



AMENDMENT TO THE

**REGIONAL WATER QUALITY
MANAGEMENT PLAN – 2010**

GREATER KENOSHA AREA

**AS ADOPTED BY THE
PLEASANT PRAIRIE**

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

MARCH 1996

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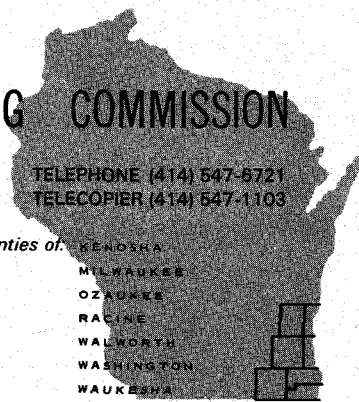
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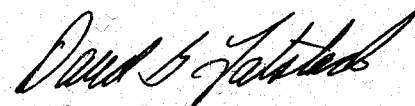


SUBJECT: Certification of Amendment to the Adopted Regional Water Quality Management Plan (Greater Kenosha Area Sanitary Sewer Service Area)

TO: The Legislative Bodies of Concerned Local Units of Government within the Southeastern Wisconsin Region, namely: the County of Kenosha; the City of Kenosha; the Village of Pleasant Prairie; the Towns of Bristol, Paris and Somers; the Village of Pleasant Prairie Sewer Utility District No. 1; the Village of Pleasant Prairie Sewer Utility District F; the Village of Pleasant Prairie Sewer Utility District D; the Town of Bristol Utility District No. 3; and the Town of Somers Utility District No. 1

This is to certify that at the quarterly meeting of the Southeastern Wisconsin Regional Planning Commission, held at the Waukesha County Courthouse, Waukesha, Wisconsin, on the 6th day of March 1996, the Commission did by unanimous vote by all Commissioners present, being 14 ayes and 0 nays, and by appropriate Resolution, a copy of which is made a part hereof and incorporated by reference to the same force and effect as if it had been specifically set forth herein in detail, adopt an amendment to the regional water quality management plan, which plan was originally adopted by the Commission on the 12th day of July 1979, as part of the master plan for the physical development of the Region. Said amendment to the regional water quality management plan pertains to the proposed sanitary sewer service area for the greater Kenosha area and consists of the documents attached hereto and made a part hereof. Such action taken by the Commission is recorded on, and is a part of, said plan, and the plan as amended is hereby transmitted to the constituent local units of government for consideration, adoption, and implementation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal and cause the Seal of the Southeastern Wisconsin Regional Planning Commission to be hereto affixed. Dated at the City of Waukesha, Wisconsin, this 7th day of March 1996.



David B. Falstad, Chairman
Southeastern Wisconsin
Regional Planning Commission

ATTEST:



Kurt W. Bauer, Deputy Secretary

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RESOLUTION NO. 96-7

RESOLUTION OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION AMENDING THE ADOPTED REGIONAL WATER QUALITY MANAGEMENT PLAN, THAT PLAN BEING A PART OF THE MASTER PLAN FOR THE PHYSICAL DEVELOPMENT OF THE REGION COMPRISED OF THE COUNTIES OF KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH WASHINGTON, AND WAUKESHA IN THE STATE OF WISCONSIN (GREATER KENOSHA AREA SANITARY SEWER SERVICE AREA)

WHEREAS, pursuant to Section 66.945(10) of the Wisconsin Statutes, the Southeastern Wisconsin Regional Planning Commission, at a meeting held on the 12th day of July 1979, duly adopted a regional water quality management plan as documented in the three-volume SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000; and

WHEREAS, at a meeting held on the 2nd day of December 1985, the Commission duly adopted an amendment to the regional water quality management plan refining and detailing the sanitary sewer service areas attendant to the City of Kenosha and Village of Pleasant Prairie sewage treatment plants, as documented in SEWRPC Community Assistance Planning Report No. 106, Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin, November 1985; and

WHEREAS, by resolutions dated April 10, 1995, the governing bodies of the Village of Pleasant Prairie, the Village of Pleasant Prairie Sewer Utility District No. 1, the Village of Pleasant Prairie Sewer Utility District D, the Village of Pleasant Prairie Sewer Utility District F, and the Village of Pleasant Prairie Water Utility; and by resolutions dated April 11, 1995, and April 17, 1995, the governing bodies of the City of Kenosha Water Utility and the City of Kenosha, respectively, requested that the Commission amend the Kenosha and environs sanitary sewer service areas to incorporate certain recommendations relating to the identification and delineation of the outer boundary of the planned sanitary sewer service area, and of the configuration of the major sewerage system facilities within such area, as set forth in a document entitled, A Coordinated Sanitary Sewer and Water Supply Plan for the Greater Kenosha Area, prepared by Ruckert & Mielke, Inc., dated October 1991; and

WHEREAS, the proposed amendment to the regional water quality management plan is documented in a Commission staff memorandum entitled, "Response to Request by the City of Kenosha and the Village of Pleasant Prairie to Amend the Regional Water Quality Management Plan," dated February 15, 1996, attached hereto and made a part hereof; and

WHEREAS, the proposed changes to the regional water quality management plan, as documented in the above-mentioned staff memorandum, were the subject of a public hearing held jointly by the City of Kenosha, the Village of Pleasant Prairie, and the Regional Planning Commission on January 23, 1996; and

WHEREAS, Section 66.945(9) of the Wisconsin Statutes authorizes and empowers the Regional Planning Commission, as the work of making the whole master plan progresses, to amend, extend, or add to the master plan or carry any part or subject thereof into greater detail;

NOW, THEREFORE, BE IT HEREBY RESOLVED:

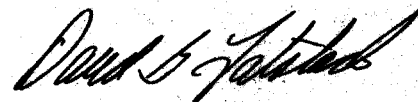
FIRST: That the regional water quality management plan for the Southeastern Wisconsin Region, being a part of the master plan for the physical development of the Region and comprised of SEWRPC Planning Report No. 30, Volumes One, Two, and Three, which was adopted by the Commission as a part of the master plan on the 12th day of July 1979, and which was amended on the 2nd day of December 1985 to include the initial refined Kenosha and environs sanitary sewer service areas, as set forth in SEWRPC Community Assistance Planning Report No. 106, be and the same hereby is amended as follows:

1. The delineation of the outer boundary of the planned sanitary sewer service area for the City of Kenosha and its environs is amended in the manner identified on Map 2 of the aforementioned SEWRPC staff memorandum, with the Kenosha sewage treatment plant designated to serve the entire area concerned.
2. The present designations of the Village of Pleasant Prairie Sewer Utility District D and the Village of Pleasant Prairie Sanitary District No. 73-1 sewage treatment plants as permanent plants are removed from the plan, and a recommendation of abandonment of these two sewage treatment plants by the year 2010 is included in the plan.
3. The configuration of the intercommunity trunk sewers and appurtenant pumping stations to serve the area concerned is amended to conform with the configuration as identified on Map 2 of the aforementioned SEWRPC staff memorandum.
4. The designations attendant to management agencies for the area concerned are amended in the manner set forth in Table 2 of the aforementioned SEWRPC staff memorandum.

SECOND: That the Executive Director is authorized to submit findings to the Wisconsin Department of Natural Resources and the Wisconsin Department of Industry, Labor and Human Relations that public and private sanitary sewer extensions necessary to serve the anticipated development on the lands concerned are in conformance with, and would serve to implement, the adopted regional water quality management plan as herein amended.

THIRD: That a true, correct, and exact copy of this resolution, together with the aforementioned SEWRPC staff memorandum, shall be forthwith distributed to each of the local legislative bodies of the local governmental units within the Region entitled thereto and to such other bodies, agencies, or individuals as the law may require or as the Commission, its Executive Committee, or its Executive Director, at their discretion, shall determine and direct.

The foregoing resolution, upon motion duly made and seconded, was regularly adopted at the meeting of the Southeastern Wisconsin Regional Planning Commission held on the 6th day of March 1996, the vote being: Ayes 14, Nays 0.



David B. Falstad, Chairman

ATTEST:



Kurt W. Bauer, Deputy Secretary

SEWRPC Staff Memorandum

RESPONSE TO REQUESTS BY THE CITY OF KENOSHA AND VILLAGE OF PLEASANT PRAIRIE TO AMEND THE REGIONAL WATER QUALITY MANAGEMENT PLAN February 15, 1996

INTRODUCTION

By resolutions adopted on April 11, 1995, and April 17, 1995, respectively, the governing bodies of the City of Kenosha Water Utility and the City of Kenosha and, by separate resolutions dated April 10, 1995, the governing bodies of the Village of Pleasant Prairie, the Village of Pleasant Prairie Sewer Utility District 1, the Village of Pleasant Prairie Sewer Utility District F, the Village of Pleasant Prairie Sewer Utility District D, and the Village of Pleasant Prairie Water Utility, requested that the Regional Planning Commission amend the regional water quality management plan with respect to the sanitary sewer service area and the sewerage system for the greater Kenosha area as these matters are currently set forth in SEWRPC Community Assistance Planning Report No. 106, Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin, November 1985, as amended.

The basic purpose of the requested amendment would be to modify the limits of the planned sanitary sewer service area and the configuration of the major sewerage system facilities within this area to reflect the recommendations contained in the document entitled A Coordinated Sanitary Sewer and Water Supply System Plan for the Greater Kenosha Area, prepared by Ruckert & Mielke, Inc., and dated October 1991, as well as service area recommendations made in the newly completed comprehensive plan for the Kenosha Urban Planning District.¹ This memorandum documents the Commission response to these requests.

BACKGROUND

On July 12, 1979, the Southeastern Wisconsin Regional Planning Commission formally adopted an areawide water quality management plan for Southeastern Wisconsin, as 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, to meet the planning requirements established by Section 208 of the Federal Clean Water Act and corresponding State legislation. That plan, as it related to the greater Kenosha area, included recommendations to maintain, to the design year 2000, two relatively small public sewage treatment plants, operated by the Town of Pleasant Prairie Sewer Utility District D and the Town of Pleasant Prairie Sanitary District No. 73-1, as well as the continued operation of the major sewage treatment plant operated by the City of Kenosha Water Utility. The adopted regional water quality management plan also included recommended sanitary sewer service areas attendant to each identified sewage treatment facility. Furthermore, the adopted plan established a process whereby local, as well as areawide, planning concerns would be properly reflected in any refinement and detailing effort initiated subsequent to the Commission's adoption of the regional water quality management plan in July 1979.

In 1985, the City of Kenosha and the Towns of Pleasant Prairie and Somers requested that the Regional Planning Commission undertake the initial refinement and detailing of the proposed year 2000 sanitary sewer service areas tributary to the City of Kenosha, the Town of Pleasant Prairie Sewer Utility District D, and the Town of Pleasant Prairie Sanitary District No. 73-1 sewage treatment facilities. A series of intergovernmental meetings and public hearings were held on the refined plan at the Town of Somers, the Town of Pleasant Prairie, and the City of Kenosha on November 12, November 14, and November 21, 1985,

¹ See SEWRPC Community Assistance Planning Report No. 212, A Comprehensive Plan for the Kenosha Urban Planning District, December 1995.

respectively. A revised sanitary sewer service area plan, as documented in SEWRPC Community Assistance Planning Report No. 106, Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin, November 1985, was adopted by the Regional Planning Commission on December 2, 1985; by the Town of Pleasant Prairie on November 25, 1985; by the City of Kenosha on December 2, 1985; and by the Town of Somers on December 10, 1985. The revised plan was approved by the Wisconsin Department of Natural Resources on August 31, 1987.

The Regional Planning Commission subsequently adopted two further amendments to the Kenosha sanitary sewer service area plan. The first amendment was documented in a SEWRPC report entitled Amendment to the Regional Water Quality Management Plan—2000, City of Kenosha and Environs, dated December 1987, and recommended the addition to the Town of Pleasant Prairie Sewer Utility District D sewer service area of certain lands located in the Town of Bristol envisioned for commercial land uses; the addition to the City of Kenosha sewer service area of certain lands located in the Town of Pleasant Prairie envisioned for recreational land uses; and the addition of certain other lands located in the Town of Pleasant Prairie which were adjacent to a proposed trunk sewer which could therefore, be readily served. This amendment was adopted by the Town of Bristol on November 11, 1987, and by the Town of Pleasant Prairie on November 23, 1987, and by the Regional Planning Commission on December 7, 1987. It was approved by the Wisconsin Department of Natural Resources on August 9, 1988.

The second amendment was documented in a SEWRPC report entitled Amendment to the Regional Water Quality Management Plan—2000, Town of Somers, dated June 1992, and recommended the addition to the City of Kenosha sewer service area of certain lands located in the Town of Somers envisioned for residential land uses. This amendment was adopted by the Town of Somers on August 25, 1992; and by the Regional Planning Commission on June 17, 1992. It was approved by the Wisconsin Department of Natural Resources on September 11, 1992.²

GREATER KENOSHA AREA SEWERAGE SYSTEM AND WATER SUPPLY SYSTEM PLAN

Work was completed in 1991 on the preparation of a coordinated set of sanitary sewerage and water supply system plans for the greater Kenosha area. The recommended plans were prepared to serve as a guide to the development of sewerage and water supply facilities within the Kenosha area by all levels and agencies of government concerned. The preparation of the plans was necessitated by, and the plans were designed to meet, the rapid urban development being experienced, and which was envisioned to continue to be experienced, within the greater Kenosha area. The recommended sewerage system plan also was intended to serve as the basis for extending the regional water quality management plan to a design year 2010 in the greater Kenosha area.

The planning area for the sanitary sewerage and water supply system plans consists of all that part of Kenosha County extending from Lake Michigan to a distance one mile west of IH 94. This area encompasses about 98 square miles, including all of the City of Kenosha, the Village of Pleasant Prairie, and the Town of Somers, as well as portions of the Towns of Bristol and Paris.

The preparation of the system plans was administered by the Southeastern Wisconsin Regional Planning Commission and guided by a technical advisory and intergovernmental coordinating committee created for

²*It should be noted that in 1989, the Town of Pleasant Prairie was incorporated as the Village of Pleasant Prairie. Therefore, all further references in this document will be to the Village of Pleasant Prairie. The Town of Pleasant Prairie Sanitary District No. 73-1 was incorporated into the Village of Pleasant Prairie Sewer Utility District F. However, the sewage treatment plant continues to be called the 73-1 plant.*

this purpose by the Regional Planning Commission. Technical work on the study was carried out by the engineering firm of Ruckert & Mielke, Inc., under contract to the Regional Planning Commission. The findings and recommendations of the study are documented in the report entitled A Coordinated Sanitary Sewer and Water Supply System Plan for the Greater Kenosha Area, published by the consulting engineer in October 1991. Funding for the planning effort was provided by Kenosha County and the local units of government involved.

Alternative sanitary sewerage and water supply system plans, based upon the land use element of the regional plan as refined in the recently completed comprehensive plan for the Kenosha Planning District, were prepared for the design year 2010 conditions. The latter plan was prepared for the City of Kenosha, the Village of Pleasant Prairie, the Town of Somers, and Kenosha County by the Regional Planning Commission. After careful evaluation of the costs, environmental impacts, socio-economic impacts, and implementability of the alternatives considered, the Advisory Committee concerned subsequently selected the recommended system plans for both sanitary sewerage and water supply.

Several alternatives for providing sanitary sewer service to the planning area were prepared and evaluated as the basis for the initial configuration and sizing of the alternatives. These alternatives may be summarized as follows:

- Alternative 1: Centralized Service: Under the centralized service alternative, all sewage generated in the area would be conveyed to, and treated at, the existing Kenosha Water Utility sewage treatment plant, which would be improved and expanded. All existing sewage treatment plants in the greater Kenosha area, except the City of Kenosha Water Utility plant, would be abandoned. The plan report contains descriptions and analyses of the trunk sewer pumping stations and sewage treatment plant sizing and configuration.
- Alternative 2: Existing Facility Expansion: Under the existing facility expansion alternative, the existing sanitary sewerage systems, including the sewage treatment plants serving the Village of Pleasant Prairie Sewer Utility District D and the former Sanitary District 73-1, would continue to provide service to the Village of Pleasant Prairie and the Town of Bristol. These two plants would be improved and expanded under this alternative. Sewage from the remaining portions of the planning area not tributary to either of the two existing Pleasant Prairie plants would be conveyed to, and treated at, the City of Kenosha plant, which would also be improved and expanded. The Pleasant Park Sewer Utility plant in the Village of Pleasant Prairie would be abandoned and its service area connected to the larger City of Kenosha sewerage system for treatment purposes.³
- Alternative 3: New Facility Construction: Under the new facility construction alternative, the existing sewerage systems, including the sewage treatment plants serving the Pleasant Prairie Sewer Utility District D and the former Sanitary District 73-1, would be improved and expanded and supplemented by the construction of a new sewage treatment plant serving portions of the Town of Bristol. The Pleasant Park sewer utility plant would be abandoned and its sewer service area connected to the City of Kenosha sewerage system for treatment purposes. This alternative was eliminated from further consideration upon preliminary review of cost data and in light of the State's policies discouraging the proliferation of sewage treatment plants and prohibiting the degradation of surface waters, which made this alternative impractical.

