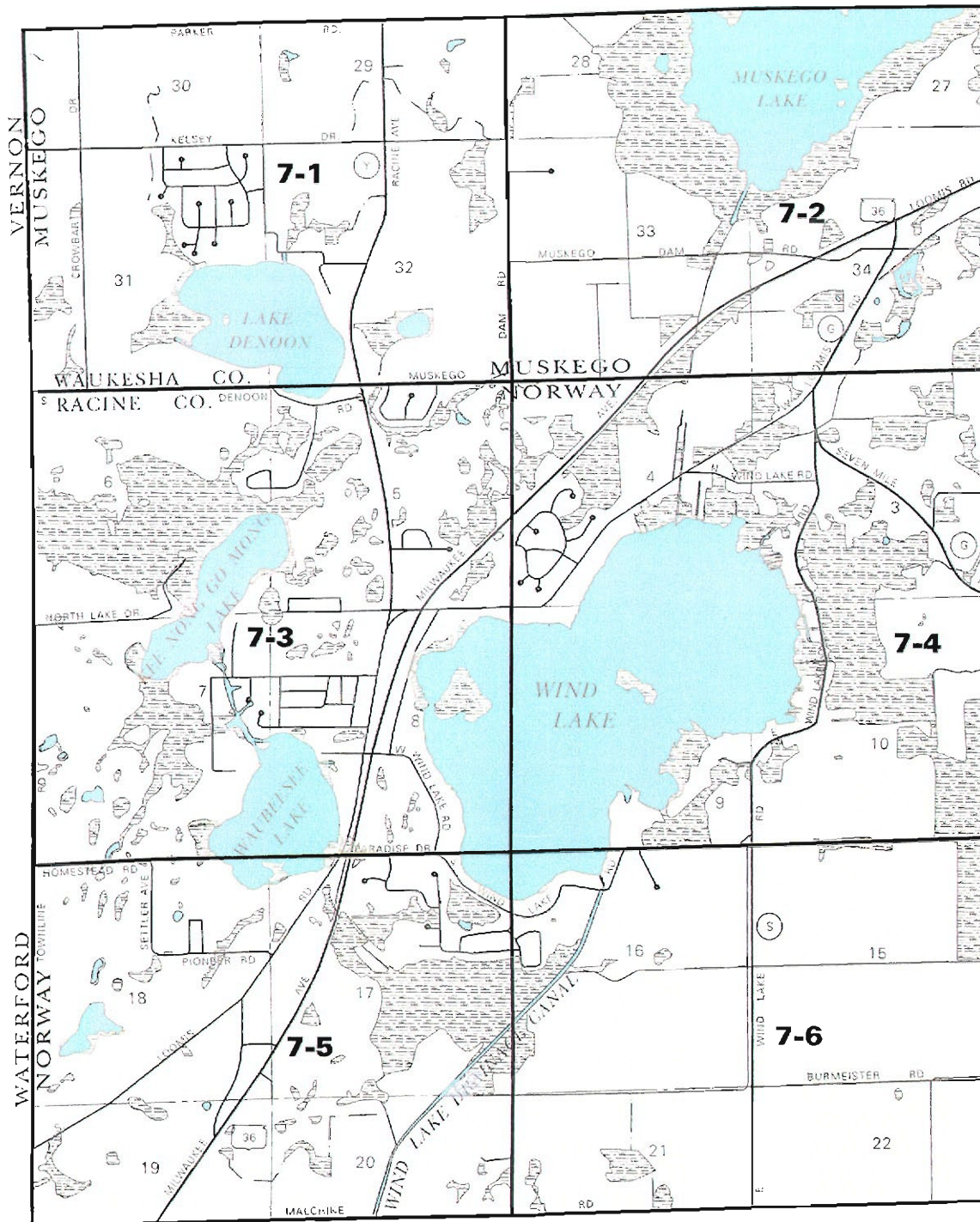
It is recommended that the following steps be taken to implement the sanitary sewer service area proposals contained in this report:

1. Formal adoption of SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, and this SEWRPC Community Assistance Planning Report by the governing bodies of the Town of Norway Sanitary District No. 1, the Town of Norway, and the City of Muskego. In addition, endorsement of the plan by the Racine County Department of Planning and Development as the county planning agency having joint responsibility with the Town of Norway in planning and zoning and otherwise regulating the development of lands in that portion of the study area, would be desirable.
2. Formal adoption of this SEWRPC Community Assistance Planning Report by the Regional Planning Commission as an amendment to the regional water quality management plan set forth in SEWRPC Planning Report No. 30, with certification of this report as a plan amendment to all parties concerned, including the Wisconsin Natural Resources Board and the U.S. Environmental Protection Agency.
3. Review by all of the local units of government concerned of their zoning, land subdivision control, and related ordinances to ensure that the policies expressed in such ordinances reflect the urban development recommendations inherent in the final delineated sanitary sewer service area as shown on Map 5. In particular, steps should be taken to ensure that those lands identified as being environmentally significant in this report are properly zoned to reflect a policy of retaining such lands, insofar as possible, in essentially natural, open uses.
4. Review by the Town of Norway Sanitary District No. 1 of utility extension policies to ensure that such policies are consistent with the urban land development recommendations inherent in the delineation of the planned sanitary sewer service area.

SUBSEQUENT REFINEMENTS TO THE SEWER SERVICE AREA

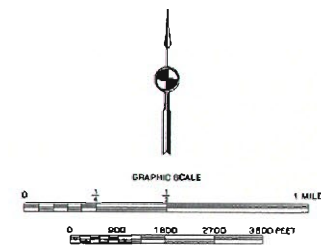
This report presents the refined sewer service area tributary to the Town of Norway Sanitary District No. 1 sewage treatment facility. The refined sewer service area was subjected to review at a public hearing. It is envisioned that the delineated sewer service area will accommodate all new urban development anticipated in the Town of Norway Sanitary District No. 1 and environs to the year 2020. Like other long-range plans, however, this sewer service area plan should be periodically reviewed, at about five-year intervals, to assure that it continues to properly reflect the urban development objectives of the

communities involved, especially as such objectives may relate to the amount and spatial distribution of new urban development requiring sewer service. Should it be determined by the Town of Norway Sanitary District No. 1, as the operator of the sewage treatment facility involved, or by the communities involved, that amendments to the sewer service area plan as presented herein are necessary, the particular unit of government should ask the Southeastern Wisconsin Regional Planning Commission for assistance in undertaking the technical work required to properly amend the plan. Any such plan revision should be carried out in a manner similar to that utilized in the refinement effort described in this report.



