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Special acknowledgement is due SEWRPC Planner Joel E. Dietl for his contribution to this report.

#### COMMUNITY ASSISTANCE PLANNING REPORT NUMBER 225

# SANITARY SEWER SERVICE AREA FOR THE PELL LAKE SANITARY DISTRICT NO. 1 WALWORTH COUNTY, WISCONSIN

#### Prepared by the

Southeastern Wisconsin Regional Planning Commission
P. O. Box 1607
Old Courthouse
916 N. East Avenue
Waukesha, Wisconsin 53187-1607

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June 1996

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### SOUTHEASTERN WISCONSIN REGIONAL PLANNING

### COMMISSION

916 N. EAST AVENUE

P.O. BOX 1607

WAUKESHA, WISCONSIN 53187-1607

TELEPHONE (414) 547-6721 TELECOPIER (414) 547-1103

Serving the Counties of: KENDSHA

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June 6, 1996

TO: The governing body of the Pell Lake Sanitary District No. 1, the Town Board of the Town of Bloomfield, and the County Board of Walworth County

The adopted regional water quality management plan for Southeastern Wisconsin identifies in a preliminary manner, recommended sanitary sewer service areas tributary to each of the existing and proposed sewage treatment plans within the Region. The plan recommends that these service areas be refined and detailed through the cooperative efforts of the local units and agencies of government concerned, so that the service areas properly reflect local, as well as areawide, development objectives. This refinement and detailing is particularly important in light of provisions in the Wisconsin Administrative Code which require that the Wisconsin Department of Natural Resources with respect to public sanitary sewers, and the Wisconsin Department of Industry, Labor and Human Relations with respect to private sanitary sewers, make a finding that all proposed sanitary sewer extensions be in conformance with the adopted regional water quality management plan and the sanitary sewer service areas identified in that plan.

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 area. If such review can be based on a refined service area cooperatively identified by the local units of government concerned, then no conflicts concerning sanitary sewer extensions should arise, and the entire sewerage system and related land use development process can proceed in a smooth and efficient manner.

Acting in response to the recommendations made in the adopted regional water quality management plan, the Pell Lake Sanitary District No. 1 by letter dated March 6, 1996, requested that the Regional Planning Commission assist the Sanitary District in refining and detailing the recommended sanitary sewer service area tributary to the proposed Pell Lake Sanitary District No. 1 sewage treatment plant. This report documents the results of the refinement and detailing process.

The report contains a map showing not only the recommended refined and detailed sanitary sewer service area, but also the location and extent of the environmental corridors within that area. These environmental corridors contain the best and most important elements of the natural resource base within the sewer service area. Their preservation in essentially natural, open uses is important to the maintenance of the overall quality of the environment in the area, while avoiding the creation of serious and costly developmental problems. Accordingly, urban development should not be encouraged to occur within these corridors, a factor which should be taken into consideration in the extension of sanitary sewer service.

A public hearing was held on May 29, 1996, to discuss the preliminary findings and recommendations of the sewer service area refinement process, and to receive the comments and suggestions of the local elected officials concerned, and of interested citizens. The recommendations contained in this report reflect the pertinent comments and suggestions made at the hearing.

The sanitary sewer service area herein presented is intended to constitute a refinement of the areawide water quality management plan adopted by the Regional Planning Commission in July 1979. Accordingly, upon adoption of this report by the local units and agencies of government concerned, and subsequent adoption by the Regional Planning Commission, this report will be certified to the Wisconsin Department of Natural Resources and the U. S. Environmental Protection Agency as an amendment to the adopted, areawide water quality management plan.

The sanitary sewer service area presented in this report provides a sound guide which can assist the responsible local public officials in the making of sewer service-related development decisions in the Pell Lake area. Accordingly, careful consideration and adoption of this report by all parties concerned is respectfully urged. The Regional Planning Commission stands ready to assist the various units and agencies of government concerned in implementing the recommendations contained in this report.

Respectfully submitted,

Kurt W. Bauer Executive Director (This page intentionally left blank)

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#### 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."

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 from 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 (DNR) must be found to be in accordance with the adopted and endorsed plan. These actions include, among others, DNR approval of waste discharge permits, DNR approval of State and Federal grants for the construction of wastewater treatment and conveyance facilities, and DNR 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.<sup>2</sup> As such, the delineation of the areas was necessarily general, and may not have reflected detailed local planning considerations.

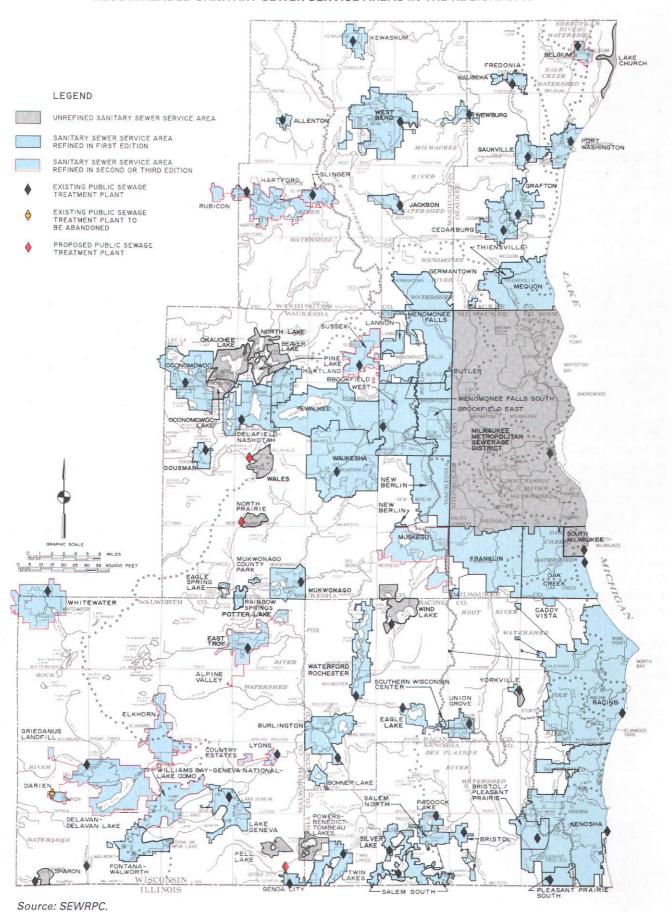
Section NR 110.08(4) and Section ILHR 82.20(4) of the Wisconsin Administrative Code require that the Wisconsin Department of Natural Resources, with respect to public sanitary sewers, and the Wisconsin Department of Industry, Labor and Human Relations, with respect to private sanitary sewers, make a 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

<sup>&</sup>lt;sup>1</sup>The adopted areawide water quality management plan is documented in SEWRPC Planning Report No. 30, <u>A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000</u>, Volume One, <u>Inventory Findings</u>, September 1978; Volume Two, <u>Alternative Plans</u>, February 1979; and Volume Three, <u>Recommended Plan</u>, June 1979.