³The Pleasant Park Sewer Utility sewage treatment plant was abandoned in 1990. Those areas once served by the Pleasant Park plant are now connected to the City of Kenosha sewerage system.

Table 1

**COST SUMMARY OF SEWERAGE SYSTEM ALTERNATIVES FOR
THE GREATER KENOSHA UTILITY PLANNING AREA: 1990-2010**

Alternative	Initial Capital Cost	20-Year Annual Operation and Maintenance Cost	Present Worth Cost Analysis ^a		
			Total Present Worth of Construction	Present Worth of Annual Operation and Maintenance	Total Present Worth
1A—Trunk Sewers and City of Kenosha Sewage Treatment Plant—Bristol and Sewer Utility D Flow Conveyance to 75th Street Trunk Sewer	\$51,631,600	\$1,789,100	\$53,837,100	\$28,199,000	\$82,036,100
1B—Trunk Sewers and City of Kenosha Sewage Treatment Plant—Bristol and Sewer Utility D Flow Conveyance to CTH Q Trunk Sewer	\$51,163,800	\$1,751,600	\$53,365,900	\$27,608,300	\$80,974,200
1C—Trunk Sewers and City of Kenosha Sewage Treatment Plant—Bristol Flow Conveyance to 75th Street Trunk Sewer, Sewer Utility D Flow Conveyance to CTH Q Trunk Sewer	\$51,362,500	\$1,738,900	\$53,631,800	\$27,408,800	\$81,040,600
1D—Trunk Sewers and City of Kenosha Sewage Treatment Plant—Bristol and Sewer Utility D Flow Conveyance to Chicago & North Western Transportation Company Railway Corridor Trunk Sewer	\$50,658,900	\$1,786,900	\$52,864,200	\$28,165,300	\$81,029,500
2—Trunk Sewers and City of Kenosha, Village of Pleasant Prairie Sewer Utility District D, and Former Village of Pleasant Prairie Sanitary District 73-1 Sewage Treatment Plants	\$49,271,500	\$2,010,200	\$52,131,900	\$31,685,100	\$83,817,000

^aPresent worth analysis was conducted using a 50-year analysis period and a 6 percent interest rate.

Source: Ruekert & Mielke, Inc.

The Selection of a Sewerage System Alternative

Table 1 provides information on the costs of the two sewerage system alternatives which were investigated in detail under the planning effort, including three subalternatives to the basic centralized alternative. Alternative 1B was selected by the Advisory Committee for adoption as the recommended sewerage system plan. The recommended system plan was designed to serve the development pattern envisioned in the regional land use plan under a plan design year 2010 high-growth, decentralized regional development scenario. The sensitivity of the recommended system plan was then evaluated on the basis of year 2030 ultimate-development conditions. The former land use pattern represents the highest reasonable 20-year growth projections; while the latter represents a potential 40-year growth condition for the planning area as permitted by the sewerage facility planning requirements of the Wisconsin Department of Natural Resources.

The selection of the centralized alternative would eliminate the need for obtaining continued approval of the diversion of surface water from the Lake Michigan basin, because any water supplied from east of the subcontinental divide would be returned via the sewerage system. Centralization of wastewater treatment at the Kenosha sewage treatment plant would also allow abandonment of the three smaller Pleasant Prairie plants, thus eliminating the discharge of treated wastewater effluent to the Des Plaines River and its tributaries and eliminating the duplication of resources needed to maintain four treatment facilities within the planning area.

The final recommended plan represented a refinement of Alternative 1B. The refinement included: reestimation of probable future sewage flows based upon the calibration of probable future sewage flows based upon analyses of actual sewage flows as measured at four critical locations in the system in 1990, an evaluation of the cost differences involved in constructing and operating facilities designed for the high-growth decentralized and ultimate-development scenarios as well as an intermediate-growth centralized scenario, and consideration of potential combinations of treatment capacity and storage equalization capacity necessary to accommodate the peak-flow requirements. The refinement also considered the possible staged construction of facilities in lieu of initial sizing for the high-growth and ultimate-development conditions by comparison of the costs for each component under each of the development conditions.

Under the recommended sewerage system plan, the Kenosha sewage treatment facility would be expanded through a combination of storage and treatment units to accommodate peak hourly flows of up to 142 million gallons per day (mgd). The cost of the needed improvements to the facility was estimated at \$19.7 million. The cost of constructing the trunk sewers and trunk sewer improvements and the pumping stations and the pumping station improvements recommended under the plan was estimated at \$25.2 million. The total construction cost of the recommended sewerage system plan was estimated at \$44.9 million. Operation and maintenance costs of the sewage treatment and trunk sewer facilities were estimated at \$2.0 million per year.

Importantly, the recommended plan, if fully implemented, would eliminate the current diversion of Lake Michigan water from the Great Lakes basin. In 1989, the Village of Pleasant Prairie did obtain permission to divert and use up to 3.2 mgd from Lake Michigan and to discharge it in the Mississippi River basin. This diversion was made in order to address a significant public health concern associated with the radium contamination of the Town of Pleasant Prairie's water supply. This approval was based upon the understanding that such diversion from the Great Lakes basin would be eliminated by the year 2010. The Wisconsin Department of Natural Resources has indicated an interest in ending this diversion as soon as possible, but no later than the year 2010.

The final recommended integrated sewer and water system plans do not provide for any water diversion beyond the year 2010. The Village of Pleasant Prairie Sewer Utility District D and the former Sanitary District No. 73-1 sewage treatment facilities would, under the plans, be abandoned by the year 2010. The study area by that time would be served by both regional sewage and water treatment facilities that, while utilizing Lake Michigan as the source of water supply, would return all spent water to Lake Michigan as treated wastewater. Thus, the current diversion would be eliminated.

The final system plans also contain an analysis of various funding options available for, and the fiscal implications of, implementing the recommended sewerage and water supply system plans; a review of the institutional options for plan implementation; and recommended measures for plan adoption and implementation. Based upon the findings of the fiscal impact analysis and consideration of the advantages and disadvantages of the alternative institutional arrangements, the Advisory Committee recommended the creation of an areawide sewer and water authority as the most effective and equitable approach to implementing the recommended sewerage and water supply system plans. Pending the creation of such an authority, the Advisory Committee recognized that the coordination plans would need to be implemented through a series of intergovernmental agreements.⁴

⁴The Advisory Committee's recommendations attendant to implementation of the coordinated sanitary sewerage and water supply system plans were the subject of extensive intergovernmental discussion over the period March 1993 through January 1996. Formal intergovernmental meetings to discuss these matters were sponsored by the Regional Planning Commission on September 26, 1994, February 23, 1995, and January 9, 1996. Minutes of these three meetings were kept and are maintained in the files of the Regional Planning Commission.

CURRENTLY APPROVED KENOSHA AND ENVIRONS SANITARY SEWER SERVICE AREAS

The combined planned year 2000 City of Kenosha and environs sanitary sewer service area, tributary to the City of Kenosha, the Village of Pleasant Prairie Sewer Utility District D, and the former Village of Pleasant Prairie Sanitary District No. 73-1 sewage treatment plants, is set forth in the currently adopted sanitary sewer service area plan as documented in SEWRPC Community Assistance Planning Report No. 106, as amended, and is shown on Map 1. The gross City of Kenosha and environs sanitary sewer service area totals about 62.9 square miles, and includes about 6.3 square miles of primary environmental corridor lands, about 2.2 square miles of secondary environmental corridor lands, and about 1.4 square miles of isolated natural resource area lands. Thus, about 9.9 square miles, or about 16 percent of the gross sewer service area, consists of primary and secondary environmental corridor and isolated natural resource area lands.

The City of Kenosha and environs sanitary sewer service area had, in 1990, a resident population of about 98,900 persons, of which about 94,600 persons, or about 96 percent, were provided with centralized public sanitary sewer service. The design year 2000 resident population level associated with the currently adopted City of Kenosha and environs sanitary sewer service area was about 138,000 persons; under the existing plan, the service area would have an overall density of about 4.4 dwelling units per net residential acre.

PROPOSED AMENDMENT TO THE REGIONAL WATER QUALITY MANAGEMENT PLAN

Given the foregoing, and in particular given the analyses which demonstrate that it would be most cost-effective and environmentally sound to convey sewage from the entire greater Kenosha area to the Kenosha sewage treatment plant, it is proposed that the regional water quality management plan be amended in the following manner:

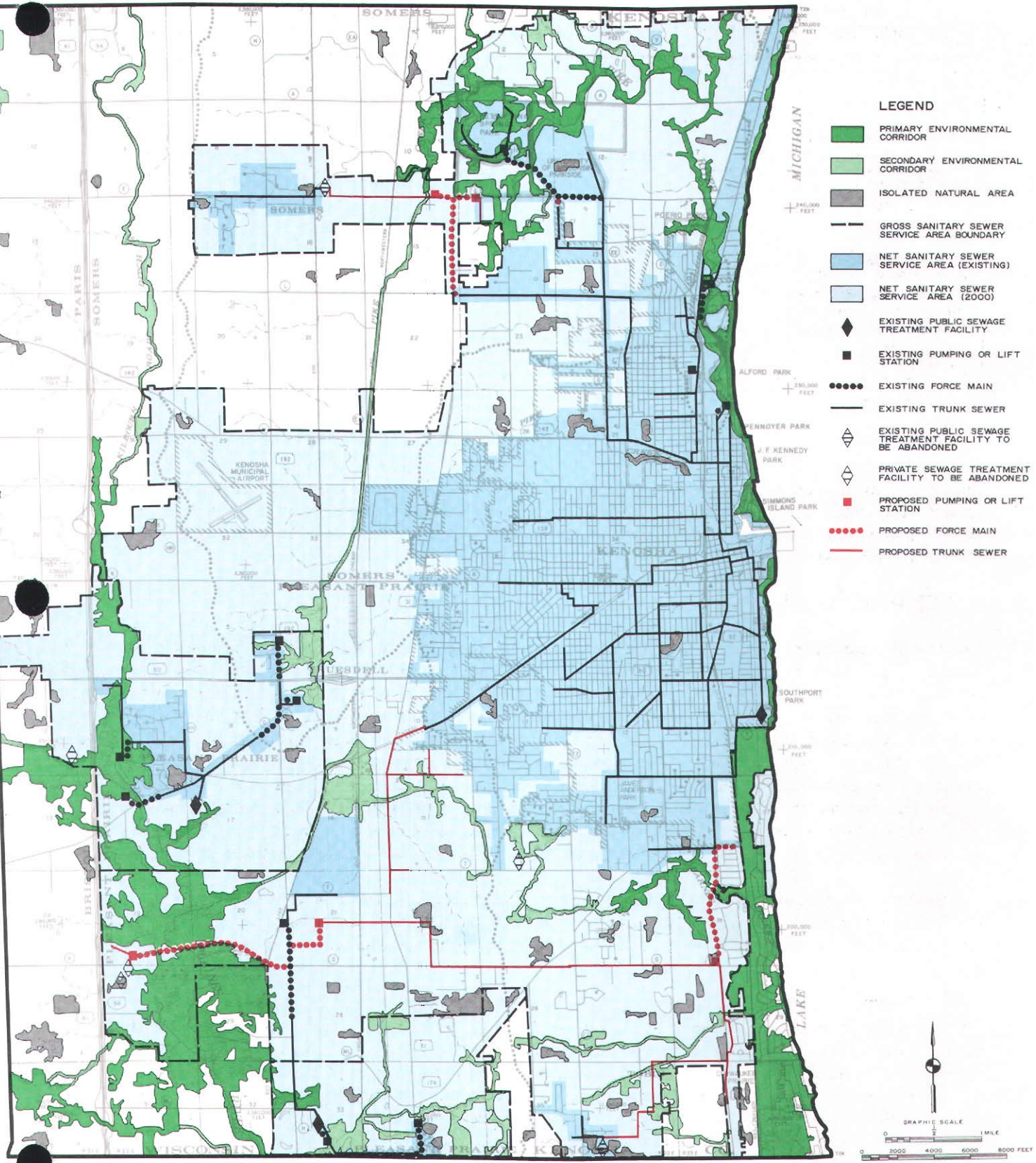
1. The planned sanitary sewer service area for eastern Kenosha County be modified to encompass the areas identified on Map 2.
2. The present designation of the Pleasant Prairie Sewer Utility District D and the former Sanitary District No 73-1 sewage treatment plants as permanent plants be removed from the plan and the abandonment of these two sewage treatment plants by the year 2010 be included in the plan.
3. The Kenosha sewage treatment plant be improved and expanded as the permanent public sewage treatment plant to serve the entire planned sewer service area defined on Map 2.
4. The configuration of the intercommunity trunk sewers and appurtenant pumping stations set forth in the regional water quality management plan be amended to conform with the configuration shown on Map 2.
5. The designations attendant to management agencies presently set forth in the adopted plan be amended as required for implementation of the system plan (see Table 2).

The planned year 2010 resident population levels within the revised Kenosha sanitary sewer service area would range from about 112,000 persons, under the Commission's recommended land use plan, to about 129,700 persons, under the Commission's high-growth centralized land use plan. Where found to be cost-effective, facilities were sized for 40-year buildout design condition.

The revised year 2010 Kenosha sanitary sewer service area, as submitted to public hearing, is shown on Map 2. The gross Kenosha sanitary sewer service area encompasses about 71.7 square miles. This includes about 9.1 square miles of primary environmental corridor lands, about 2.6 square miles of secondary environmental corridor lands, and about 1.4 square miles of isolated natural resource area lands. Therefore, a total of about 13.1 square miles, or about 18 percent of the revised sewer service area, would be encompassed in environmentally sensitive lands.

Map 1

CURRENTLY ADOPTED GREATER KENOSHA AREA SANITARY SEWER SERVICE AREA



Source: SEWRPC.

Table 2

LOCAL GOVERNMENTAL MANAGEMENT AGENCY DESIGNATIONS AND SELECTED RESPONSIBILITIES FOR THE POINT SOURCE POLLUTION ABATEMENT ELEMENT OF THE RECOMMENDED AREAWIDE WATER QUALITY MANAGEMENT PLAN FOR THE GREATER KENOSHA AREA

Point Source Management Agency	Refine and Detail Sewer Service Area	Upgrade, Expand, Maintain, and Operate Sewage Treatment Plant	Abandon Sewage Treatment Plant	Construct and Maintain Intercommunity Trunk Sewer	Construct and Maintain Local Sewer System
City of Kenosha	X	X	--	X	X
Town of Bristol Utility District No. 3	X	--	--	X	X
Town of Paris New Utility District	X	--	--	X	X
Village of Pleasant Prairie Sewer Utility District No. 1	X	--	--	--	X
Sewer Utility District F	X	--	X	--	X
Sewer Utility District D	X	--	X	X	X
Town of Somers Utility District No. 1	X	--	--	X	X

Source: SEWRPC.

The incremental population and housing unit levels envisioned in the combined Kenosha and environs sewer service area would be accommodated at a density of about 3.6 dwelling units per net residential acre.⁵ This density lies within the recommended density range for the Kenosha area as identified in the Commission's year 2010 regional land use plan.

WATER QUALITY IMPACTS

Under the adopted regional water quality management plan and the amended sanitary sewer service area plan set forth herein, it is envisioned that all urban lands within the planned urban service area would receive sanitary sewer service through the City of Kenosha sewerage system, including treatment at the improved and expanded City of Kenosha Water Utility sewage treatment plant, with effluent to be discharged to Lake Michigan via an outfall pipe. The two existing small public sewage treatment plants discharging to the Des Plaines River tributaries would be abandoned during the planning period. In addition, a small existing sewage treatment plant serves the Pleasant Park Homes Subdivision in the Village of Pleasant Prairie which discharges to a minor tributary of Lake Michigan, would also be abandoned.⁶ The abandonment of these three plants and the connection of scattered urban development currently served by onsite sewage disposal systems to the public sanitary sewer system may be expected to have positive water quality impacts.

