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### COMMUNITY ASSISTANCE PLANNING REPORT NUMBER 90

### SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF SAUKVILLE OZAUKEE COUNTY, WISCONSIN

Prepared by the

Southeastern Wisconsin Regional Planning Commission
P. O. Box 769
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916 N. East Avenue
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September 1983

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### SOUTHEASTERN WISCONSIN REGIONAL PLANNING

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September 21, 1983

TO: The Village of Saukville and the Towns of Grafton, Port Washington, and Saukville

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 plants 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 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. The Department, in carrying out its responsibilities in this respect, requires 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 Village of Saukville on November 17, 1982, requested that the Regional Planning Commission assist the Village in refining and detailing the recommended sanitary sewer service area tributary to the Village's wastewater treatment facility. This report documents the results of that refinement process.

The report contains a map showing the recommended, refined sanitary sewer service area and the location and extent of the primary environmental corridors lying within that service area. These primary 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 considered in the future extension of sanitary sewer service.

During the preparation of this report, a number of meetings were held with local elected officials and concerned citizens, these meetings culminating in a public hearing held on June 9, 1983, to discuss the findings and recommendations of the work and to receive the comments and suggestions of the local elected officials concerned and of interested citizens. In addition, informal discussions were held with representatives of the City of Port Washington in order to reach an agreement on a common sewer service area boundary line between these respective communities. The recommendations contained in this report reflect the pertinent comments and suggestions made at those meetings, hearings, and informal discussions.

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, the Governor, 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 is intended to assist the responsible local public officials in the making of sewerage service-related development decisions in the Village of Saukville. Accordingly, careful consideration and adoption of this report and of the recommended sanitary sewer service area set forth herein by the Village is respectfully urged.

The Regional Planning Commission stands ready to assist the Village 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 primarily 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 proper 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 extent and location of sanitary sewer service areas, the location, type, capacity, and 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.

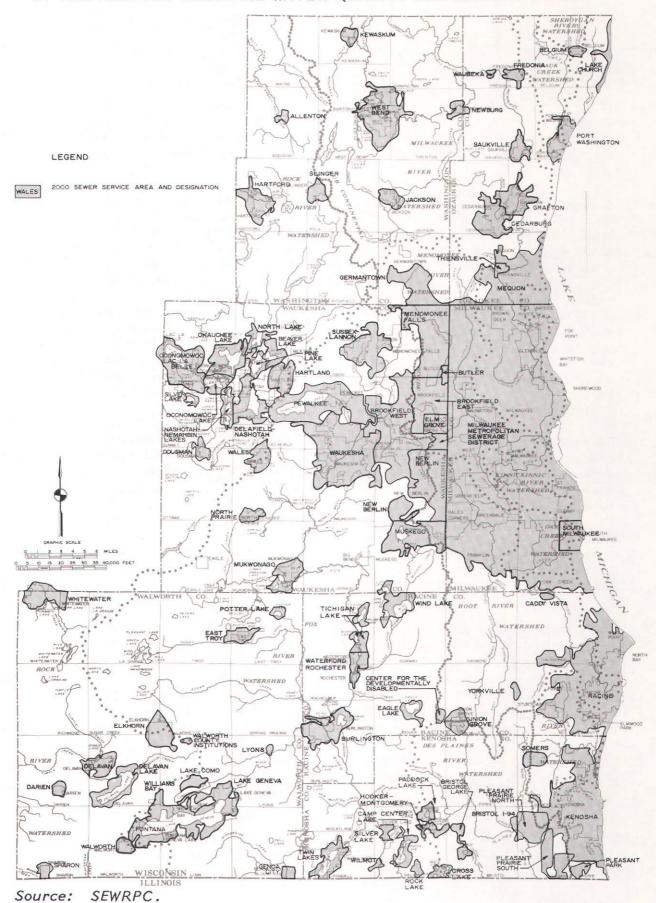
The plan was formally certified over the period July 23 to September 20, 1979, to all of the local units of government in the Region and to the concerned state and federal agencies. The plan was formally endorsed by the Wisconsin Natural Resources Board on July 25, 1979. Such endorsement is particularly important because under state law and administrative rules, certain actions by the Wisconsin Department of Natural Resources (DNR) must be found to be in accordance with the adopted and endorsed plan. These actions extend from DNR approval of waste discharge permits to DNR approval of state and federal grants for the construction of wastewater treatment and conveyance facilities, and to DNR approval of locally proposed sanitary sewer extensions.

### NEED FOR REFINEMENT AND DETAILING OF LOCAL SANITARY SEWER SERVICE AREAS

As noted above, the adopted regional water quality management plan includes recommended sanitary sewer service areas attendant to each recommended sewage treatment facility. There are in the plan a total of 85 such identified sanitary sewer service areas, as shown on Map 1. These recommended sanitary sewer

The 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.

## RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION AS IDENTIFIED IN THE ADOPTED REGIONAL WATER QUALITY MANAGEMENT PLAN



service areas are 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 delineations are necessarily general, and may not reflect detailed local planning considerations.

Section NR 110.08(4) of the Wisconsin Administrative code requires that the Wisconsin Department of Natural Resources 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. The Department, in carrying out its responsibilities in this respect, requires that the Southeastern Wisconsin Regional Planning Commission, as the designated areawide water quality management planning agency for the Southeast 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 regional, planning concerns in the execution of this review responsibility, the Regional Planning Commission, in adopting the areawide water quality management plan, directed 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 was envisioned to consist of the following seven steps:

- The preparation of a base map at an appropriate scale for each sanitary sewer service area identified in the regional water quality management plan.
- 2. The delineation on that base map of the design year 2000 sanitary sewer service area as proposed in the regional water quality management plan and consistent with the objectives set forth in the adopted regional land use plan.
- 3. The conduct of intergovernmental meetings with the local and areawide units of government operating the sewage treatment facilities and with all other local units of government which are to be provided sanitary sewer service at the sewage treatment 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 local units of government concerned solicited.
- 4. The preparation of modifications to the 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 sewer system plans.
- 5. The holding of a public hearing jointly by the Commission and the local or areawide unit, or units, of government operating the treatment 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.

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

- 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 amendments 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, or agency of government operating the sewage treatment facility or facilities concerned, and by the governing bodies of the local units of government which 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 SAUKVILLE SANITARY SEWER SERVICE AREA REFINEMENT PROCESS

The process of refining and detailing the sanitary sewer service areas in southeastern Wisconsin was initiated subsequent to the Commission adoption of the regional water quality management plan in July 1979. By letter dated November 17, 1982, the Village of Saukville requested that the Regional Planning Commission undertake the refinement and detailing of the proposed year 2000 sewer service area tributary to the Village's wastewater treatment facility.