<sup>&</sup>lt;sup>2</sup>See SEWRPC Planning Report No. 25, <u>A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000</u>, Volume One, <u>Inventory Findings</u> April 1975; and Volume Two, <u>Alternative and Recommended Plans</u> May 1978.

Map 1

#### **RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION: 2010**



properly to reflect local, as well as areawide, planning concerns in the execution of this review responsibility, the Regional Planning Commission, in 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:

- The 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.<sup>3</sup>
- 3. The conduct of intergovernmental meetings involving the local or areawide unit or units of government operating the sewage treatment facility or facilities concerned and the other local units of government that are to be provided sanitary sewer service by the sewage treatment facility or facilities 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 of the initially proposed sanitary sewer service area to reflect the agreements reached at the intergovernmental meetings, meeting 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.
- The holding of a public hearing jointly by the Commission and the local or areawide unit or units of government operating the treatment

<sup>3</sup>The 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 2010 land use plan, which plan served as the point of departure in the delineation of the sewer service area set forth in this report.

- facility or facilities 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 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 operating the sewage treatment facility or facilities concerned and by the governing bodies of the local units of government that are to be served by the sewage treatment facility or facilities. 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 PELL LAKE SANITARY SEWER SERVICE AREA REFINEMENT PROCESS

As previously noted, the Regional Planning Commission adopted a regional water quality management plan in 1979 to meet the planning requirements of Section 208 of the Federal Clean Water Act and corresponding State legislation. That plan recommended that the urban development located along the shoreline of Pell Lake not be included within a planned sanitary sewer service area since information available at that time did not indicate a need for the provision of centralized public sanitary sewer service to this area. Thus, the areawide water quality management plan recommended that sewage disposal in the Pell Lake area be provided through onsite sewage disposal systems. The regional plan, however, also recommended that sewage disposal needs in this area be periodically reevaluated in light of changing circumstances over time.

Subsequently, as recommended in a facilities study for the Pell Lake area prepared by the engineering

firm of Baxter & Woodman, Inc., titled Pell Lake Sanitary District No. 1, Pell Lake, Wisconsin, Facilities Planning Report, dated June 1993, the Pell Lake Sanitary District No. 1, by resolution dated May 17, 1993, requested the Regional Planning Commission to undertake a study to determine the most cost-effective and environmentally sound means of providing sewage treatment and disposal services to the urban development located within the Pell Lake area.

The requested study was conducted by the Regional Planning Commission for a geographic area encompassing the Villages of Genoa City and Twin Lakes and the urban development located around the shorelines of Pell, Powers, Benedict, and Tombeau Lakes in southwestern Kenosha and southeastern Walworth Counties and is set forth in a SEWRPC document entitled, Amendment to the Regional Water Quality Management Plan-2000, Pell Lake Area and Powers-Benedict-Tombeau Lakes Area. Kenosha and Walworth Counties, dated December 1994. Among the conclusions of the this document was a recommendation that the regional water quality management plan be amended to add to that plan the Pell Lake area as a new sanitary sewer service area and that such sewer service area be refined in cooperation with the local units of government concerned at some future date; that the regional water quality management plan be amended to add to the plan a new public sewage treatment plant to be located in an area southwest of Tombeau Lake and southeast of Pell Lake as a permanent sewage treatment plant; and that the public sewage treatment plant be designed in such a manner so as to enable the plant to be expanded at some future date to serve, as a regional plant, the Pell Lake area, the Powers-BenedictTombeau Lakes area, and, ultimately, the Village of Genoa City.

Subsequent to a public hearing held on this amendment on November 11, 1994, the amendment to the regional water quality management plan set forth in the aforereferenced document was adopted by the governing body of the Pell Lake Sanitary District No. 1 on November 30, 1994, and by the Regional Planning Commission of December 7, 1994, and was endorsed by the Wisconsin Department of Natural Resources on April 13, 1995.

In accord with the aforementioned recommendations, the Pell Lake Sanitary District No. 1, by letter dated March 6, 1996, requested that the Regional Planning Commission refine the initially identified Pell Lake sanitary sewer service area proposed to be tributary to the planned new public sewage treatment facility envisioned to be located southeast of Pell Lake, adjacent to the East Branch of Nippersink Creek.

Copies of the draft of this report setting forth a refined sanitary sewer service area plan were provided to the Pell Lake Sanitary District No. 1, the Town of Bloomfield, Walworth County, and the Wisconsin Department of Natural Resources for review and comment prior to the public hearing held on the plan proposal. A public hearing was held on May 29, 1996. 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, agreed-upon, refined Pell Lake sanitary sewer service area is described in Chapter III of this report. The delineation of this area reflects the pertinent comments made at the public hearing held on this matter.

#### **Chapter II**

#### STUDY AREA DESCRIPTION

#### LOCATION

The study area considered for determining the refined Pell Lake sanitary sewer service area is shown on Map 2. The area consists of a portion of the Town of Bloomfield and is about 12.3 square miles in extent. The Pell Lake Sanitary District No. 1, which encompasses approximately 2.0 square miles, or about 16 percent of the total study area, is also shown on Map 2.1

#### **POPULATION**

The estimated resident population of the study area in 1990 was about 2,300 persons.<sup>2</sup> It should be noted that the entire population of the study area was served by onsite soil-absorption sewage disposal systems or by sewage holding tanks.