Map 7

**INDEX OF MAPS SHOWING ENVIRONMENTALLY
SIGNIFICANT LANDS AND PLANNED SANITARY
SERVICE AREA FOR THE TOWN OF NORWAY
SANITARY DISTRICT NO. 1 AND ENVIRONS**

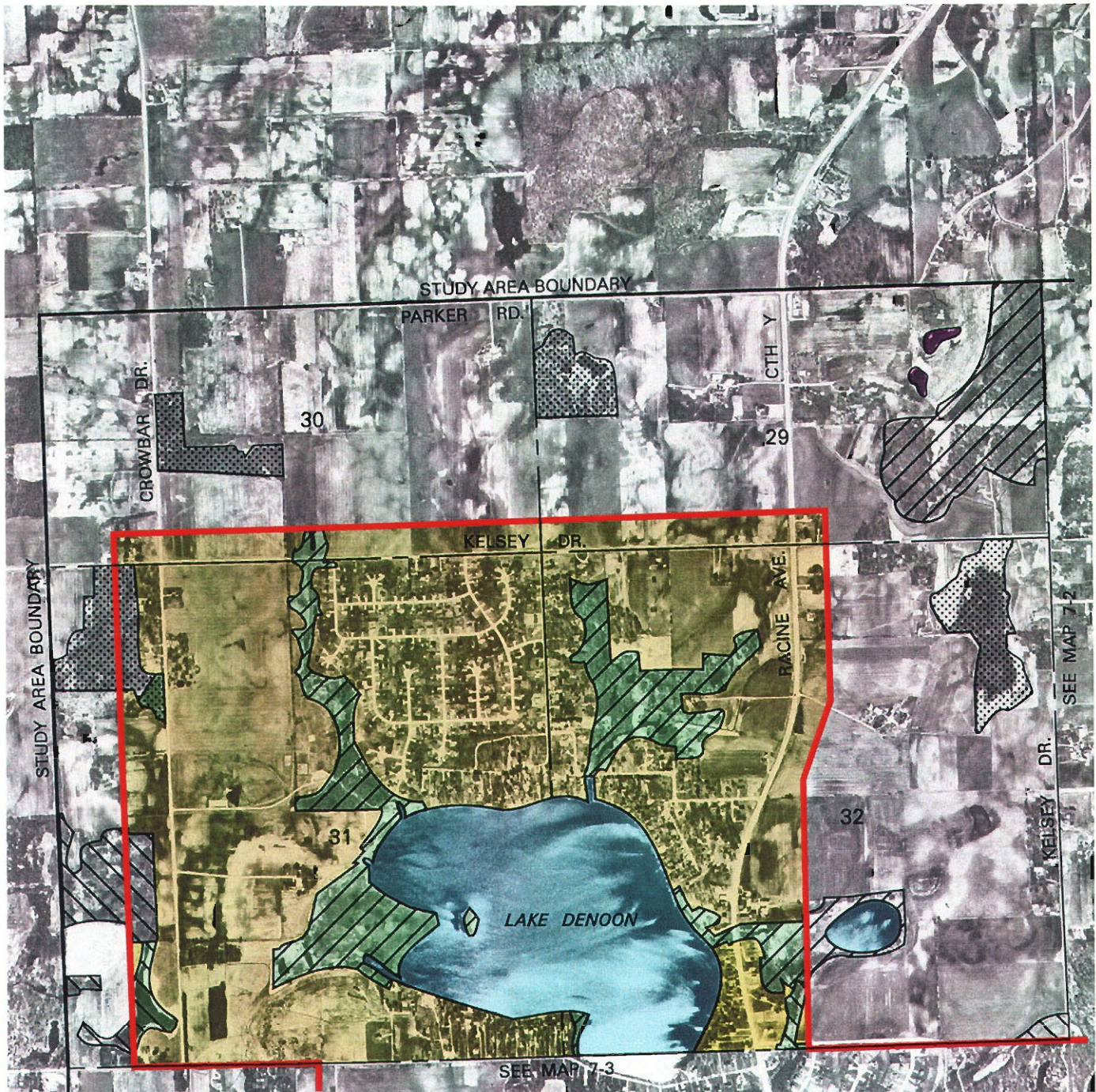


Source: SEWRPC.

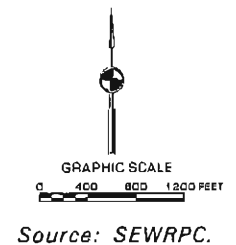
Map 7-1

**ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER
SERVICE AREA FOR THE TOWN OF NORWAY SANITARY DISTRICT NO. 1 AND ENVIRONS**