Interagency staff meetings for the purpose of refining and detailing the Saukville sanitary sewer service area were held on March 23, 1983 and April 14, 1983. In attendance at these meetings were representatives of the Village of Saukville and the Regional Planning Commission. At the conclusion of the meetings, all parties concerned had agreed upon a preliminary but refined and detailed sanitary sewer service area to be presented at a public hearing. On April 22, 1983, draft copies of the sewer service area report describing the refined and detailed sewer service area for the Village of Saukville were transmitted to the Towns of Grafton, Port Washington, and Saukville for their review and comment prior to the public hearing.

The public hearing was held on June 9, 1983. The public reaction to the proposed sanitary sewer service area is documented in the minutes contained in Appendix A and is summarized later in this report. The final, agreed-upon, refined and detailed sanitary sewer service area for the Village of Saukville and environs is described in Chapter III of this report, and reflects the decisions made in the referenced meetings and hearing held to consider this matter.

### Chapter II

#### STUDY AREA DESCRIPTION

The study area considered for the purposes of refining and detailing the Saukville sanitary sewer service area is shown on Map 2. The area consists of all of the land encompassed within the corporate limits of the Village of Saukville, as well as adjacent portions of the Towns of Cedarburg, Grafton, Port Washington, and Saukville. The total study area is 20.4 square miles in extent, of which 2.2 square miles, or 11 percent, lie within the Village of Saukville; 1.1 square miles, or 5 percent, lie within the Town of Cedarburg; 3.1 square miles, or 15 percent, lie within the Town of Grafton; 4.1 square miles, or 20 percent, lie within the Town of Port Washington; and 9.9 square miles, or 49 percent, lie within the Town of Saukville. These areas are based on 1980 civil division boundaries.

The 1980 resident population of the entire study area was 5,523 persons. Of this total, about 3,494 persons, or 63 percent, reside in the Village of Saukville; and of this total 3,415 persons, or 98 percent, are provided with centralized sanitary sewer service. The remaining 79 persons, or 2 percent of the Village of Saukville residents, are served by onsite soil absorption sewage disposal systems or by sewage holding tanks. The remaining 2,029 persons in the study area are distributed among the four towns as follows: Town of Cedarburg, 191 persons, or 4 percent of the total resident population of the study area; Town of Grafton, 537 persons, or 10 percent; Town of Port Washington, 566 persons, or 10 percent; and the Town of Saukville, 735 persons, or 13 percent. At the present time all of the resident populations in the four towns are served by onsite soil absorption sewage disposal systems, or by sewage holding tanks.

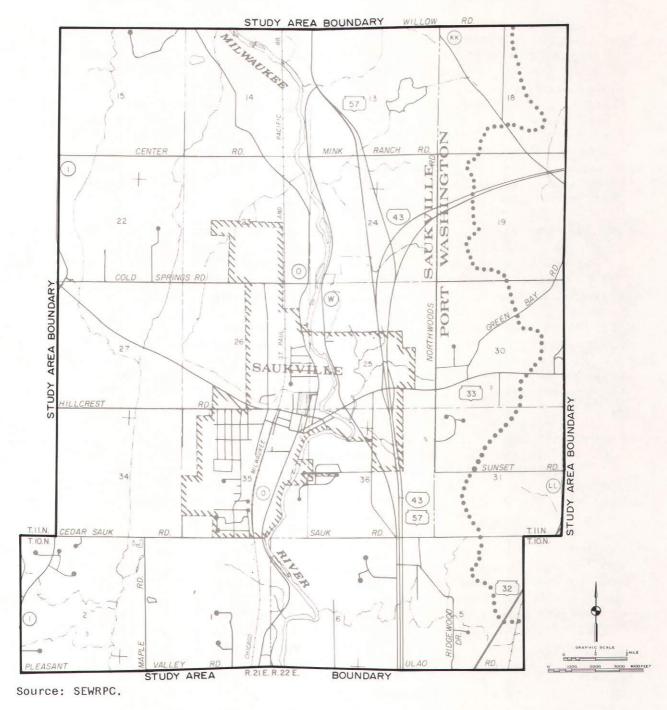
By the year 2000 it is estimated that 8,600 persons will reside in the identified study area. The areawide water quality management plan envisions that of this total, about 6,500 persons, or 76 percent, will be served with centralized sanitary sewer service extending from the Saukville sewage treatment facility. The remaining 2,100 persons would continue to rely on onsite sewage disposal systems for sewage disposal.

It should be noted that the forecast of probable future population levels for small geographic areas such as the Saukville study area is a difficult task accompanied by uncertainties and subject to periodic revision as new information becomes available. The practice typically followed in forecasting population levels for physical development planning has been to prepare 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

<sup>&</sup>lt;sup>1</sup>This population information is based upon 1980 census data published by the U. S. Bureau of the Census.

Map 2

STUDY AREA IDENTIFIED FOR PURPOSES OF REFINING AND DETAILING THE SAUKVILLE SANITARY SEWER SERVICE AREA



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 socioeconomic 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 socioeconomic conditions in the United States, the Regional Planning Commission began to incorporate the alternative futures approach into its planning program late in the 1970's, 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 future development conditions in the Region, together with the likely future range of prospects for these factors. Two 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--were thus defined. These scenarios represent opposite extremes of the prospects identified for the external factors and, consequently, indicate relatively large differences in future population growth and economic activity. One scenario developed postulates moderate population and economic growth; the other scenario postulates stable or declining population and employment levels in the Region. Two alternative regional land use plans, a centralized plan and a decentralized plan, were then developed for each of the two alternative future scenarios, thus providing, in effect, four alternative futures as a framework for physical development and planning in the Region.

The anticipated year 2000 population level of 8,600 persons in the Saukville study area is based upon the moderate growth, centralized land use scenario-the scenario utilized by the Commission in the development of the areawide water quality management plan. Under the alternative futures approach, however, the anticipated population levels within the study area could range from a low of 6,100 under the stable or declining growth-centralized land use scenario, to a high of almost 13,900 under the moderate growth, decentralized land use scenario.

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### Chapter III

#### PROPOSED SANITARY SEWER SERVICE AREA

### SIGNIFICANCE OF SEWER SERVICE AREA DELINEATION

As noted in Chapter I of this report, recent changes in the rules promulgated by the Wisconsin Department of Natural Resources (DNR) pertaining to sanitary sewer extensions have made the process of delineating local sanitary sewer service areas important for local units of government and private land developers. Up until the recent rule changes, DNR approval of locally proposed sanitary sewer extensions was confined primarily to engineering considerations, ensuring that the sewers were properly sized and constructed to accommodate the anticipated sewage flows. The recent rule changes significantly expand the scope of the DNR review process to include water quality-oriented land use planning considerations. Before the DNR can approve a locally proposed sanitary sewer extension, it 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 approved by the Wisconsin Natural Resources Board through approval of an 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 DNR 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