The forecast of probable future resident population levels for small geographic areas such as the Pell Lake study area is a difficult task, accompanied by uncertainties and subject to periodic revision as new information becomes available. The practice that typically has been followed in forecasting population levels for physical development planning is the preparation of a single population forecast believed to be the most representative of future conditions. This traditional approach works well in periods of social and economic stability, when historic trends can be anticipated to continue relatively unchanged over the plan design period. During periods of major change in social and economic conditions, however, when there is great uncertainty as to whether historic trends will continue, alternatives to this traditional approach may be required. One such alternative approach proposed in recent years, and utilized to a limited extent at the national level for public and quasi-public planning purposes, is termed "alternative futures." Under this approach, the development, test, and evaluation of alternative plans is based, not upon a single, most probable forecast of socio-economic

conditions, but upon a number of alternative futures chosen to represent a range of conditions which may be expected to occur over the plan design period.

Recognizing the increasing uncertainty inherent in estimating future population levels under the rapidly changing socio-economic conditions existing in the United States, the Regional Planning Commission began to incorporate the alternative futures approach into its planning program in the late 1970s, the first known attempt to apply this approach to areawide and local planning in the United States. In the exploration of alternative futures for the Southeastern Wisconsin Region, an attempt was made first to identify all those external factors which may be expected to directly or indirectly affect development conditions in the Region. together with the likely range of prospects for these factors. Thus, the preparation of the Commission's new year 2010 regional land use plan incorporated a consideration of three alternative scenarios for regional growth and change, involving different assumptions regarding three major external factors: the cost and availability of energy, population lifestyles, and economic conditions. Two of these scenarios, the high-growth and low-growth scenarios, are intended to represent the upper and lower extremes of possible future regional growth and change, while the third is intended to represent an intermediate future between the two extremes. A set of population and employment projections was then developed for each of the three scenarios.

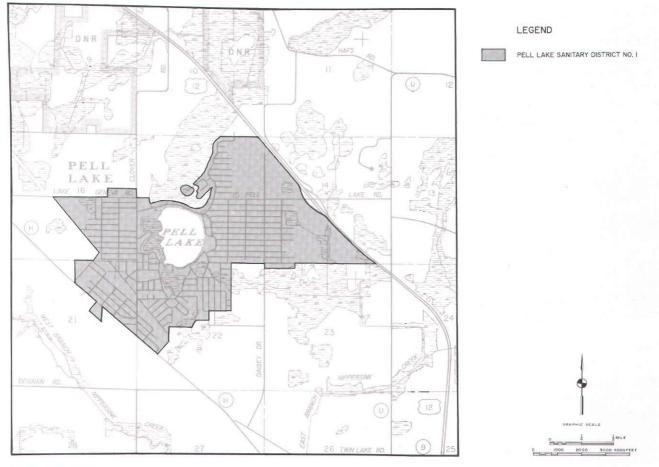
The Commission's year 2010 land use plan also considered alternative development patterns for accommodating the incremental population and employment levels envisioned under the aforedescribed growth scenarios. Two development patterns were considered in the preparation of the alternative land use plans: a centralized development pattern, which, like the first- and second generation adopted regional land use plans, accommodated 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, and a decentralized development pattern, which accommodated the continued diffu-

<sup>&</sup>lt;sup>1</sup>Includes approximately 86 acres of surface water associated with Pell Lake.

<sup>&</sup>lt;sup>2</sup>Does not include a seasonal population of about 1,000 persons.

Map 2

### STUDY AREA IDENTIFIED FOR PURPOSES OF REFINING AND DETAILING THE PELL LAKE SANITARY SEWER SERVICE AREA



Source: SEWRPC.

sion of population and employment levels but in a manner consistent with the protection of the natural resource base of the Region.

Under the alternative futures approach utilized by the Commission for its work, the resident population level within the Pell Lake study area could, by the design year 2010, range from about 2,100 persons under the intermediate-growth centralized land use plan, the Commission's adopted land use plan, to a high of about 3,100 persons under the high-growth decentralized future land use plan. It should be noted that due to relatively rapid growth in the Pell Lake area in the recent past, the

1990 resident population level of this area, 2,300 persons, exceeded the population level envisioned under the Commission's intermediate-growth centralized land use plan but was still well below the population level envisioned under the Commission's high-growth decentralized future scenario.

#### ENVIRONMENTALLY SIGNIFICANT LANDS

Environmental corridors are defined by the Commission 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

<sup>&</sup>lt;sup>3</sup>Does not include a seasonal population of about 1,000 persons.

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.

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 in the corridors, including park and outdoor recreation facilities and certain institutional uses. In some cases, extremely low-density residential development at a rate 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 Pell Lake 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

Table 1

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

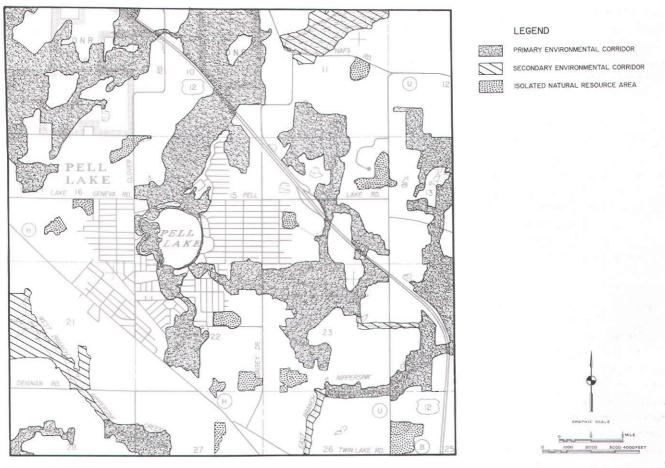
Resource Base or Related Element	Point Value
Natural Resource Base	
Lake	
Major (50 acres or more)	20
Minor (5 to 49 acres)	20
River or Stream (perennial)	10
Shoreland	
Lake or Perennial River or Stream	10
Intermittent Stream	. 5
Floodland (100-year recurrence interval)	3
Wetland	10
Wet, Poorly Drained, 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 to 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.

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 Southeastern

Map 3

ENVIRONMENTALLY SIGNIFICANT LANDS IN THE PELL LAKE STUDY AREA



Source: SEWRPC.