**U. S. Public Land Survey Sections 29, 30, 31, and 32
Township 5 North, Range 20 East**



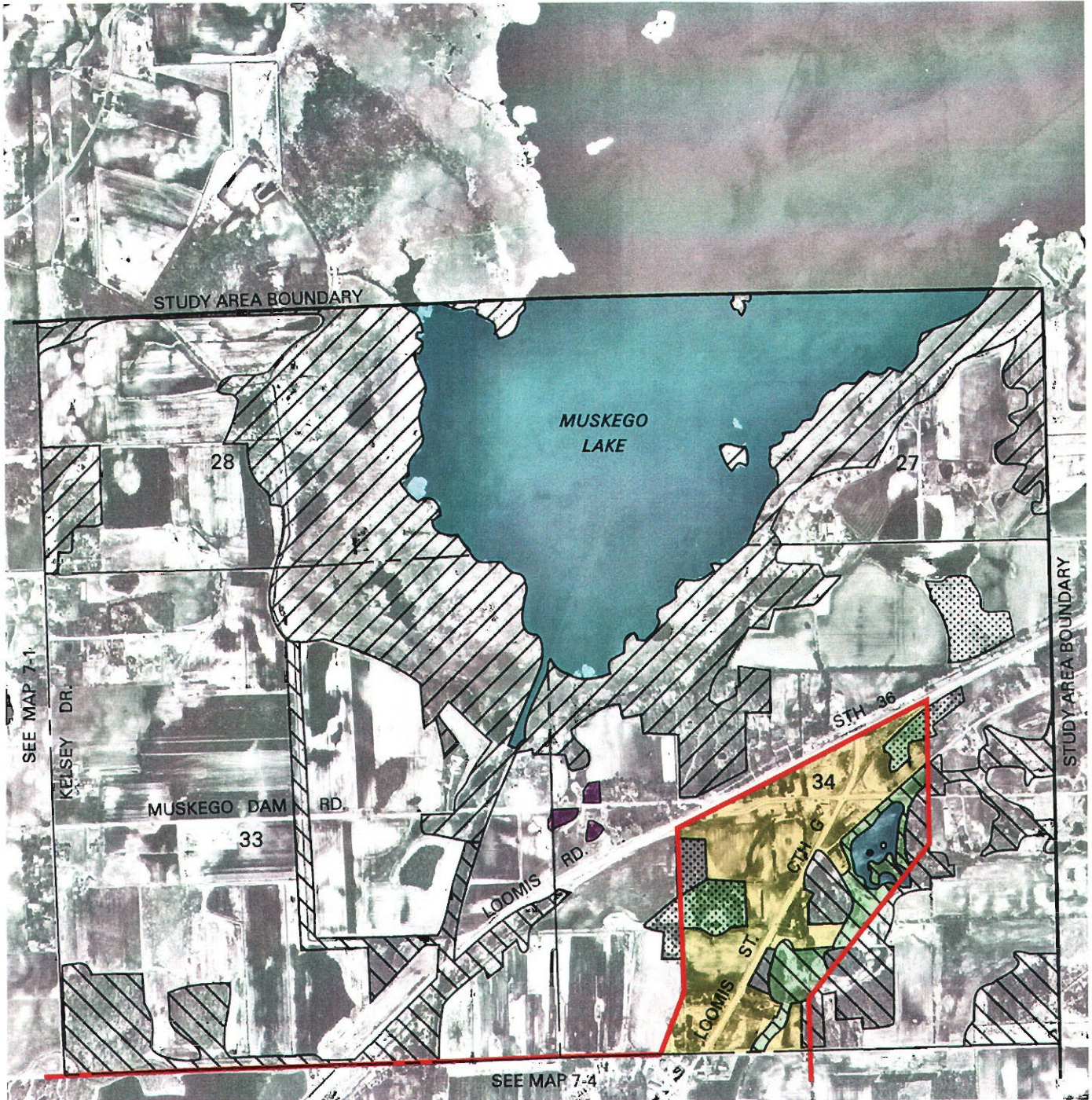
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|--|---|--|---|
| | PRIMARY ENVIRONMENTAL CORRIDOR | | SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS |
| | SECONDARY ENVIRONMENTAL CORRIDOR | | PLANNED SANITARY SEWER SERVICE AREA |
| | ISOLATED NATURAL RESOURCE AREA | | GROSS SANITARY SEWER SERVICE AREA BOUNDARY |
| | WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE | | LANDS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA INELIGIBLE FOR SEWER SERVICE |









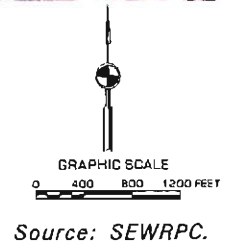
Map 7-2

**ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER
SERVICE AREA FOR THE TOWN OF NORWAY SANITARY DISTRICT NO. 1 AND ENVIRONS**