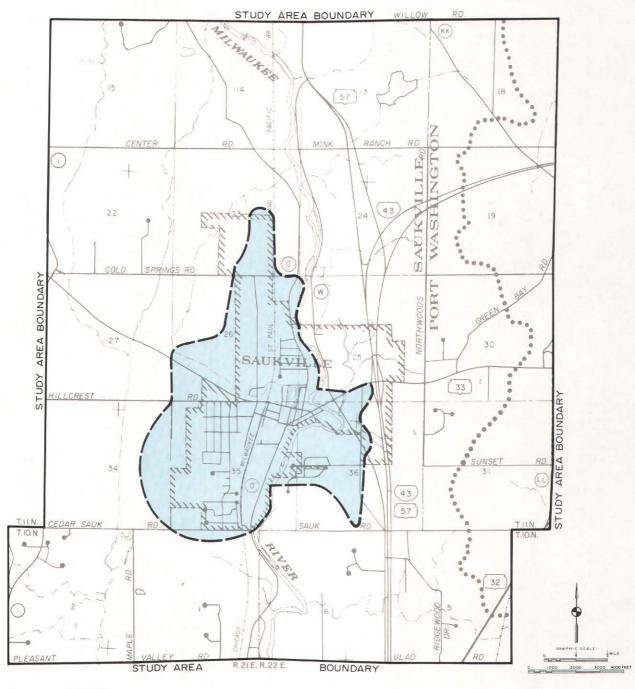
The planned year 2000 sanitary sewer service area tributary to the Saukville sewage treatment facility as proposed in the approved areawide water quality management plan is shown on Map 3. The area totals about 2.25 square miles, or 11 percent of the total study area of 20.4 square miles. As noted in Chapter II, the population expected to reside in this sanitary sewer service area by the plan design year 2000 was estimated in SEWRPC Planning Report No. 30 at 6,500 persons.

The anticipated year 2000 population level of 6,500 persons within the proposed sanitary sewer service area for the Village of Saukville is based upon the moderate growth, centralized land use scenario. However, under the alternative futures approach discussed earlier in this report, the anticipated population levels within the proposed sewer service area could range from a low of 4,800 under the stable or declining growth, centralized land use scenario, to a high of almost 7,000 persons under the moderate growth, decentralized land use scenario.

A number of important factors were taken into account in the delineation of the recommended sanitary sewer service area as set forth in SEWRPC Planning Report No. 30. These factors also were important considerations in the development of the adopted regional land use plan. These factors include, among others, the location, type, and extent of existing urban land use development; the location of areas where onsite, soil absorption, sewage disposal systems

Map 3

THE SAUKVILLE SANITARY SEWER SERVICE AREA
AS DEFINED IN SEWRPC PLANNING REPORT NO. 30



were known to be failing; the location and extent of gravity drainage areas tributary to existing major sewerage system pumping stations, or directly tributary 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 and secondary environmental corridors, and the location and extent of prime agricultural lands.

### DETERMINATION OF ENVIRONMENTALLY SIGNIFICANT LANDS IN THE SAUKVILLE STUDY AREA

Environmental corridors are defined as linear areas in the landscape containing concentrations of natural resource amenities as well as scenic, recreational, and historic amenities. These corridors generally lie along the major stream valleys around major lakes, and in the Kettle Moraine area of southeastern Wisconsin. Almost all of the remaining high-value woodlands, wetlands, 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 important recreational and scenic areas, and the best remaining potential park sites are located within the environmental corridors. Such environmental corridors are, in effect, a composite of the most important individual elements of the natural resource base in southeastern Wisconsin and have immeasurable environmental 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, however, recognized in the plan 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, very low-density residential development on five-acre lots, 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 and detailing the Saukville sanitary sewer service area was to map, in detail, the environmentally significant lands in the Saukville study area. Accordingly, Commission inventories of the following elements of the natural resource base were reviewed and updated as necessary: 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 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 archeological value, scenic vistas or viewpoints, and areas of scientific value.

Each of these natural resource and resource-related elements was mapped on ratioed and rectified aerial photographs at a scale of 1 inch equals 400 feet. A point system for value rating the various elements of the resource base was established (see Table 1), and, on the basis of the score of the point values, the final primary environmental corridor delineations were established. To qualify for inclusion in a primary environmental corridor, an area must have 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. The primary environmental corridors as delineated in the Saukville study area are shown on Map 4.

In addition, Map 4 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 in the urban development process, 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 have a point value of 10 or more, with such a corridor having a minimum area of 100 acres and a minimum length of one mile.

Also identified on Map 4 are isolated natural areas. Isolated natural 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 and agricultural land uses. An isolated natural area must be at least five acres in size. Like secondary environmental corridors, isolated natural areas are not as significant as primary environmental corridors in terms of overall resource values, but should be considered for preservation in the urban development process because such areas provide needed "green space" and can serve as future park sites in developing residential neighborhoods.

Lands encompassed within the primary environmental corridors total about 3.0 square miles, or about 15 percent of the total study area. Lands encompassed within the secondary environmental corridors total about 0.6 square mile, or 3 percent of the study area. Lands encompassed within isolated natural areas total about 0.4 square mile, or 2 percent of the study area. Thus, all environmentally significant lands in the Saukville study area comprise about 4.0 square miles, or 20 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 space 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 the Village of Saukville 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 a greater community benefit than preservation of a small segment of the primary environmental corridor. Thus, a compromise to the preservation of primary environmental corridor lands would be required. When such conflicts in legitimate

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	A Company
Lake	20
Major (50 acres or more)	20
Minor (5-49 acres)	10
Rivers or Streams (perennial)	
Shoreland Same Same Same Same Same Same Same Same	10
Lake or Perennial River or Stream	'š
Intermittent Stream	3
Flood and (100-year recurrence interval)	10
Wetland Wet, Poorly Drained, or Organic Soil	5
wet, Poorly Drained, or organic Soil	10
Woodland	1
High Value	10
Medium Value	7
Low Value	j <u> </u>
Steep Slope	
20 Percent or More	7
13-19 Percent	5
Prairie	10
	<u> </u>
Natural Resource Base-Related	
Existing Park or Open Space Site	1 -
Rural Open Space Site	]
Other Park and Open Space Sites	2
Potential Park Site	
High Value	3
Medium Value	2
Low Value	
Historic Site	
Structure	
Other Cultural	1 .
Archeological	2
Scenic Viewpoint	>
Scientific Area	1
State Scientific Area	15
State Significance	15
County Significance	10
Local Significance	5

Source: SEWRPC.