Wisconsin." The primary environmental corridors as delineated in the Pell Lake study area are shown on Map 3.

In addition, Map 3 identifies secondary environmental corridors. The secondary environmental corridors, while not as significant as the primary environmental corridors in terms of overall resource values, 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 must exhibit a point value of 10 or more, and have a minimum area of 100 acres and a minimum length of one mile.

Also identified on Map 3 are isolated natural resource areas. Isolated natural resource areas

generally consist of those natural resource base elements that have "inherent natural" value, such as wetlands, woodlands, wildlife habitat areas, and surface water areas, but that 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.

Lands encompassed within the primary environmental corridors of the Pell Lake study area in 1995 totaled 3.1 square miles, including the entire surface water area of Pell Lake, or about 25 percent of the total study area. Lands encompassed within the

secondary environmental corridors totaled about 0.4 square mile, or about 3 percent of the study area. Lands encompassed within isolated natural resource areas totaled about 0.3 square mile, or about 3 percent of the study area. Thus, all environmentally significant lands in the Pell Lake study area encompassed about 3.8 square miles, or about 31 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 almost all the delineated floodlands in the Pell Lake study area are contained within the environmental corridors, there are small 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 be preserved in essentially natural, open space uses, and become, over time, part of the adjacent environmental corridor.

In addition, the adopted regional water quality management plan recognizes that certain secondary environmental corridors and isolated natural resource areas may, at the discretion of local units of government, be converted to urban uses over the plan design period. Current Federal, State, and local regulations may, however, 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.

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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 (DNR) and Wisconsin Department of Industry, Labor and Human Relations (DILHR) 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, DNR and DILHR review and approval of locally proposed sanitary sewer extensions 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.

# CURRENTLY APPROVED PELL LAKE SANITARY SEWER SERVICE AREA

The currently identified design year 2010 Pell Lake sanitary sewer service area, envisioned to be tributary to the proposed Pell Lake Sanitary District No. 1 sewage treatment facility, is set forth in a SEWRPC document entitled, Amendment to the Regional Water Quality Management Plan-2000, Pell Lake Area and Powers-Benedict-Tombeau Lakes Area, Kenosha and Walworth Counties, dated December 1994. As stated in this document, the identified sewer service area boundary is intended to be refined subsequently as part of a more detailed

study to be undertaken to determine the outer limits of the Pell Lake sanitary sewer service area, and of the location and extent of environmentally sensitive lands within that area. As shown on Map 4, this service area totals about 2.0 square miles, including 86 acres of surface water associated with Pell Lake, or about 16 percent of the total study area of 12.3 square miles. It is also important to note that the Pell Lake sanitary sewer service area, in addition to encompassing the entire Pell Lake Sanitary District No. 1, also includes certain either developed or platted lands located south of, but immediately adjacent to, the Sanitary District, such lands encompassing approximately 35 acres.

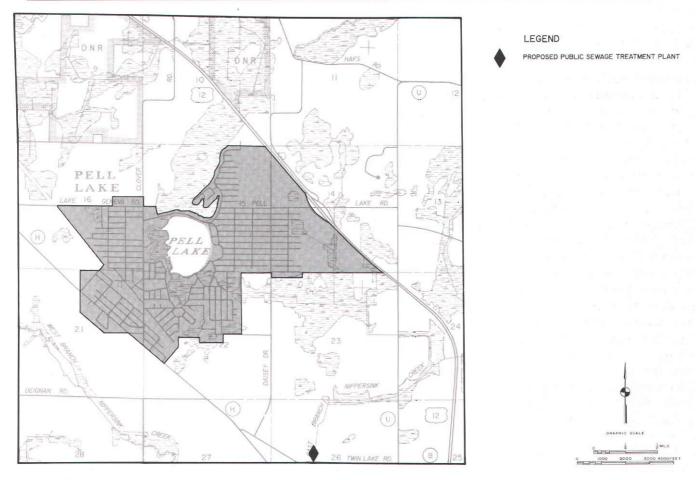
#### REFINED PELL LAKE SANITARY SEWER SERVICE AREA

Factors taken into account in the delineation of the refined Pell Lake sanitary sewer service area included the currently identified sanitary sewer service area plan set forth in a SEWRPC document titled, Amendment to the Regional Water Quality Management Plan--2000, Pell Lake Area and Powers-Benedict-Tombeau Lakes Area, Kenosha and Walworth Counties, dated December 1994, as shown on Map 4; the design year 2010 regional land use plan adopted by the Regional Planning Commission on September 23, 1992, as documented in SEWRPC Planning Report No. 40, A Regional Land Use Plan for Southeastern Wisconsin: 2010, dated January 1992; and the findings and recommendations of a report entitled, Pell Lake Sanitary District No. 1, Pell Lake, Wisconsin, Facilities Planning Report, dated June 1993, prepared by Baxter & Woodman, Inc.

The refinement effort also 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 major sewerage system pumping stations and 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

Map 4

# PELL LAKE SANITARY SEWER SERVICE AREA AS IDENTIFIED IN A SEWRPC DOCUMENT TITLED AMENDMENT TO THE REGIONAL WATER QUALITY MANAGEMENT PLAN—2000, PELL LAKE AREA AND POWERS-BENEDICT-TOMBEAU LAKES AREA, KENOSHA AND WALWORTH COUNTIES



Source: SEWRPC.

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 Pell Lake area 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 most

reasonable upper end of the population range based upon the Commission's high-growth decentralized future scenario.

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 such facilities and mechanical and electrical components as pumps, compressors, and chemical-feed equipment of sewage treatment facilities 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, thus, may 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 Pell Lake Sanitary District No. 1 sewage treatment facility would, by the design year 2010, range from about 1,900 persons under the Commission's recommended land use plan, to about 2,800 persons under the Commission's high-growth decentralized future scenario. It is important to note that due to relatively rapid growth in the Pell Lake area in the recent past, the 1990 resident population level of the proposed Pell Lake sanitary sewer service area, some 2,000 persons, exceeded the population level envisioned under the Commission's intermediate-growth centralized land use plan

but was still well below the population level envisioned under the Commission's high-growth decentralized future scenario.