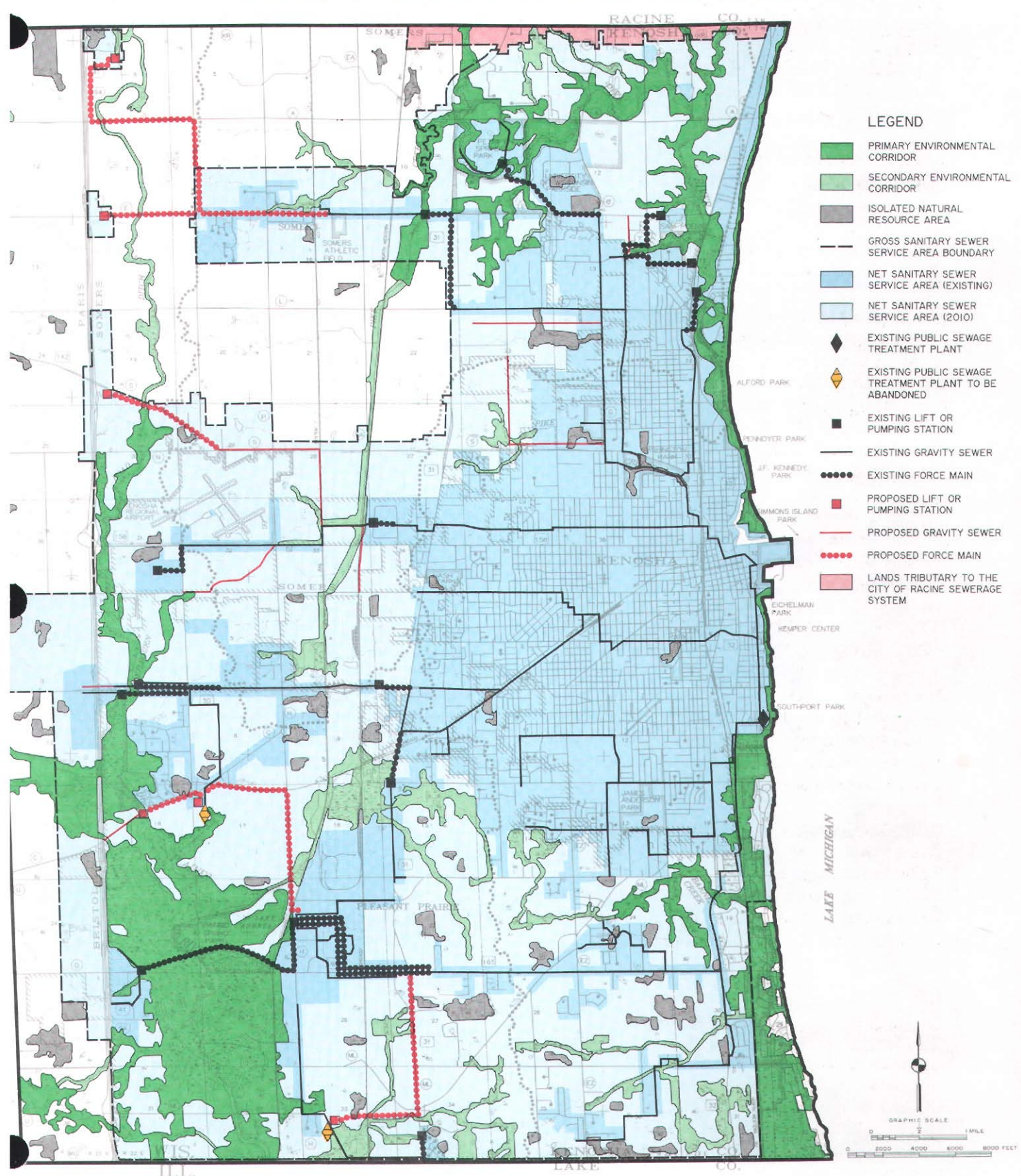
In this regard, it should be noted that there will be some reduction in the base flow in the tributaries to which the Village of Pleasant Prairie Sewer Utility District D and the former Sanitary District 73-1 sewage treatment plants discharge. However, the removal of the effluent discharge containing various chemicals,

⁵Net incremental residential density in the revised Kenosha sewer service area is determined by dividing the total number of incremental dwelling units anticipated in the sewer service area in the design year by the net incremental residential land area anticipated within that area. The total number of incremental dwelling units anticipated in the Kenosha sewer service area in the design year, 15,671 units, divided by the incremental net residential land within the sewer service area, 4,351 acres, results in an incremental net residential density of 3.6 dwelling units per acre.

⁶This plant was abandoned in 1990.

Map 2

PROPOSED GREATER KENOSHA AREA SANITARY SEWER SERVICE AREA



including ammonia nitrogen and residual chlorine, as well as bacterial levels, may be expected, on balance, to have a positive impact. Furthermore, fish surveys taken in the tributary to which the Village of Pleasant Prairie Utility District D treatment plant discharges indicates that the best fish habitat and widest variety of fish in the tributary are found in the vicinity of, and downstream from, the significant wetland complex located downstream of the outfall near the Des Plaines River mainstem. That portion of the stream is not expected to be significantly impacted by low-flow conditions resulting from abandonment of the sewage treatment plant concerned.

All lands identified in the service area plan as primary environmental corridors would be maintained in essentially natural, open uses. It is recognized, however, that certain land uses requiring sanitary sewer service could be properly located in these corridors, including park and outdoor recreation facilities, certain institutional uses, and, in some cases, very-low-density residential development not to exceed one housing unit per five acres of upland corridor land, compatible with the preservation of the corridors in essentially natural, open uses.

The plan, moreover, recommends that secondary environmental corridors and isolated natural resource areas, at the discretion of the local units of government concerned, also be maintained in essentially natural, open uses. In this respect, current Federal, State, and local regulations may in any case 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 developers and local units of government concerned obtain the necessary Federal, State, and local permits prior to any proposed disturbance of wetlands, floodplains, or other regulated lands in the service area.⁷

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

OTHER ENVIRONMENTAL AND NONECONOMIC CONSIDERATIONS IN THE EVALUATION PROCESS

In addition to the cost-effectiveness and water quality considerations, a number of other noneconomic factors were considered in the evaluation of the recommended sewerage system plan and attendant sewer service area. Other factors considered to be significant included: Lake Michigan surface water diversion, Wisconsin Department of Natural Resources treatment plant nonproliferation policy, secondary urban growth impacts, and protection of such environmentally sensitive lands as floodplains.

Lake Michigan Surface Water Diversion

The issue of water diversion across the subcontinental divide from the Lake Michigan basin to the Mississippi River basin is governed by Wisconsin Statutes (Sections 30.18, 30.21, and 114.026) and by Section 1109 of the Federal Water Resources Development Act of 1986. One of the concerns in the preparation of the sewage system plan for the greater Kenosha area was that any recommended plan eliminate the current diversion of water out of the Lake Michigan Basin.

⁷*It should be noted that the sanitary sewer service area map set forth herein, and in particular 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, with applicable permits obtained prior to any land disturbing activity.*

Table 3

DEVELOPABLE LAND UNDER CURRENT PLAN AND UNDER PROPOSED AMENDMENT

Sanitary Sewer Service Area	Gross Area (square miles)	Developed Area (square miles)	Undevelopable Environmentally Sensitive Areas (square miles)	Developable Area (square miles)
Currently State-Approved Kenosha-Somers-Bristol-Pleasant Prairie	62.9	26.8	9.9	26.2
Sewerage and Water Supply System Plan Recommended Additions	8.8	1.3	3.2	4.3
Total	71.7	28.1	13.1	30.5

Source: SEWRPC.

In 1989, the Village of Pleasant Prairie obtained permission to divert up to 3.2 mgd from Lake Michigan for its use and to discharge into the Mississippi River basin. This diversion was made in order to address a significant public health concern associated with the radium contamination of the Town of Pleasant Prairie's water supply. This approval was based upon the understanding that the diversion would be eliminated by the year 2010.

The final recommended sewerage and water supply facilities in this plan do not provide for any water diversion beyond the year 2010. The Village of Pleasant Prairie wastewater treatment facilities are recommended herein to be abandoned by the year 2010. The entire area would then be served by both regional wastewater and water treatment facilities that would discharge back to Lake Michigan as treated wastewater any water taken from Lake Michigan for municipal supply purposes. Thus, the recommended plan would be fully consistent with the water diversion termination condition placed on the approval of the present Pleasant Prairie diversion. Other alternatives which provide for maintaining the existing sewage treatment plants would be inconsistent with this termination condition.

Wisconsin Department of Natural Resources Nonproliferation Policy

Amending the regional water quality management plan to provide for the elimination of the three small sewage treatment plants within the Village of Pleasant Prairie is considered to be consistent with the sewage treatment plant nonproliferation policy adopted by the Wisconsin Department of Natural Resources.

Secondary Urban Growth Impacts

There is not a significant quantitative difference between the amount of developable land that is currently included in the State-approved sanitary sewer service area for the greater Kenosha area and the amount of land that would be included in that area if the regional water quality management plan were to be amended in the manner recommended herein. This conclusion may be drawn from the data in Table 3.

Of the 4.3 square miles of developable land that would be added to the planned sewer service area if the regional water quality management plan is amended as proposed herein and its recommendations were to be carried forward into the regional water quality management plan, 1.1 square miles, or 26 percent, lie in the Town of Bristol as it existed when the plan was made; 0.1 square miles, or 2 percent, lie in the Town of Paris; 1.6 square miles, or 37 percent, lie in the Town of Somers, and the remaining 1.5 square miles, or 35 percent, lie in the Village of Pleasant Prairie. That portion of the incremental development land lying in the Town of Bristol was identified for sewered urban development in the adopted Town land use plan.

On the basis of the foregoing, it may be concluded that the recommendations for the expansion of the sanitary sewer service area as herein proposed are derived from an agreed-upon land use plan, are relatively modest in terms of expanding the existing State-approved service area, and are sound and in the long-term public interest.

Protection of Environmentally Sensitive Land and Floodplain Areas

All the alternative sewerage and water supply systems evaluated in the greater Kenosha area utility study were designed to serve and support a common land use pattern. That land use pattern, derived from ongoing regional land use planning efforts and more detailed subregional planning efforts in Kenosha County, appropriately takes into account the need to preserve and protect primary and secondary environmental corridors and isolated natural resource areas, as well as floodplains that extend beyond the boundaries of those corridors. Indeed, the floodplain zoning ordinances in place within the greater Kenosha area seek to preserve and protect the undeveloped floodplain lands, as long recommended by the Commission in its land use and watershed planning efforts.

COST-EFFECTIVENESS ANALYSIS

The cost-effectiveness of the sewerage system recommended herein was demonstrated in the sanitary sewerage and water supply system planning effort described earlier in this memorandum. Since preparation of that system plan, major trunk sewer extensions and the expansion of the Kenosha Water Utility sewage treatment plant have been completed in accordance with the plan recommendations. Since these completed components of the recommended plan now represent sunk costs, the cost-effectiveness of the recommended plan providing for centralized treatment at the City of Kenosha sewage treatment plant would be more pronounced than at the time that the system plan was completed. Thus, it may be concluded that the most cost-effective means of providing public sanitary sewer service to the greater Kenosha area is through a sewerage system tributary to the City of Kenosha sewage treatment plant.

SEWAGE TREATMENT PLANT CAPACITY ANALYSIS

In 1994, the Kenosha Water Utility completed sewage treatment plant improvements in accordance with the recommendations set forth in the sewerage system plan. The expanded sewage treatment plant has a capacity of 28.6 mgd on an average annual basis, and 142 mgd on a peak hourly basis. The peak hourly capacity is being provided by a combination of 30 million gallon flow equalization storage facility and 74.0 mgd of treatment capacity. Since these design flows include consideration of the entire service area set forth on Map 2, including the areas currently served by the Village of Pleasant Prairie Sewer Utility District D and the former Sanitary District No. 73-1 sewage treatment plants, the City of Kenosha sewage treatment plant, provides adequate capacity to serve the area in this plan amendment.

PUBLIC REACTION TO THE AMENDMENT

The public participation process attendant to the proposed plan amendment for the greater Kenosha area was comprised of two parts. The first part consisted of a series of three intergovernmental meetings convened by the Commission in an attempt to reach intercommunity agreement as to the plan amendment recommendations. That part began in September 1994 and ended in January 1996. The second part consisted of a formal public hearing on the proposed plan amendment. That hearing was held on January 23, 1996, with the record for that hearing closing on February 2, 1996. All the materials developed under this public participation process are reproduced in a SEWRPC document entitled Record of Intergovernmental Meetings and Public Hearing, Amendment to the Regional Water Quality Management Plan: Greater Kenosha Area, February 1996. The following summarizes that record.

Intergovernmental Meetings

On September 26, 1994, the Commission convened a meeting at the request of the Wisconsin Department of Natural Resources to ascertain the status of local government approval of the sanitary sewerage and water supply system plans for the greater Kenosha area as documented in the report entitled A Coordinated Sanitary Sewer and Water Supply System Plan for the Greater Kenosha Area, prepared by the firm of Ruckert & Mielke, Inc., and dated October 1991. In addition to the Commission and Department staff, the meeting included representatives of the City of Kenosha; the Village of Pleasant Prairie; the Towns of Bristol, Paris, and Somers; and Kenosha County. The following summarizes the findings and conclusions reached at that meeting:

1. All parties concerned agreed that the sanitary sewerage and water supply system plans recommended in the aforementioned Ruekert & Mielke report did indeed represent the most cost-effective physical systems for meeting the basic utility infrastructure needs for the greater Kenosha area.
2. All parties concerned, except for the City of Kenosha, agreed that it would be desirable to establish a metropolitan sewer and water utility as the basic implementation mechanism for carrying out the recommended system plans. Absent any change in the position of the City of Kenosha, it was concluded that the provision of sewerage and water supply services in the area would have to continue to be provided on the basis of contracts between the municipalities.
3. All parties concerned agreed that the City of Kenosha and the Town of Bristol should be given time to negotiate a municipal boundary agreement that could provide the basis for reaching full agreement among the municipalities on governance issues attendant to implementation of the physical systems recommended in the Ruekert & Mielke report.

The first meeting concluded with a determination to await the results of the anticipated boundary negotiations between the City of Kenosha and the Town of Bristol, as well as anticipated formal actions by the governing bodies of the local governments concerned to adopt the Ruekert & Mielke plan.

The minutes of the first intergovernmental meeting are reproduced as Appendix A-1 of the aforementioned public participation document.

On February 23, 1995, the Commission convened a second intergovernmental meeting concerning local government approval of the sanitary sewerage and water supply system plans for the greater Kenosha area. The parties present at the first meeting were also represented at the second meeting. The following summarizes the findings and conclusions reached at the second meeting:

1. With respect to reports as to formal local government actions attendant to adoption of the sanitary sewerage and water supply system plans recommended in the Ruekert & Mielke report, the Town of Somers had unconditionally approved the system plans and the implementation recommendations; the Town of Bristol, having concluded unsuccessful boundary negotiations with the City of Kenosha, effectively rejected the centralized Kenosha-based sewerage and water supply system plans, calling for the selection of another alternative that would continue operation of the Pleasant Prairie Sewer Utility District D sewage treatment plant; the Town of Paris supported the position of the Town of Bristol; and the City of Kenosha and Village of Pleasant Prairie reported that the governing bodies concerned were expected to formally adopt the physical systems recommendations set forth in the Ruekert & Mielke report, but effectively to reject the metropolitan governance recommendations, preferring instead to rely upon intergovernmental agreements for the extension of sanitary sewer and water supply services.
2. The Town of Bristol reported formally petitioning the Wisconsin Department of Natural Resources to order the creation of a metropolitan sewerage district in the greater Kenosha area.
3. The Department of Natural Resources indicated that it was prepared to take the actions required under the Wisconsin Statutes in response to the Town of Bristol petition.

The second intergovernmental meeting concluded with a determination to await the anticipated actions of the City of Kenosha and Village of Pleasant Prairie with respect to adoption of the Ruekert & Mielke plan and any action by the Wisconsin Department of Natural Resources with respect to the petition of the Town of Bristol to create a metropolitan sewerage district for the Kenosha area.

The minutes of the second intergovernmental meeting are reproduced as Appendix A-2 of the aforementioned public participation document.