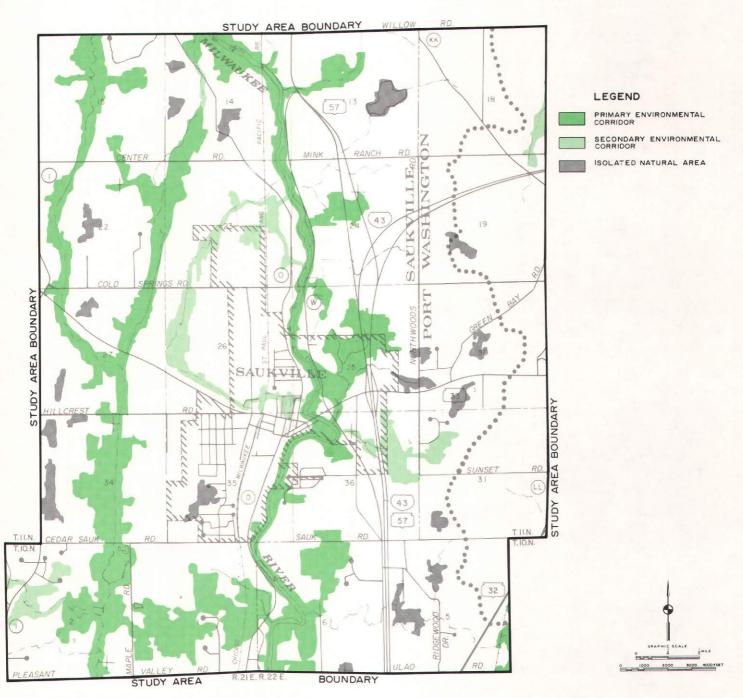
community development objectives occur, it is important that they be resolved sensitively, and that any damage to the natural environment in the corridors be minimized.

### REFINED SANITARY SEWER SERVICE AREA

As previously noted, the sanitary sewer service area attendant to the Village of Saukville sewage treatment facility as delineated in the adopted areawide water quality management plan is a general delineation and, as such, does not necessarily reflect detailed local planning considerations. Some important considerations bearing on the refinement of the sanitary sewer service area are the engineering work completed by Ruekert & Mielke, Inc., consulting engineers to the Village, regarding the determination of the ultimate limits for sanitary sewer service tributary to the village sewage treatment facility; the

Map 4

ENVIRONMENTALLY SIGNIFICANT LANDS IN THE SAUKVILLE STUDY AREA



treatment capacity of the newly constructed village sewage treatment plant; and the completion of a master plan for the Village by the firm Max Anderson & Associates, consultant planners to the Village.

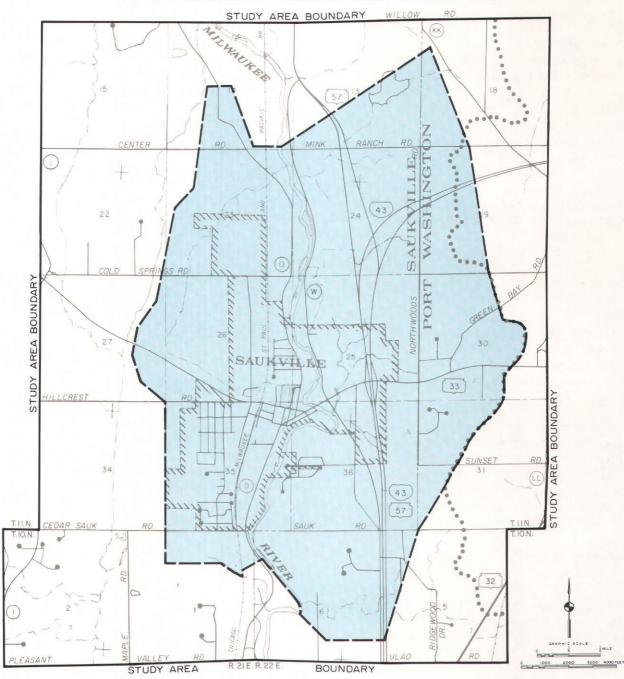
The ultimate limits of the sanitary sewer service area tributary to the village sewage treatment plant, as delineated by the consulting engineers to the Village and as shown on Map 5, encompass a total area of 9.2 square miles, or 45 percent of the total study area. Based upon topographic conditions, the ultimate service area as shown on Map 5 represents the probable maximum extent of urban development which could economically be provided with sanitary sewer service from the village sewage treatment plant. This ultimate service area is an important consideration in the proper design of the major trunk sewer lines necessary to serve the population anticipated to reside within that service area. Being an ultimate service area, however, it is understandably larger in size than the year 2000 urban service area to be determined as part of this plan refinement effort.

Another important consideration in the refinement of the Saukville sanitary sewer service area is the master plan prepared by the consulting planners to the Village. This plan is intended to provide guidance in determining the amount and spatial distribution of anticipated urban development in the Saukville area over the next two decades. The geographic limits of the urban service area envisioned under this plan are shown on Map 6. At the developmental densities envisioned in the plan, the resident population within the urban service area shown on Map 6 would approximate 15,000 persons in the plan design year. This population level exceeds the capacity of the village sewage treatment plant, which began operating in August 1981 with an average hydraulic design capacity of about 1.0 million gallons per day (mgd), and with the ability to accommodate a design year 2000 resident population in its service area of about 6,700 persons. Consultation with village officials on this matter resulted in an adjustment of the urban service area as delineated in the village master plan so as to accommodate a design year 2000 resident population more in accord with the capacity of the village sewage treatment plant. The adjustments are shown on Map 6. Exclusions from the service area as delineated on the master plan were made primarily in the eastern and northeastern portions of the master plan area--consisting of lands which should not, in the opinion of village officials, require sanitary sewer service by the year 2000; and additions were made primarily in the western and northern portions of the master plan area, consisting of lands located immediately adjacent to existing sewered urban development which would, in the opinion of village officials, require sewer service by the year 2000.

Map 7 shows the refined, design year 2000, sanitary sewer service area as agreed upon by the local government officials involved in the interagency meetings and as submitted to public hearing, together with existing and proposed trunk sewers. This refined year 2000 sewer service area for Saukville encompasses about 4.4 square miles, or about 21 percent of the total study area of 20.4 square miles, and includes 0.4 square mile of primary environmental corridor, 0.3 square mile of secondary environmental corridor, and 0.1 square mile of isolated natural areas. The year 2000 sanitary sewer service area, as shown on Map 7, would accommodate a total planned year 2000 resident population of about 6,700 persons, resulting in a density of about 3.1 dwelling units per net residential acre.