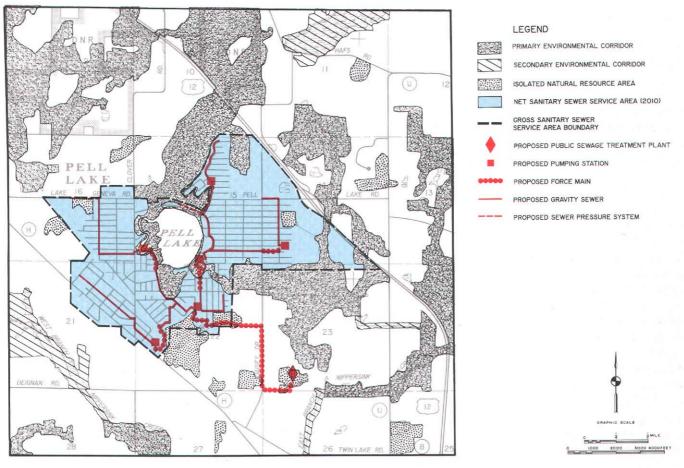
The refined year 2010 Pell Lake sanitary sewer service area anticipated to be tributary to the Pell Lake Sanitary District No. 1 sewage treatment facility, together with planned trunk sewers, as submitted to public hearing, is shown on Map 5. It should be noted that no changes were made during this refinement effort to the outer boundary of the Pell Lake sanitary sewer service area as initially identified in the SEWRPC document entitled, Amendment to the Regional Water Quality Management Plan--2000, Pell Lake Area and Powers-Benedict-Tombeau Lakes Area, Kenosha and Walworth Counties, dated December 1994. The gross refined Pell Lake sanitary sewer service area encompasses about 2.0 square miles, including 86 acres of surface water associated with Pell Lake, or about 16 percent of the total study area of 12.3 square miles. This gross sewer service area includes about 0.4 square mile of primary environmental corridors and less than 0.1 square mile of isolated natural resource areas. There are no secondary environmental corridor lands located within the revised sewer service area. Therefore, a total of about 0.4 square mile, or about 20 percent of the refined sewer service area, would be encompassed in environmentally sensitive areas, consisting of primary environmental corridor and isolated natural resource area lands.

It should be noted that the environmentally significant lands indicated on Map 5 total approximately 14 acres less than the environmentally significant lands indicated on Map 3. As shown on Map 6, two areas encompassing a total of about three acres, lying within the 100-year recurrence interval flood hazard area associated with Pell Lake, are currently undeveloped and are adjacent to primary environmental corridor lands. It is anticipated that, over time, these lands will be withdrawn from open space uses, revegetated to posses the characteristics of, and be added to, the adjacent primary environmental corridor.

As also shown on Map 6, there are four areas encompassing a total of about 17 acres of primary environmental corridor lands which are anticipated to be converted to urban uses. It is anticipated that such lands, located within long-standing platted subdivisions, will eventually be developed for residential purposes and provided with public sanitary

<sup>&</sup>lt;sup>1</sup>Does not include an estimated seasonal population of about 1,000 persons.

Map 5
PELL LAKE SANITARY SEWER SERVICE AREA



Source: SEWRPC.

sewer service. It should be noted that there are no identified wetlands or floodlands located within these areas. In addition, it should also be noted that there are four areas located within long-standing platted subdivisions, encompassing a total of about 15 acres of primary environmental corridor lands, which do contain identified wetlands or floodlands. Under current Federal, State and local regulations, however, these lands may effectively be precluded from development and thus, under this plan, are anticipated to remain in natural, open space uses.

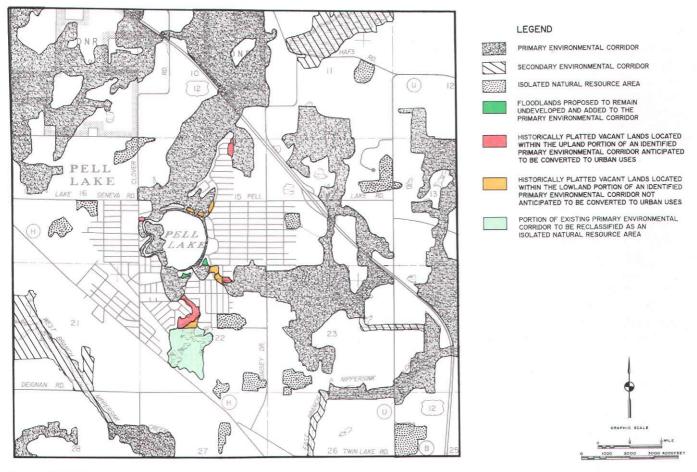
Furthermore, one area encompassing approximately 65 acres, currently classified as primary environmental corridor and composed of wetlands, woodlands, steep slopes, and significant wildlife habitat, located adjacent to, and south of, Pell Lake, would be reclassified as an isolated natural resource area.

This reclassification would occur as a result of the anticipated conversion of an adjacent upland portion of primary environmental corridor land to residential uses, as noted above. Such conversion of primary environmental corridor land would have the effect of disrupting the continuity of the environmental corridor, isolating the remaining portion, and thereby requiring its reclassification.

The refined year 2010 Pell Lake sanitary sewer service area anticipated to be tributary to the proposed Pell Lake Sanitary District No. 1 sewage treatment facility would accommodate a design year 2010 resident population of about 2,800 persons and an additional seasonal population of about 1,000 persons. The population and housing unit levels envisioned in the Pell Lake sewer service area would be accommodated at an overall rate of

Map 6

### ANTICIPATED CHANGES TO THE ENVIRONMENTALLY SIGNIFICANT LANDS IN THE PELL LAKE SANITARY SERVICE AREA: 1995-2010



Source: SEWRPC.

about 2.5 dwelling units per net residential acre. This density lies within the recommended density range for the Pell Lake area of the Region as identified in the Commission-adopted regional land use plan for the year 2010.<sup>2</sup>

#### 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, except as previously noted, 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 lowdensity residential development at a density not to exceed one housing unit per five acres of upland corridor land, compatible with the preservation of

<sup>&</sup>lt;sup>2</sup>Net residential density in the refined Pell Lake 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 Pell Lake sewer service area in the design year, 1,621 units, divided by the net residential land within the sewer service area, 659 acres, results in a net residential density of 2.5 dwelling units per acre.