On January 9, 1996, the Commission convened the third and final intergovernmental meeting concerning local government approval of the sanitary sewerage and water supply system plans for the greater Kenosha

area. All parties present at the first and second meetings were also represented at the third meeting. The minutes of the third intergovernmental meeting are reproduced as Appendix A-3 of the aforementioned public participation document. Also reproduced as Appendix A-4 of that document is a SEWRPC Staff Memorandum reviewed at the meeting and responding in detail to comments submitted to the Commission by the Town of Bristol during the period of time after the second intergovernmental meeting and before the third intergovernmental meeting.

The following summarizes the findings and conclusions reached at the third meeting:

1. With respect to the sewerage and water supply system development recommendations contained in the Ruekert & Mielke report, the recommendations had now been adopted by the Common Council of the City of Kenosha, the Village Board of the Village of Pleasant Prairie, and the Town Board of the Town of Somers, and effectively rejected by the Town Boards of the Towns of Bristol and Paris.
2. With respect to the metropolitan governance recommendations set forth in the Ruekert & Mielke report, such recommendations had now been effectively adopted by the Town Boards of the Towns of Bristol, Paris, and Somers and effectively rejected by the Common Council of the City of Kenosha and the Village Board of the Village of Pleasant Prairie. Failure to achieve unanimity on this issue means that the cost-effective areawide systems will have to be put in place through intergovernmental agreements, rather than through the creation of a special-purpose metropolitan district.
3. As the owners and operators of the three public sewage treatment plants currently serving the greater Kenosha area, the Common Council of the City of Kenosha and the Village Board of the Village of Pleasant Prairie formally requested that the sewerage system development recommendations of the regional water quality management plan be amended substantially in the manner set forth in the Ruekert & Mielke report.
4. The Wisconsin Department of Natural Resources formally denied the petition of the Town Board of the Town of Bristol to create a Kenosha metropolitan sewerage district. In so doing, the Department concluded as a matter of law that the statutory criterion whereby the territory of a metropolitan sewerage district include at least one municipality in its entirety would not be met. This conclusion was based upon formal objections to the creation of the metropolitan sewerage district filed for the record by the City of Kenosha and the Village of Pleasant Prairie. The Department also found that a second statutory criterion, one that requires sewerage facilities to be constructed and maintained by a metropolitan sewerage district be found to be consistent with an adopted regional water quality management plan, was also not met at the time of the filing a petition, since the Regional Planning Commission and the Wisconsin Department of Natural Resources had not yet amended the plan to be consistent with the Ruekert & Mielke sewerage system development recommendations.
5. A series of concerns about, and objections to, the Ruekert & Mielke plan raised by the Town of Bristol were found by the Regional Planning Commission staff to be without substantial merit. Consequently, such concerns and objections should not stand in the way of amending the regional water quality management plan to reflect inclusion of the cost-effective sewerage system development recommendations set forth in the Ruekert & Mielke plan. More particularly, the Commission staff analyses reported at the third intergovernmental meeting responded to the following positions of the Town of Bristol, each position being briefly restated, together with a summary of the Commission staff response thereto:
 - a. The Ruekert & Mielke report does not meet the planning requirements of Chapter NR 110 of the Wisconsin Administrative Code.

As a system plan, the Ruekert & Mielke report meets the requirements attendant to sewerage system planning set forth in Chapter NR 121 of the Wisconsin Administrative Code. It should not be expected that the Ruekert & Mielke report will meet the more detailed sewerage facility planning requirements set forth in Chapter NR 110 of the Wisconsin Administrative Code. Those

more detailed requirements have been, and will continue to be, met through sewerage facilities planning for individual components of the system plan prepared and submitted by the implementing agencies concerned to the Wisconsin Department of Natural Resources.

- b. The Ruekert & Mielke report appears to be internally and significantly inconsistent with respect to the actual timeframe of planned sanitary sewer service areas.

There are no inconsistencies in the Ruekert & Mielke report attendant to the timeframes associated with planned sanitary sewer service areas. The graphic technique used by the Ruekert & Mielke firm to portray an ultimate development population level, along with the anticipated population levels for the year 2010 under two different development scenarios, should not be confusing to a discerning reader.

- c. The Ruekert & Mielke report is inconsistent with the adopted regional land use plan and the adopted Town of Bristol land use plan.

There are no inconsistencies between the Ruekert & Mielke report and either the adopted regional land use plan or the adopted Town of Bristol land use plan. Even though the Ruekert & Mielke report used a preliminary regional land use plan population forecast number lower than the final regional land use plan population forecast number for the greater Kenosha area, that difference had no bearing upon the ultimate determination of the recommended set of sewerage and water supply facilities.

- d. Because of the conflict with both the adopted regional land use plan and the adopted Town of Bristol land use plan, the Ruekert & Mielke report contains an excessively large sanitary sewer service area that will probably cause significant loss of prime agricultural lands, a "sprawl," or "checkerboard," pattern of development within a significantly large area and "leapfrog" development.

As noted above, there are no conflicts between the two land use plans concerned and the Ruekert & Mielke report; moreover, the sewerage system recommendations set forth in the Ruekert & Mielke report are designed to serve an agreed-upon land use plan consistent with both the adopted regional land use plan and the adopted Town of Bristol land use plan.

- e. The increased weight given to monetary considerations by the Ruekert & Mielke report is inconsistent with the DNR Land Use Task Force Report, which stressed the need to "review NR Administrative Codes and identify those that could increase the weight given to environmental and land use concerns and decrease the weight given to project construction costs."

The weight given to monetary considerations in the analyses included in the Ruekert & Mielke report is fully consistent with the system planning guidelines promulgated by the Federal and State governments with respect to regional water quality management planning and is, moreover, consistent with sound engineering and planning practice. Appropriate weights were also given in the work to environmental and land use concerns. There is nothing in the aforereferenced Department of Natural Resources report that would in any substantial way change the manner in which the Ruekert & Mielke study was structured and effected.

- f. The Ruekert & Mielke report did not address the impact of the proposed sewer service area on environmentally sensitive areas in floodplains.

All the sewerage system alternatives evaluated in the Ruekert & Mielke report were designed to serve and support a common land use pattern. That land use pattern assumed, on the basis of existing zoning ordinances, that no sanitary sewer service would be provided in environmentally sensitive floodplain areas.

- g. The Ruckert & Mielke report did not address the urban sprawl that would occur in the Town of Bristol upon implementation of the Ruckert & Mielke recommended plan.

There is no reason to believe that if the recommended system of sewerage facilities set forth in the Ruckert & Mielke report were to be implemented, additional urban development would "sprawl" into the Town of Bristol. The recommended sanitary sewer service area in the Ruckert & Mielke report limits the areal extent of urban development concerned, no matter what local municipality may have jurisdiction over the land.

- h. The Ruckert & Mielke report did not address localized impacts on water quality or wildlife, fish, and aquatic life Impacts.

There are no deficiencies in the Ruckert & Mielke report insofar as addressing the impact of the system alternatives considered on water quality and fish and aquatic life are concerned. As may be necessary, the Wisconsin Department of Natural Resources, in completing its environmental assessment attendant to the proposed plan amendment, will address further any impacts on the environment.

- i. The costs of the system alternatives evaluated in the Ruckert & Mielke report are all within the estimating accuracy of the calculations and, accordingly, permit any of the alternatives to be selected for implementation.

While all the sewerage system alternatives evaluated in the Ruckert & Mielke report had a total present worth within 10 percent of one another at the time the study was undertaken, supplemental cost-effectiveness analyses included in the report, which isolated on the differential aspects of the systems concerned, indicated that the recommended centralized alternative was about one-third less costly than the alternative that would retain both Pleasant Prairie sewage treatment plants. Furthermore, additional investment in sewerage facilities has been made since completion of the Ruckert & Mielke report in substantial reliance upon the recommendations contained in that report. Any recognition at this time of these additional sunk costs would only strengthen the conclusion reached in the Ruckert & Mielke report attendant to the cost-effectiveness of the centralized alternative.

- j. Implementation of the recommendations contained in the Ruckert and Mielke report depend upon the creation of a regional authority. The City of Kenosha and the Village of Pleasant Prairie have rejected the recommended approach for establishment of a regional authority. The Wisconsin Department of Natural Resources has denied the petition of the Town of Bristol for the creation of a metropolitan sewerage district. Accordingly, the coordinated sewerage and water supply facility plan recommended in the Ruckert & Mielke report is nonimplementable.

The Ruckert & Mielke study recognized that institutional structures other than a regional authority are available to implement the recommended plan. While the regional authority was the preferred method of implementation set forth in the Ruckert & Mielke plan, it cannot be construed therefrom that the intergovernmental contract option could not also be used to implement the cost-effective system plan. Indeed, it was foreshadowed in the Ruckert & Mielke report that continued reliance upon the intergovernmental option for progress toward plan implementation would be required in any case while the local governments concerned debate the merits of the regional authority governance option.

On the basis of the foregoing findings and conclusions presented at the third intergovernmental meeting, the Commission staff and the Wisconsin Department of Natural Resources staff agreed that steps should be taken to amend the regional water quality management plan substantially consistent with the sewerage system recommendations set forth in the Ruckert & Mielke report. This course of action was supported by representatives of the City of Kenosha, the Village of Pleasant Prairie, and the Town of Somers.

Representatives of the Town of Bristol, while initially supportive of the basic sewerage system recommendations contained in the Ruekert & Mielke plan despite the criticism of those recommendations, put forth by their consultants, expressed concern that the failure to implement the regional authority governance recommendation contained in the Ruekert & Mielke plan would essentially, given agreements reached since the second intergovernmental meeting between the City of Kenosha and Village of Pleasant Prairie, require annexation of lands in the Town of Bristol to the City or the Village before sewer service would be provided, thereby destroying the territorial integrity of the Town and effectively negating the current agreement between the Town and the Village of Pleasant Prairie for sewage treatment services to a portion of the Town. Representatives of the Town of Paris expressed concerns similar to those of the Town of Bristol relative to the future territorial integrity of that Town. Because of these concerns, both the Town of Bristol and the Town of Paris indicated that while they understood the desire of the other parties in this matter to move forward with the proposed plan amendment, they would formally oppose the plan amendment.

Public Hearing

A formal public hearing on this matter was held on January 23, 1996, at 5:00 p.m. in the Kenosha Municipal Building. The hearing was cosponsored by the Regional Planning Commission and the City of Kenosha and the Village of Pleasant Prairie, the two local governments concerned that currently operate the sewage treatment facilities in the greater Kenosha area. The hearing record was held open through February 2, 1996. The record of the public hearing, including the transcript of the comments made at the public hearing and all written comments received following the public hearing, is set forth in Appendices B and C of the aforementioned SEWRPC public participation document.

The results of this part of the public participation process undertaken by the Commission in this matter may be summarized as follows:

1. The City of Kenosha formally reiterated for the public hearing record its support of the proposed plan amendment.
2. The Village of Pleasant Prairie formally reiterated for the public hearing record its support of the proposed plan amendment.
3. The Town of Bristol formally reiterated for the public hearing record its opposition to the plan amendment given the failure to achieve full intergovernmental agreement on the regional authority governance implementation option recommended in the Ruekert & Mielke report. The Town also placed into the public hearing record all the technical concerns and comments raised by its consultants attendant to the Ruekert & Mielke report that were addressed at the third intergovernmental meeting noted above. Through a number of individuals, the Town expressed concern that because of the inequalities between incorporated and unincorporated local governments inherent in the Wisconsin Statutes, amendment of the plan as proposed would, given agreements reached between the City of Kenosha and the Village of Pleasant Prairie, inevitably result in annexation of at least certain lands in the Town of Bristol to the City or the Village as a condition of extending sanitary sewer service.

Furthermore, the Town representatives expressed concern that amendment of the plan as proposed, involving the recommended abandonment of the Pleasant Prairie Sewer Utility District D treatment facility by the year 2010, would create a cloud of uncertainty over the present agreement between the Town and the Village of Pleasant Prairie whereby the Village provides sewage treatment services to certain lands in the Town. That agreement expires in the year 2005. Accordingly, absent any intergovernmental agreement whereby the territorial integrity of the Town of Bristol would be maintained, the Town indicated its opposition to the proposed changes in the regional water quality management plan.

4. The Town of Paris formally reiterated for the public hearing record its opposition to the plan amendment, given the failure to achieve full agreement on the regional authority governance implementation option recommended in the Ruekert & Mielke report.

5. A total of four residents of the City of Kenosha who live in the vicinity of the Kenosha sewage treatment plant, together with the City of Kenosha Alderman for the neighborhood concerned, expressed concern over the odor and noise problems associated with operations at that plant. These individuals indicated that while the City of Kenosha was trying to be responsive to their concerns, the odor and noise problems should be resolved before additional flows from the Village of Pleasant Prairie are diverted to the Kenosha plant as recommended in the proposed plan amendment.
6. One landowner in the Village of Pleasant Prairie supported the proposed plan amendment as being essential to enabling the Village of Pleasant Prairie to extend sanitary sewers so that the land concerned could be developed for urban use.
7. Two residents of the Town of Bristol expressed concern that the proposed plan amendment would result in a situation whereby, in order to develop their lands with sanitary sewer service, such lands would have to be annexed to either the City of Kenosha or the Village of Pleasant Prairie.
8. One landowner in the Town of Paris expressed support for the proposed plan amendment provided that the proposed areal extent of the planned sanitary sewer service area be modified to encompass certain lands lying along the west Frontage Road of IH 94 between CTH K and CTH N.
9. One resident of the Town of Somers appeared in opposition to the proposed plan amendment, indicating that surface water diversion issues would best be addressed by retaining the sewage treatment plants that discharge to the Des Plaines River. This individual also alleged that the current diversion of Lake Michigan water by the Village of Pleasant Prairie to provide water supply to certain Village residents living in the Des Plaines River watershed did not meet Federal requirements.
10. A total of 11 individuals indicated their support of the proposed plan amendment by virtue of the filing of appearance slips so indicating such support.
11. State Senator Joseph F. Andrea, 22nd Senate District; State Representative James D. Kreuser, 64th Assembly District; and State Representative Robert W. Wirch, 65th Assembly District, filed letters in support of the proposed plan amendment and urging the Commission to make the recommended changes to the regional water quality management plan citing, in particular, the importance of the amendment to resolving any questions attendant to the current diversion of Lake Michigan water to the Des Plaines River watershed.

CONCLUDING RECOMMENDATIONS

The foregoing summary of the reaction of elected public officials and citizens to the proposed plan amendment indicates that it was not possible to achieve full agreement in this matter. Nevertheless, the preponderance of the record of public participation indicates substantial support by elected officials and citizens for proceeding with the proposed amendment to the regional water quality management plan. In drawing this conclusion, the Commission staff provides the following specific responses to the major issues raised during the public participation process:

1. The positions of the Towns of Bristol and Paris attendant to this matter, while understandable in light of their desire to maintain the territorial integrity of the Towns concerned, do not directly concern the cost-effectiveness and environmental planning matters that are the Commission's responsibility to address in the areawide water quality management planning process. Rather, the concerns expressed by the Towns of Bristol and Paris relate to questions of annexation and local government jurisdiction. Whatever inequalities may exist in Wisconsin law as between incorporated and unincorporated municipalities, the Commission cannot take such inequalities into account in discharging its areawide water quality management planning responsibilities. Rather, the focus of the areawide water quality management plan must be to identify the most cost-effective, environmentally sound solution to water quality-related problems, including sanitary sewerage systems. The basic sewerage system development

recommendations for the greater Kenosha area set forth in the Ruckert & Mielke report have been found to be cost-effective and environmentally sound and, accordingly, should be implemented by whatever means the Wisconsin Legislature has made available to the local governments concerned.