ULTIMATE SANITARY SEWER SERVICE AREA TRIBUTARY
TO THE SAUKVILLE SEWAGE TREATMENT PLANT

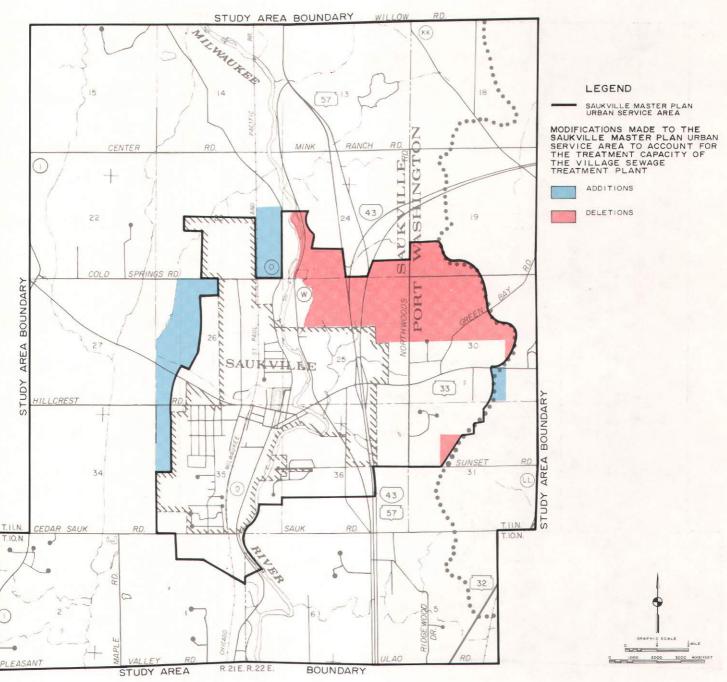
Map 5



Source: Ruekert and Mielke, Inc.

Map 6

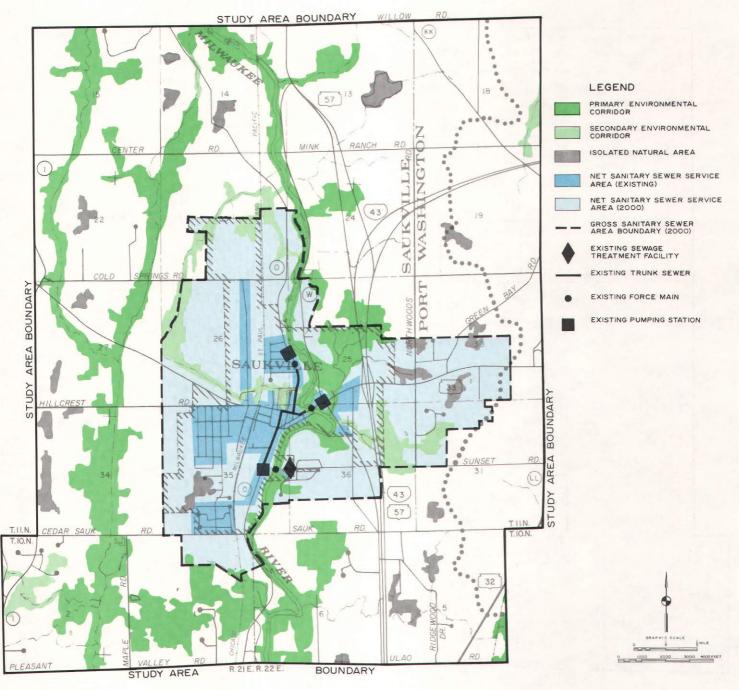
SAUKVILLE URBAN SERVICE AREA AS
DEFINED IN THE SAUKVILLE MASTER PLAN



Source: Max Anderson Associates.

Map 7

PRE-PUBLIC HEARING
SAUKVILLE SANITARY SEWER SERVICE AREA



### PUBLIC REACTION TO THE PROPOSED SANITARY SEWER SERVICE AREA

A public hearing was held on June 9, 1983, for the purpose of receiving comments on the revised sanitary sewer service area as shown on Map 7. The hearing was sponsored jointly by the Village of Saukville and the Regional Planning Commission. A review of the public hearing record which is provided in Appendix A indicates there were no substantive concerns raised at that hearing.

About the same time that Village of Saukville officials were refining the delineation of their sanitary sewer service area, however, City of Port Washington officials had begun a similar effort for their community. The sanitary sewer service area proposed by City of Port Washington officials included a parcel of land which was also included in the sewer service area delineated by the Village of Saukville. This parcel of land-approximately 80 acres in size--is known as the Schanen farm and is located along both the north and south sides of STH 33 approximately one-quarter mile west of CTH LL (see Map 8).

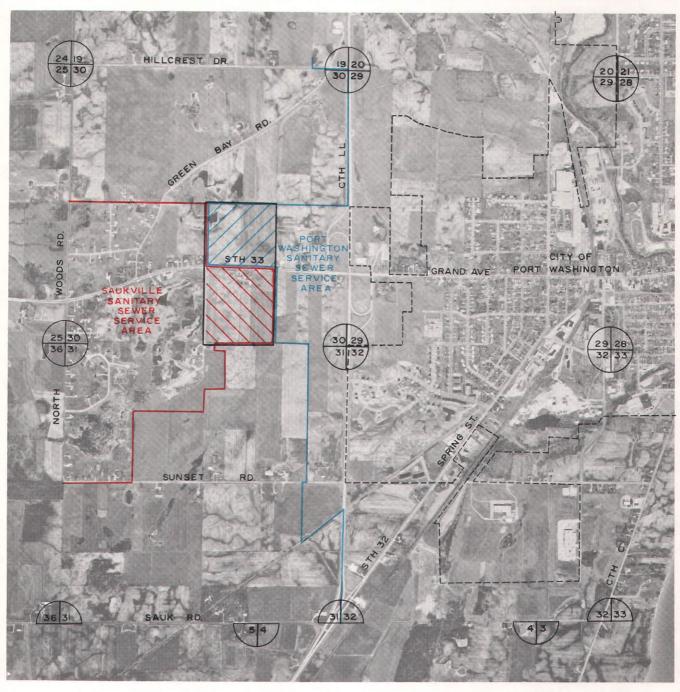
In intergovernmental discussions on this matter, questions were raised concerning the relative ability of each community to serve the subject lands. The recent construction of a new Saukville sewage treatment plant provided the Village with adequate capacity to provide treatment services for any sewage that may be generated by development on the Schanen farm. As a practical matter, however, because of the distance of the Schanen farm from the existing sewered area of the Village, it would be many years before the Village could actually provide sewer service to those lands. The situation in the City of Port Washington was somewhat the reverse. The Schanen lands lie relatively close to the existing sewer service area in that City, and service could be provided quite readily through extensions of the existing sewer system. While the City is under no orders from the DNR to take steps to expand its sewage treatment facility, it was recognized that at the present time that facility is operating near its design capacity. Whether or not the City would be in a position to immediately provide service to new urban development on the Schanen lands would be dependent upon the amount of other new development that the City may attempt to accommodate over the next several years. The adopted regional water quality management plan does call for an expansion of the Port Washington plant to provide additional capacity as needed during the design period of the plan.

Upon conclusion of the intergovernmental discussions concerning this issue, it was collectively agreed by the units of government concerned that that portion of the parcel in question located north of STH 33 would be included in the City of Port Washington's sewer service area, and that portion of the parcel south of STH 33 would be included in the Village of Saukville's sewer service area (see Map 8).