**U. S. Public Land Survey Sections 27, 28, 33, and 34
Township 5 North, Range 20 East**



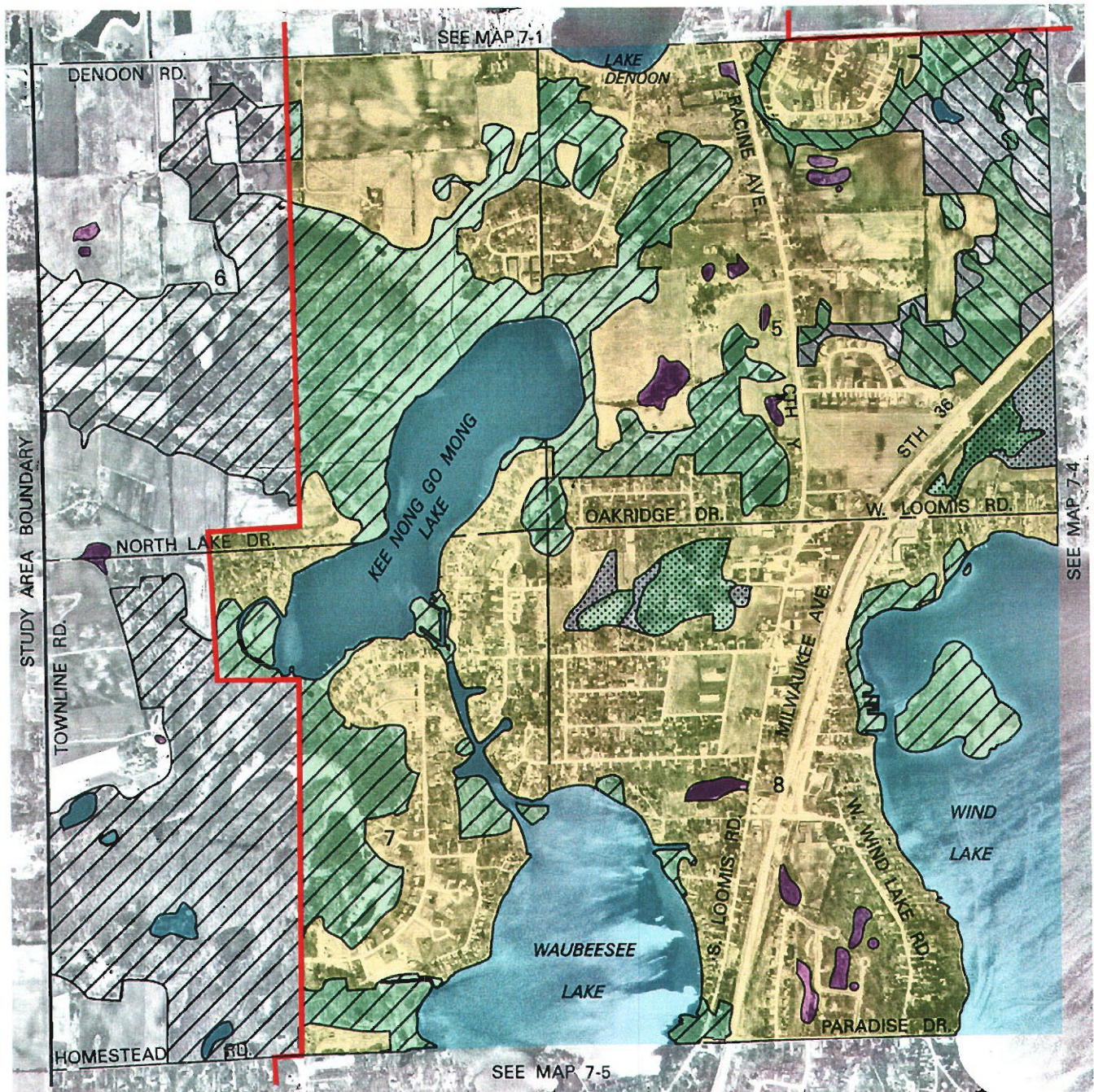
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|---|--|---|--|
|  | PRIMARY ENVIRONMENTAL CORRIDOR |  | SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS
AND ISOLATED NATURAL RESOURCE AREAS |
|  | SECONDARY ENVIRONMENTAL CORRIDOR |  | PLANNED SANITARY SEWER SERVICE AREA |
|  | ISOLATED NATURAL RESOURCE AREA |  | GROSS SANITARY SEWER SERVICE AREA BOUNDARY |
|  | WETLANDS AND SURFACE WATER
AREAS LESS THAN FIVE ACRES IN SIZE |  | LANDS WITHIN THE PLANNED SANITARY SEWER
SERVICE AREA INELIGIBLE FOR SEWER SERVICE |











Map 7-3

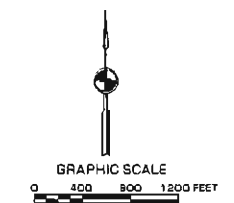
**ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER
SERVICE AREA FOR THE TOWN OF NORWAY SANITARY DISTRICT NO. 1 AND ENVIRONS**

U. S. Public Land Survey Sections 5, 6, 7, and 8
Township 4 North, Range 20 East



-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE

-  SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY
-  LANDS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA INELIGIBLE FOR SEWER SERVICE

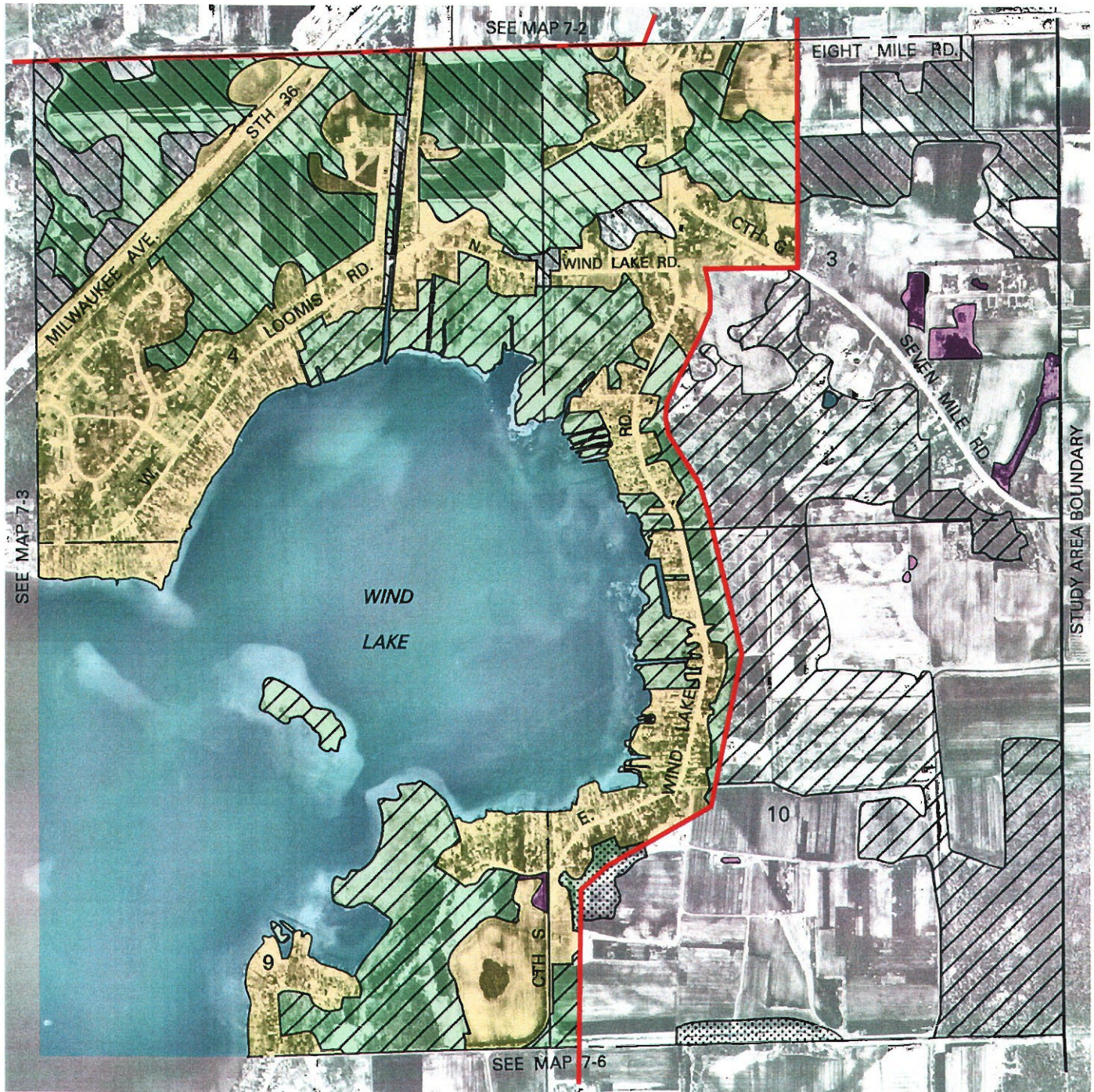






Source: SEWRPC.