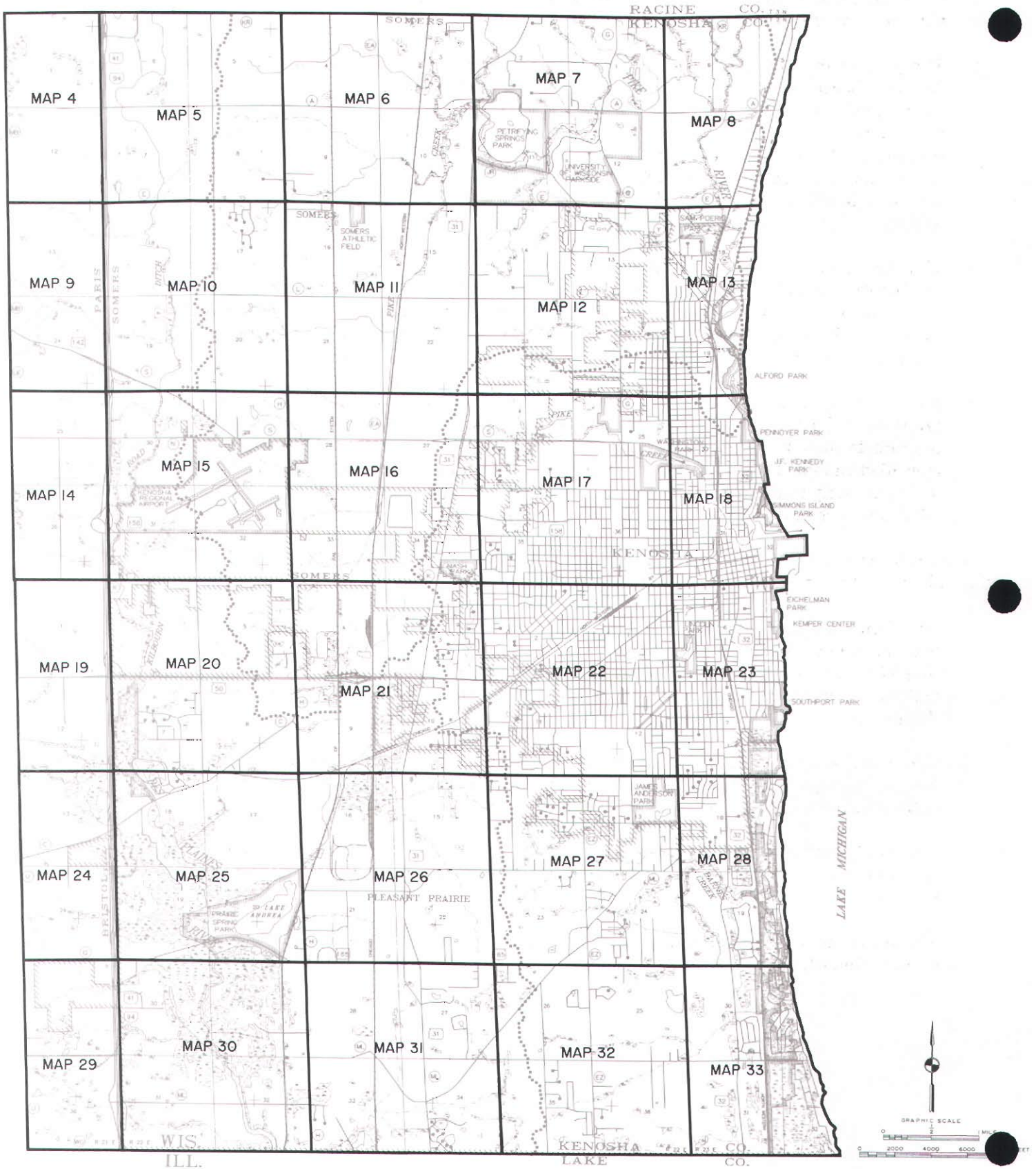
2. The present intergovernmental agreement between the Village of Pleasant Prairie and the Town of Bristol, whereby the Town of Bristol receives sewage treatment services at the Pleasant Prairie Sewer Utility District D treatment plant, needs to be maintained through its current expiration date in the year 2005, at which time that agreement will need to be renegotiated in light of the recommendation to abandon the subject treatment plant by the year 2010. In exercising its oversight responsibilities as the regulatory agency concerned, the Wisconsin Department of Natural Resources should take appropriate steps to ensure that at least the extent of the present agreement in terms of area served is indefinitely maintained as treatment is provided at the Kenosha treatment plant.
3. The operational problems attendant to the Kenosha sewage treatment plant need to be addressed at the facilities-planning level, conducted by the City of Kenosha, planning also overseen by the Wisconsin Department of Natural Resources. Accordingly, it is recommended that the City and the Department cooperatively work to address the odor and noise concerns that were entered into the record of the public hearing by residents and an elected official of the neighborhood concerned.
4. There is no basis for expanding the areal extent of the planned sanitary sewer service area beyond that proposed on Map 2, presented earlier in this document. There is nothing in the public hearing record to indicate that the Town of Paris supports any planned sanitary sewer service area other than that identified on Map 2. Moreover, the planned sewerage facilities identified in the Ruckert & Mielke report and summarily described earlier in this document were not configured nor sized to accommodate any additional urban development in the Town of Paris.

Given the foregoing, then, it is recommended that the Southeastern Wisconsin Regional Planning Commission formally amend the regional water quality management plan in the following respects:

1. The delineation of the outer boundary of the planned sanitary sewer service area for the City of Kenosha and environs should be modified in the manner identified on Map 2 of this document, with the Kenosha sewage treatment plant designated to serve the entire area concerned. A more detailed delineation of the planned sewer service area is shown on aerial photographs reproduced as Maps 4 through 33.
2. The designations of the Village of Pleasant Prairie Sewer Utility District D and Sanitary District No. 73-1 sewage treatment plants as permanent plants should be removed from the plan and replaced with a recommendation to abandon these two plants by the year 2010.
3. The configuration of the intercommunity trunk sewers and appurtenant pumping stations to serve the area concerned should be amended to conform with the configuration identified on Map 2 in this document.
4. The designations attendant to management agencies for carrying out the plan recommendations in the greater Kenosha area should be amended in the manner set forth in Table 2 of this document.

Map 3

INDEX OF MAPS SHOWING ENVIRONMENTALLY SIGNIFICANT LANDS
AND PLANNED SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA



Source: SEWRPC.

Map 4

ENVIRONMENTALLY SIGNIFICANT LANDS
FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 1 and 12
Township 2 North, Range 21 East



LEGEND

-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA



Source: SEWRPC.





Map 5

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 5, 6, 7, and 8
Township 2 North, Range 22 East



LEGEND

-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

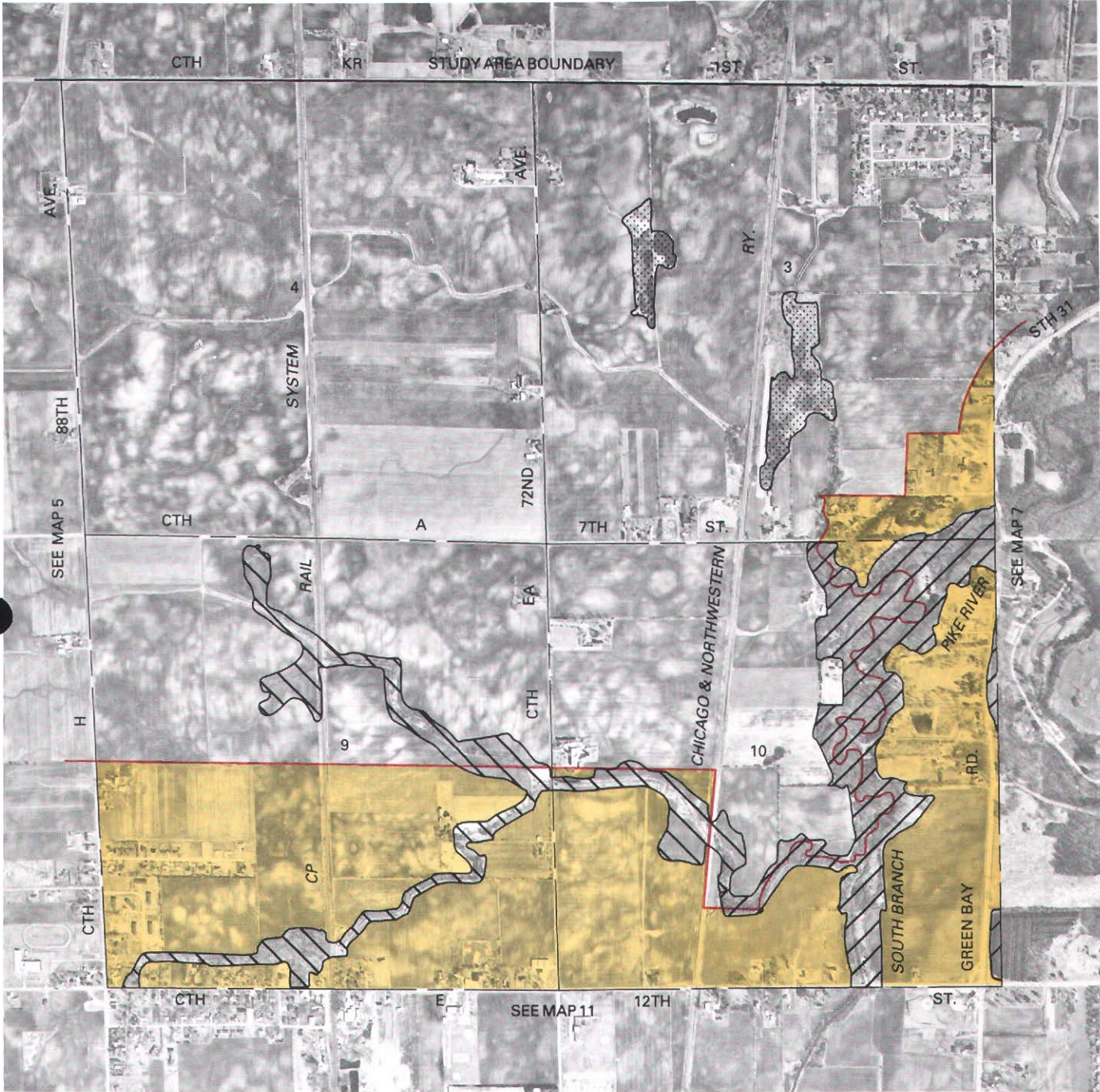


Source: SEWRPC.






Map 6

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 3, 4, 9, and 10
Township 2 North, Range 22 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

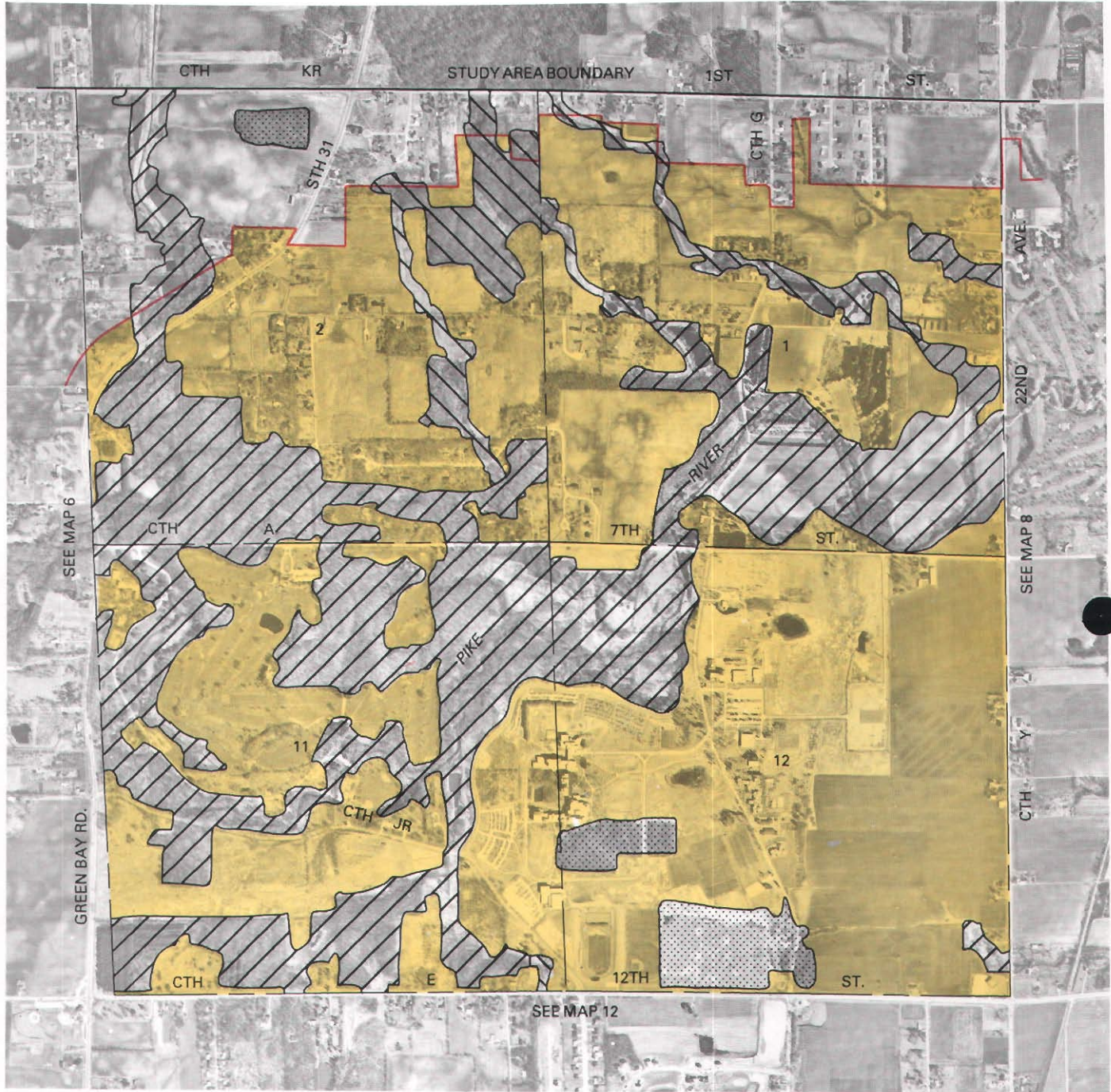
Source: SEWRPC.








Map 7

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

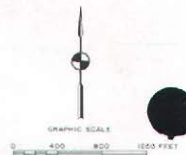
U. S. Public Land Survey Sections 1, 2, 11, and 12
Township 2 North, Range 22 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

Source: SEWRPC.



Map 8

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 5, 6, 7, and 8
Township 2 North, Range 23 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY



Source: SEWRPC.




Map 9

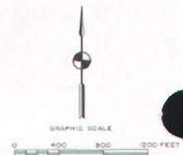
ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 13 and 24
Township 2 North, Range 21 East



LEGEND

-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY







Source: SEWRPC.

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 17, 18, 19, and 20
Township 2 North, Range 22 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY



Source: SEWRPC.






Map 11

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 15, 16, 21, and 22
Township 2 North, Range 22 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

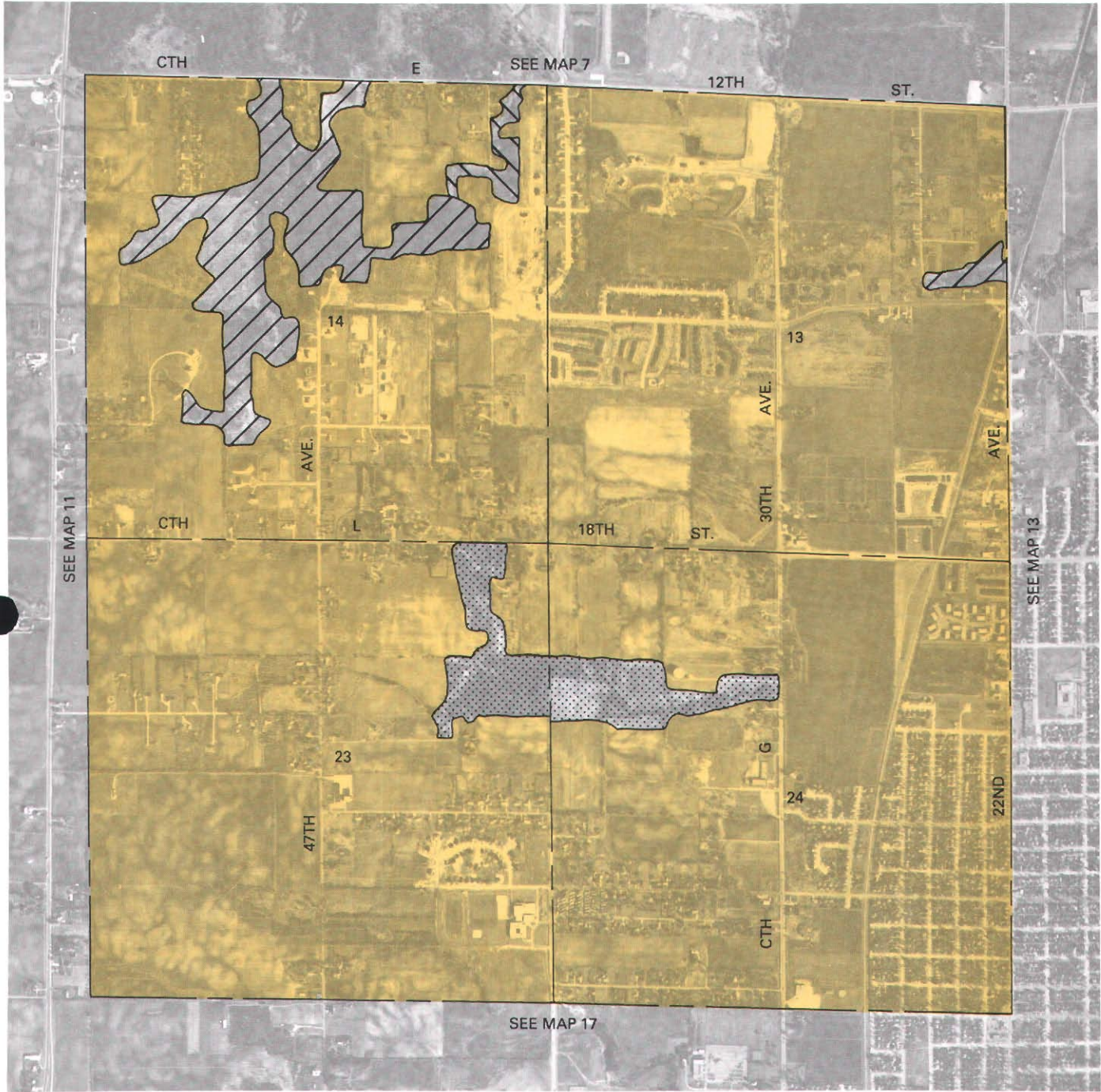
Source: SEWRPC.