The final sanitary sewer service area for the Village of Saukville is shown on Map 9. This area totals about 4.3 square miles, or about 21 percent of the total study area of 20.4 square miles. This final sanitary sewer service area includes 0.4 square mile of primary environmental corridor, 0.3 square mile of secondary environmental corridor, and 0.1 square mile of isolated natural areas. It should be noted that the primary environmental corridors indicated on Map 9 total approximately three acres less than the primary environmental corridors indicated on Map 4 owing to the filling of a wetland

Map 8

PARCEL SUBJECT TO POST-PUBLIC HEARING DISCUSSION



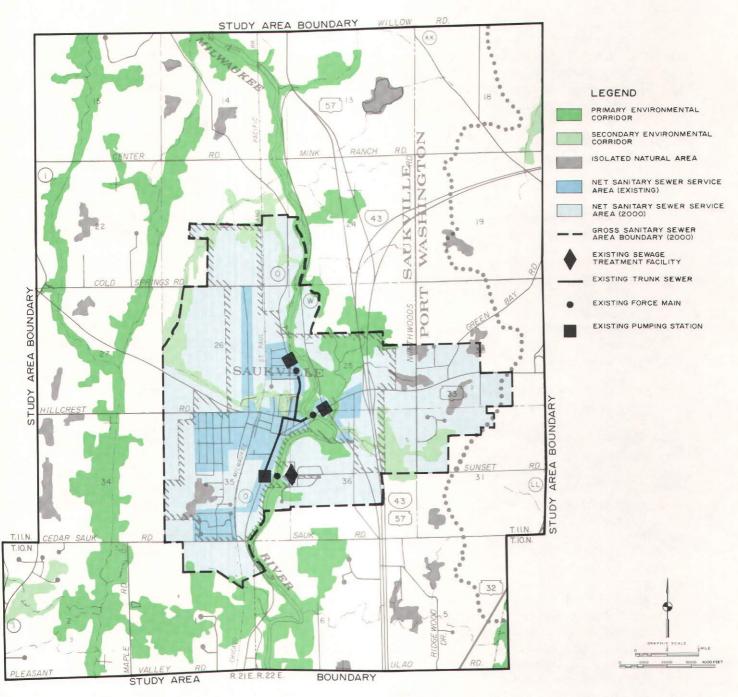
LEGEND

PORTION OF PARCEL TO BE INCLUDED IN THE SAUKVILLE SEWER SERVICE AREA

PORTION OF PARCEL TO BE INCLUDED IN THE PORT WASHINGTON SEWER SERVICE AREA



Map 9
POST-PUBLIC HEARING SAUKVILLE SANITARY SEWER SERVICE AREA



area in a corridor along the Milwaukee River in the southeast one-quarter of Section 35, Township 11 North, Range 21 East. This filling was undertaken in accord with a U. S. Army Corps of Engineers nationwide permit issued to theowner of the land in February 1982.

The planned year 2000 resident population of 6,700 persons would be accommodated within this sanitary sewer service area, resulting in a density of about 3.2 dwelling units per net residential acre. This density lies within the SEWRPC-recommended medium land use density range. More detailed delineations of the environmentally significant lands in the Saukville study area are shown on a series of aerial photographs reproduced as Map 10 beginning on page 24 and continuing through page 32 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 Village Board of the Village of Saukville as the operator of the sewage treatment facility; and by the Town Boards of the Towns of Grafton, Port Washington, and Saukville as towns having lands affected by the planned sewer service area.
- 2. Formal adoption of this SEWRPC Community Assistance Planning Report by the Regional Planning Commission as an amendment to the regional

<sup>1</sup>Net residential density is determined by dividing the total number of dwelling units in the sewer service area in the design year by the net residential land area anticipated in the sewer service area. The total number of dwelling units anticipated in this sewer service area--2,556--was determined by dividing the anticipated household population--6,700--by the anticipated average household size of 2.7 persons per dwelling, and adding 3 percent more units to account for housing vacancies. The net residential land anticipated in this sewer service area was determined by first identifying all land within the service area anticipated to be used for residential purposes. A total of 635 acres of additional new "gross" residential land identified in the Village of Saukville master plan was encompassed within the refined sewer service area. In order to provide flexibility to the community in determining the spatial distribution of new urban development and in order to facilitate operation of the urban land market, it was assumed that only 80 percent of the new gross residential land--508 acres--would actually be developed for urban purposes by the design year of the plan. Of the 508 acres allocated to new "gross" residential uses, it was further assumed that streets would occupy 23 percent of the area, leaving the remaining 77 percent, or 391 acres, for new "net" residential development. This area, added to the 414 acres of existing net residential land in the service area, provided a total net residential area of 805 acres. The number of dwelling units anticipated in the sewer service area in the design year--2,556--divided by the anticipated net residential land area--805 acres--results in an overall net residential density of 3.2 dwelling units per acre.

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 Saukville sanitary sewer service area as shown on Maps 9 and 10. 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 Village of Saukville 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 SAUKVILLE SEWER SERVICE AREA

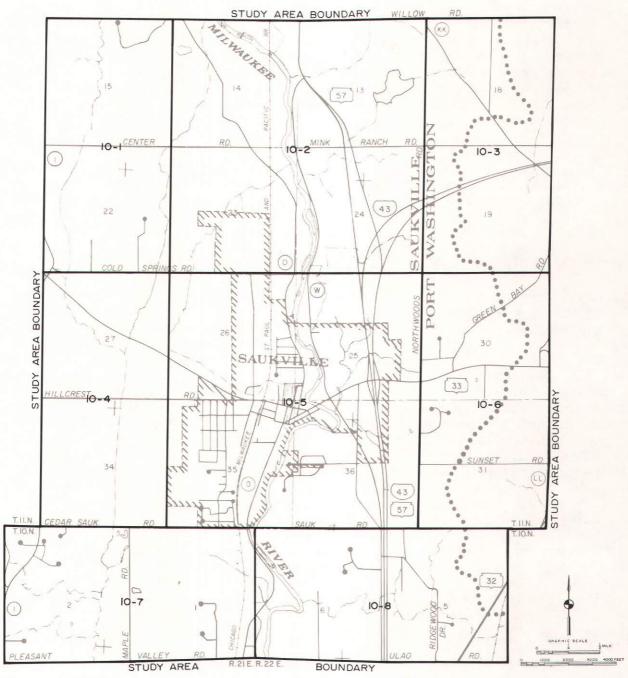
This report presents a refined sewer service area for the Village of Saukville. The refined sewer service area was delineated cooperatively by the units and agencies of government concerned, and was subjected to review at an interagency meeting and at a public hearing. It is envisioned that the delineated sewer service area will accommodate all new urban development anticipated in the Saukville area to the year 2000. Like other long-range plans, however, this sewer service area plan should be periodically reviewed--every five years--to assure that it continues to properly reflect the urban development objectives of the community 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 Village of Saukville as the operator of the sewage treatment facility involved that amendments to the sewer service area plan as presented herein are necessary, the Village should ask the Southeastern Wisconsin Regional Planning Commission for assistance in undertaking the technical work required to amend the plan properly. 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 Village Board of the Village of Saukville and by the Southeastern Wisconsin Regional Planning Commission prior to certification to the Wisconsin Department of Natural Resources and the U. S. Environmental Protection Agency.