Map 7-4

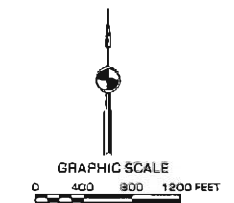
**ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER
SERVICE AREA FOR THE TOWN OF NORWAY SANITARY DISTRICT NO. 1 AND ENVIRONS**

U. S. Public Land Survey Sections 3, 4, 9, and 10
Township 4 North, Range 20 East



-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE

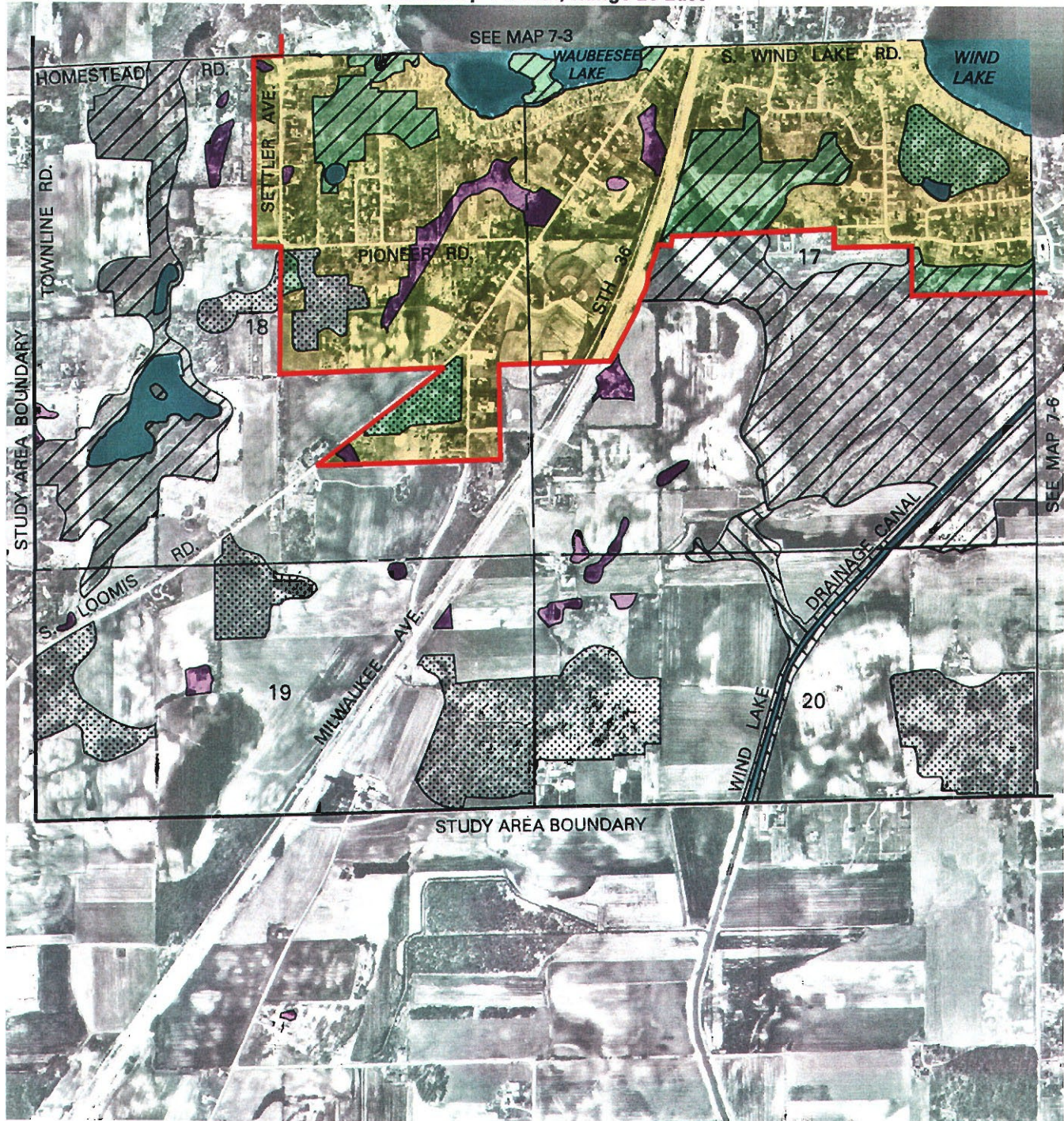
-  SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY
-  LANDS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA INELIGIBLE FOR SEWER SERVICE











Source: SEWRPC.