the corridors in essentially natural, open uses. These plans also recognize that certain secondary environmental corridors and isolated natural resource areas may, at the discretion of the local unit of government, be converted to urban uses over the plan design period. Current Federal, State, and local regulations may however, 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 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 water and groundwater. In this regard, it should be noted that a detailed evaluation of the existing onsite sewage disposal systems within the Pell Lake area was conducted as part of the sewerage system facility planning conducted by the Pell Lake Sanitary District in 1993.4 That study concluded that about 60 percent of the existing onsite systems had some type of deficiency, such as unsuitable soils or high groundwater levels, associated with them. Analyses conducted under the regional water quality management plan concluded that over 40 percent of the phosphorus loading to

Pell Lake resulted from onsite sewage disposal systems. Therefore, the installation of a public sanitary sewer system in this area should result in improved surface and groundwater quality.

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 positive water quality impacts attributable to the development of the planned sanitary sewer service area.

#### COST-EFFECTIVENESS ANALYSIS OF SEWAGE CONVEYANCE AND TREATMENT ALTERNATIVES

As previously noted, at the request of the governing body of the Pell Lake Sanitary District No. 1, the Regional Planning Commission conducted a study to determine the most cost-effective and environmentally sound method of providing sewerage and sewage treatment services to the Pell Lake area.<sup>5</sup> In that study, several alternatives for providing sanitary sewer service to the planning area were described and evaluated. One of these alternatives provided for the construction of a new sewage treatment plant to serve the Pell Lake area, with the potential future connection of the Powers-Benedict-Tombeau Lakes area to that plant. Under that alternative, the new plant would be sited generally east of the Pell Lake area and would discharge treated plant effluent to the North Branch of Nippersink Creek. Two other alternatives provided for connection of the Pell Lake area to other existing sewerage systems, namely the Village of Genoa City and the Village of Twin Lakes systems, respectively. A fourth alternative provided for the construction of a new regional sewage treatment plant to be located east of the Village of Twin Lakes, near the Fox River, in the Town of Salem, to serve the Pell Lake area, the Powers-Benedict-Tombeau Lakes area, and the Village of Twin Lakes.

Each of these four alternatives was evaluated to determine the most cost-effective alternative; that is, the alternative that would result in the least

<sup>&</sup>lt;sup>3</sup>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.

<sup>&</sup>lt;sup>4</sup>See <u>Pell Lake Sanitary District No. 1, Pell Lake</u>, <u>Wisconsin</u>, <u>Facilities Planning Report</u>, dated June 1993, prepared by the engineering firm of Baxter and Woodman, Inc.

<sup>&</sup>lt;sup>5</sup>See SEWRPC document, <u>Amendment to the Regional Water Quality Management Plan--2000</u>, <u>Pell Lake Area and Powers-Benedict-Tombeau Lakes area</u>, <u>Kenosha and Walworth Counties</u>, dated <u>December 1994</u>.

investment of public funds for both capital and operation and maintenance purposes over a 20-year period. The alternatives were also evaluated with regard to a number of other factors considered to be of significant concern, including: initial capital cost requirements, grant and loan eligibility, Wisconsin Department of Natural Resources treatment plant nonproliferation policy, Wisconsin Department of Natural Resources surface water quality non-degradation policy, existing sewage treatment plant site constraints, and ease of plan implementation.

On the basis of the analyses and evaluations conducted, this plan amendment recommends that the regional water quality management plan be amended to provide for a new public sewage treatment plant to serve the Pell Lake area initially, as shown on Map 5, and, depending upon local actions toward the formation of a sanitary or utility district, the Powers-Benedict-Tombeau Lakes area. The plant would be designed so that, if necessary, it could be expanded to serve the Village of Genoa City also, pending an evaluation of alternatives at the end of the useful life of the existing Village of Genoa City plant.

## SEWAGE TREATMENT PLANT CAPACITY IMPACT ANALYSIS

The Pell Lake Sanitary District is currently preparing detailed design plans and specifications for a new sewage treatment plant with a capacity of 0.46 million gallons per day (mgd) on an average annual flow basis. This plant sizing was based upon a design year 2010 population equivalent for the Pell Lake service area of about 3,900 persons, including a resident population level of about 2,800 persons, a seasonal population level of about 1,000 persons, and a population equivalent of about 100 persons to account for the limited commercial development anticipated within the sewer service area. In addition, it should be noted that the proposed plant site and proposed plant design capacity were selected so that additional capacity could be readily added. In this regard, specific consideration was given to the potential addition of, and attendant additional capacity needed to accommodate, the Powers-Benedict-Tombeau Lakes area. The planned year 2010 population data used to size the sewage treatment plant are the same as the populations set forth in the adopted regional water quality management plan, as previously discussed. Thus, there should be adequate sewage treatment plant capacity available.

# PUBLIC REACTION TO THE REFINED SANITARY SEWER SERVICE AREA

A public hearing was held on May 29, 1996, for the purpose of receiving comments on the preliminarily refined Pell Lake sanitary sewer service area plan as shown on Map 5. This hearing was sponsored jointly by the Pell Lake 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 refined Pell Lake sanitary sewer service area plan was presented prior to receiving public comment. Topics specifically addressed in the summary presentation included the rationale for refining the Pell Lake 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 sensitive lands within the service area, and the significance of these lands for the future extension of sewer service. In addition, the probable impact of planned development within the refined sanitary sewer service area on the capacity of the proposed Pell Lake Sanitary District No. 1 sewage treatment plant was also summarized. Comments on the refined plan were then solicited.

Review of the hearing record indicates that no substantive concerns were raised regarding the delineation of the external boundaries of the preliminarily refined Pell Lake sanitary sewer service area, or the delineation of the environmentally sensitive lands within that area. Accordingly, no changes were made to the Pell Lake sanitary sewer service area plan as presented at the public hearing and as reflected on Map 5.