INDEX OF MAPS SHOWING ENVIRONMENTALLY SIGNIFICANT

Map 10

### LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF SAUKVILLE AND ENVIRONS



### ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE VILLAGE OF SAUKVILLE AND ENVIRONS

U. S. Public Land Survey Sections 15 and 22 Township 11 North, Range 21 East

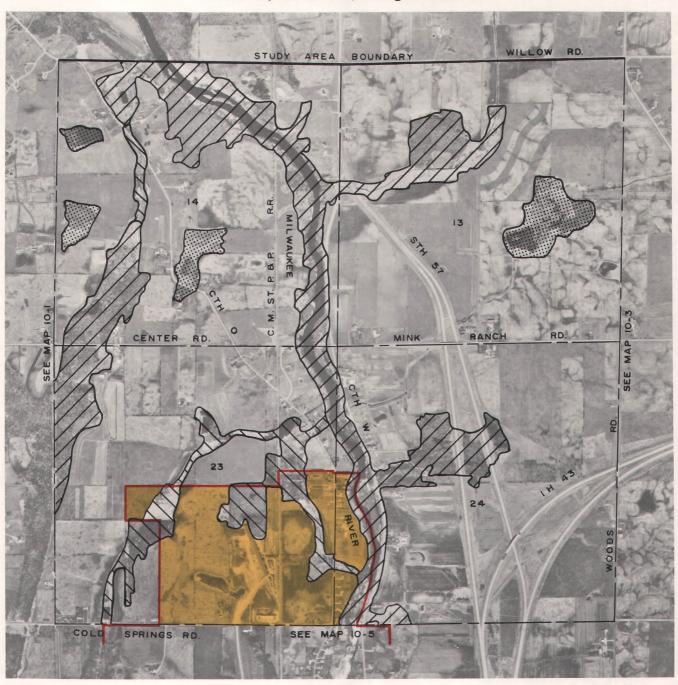


LEGEN

PRIMARY ENVIRONMENTAL CORRIDOR

ISOLATED NATURAL AREA

U. S. Public Land Survey Sections 13, 14, 23, and 24 Township 11 North, Range 21 East







SECONDARY ENVIRONMENTAL CORRIDOR

TOTAL ISOLATED NATURAL AREA

PLANNED SANITARY SEWER SERVICE AREA

GROSS SANITARY SEWER SERVICE AREA BOUNDARY



### ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE VILLAGE OF SAUKVILLE AND ENVIRONS

U. S. Public Land Survey Sections 18 and 19 Township 11 North, Range 22 East



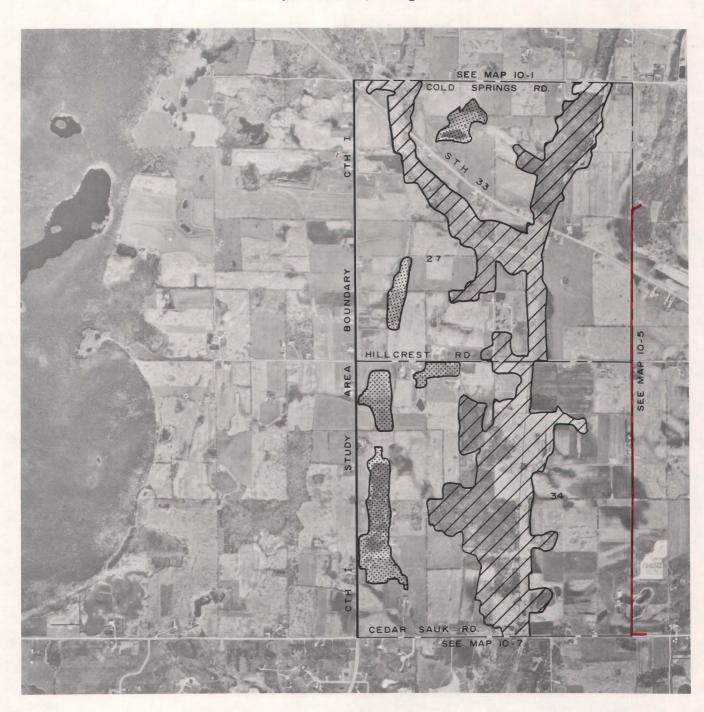
LEGEND

SECONDARY ENVIRONMENTAL CORRIDOR

ISOLATED NATURAL AREA

### ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE VILLAGE OF SAUKVILLE AND ENVIRONS

U. S. Public Land Survey Sections 27 and 34 Township 11 North, Range 21 East



LEGEND

PRIMARY ENVIRONMENTAL CORRIDOR



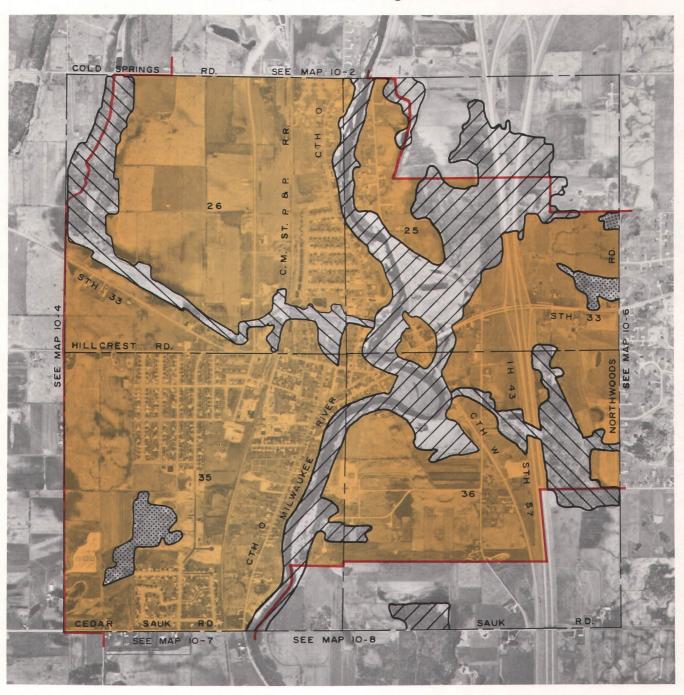
ISOLATED NATURAL AREA



GROSS SANITARY SEWER SERVICE AREA BOUNDARY



U. S. Public Land Survey Sections 25, 26, 35, and 36 Township 11 North, Range 21 East





PRIMARY ENVIRONMENTAL CORRIDOR

SECONDARY ENVIRONMENTAL CORRIDOR

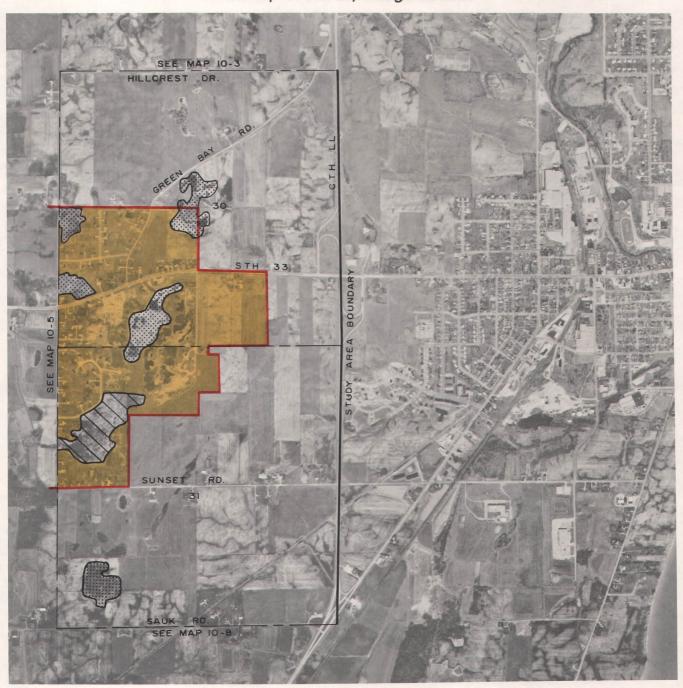
ISOLATED NATURAL AREA

PLANNED SANITARY SEWER SERVICE AREA

GROSS SANITARY SEWER SERVICE AREA BOUNDARY



U. S. Public Land Survey Sections 30 and 31 Township 11 North, Range 22 East



LEGEND

SECONDARY ENVIRONMENTAL CORRIDOR

ISOLATED NATURAL AREA

PLANNED SANITARY SEWER SERVICE AREA

GROSS SANITARY SEWER SERVICE AREA BOUNDARY



U. S. Public Land Survey Sections 1 and 2 Township 10 North, Range 21 East



LEGEND

PRIMARY ENVIRONMENTAL CORRIDOR

SECONDARY ENVIRONMENTAL CORRIDOR

PLANNED SANITARY SEWER SERVICE AREA

GROSS SANITARY SEWER SERVICE AREA BOUNDARY