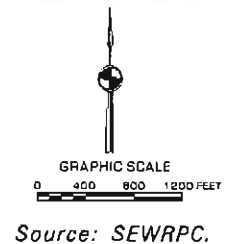
**ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER
SERVICE AREA FOR THE TOWN OF NORWAY SANITARY DISTRICT NO. 1 AND ENVIRONS**

U. S. Public Land Survey Sections 17, 18, 19, and 20
Township 4 North, Range 20 East



-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE

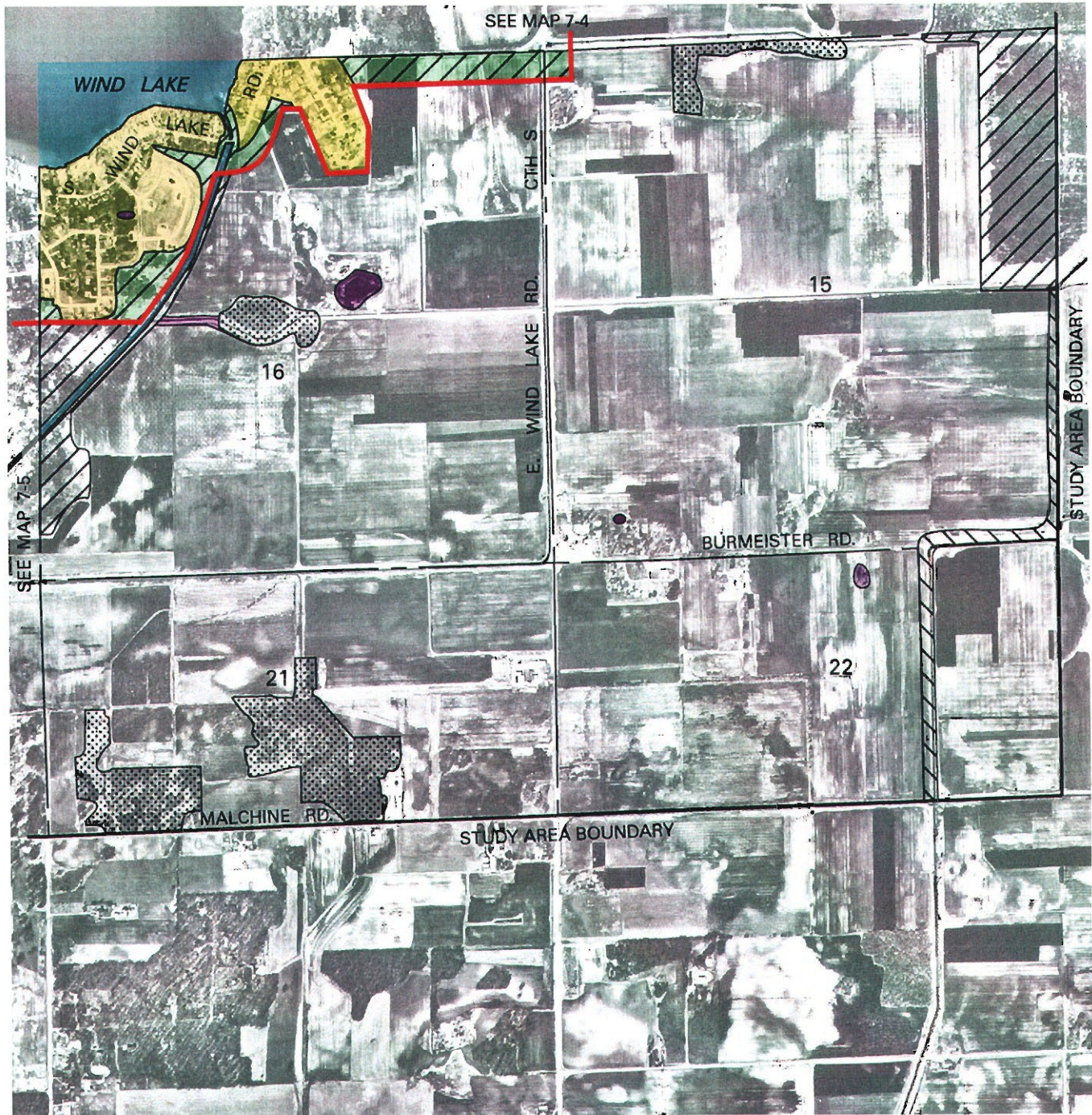
-  SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY
-  LANDS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA INELIGIBLE FOR SEWER SERVICE











Map 7-6

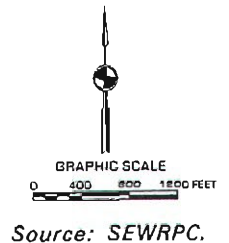
**ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER
SERVICE AREA FOR THE TOWN OF NORWAY SANITARY DISTRICT NO. 1 AND ENVIRONS**

**U. S. Public Land Survey Sections 15, 16, 21, and 22
Township 4 North, Range 20 East**



-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE

-  SURFACE WATER WITHIN ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY
-  LANDS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA INELIGIBLE FOR SEWER SERVICE



APPENDICES

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Appendix A

MINUTES OF THE PUBLIC HEARING

Date: May 13, 1999 at 6:30 P.M.

Place: Norway Town Hall, 6419 Heg Park Road, Wind Lake, WI 53185

Present at Hearing: President Norman Schultz, Commissioner Ronald Drenzek, Commissioner Lawrence Taylor, District Manager Jarmen Czuta, Executive Secretary Carol Jacobson, Frank Tiefert of Applied Technologies, William J. Stauber, AICP, and Timothy McCauley, Senior Planner, Southeastern Wisconsin Regional Planning Commission, David Koenings, and Andy Porter of 24542 Sandy Point, Wind Lake, WI.

The Public Hearing commenced at 6:30 o'clock by Norman Schultz.

Timothy J. McCauley spoke to the audience regarding the purpose of the hearing, the rationale, background data, and provided a description of the plan. Mr. McCauley's speech is in written form and a copy is attached hereto and marked "Exhibit A". Mr. McCauley also went over the maps as set forth in the Preliminary Draft of the Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs. The boundaries of the District including Muskego were examined and discussed by Mr. McCauley and Mr. Stauber.

Mr. Stauber made comments on the maps and the study done overall. Definitions of wetlands set forth on the maps were explained. It was stated that the sewer service area would remain the same except for 1/10th of a square mile difference which was an adjustment. Overall, the sewer service area would remain the same as defined.

It was suggested by Mr. Stauber to leave the record of this hearing open for 10 days from the date of the hearing for anyone to make comments or requests, i.e. May 24, 1999.

Ron Drenzek asked if the DNR, SEWRPC and developers can force the district to expand its boundaries. Mr. Stauber commented that SEWRPC does not dictate as to boundaries.