Detailed delineations of the refined Pell Lake sanitary sewer service area, and of the environmentally significant lands within this area, are shown on a series of aerial photographs reproduced as Map 7, beginning on page 19 and continuing through page 25 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:

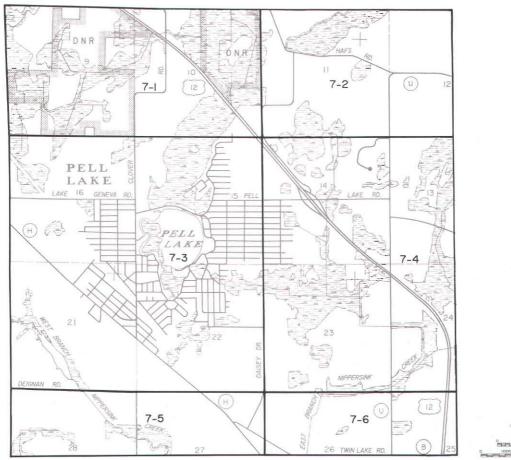
- 1. Formal adoption or endorsement of SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, and this SEWRPC Community Assistance Planning Report by the governing body of the Pell Lake Sanitary District No. 1, as the operator of the sewage treatment facility; by the Town Board of the Town of Bloomfield, as having lands affected by the planned sanitary sewer service area; and by the Walworth County Park and Planning Department, as the County planning agency having joint responsibility with the Town in planning and zoning and otherwise regulating the development of lands in the study area.
- 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 Pell Lake sanitary sewer service area as shown on Maps 5 and 7. 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 Walworth County 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 PELL LAKE SEWER SERVICE AREA

This report presents the refined Pell Lake sewer service area tributary to the Pell Lake Sanitary District No. 1 sewage treatment facility. The refined sewer service area was delineated cooperatively by the units and agencies of government concerned, and 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 Pell Lake area to the year 2010. 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 reflect properly 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 governing body of the Pell Lake 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. While plan amendment may be expedited because study area base maps have been prepared and certain inventories completed as part of the sewer service area planning documented herein, such amendment should be subject to the same analyses and interagency review and should include a public hearing to obtain the comments and suggestions of those citizens and landowners most affected by the proposed changes to the sewer service area boundary. Upon agreement on a revised sewer service area, the new plan map should be endorsed by the governing bodies of the appropriate local units of government and by the Southeastern Wisconsin Regional Planning Commission before certification to the Wisconsin Department of Natural Resources and the U.S. Environmental Protection Agency.

INDEX OF MAPS SHOWING ENVIRONMENTALLY SIGNIFICANT LANDS
AND PLANNED SANITARY SEWER SERVICE AREA FOR THE PELL LAKE AREA

Map 7



SRAPHIC SCALE

SPECIAL STATE

ON ROSO 3000 4000FEET

#### **ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE PELL LAKE AREA**

U. S. Public Land Survey Sections 9 and 10 Township 1 North, Range 18 East



LEGEND



PRIMARY ENVIRONMENTAL CORRIDOR

GROSS SANITARY SEWER SERVICE AREA BOUNDARY



#### **ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE PELL LAKE AREA**

U. S. Public Land Survey Section 11 and the West One-Half of Section 12 Township 1 North, Range 18 East



LEGEND



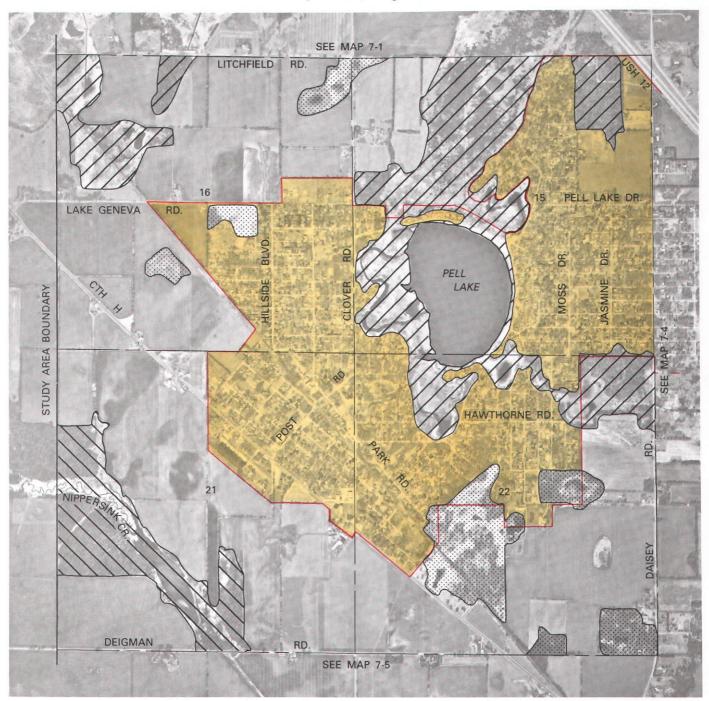
PRIMARY ENVIRONMENTAL CORRIDOR
.
SECONDARY ENVIRONMENTAL CORRIDOR

ISOLATED NATURAL RESOURCE AREA



# ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE PELL LAKE AREA

U. S. Public Land Survey Sections 15, 16, 21, and 22 Township 1 North, Range 18 East







# ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE PELL LAKE AREA

U. S. Public Land Survey Sections 14 and 23, the West One-Half of Section 13, and the West One-Half of Section 24, Township 1 North, Range 18 East







PRIMARY ENVIRONMENTAL CORRIDOR

SECONDARY ENVIRONMENTAL CORRIDOR



ISOLATED NATURAL RESOURCE AREA





#### **ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE PELL LAKE AREA**

The North One-Half of U. S. Public Land Survey Section 27 and the North One-Half of Section 28, Township 1 North, Range 18 East