U. S. Public Land Survey Sections 5 and 6 Township 10 North, Range 22 East





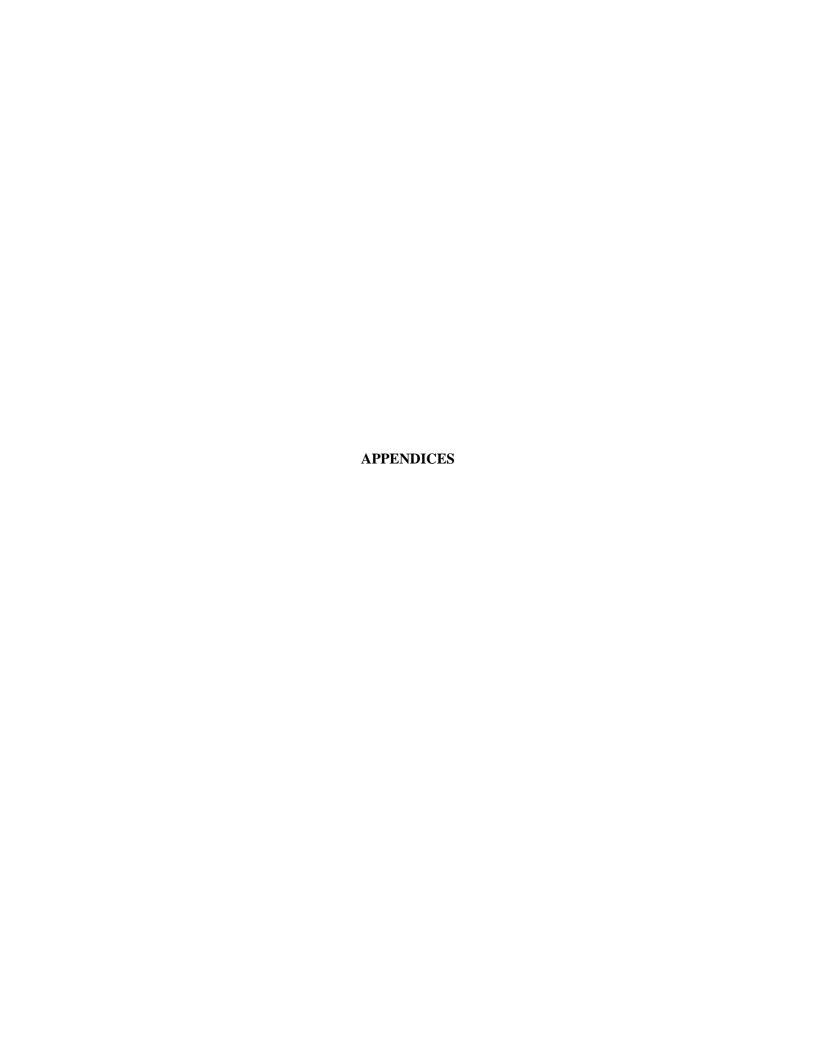


ISOLATED NATURAL AREA

PLANNED SANITARY SEWER SERVICE AREA

GROSS SANITARY SEWER SERVICE AREA BOUNDARY





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### Appendix A

# PUBLIC HEARING MINUTES SAUKVILLE SANITARY SEWER SERVICE AREA JUNE 9, 1983 Saukville Village Hall

The Hearing was called to order at 7:00 p.m. by Chairman Miller.

Village Administrator Harrigan stated the hearing had been posted and noticed according to law.

Present: Paul Miller

Howard Taft
James Douglas
Arnold Miller
Ray Meyer

Charles Prendergast

Also Present: Michael C. Harrigan

Phil Evenson, SEWPRC Bob Biebel, SEWRPC Betty Lubahn

Richard Feller Dorothy Klein Jeffery Knight

Presentation of Saukville Sanitary Sewer Service Area Plan for year 2000.

Mr. Philip Evenson, Assistant Director of Southeastern Wisconsin Regional Planning Commission, was present and delivered the presentation of the plan as prepared by the Regional Planning Commission.

Following the presentation, questions were fielded from those present.

Mr. Charles Prendergast stated that the Plan Commission had previously requested that the Saukville Sewer Service Boundary be extended to the east along Highway 33 to the limit of the watershed between Port Washington and Saukville. Mr. Evenson stated that this was an oversight and that the plan would be corrected to reflect this request.

There were no other objections or requests for modification raised by any of those present.

Mr. Evenson stated that SEWRPC would now prepare the final draft of the plan, which would be submitted for Village Board approval and then to the Regional Planning Commission for its approval. The final document could then be used by the DNR as a basis for granting sewer extensions.

It was moved by Ray Meyer and seconded by James Douglas to adjourn. Motion unanimously approved and hearing adjourned at 7:36 p.m.

Respectfully submitted,

Michael C. Harrigan Administrator/Clerk