Map 12

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 13, 14, 23, and 24
Township 2 North, Range 22 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA

Source: SEWRPC.



Map 13

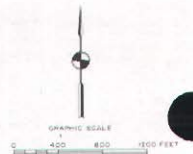
ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 18 and 19
Township 2 North, Range 23 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  PLANNED SANITARY SEWER SERVICE AREA

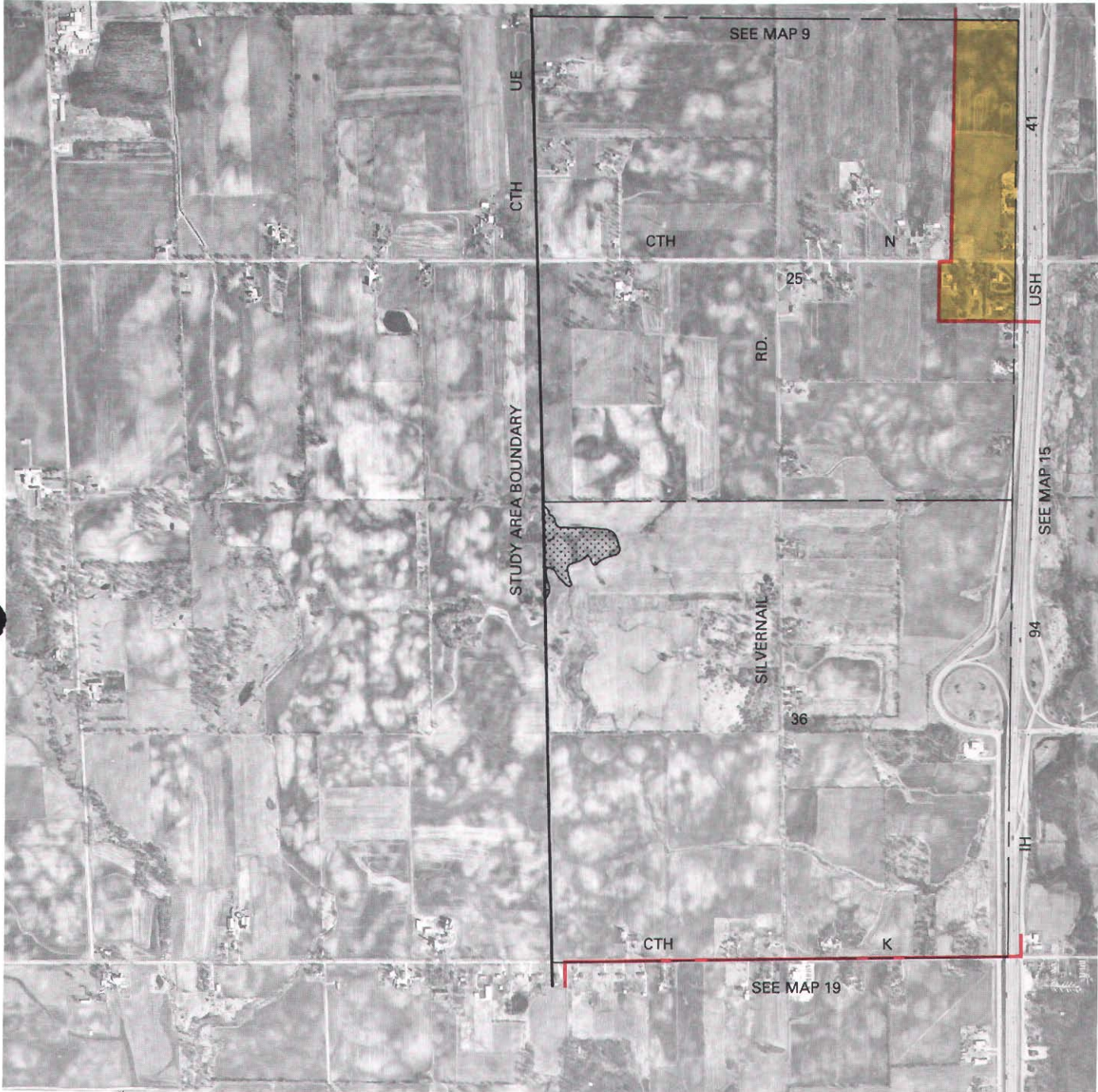


Source: SEWRPC.




Map 14

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 25 and 36
Township 2 North, Range 21 East



LEGEND

-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

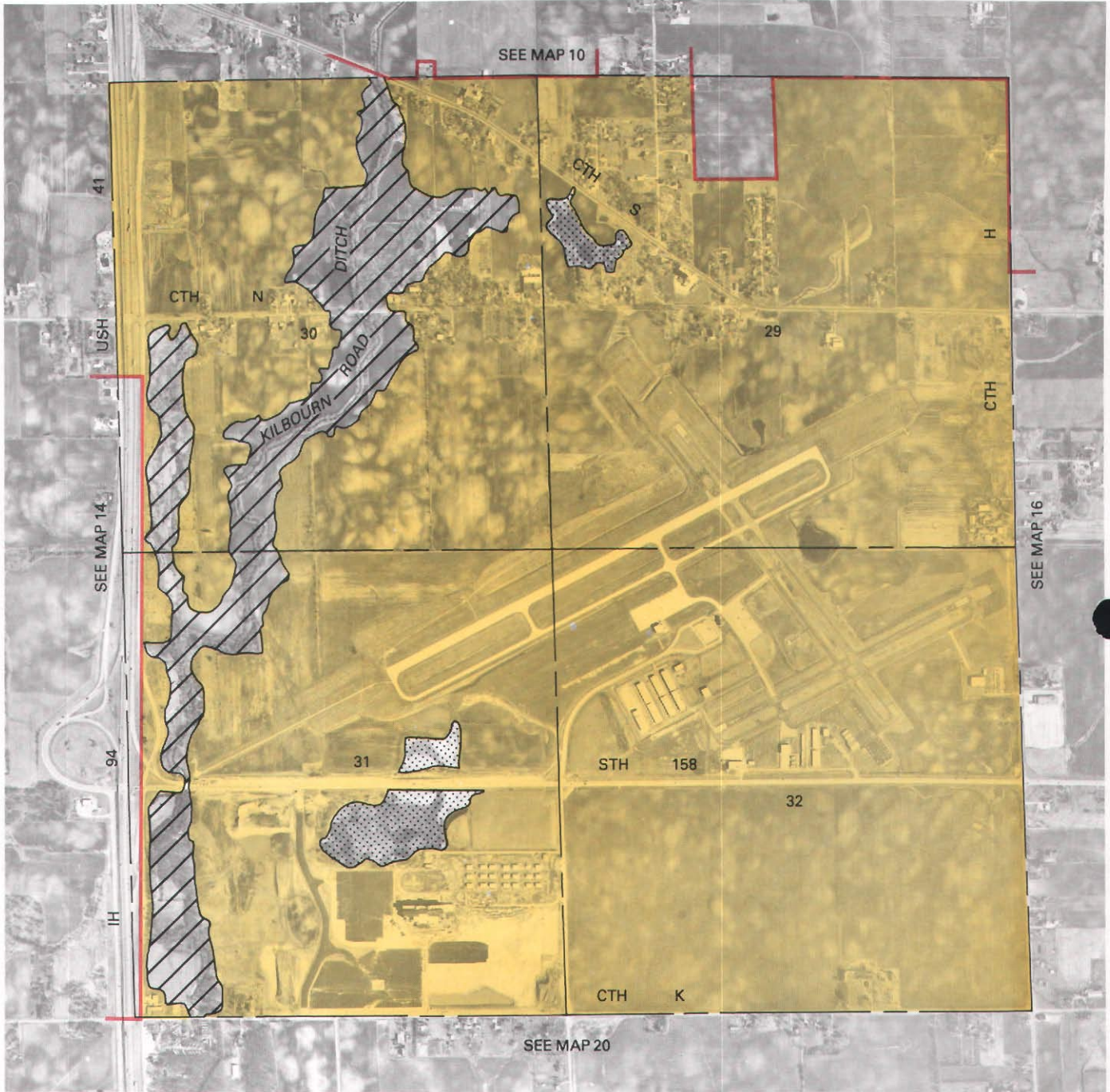


Source: SEWRPC.





Map 15

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 29, 30, 31, and 32
Township 2 North, Range 22 East



LEGEND

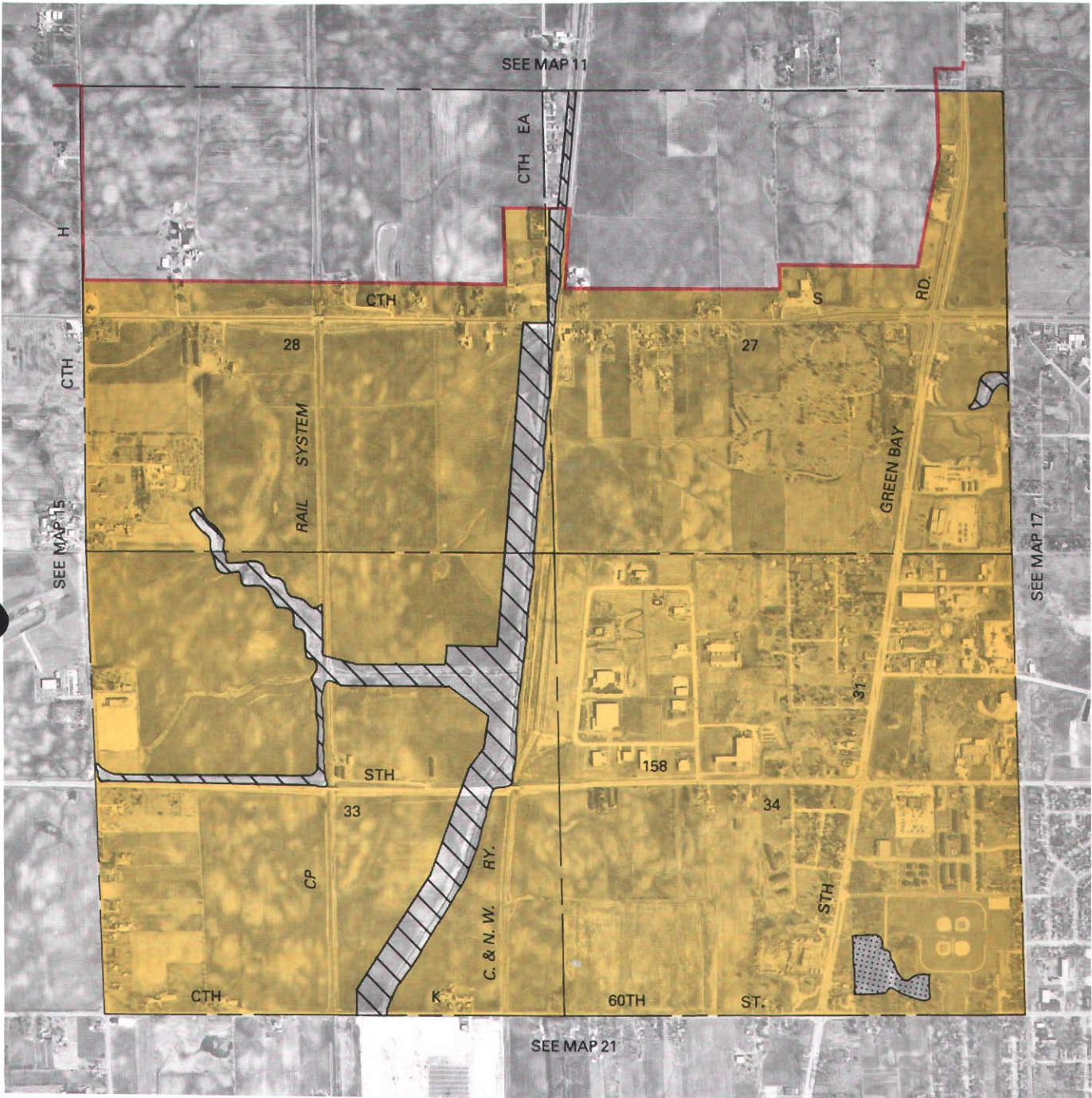
-  PRIMARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY







Source: SEWRPC.

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 27, 28, 33, and 34
Township 2 North, Range 22 East



LEGEND

-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

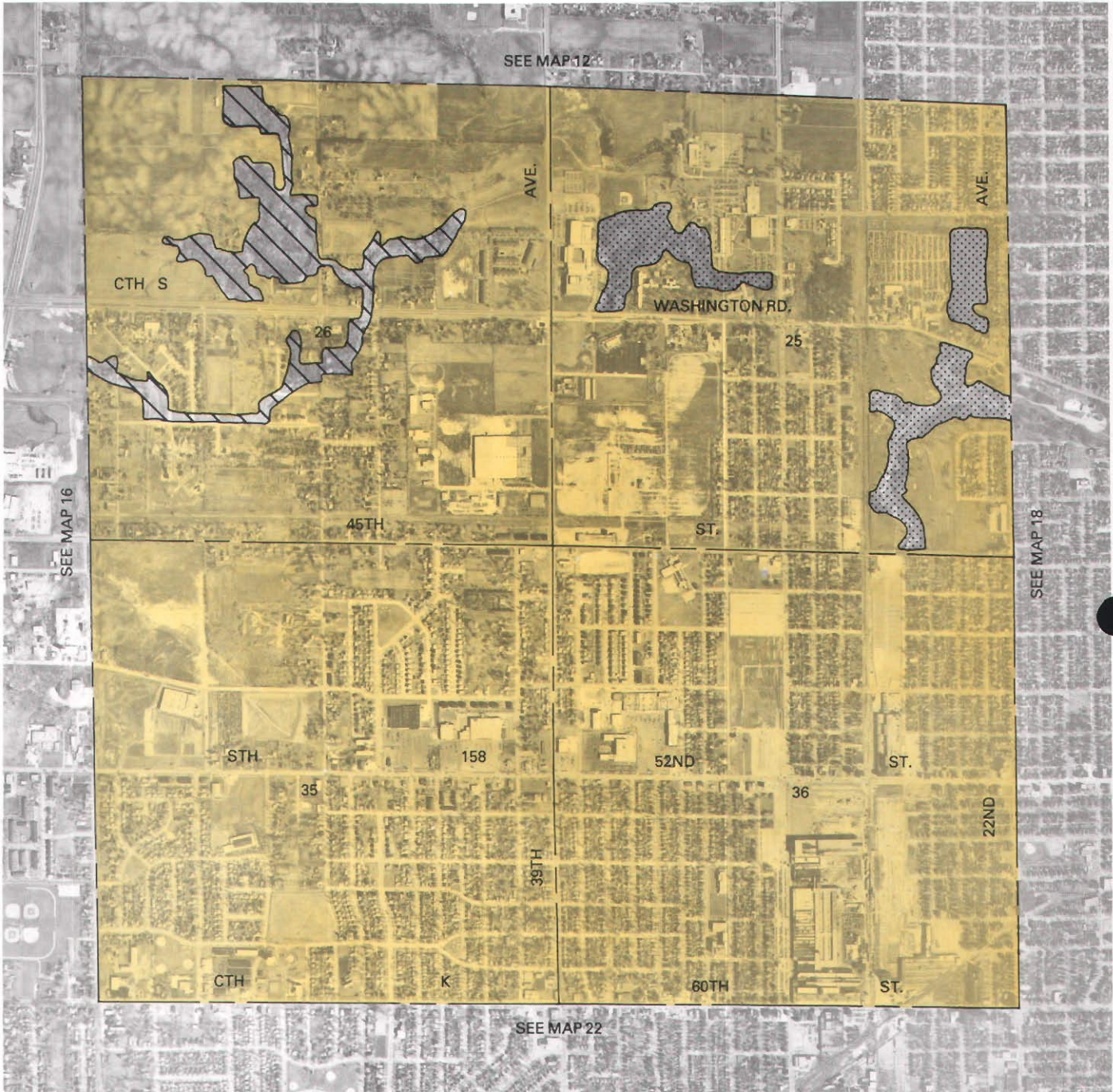


Source: SEWRPC.