Norm Schultz asked Mr. Stauber if the boundaries of the district can be changed without difficulties in the future if it is required. Mr. Stauber commented that the procedure was not difficult.

The hearing was adjourned at 7:25 P.M.

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DEPARTMENT OF PUBLIC WORKS/UTILITIES
John Loughney, Public Works Superintendent
(414) 679-4148
Scott Kloskowski, Utilities Superintendent
(414) 679-4149

May 18, 1999

Philip C. Everson
Executive Director, SEWRPC
P.O. Box 1607
Waukesha, WI 53187-1607

Dear Philip,

The City of Muskego is currently negotiating with the Town of Norway Sanitary District No. 1 for sanitary sewer service for a portion of the City of Muskego.

This agreement will replace an agreement that expired on December 31, 1998.


As part of this agreement the City of Muskego has proposed an expanded service area in Muskego as shown on the attached map.

I am requesting that this map be included in the comments from the May 13, 1999 Public Hearing since neither Mayor De Angelis or myself were able to attend due to prior commitments.

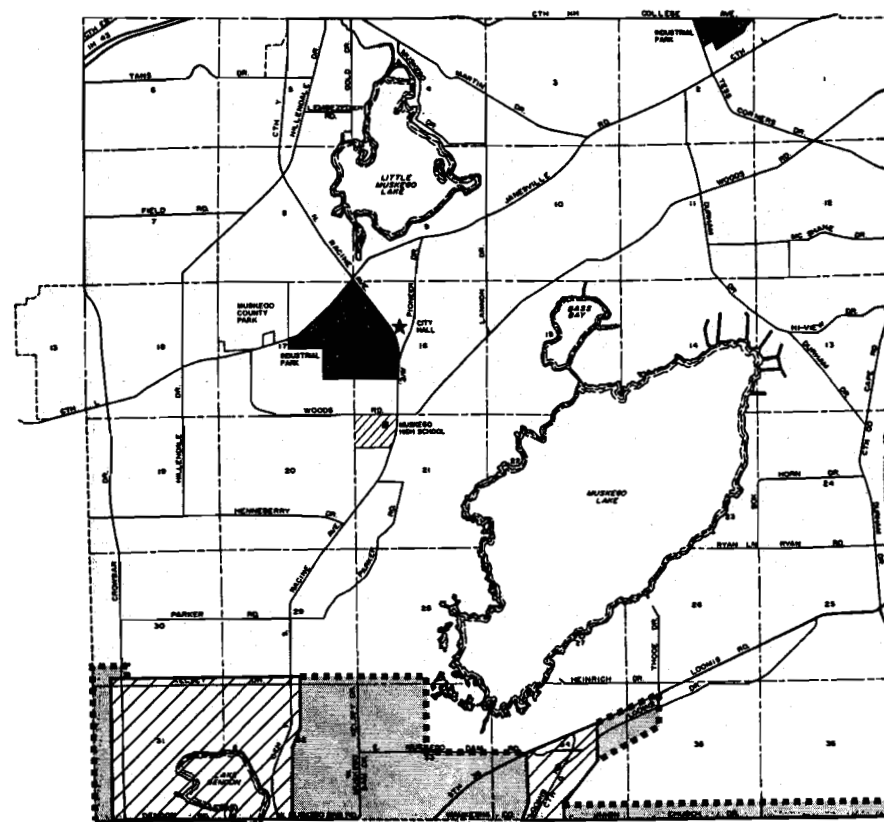
This service area amendment request is consistent with past requests Muskego has made in the planning process of Norway's treatment plant expansion.



Thank you for your consideration.

Sincerely,


Scott Kloskowski
Superintendent Public Utilities

cc: Mr. Norman L. Schultz, Town of Norway



- 2020 PROPOSED SEWER SERVICE AREA BOUNDARIES
-  SEWER SERVICE AREA AS PRESENTED AT THE PUBLIC HEARING AND IN THE DRAFT REPORT
-  PROPOSED SEWER SERVICE AREA BEYOND THAT PRESENTED AT THE PUBLIC HEARING AND IN THE DRAFT REPORT

WRITTEN MATERIALS SUBMITTED INTO THE RECORD OF THE PUBLIC HEARING

Appendix B

H O S T A K
 ◆
 H E N Z L
 ◆
 B I C H L E R

ATTORNEYS AT LAW

Kenneth F. Hostak
 Robert R. Henzl
 Robert H. Bichler
 James W. Hill
 Stephen J. Smith
 Thomas M. Devine
 Timothy J. Pruitt
 Susan M. Perry
 Barbara A. Kuhl
 David A. Wolfe
 JoAnne Breese-Jaack
 Kristin M. Callerty

May 24, 1999

Mr. Philip E. Evenson
 Executive Director
 Southwestern Wisconsin Regional Planning Commission
 P. O. Box 1607
 Waukesha, WI 53187-1607

Re: Sewer Service Area

Dear Mr. Evenson:

Please be advised that we represent Norway Sanitary District No. 1. As such, we have been asked to address a letter to you in response to the May 18, 1999, letter from Scott Kloskowski of the City of Muskego. In his letter, Mr. Kloskowski requested the inclusion of a map for an expansion of the Sanitary District's sewer service area within the City of Muskego in the record of the May 13th hearing. As we understand, the City did not appear at the hearing.

On behalf of the Sanitary District, we object to any steps to expand the sewer service area from that set forth in the proposed report.

Our objection is not based upon any technicality such as not appearing at the hearing. Rather, it is based upon the history of the discussions that have occurred over an extended period regarding the Sanitary District's sewer service area in the city of Muskego in connection with the facilities planning which has been ongoing for a number of years. It was the understanding of the Sanitary District that an agreement was reached with the City and your Commission as to the appropriate service area, both for the facilities planning study and the regional plan. The Sanitary District does not believe it is appropriate to reopen the question as to the regional plan at this time.

To support the Sanitary District's position, it is helpful to review the history as to the determination of the sewer service area within Muskego as set forth in the facilities plan and the proposed SEWRPC report.