LEGEND



PRIMARY ENVIRONMENTAL CORRIDOR

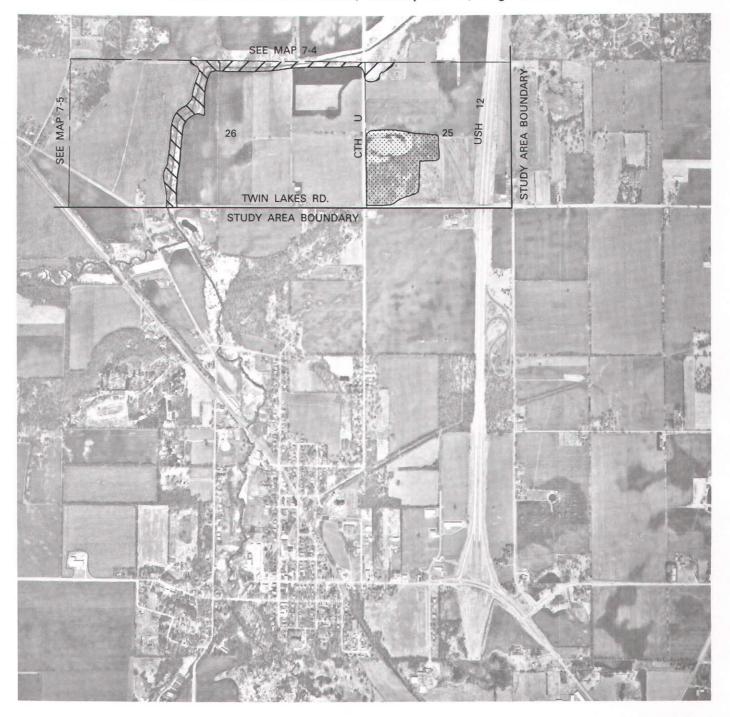
SECONDARY ENVIRONMENTAL CORRIDOR

ISOLATED NATURAL RESOURCE AREA



#### **ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE PELL LAKE AREA**

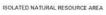
The Northwest One-Quarter of U. S. Public Land Survey Section 25, and the North One-Half of Section 26, Township 1 North, Range 18 East



LEGEND

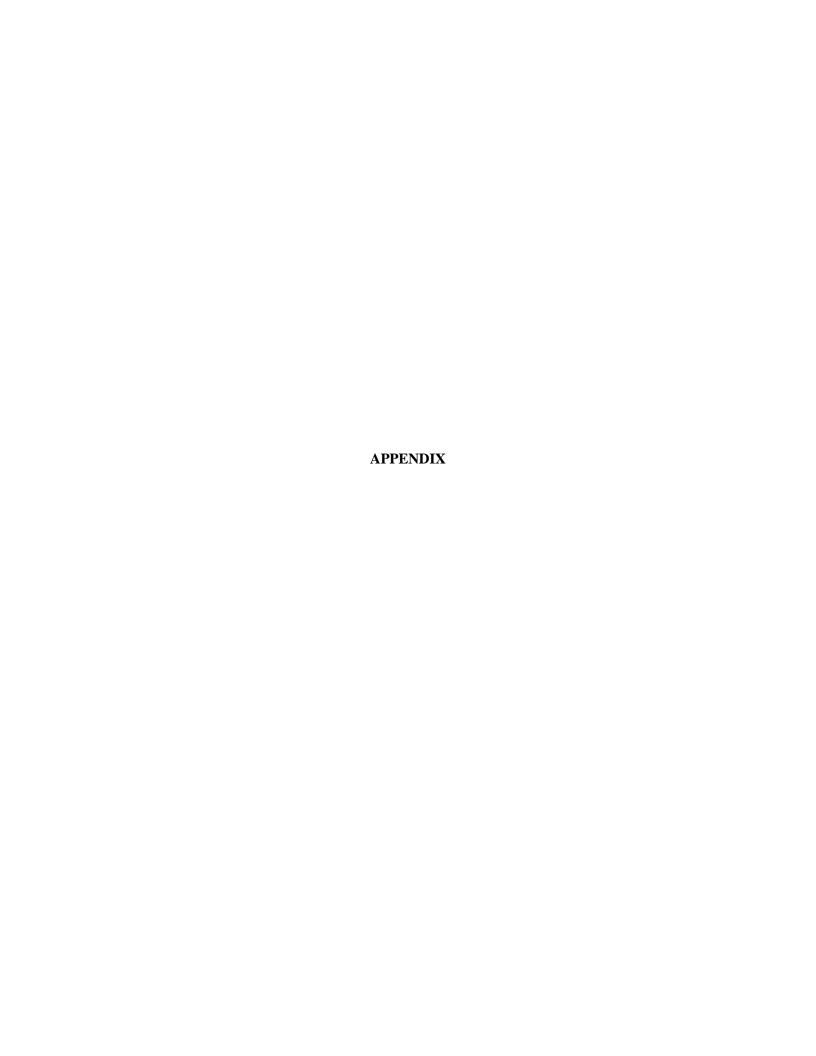


PRIMARY ENVIRONMENTAL CORRIDOR
SECONDARY ENVIRONMENTAL CORRIDOR



GRAPPIC SCALE

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#### Appendix A

#### MINUTES OF PUBLIC HEARING

### Pell Lake Sanitary Sewer Service Area

May 29, 1996

Secretary Aronson opened the hearing at 7:07 P.M. All commissioners present with Jim Johnson of Baxter and Woodman, Attorney Ludwig, Bruce Rubin and Bob Biebel or SEWRPC were also present.

Aronson welcomed everyone for attending, explained the purpose of the hearing and introduced the guest speakers of SEWRPC.

Mr. Rubin explained how the Water Quality Plan of 1979 came to be. With their color coded map he explained environmentally significant lands in the service area. These lands included wetlands, floodlands, bodies of water, and woodlands. The issue at hand are plotted properties within the service area that do not conform to current regulations. These properties will not be assessed.

Mr. Biebel explained three elements that went into planning the district service area. First, the water quality impact to the lake from pollutants from failing septic systems and high ground water. Second, to be cost effective to the area and to design the treatment plant to service Pell lake and have expansion capacity for Powers Lake, Lake Benedict and Genoa City areas in the future. Third, the treatment plant is designed to handle such capacities.

Aronson asked everyone to examine the color coded map in order to understand the properties in question.

The floor was opened for discussion. Everyone concurred with the issues presented. There were questions about the capacity and quality of the discharge waters, if anyone is currently monitoring the quality of the lake and will the ground water levels change in the future. Mr. Biebel answered all questions.

The commissioners thanked Mr. Rubin and Mr. Biebel for their presentations and assured them the board will pass the resolution to adopt their plan.

Aronson adjourned the hearing at 7:50 P.M.

Dan Aronson Secretary