Map 17

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

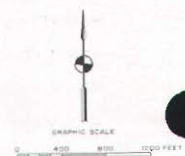
U. S. Public Land Survey Sections 25, 26, 35, and 36
Township 2 North, Range 22 East



LEGEND

-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA

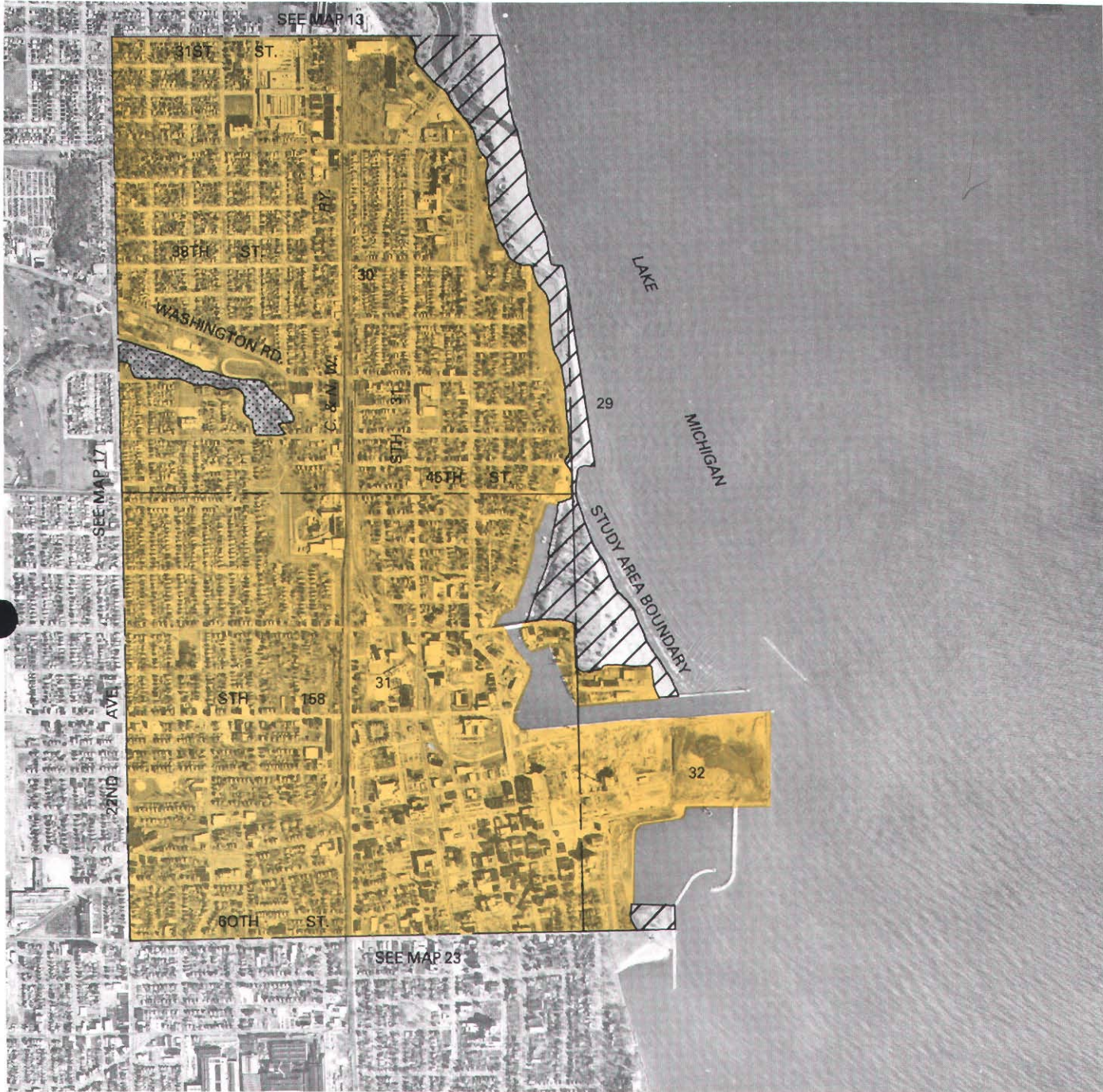
Source: SEWRPC.



Map 18

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 29, 30, 31, and 32
Township 2 North, Range 23 East



LEGEND

- PRIMARY ENVIRONMENTAL CORRIDOR
- ISOLATED NATURAL RESOURCE AREA
- PLANNED SANITARY SEWER SERVICE AREA

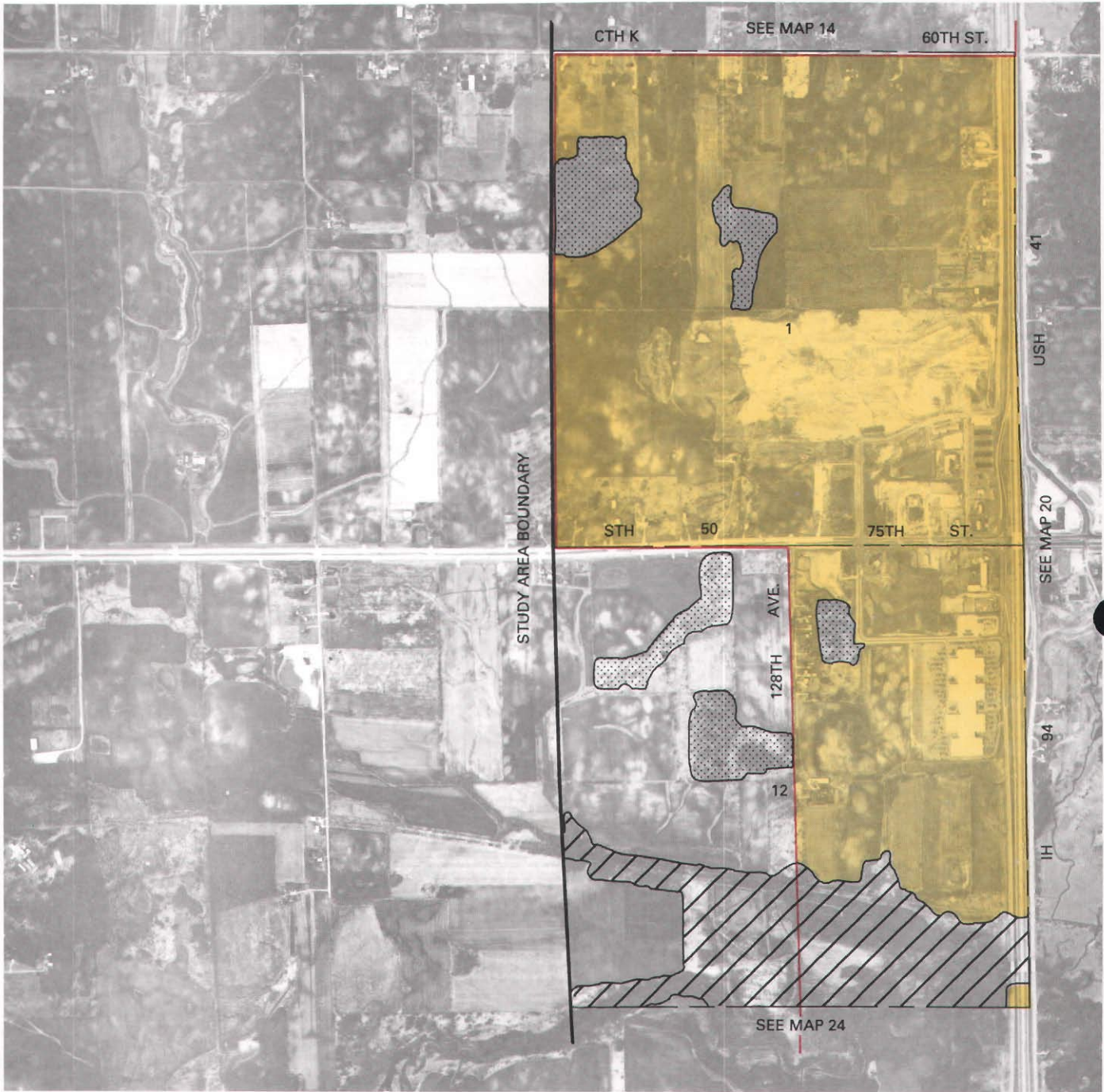


Source: SEWRPC.





Map 19

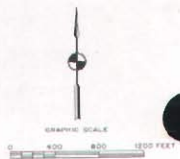
ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 1 and 12
Township 1 North, Range 21 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

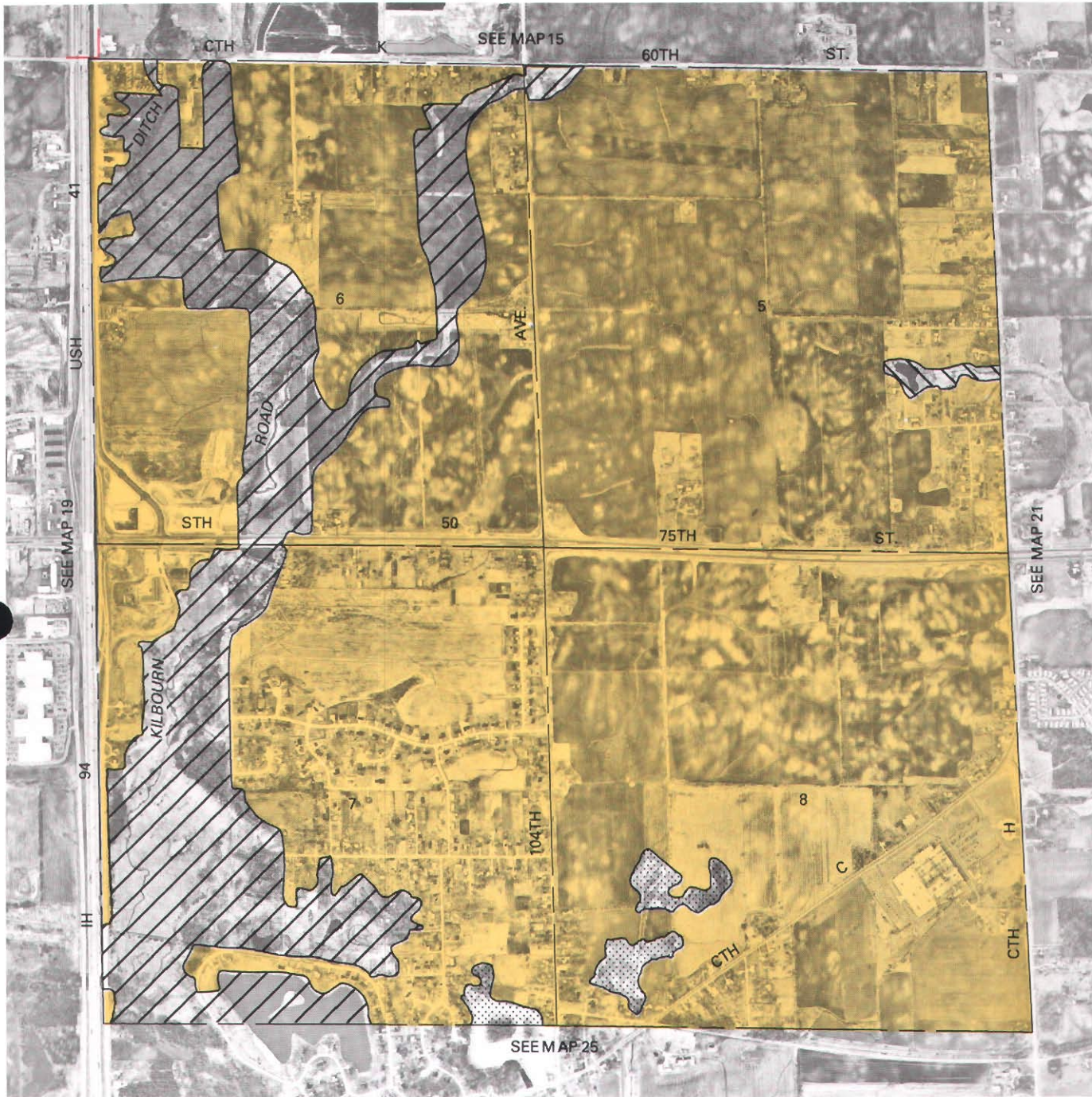


Source: SEWRPC.






Map 20

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

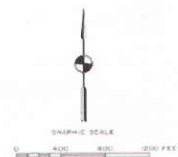
U. S. Public Land Survey Sections 6, 7, and 8
Township 1 North, Range 22 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

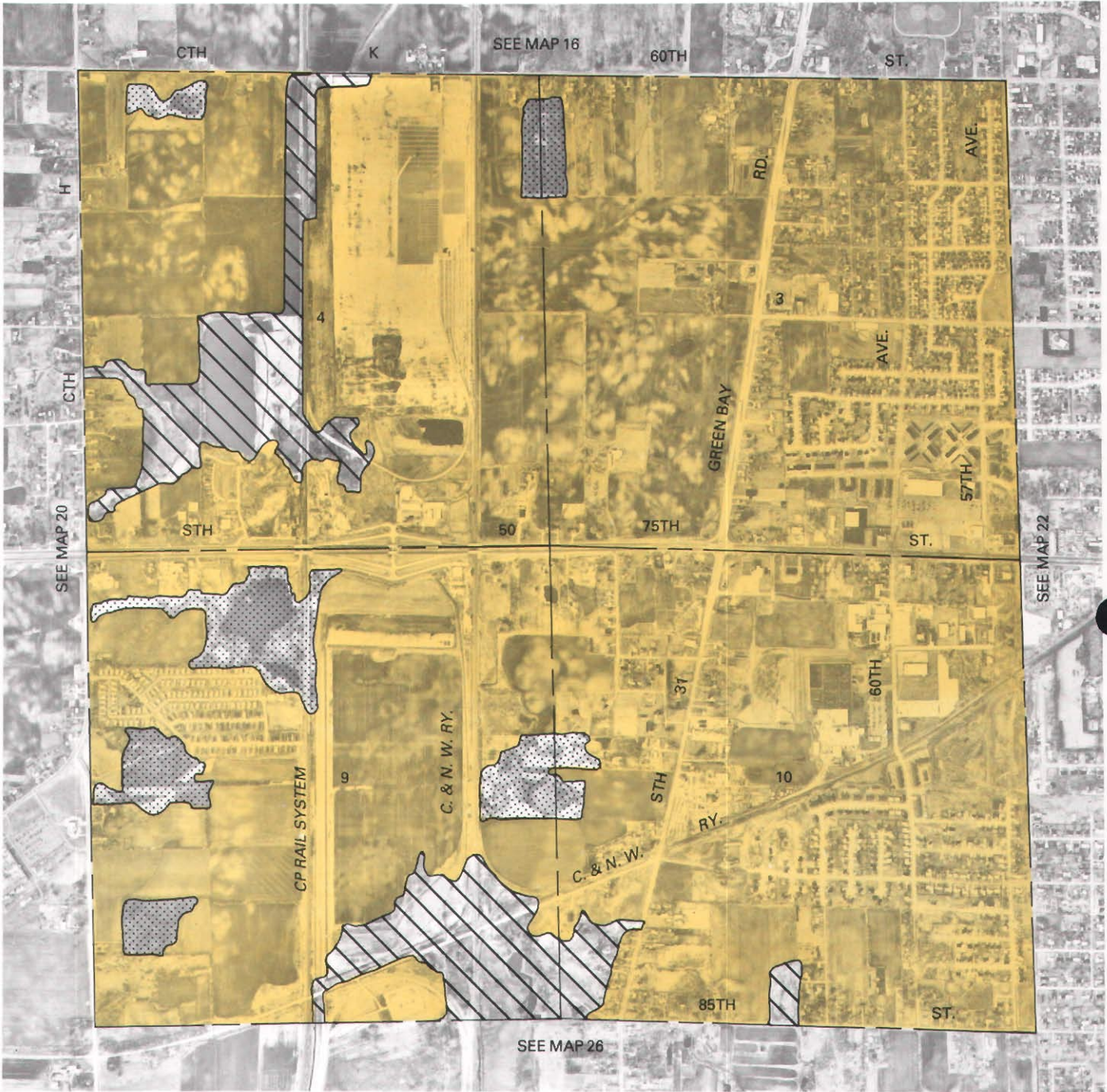
Source: SEWRPC.