In the original contract between the Sanitary District and the City, the Sanitary District agreed to service a limited area of the City in the vicinity of Lake Denoon. The reasons for doing so were the adverse environmental problems associated with development around that lake and the inability of the City to provide public sewer service to the area. The Sanitary District was asked to consider providing sewer service to that

05/24/99

Page 2

area to address the problem. It agreed to do so, but it was very insistent that the area be limited to Lake Denoon and adjoining areas through which the sewer lines had to pass to service that area. The 1978 contract specifically delineated that area and limited service to it.

The question of the service area in the City was again addressed in connection with the current facilities plan study. The Sanitary District again insisted upon the service area remaining as under the 1978 contract. The City requested a much larger area, incorporating all of the area bordering on the Sanitary District. The estimated 2020 population for the area as proposed by the Sanitary District was 2,600 people. At an intergovernmental meeting in April, 1998, an agreement was reached to include an additional area along Hwy. 36 that had a number of failing septic systems. However, it was also agreed that the ultimate 2020 population would remain at 2,600. See your letter of April 14, 1998, to Norman L. Schultz, President of Sanitary District. It was on that basis that the facilities plan study was conducted, completed and approved.

We are now faced with requests by the City to provide for a service area that is not in accord with the approved facilities plan. In addition, in the contract negotiations between the municipal bodies the City has requested that the Sanitary District agree to service these other areas as well. The Sanitary District has refused to do so.

The Sanitary District submits that the approved service area for the Sanitary District in the area-wide plan should be consistent with the approved facilities plan for the Sanitary District. Otherwise, innumerable problems may arise. To avoid such a possibility, the Sanitary District requests that the service area as set forth in the preliminary draft be approved without modification.

Very truly yours,

HOSTAK, HENZL & BICHLER, S.C.


 Kenneth F. Hostak

KFH:bpl

cc: City of Muskego
 Norway Sanitary District
 Mr. Donald Molter
 Mr. Frank Tiefert

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

916 N. EAST AVENUE • P.O. BOX 1607 • WAUKESHA, WISCONSIN 53187-1607 • TELEPHONE (414) 547-6721
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WASHINGTON

WAUKESHA



May 28, 1999

Mr. Scott Kloskowski
Superintendent of Public Utilities
City of Muskego
W189 S8235 Mercury Drive
Muskego WI 53150

Dear Mr. Kloskowski:

The Commission staff has received your May 18, 1999, letter pertaining to the proposed refinement to the sanitary sewer service area for the Town of Norway Sanitary District No. 1 and environs that was submitted to public hearing on May 13, 1999. In your letter, you noted that the City of Muskego was in the process of negotiating an intergovernmental agreement with the Town of Norway Sanitary District No. 1 for provision of sanitary sewer service to portions of the City, and that, as part of that process, the City is proposing a larger sewer service area than that identified under the plan presented at the public hearing. You requested that your letter and an accompanying map identifying the City-proposed sewer service area be included in the record of the public hearing.

The City of Muskego portion of the proposed sewer service area as presented at the May 13, 1999 public hearing was cooperatively determined through the following steps:

1. In a letter to the Commission staff dated November 14, 1996, the City of Muskego requested that portions of the City, in addition to the currently sewered Lake Denoon area, be considered for addition to the sanitary sewer service area tributary to the Town of Norway Sanitary District No. 1 sewage treatment facility. This matter was held in abeyance until the Town of Norway Sanitary District No. 1 completed wastewater facilities planning work, and until the City of Muskego sanitary sewer service area tributary to the Milwaukee Metropolitan Sewerage District was revised.
2. An interagency meeting was held on March 13, 1998, between the Commission staff and representatives of the City of Muskego, including Mayor DeAngelis, the director of planning, and an engineering consultant, to discuss proposed additions to the sewer service area. Based upon an analysis completed by the Commission staff, the ultimate population of the Muskego portion of the sewer service area, as proposed by the City, would likely range from 5,000 to 6,400 persons. In contrast, the recently completed wastewater facilities plan for the Town of Norway Sanitary District No. 1 envisioned a maximum of 2,600 residents for that portion of the sewer service area within the City of Muskego. Those present agreed that it would be necessary to modify the City's request, and a smaller addition to the sewer service area was identified, consisting of certain lands on either side of CTH G south of STH 36.

Mr. Scott Kloskowski

Page 2

May 28, 1999

3. An interagency meeting was held on April 9, 1998, attended by representatives of the Commission, the Town of Norway Sanitary District No. 1, and the Wisconsin Department of Natural Resources, as well as Mayor DeAngelis. The Commission staff distributed copies of a map depicting the proposed City of Muskego portion of the sanitary sewer service area tributary to the Town of Norway Sanitary District No. 1 sewage treatment facility, reflecting the smaller addition identified at the March 13, 1998, interagency meeting.
4. The Town of Norway Sanitary District No. 1 subsequently amended its sewerage facilities plan to include the areas agreed upon at the April 9, 1999, interagency meeting.
5. The Commission staff completed a draft sanitary sewer service area plan report for the Town of Norway Sanitary District No. 1 and environs, including within the proposed sewer service area those portions of the City of Muskego identified through the process described above. Copies of the draft report were provided to the Town of Norway Sanitary District No. 1, the Town of Norway, the City of Muskego, Racine and Waukesha Counties, and the Wisconsin Department of Natural Resources by letter on October 23, 1998. That report was presented for public review and comment at the public hearing jointly sponsored by the Commission and the District on May 13, 1999.

Given the process followed in identifying the proposed sewer service area, a process which attempted to take into account the objectives and needs of the Sanitary District and the City of Muskego, the Commission staff will recommend adoption of the sewer service area plan as presented at the public hearing.

Your letter to the Commission of May 18, 1999, will, of course, be included in the record of the public hearing, together with this response.

Should you have any questions concerning the foregoing, please do not hesitate to call.

Sincerely,

Philip C. Evenson

Philip C. Evenson
Executive Director

PCE/WJS/tjm
muskego rept.doc

cc: Mr. David DeAngelis, Mayor, City of Muskego
Mr. Norman L. Schultz, President, Town of Norway Sanitary District No. 1
Mr. Kenneth F. Hostak, Attorney, Hostak, Henzl, and Bichler, S.C.