Map 21

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 3, 4, 9, and 10
Township 1 North, Range 22 East



LEGEND

-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA

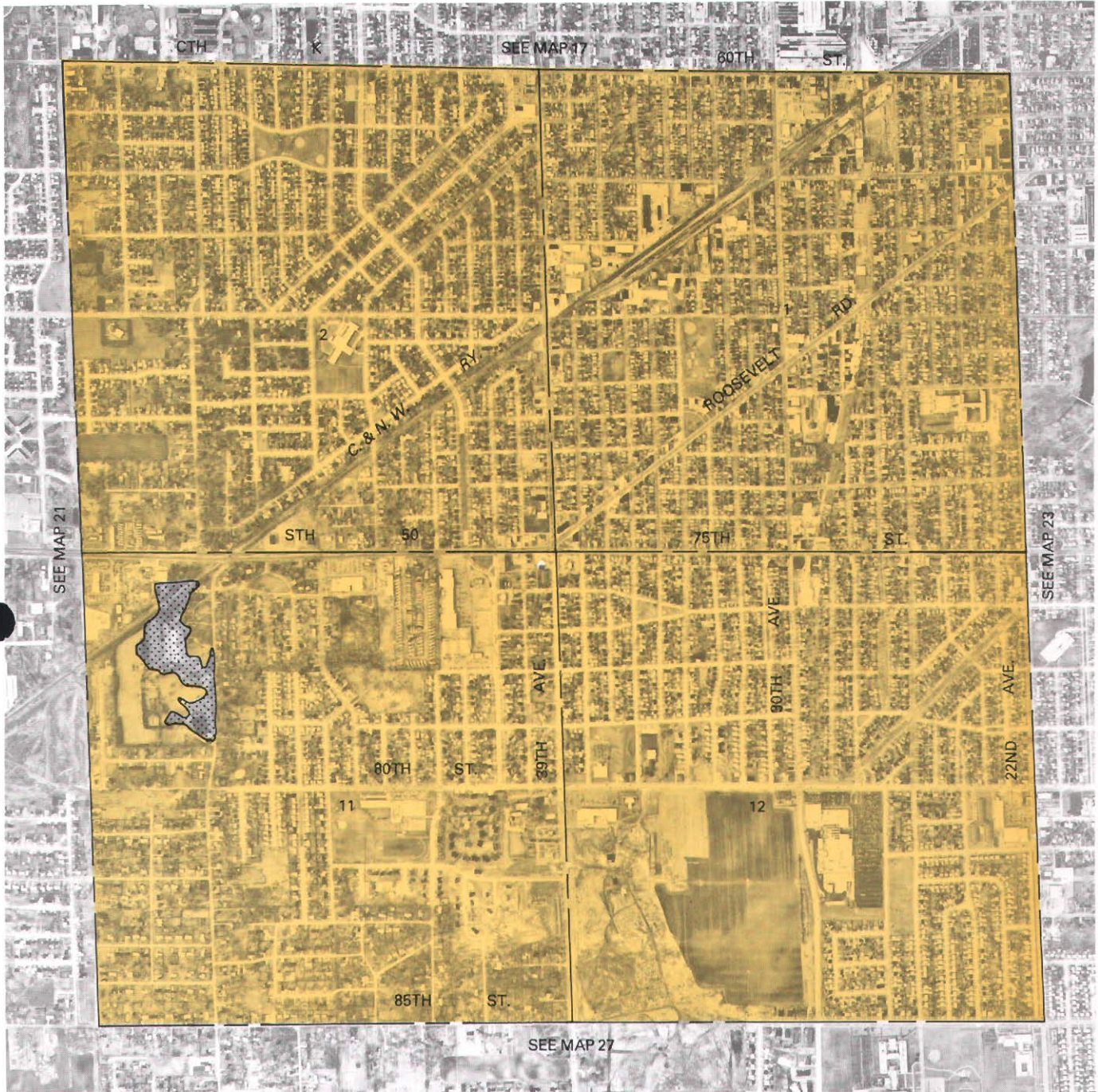


Source: SEWRPC.

Map 22

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 1, 2, 11, and 12
Township 1 North, Range 22 East



LEGEND

-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA

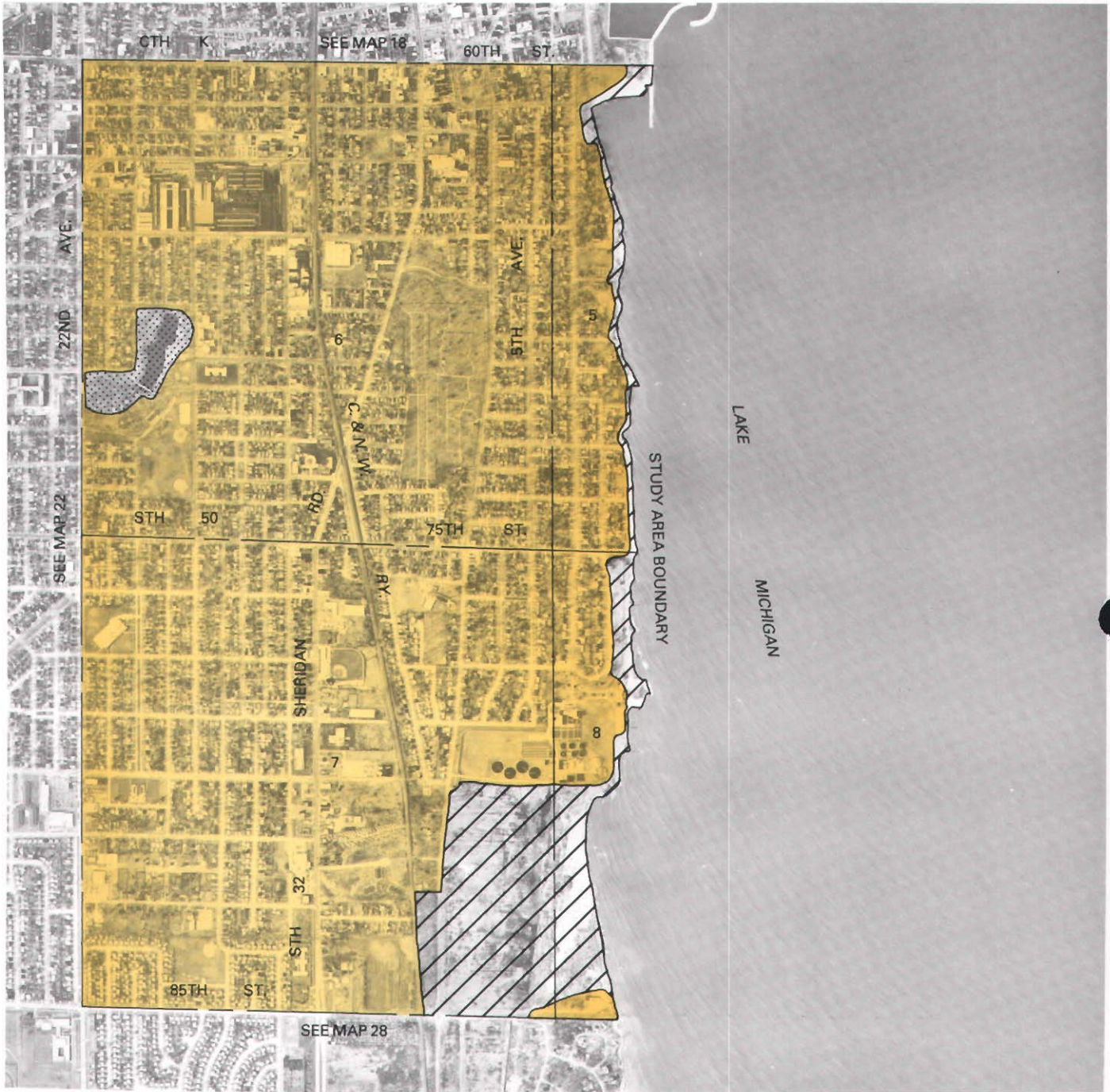


Source: SEWRPC.

Map 23

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 5, 6, 7, and 8
Township 1 North, Range 23 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA

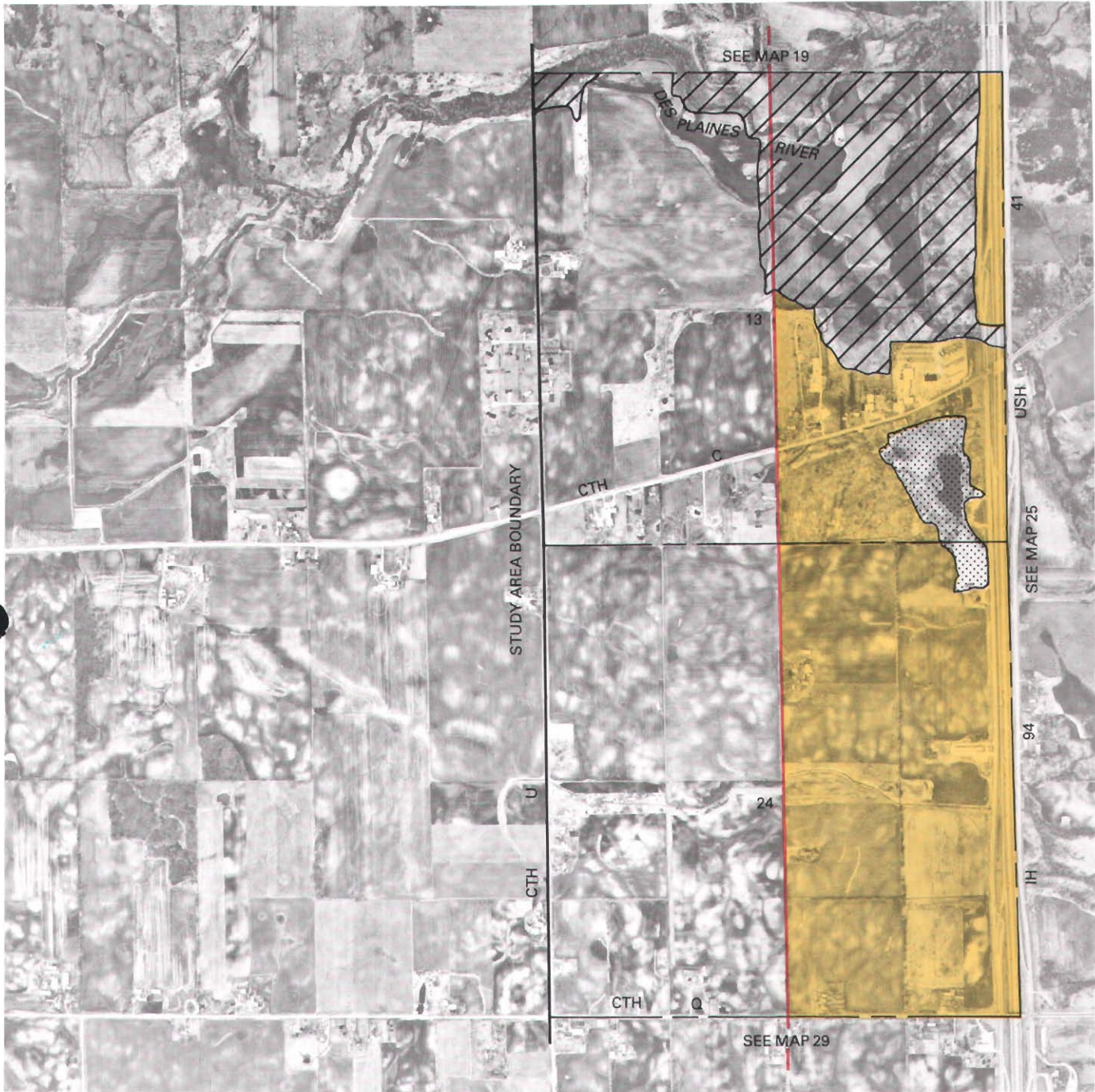
Source: SEWRPC.







Map 24

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 13 and 24
Township 1 North, Range 21 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

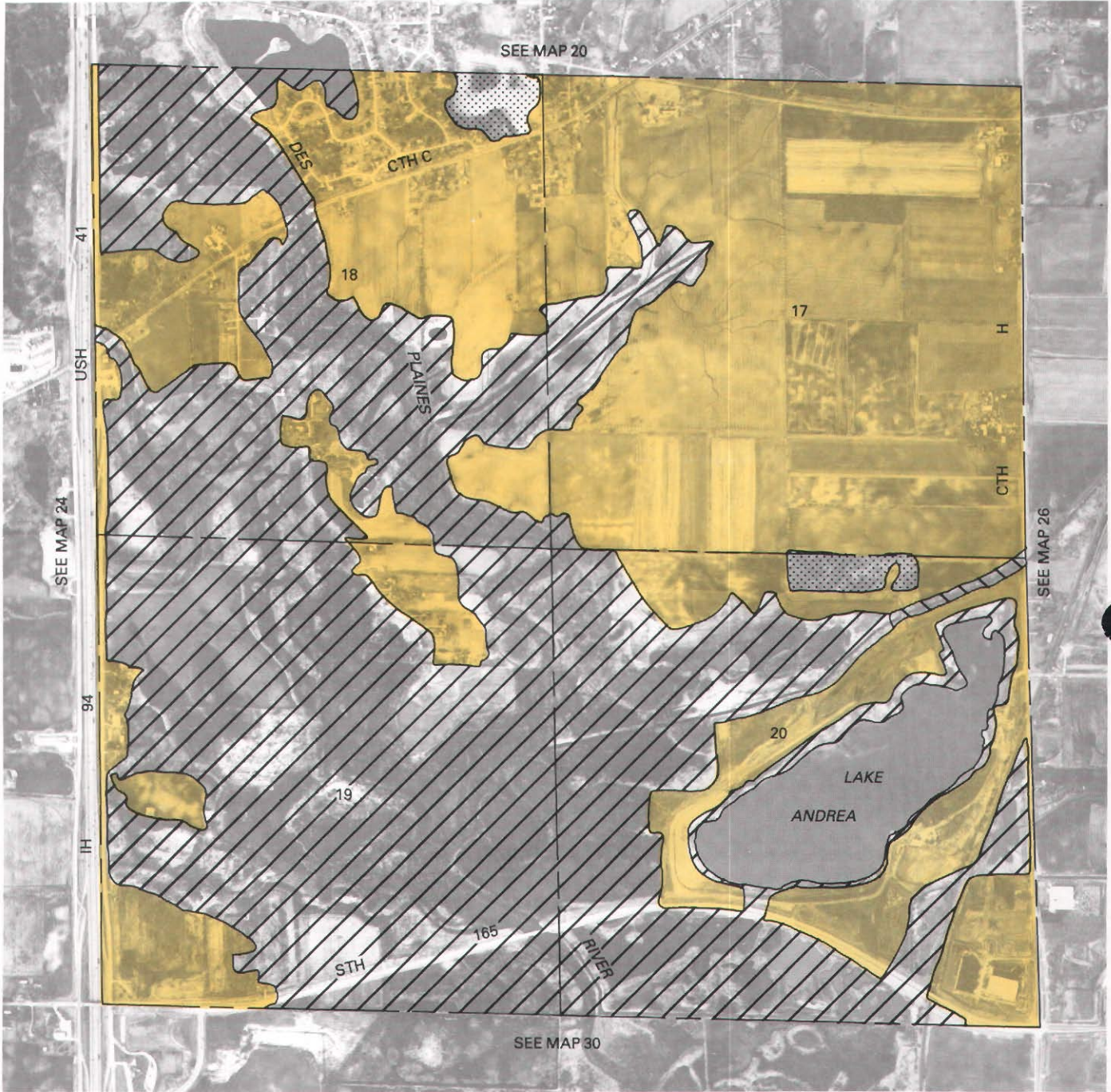


Source: SEWRPC.

Map 25

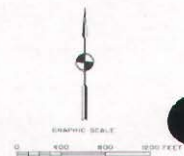
ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 17, 18, 19, and 20
Township 1 North, Range 22 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA

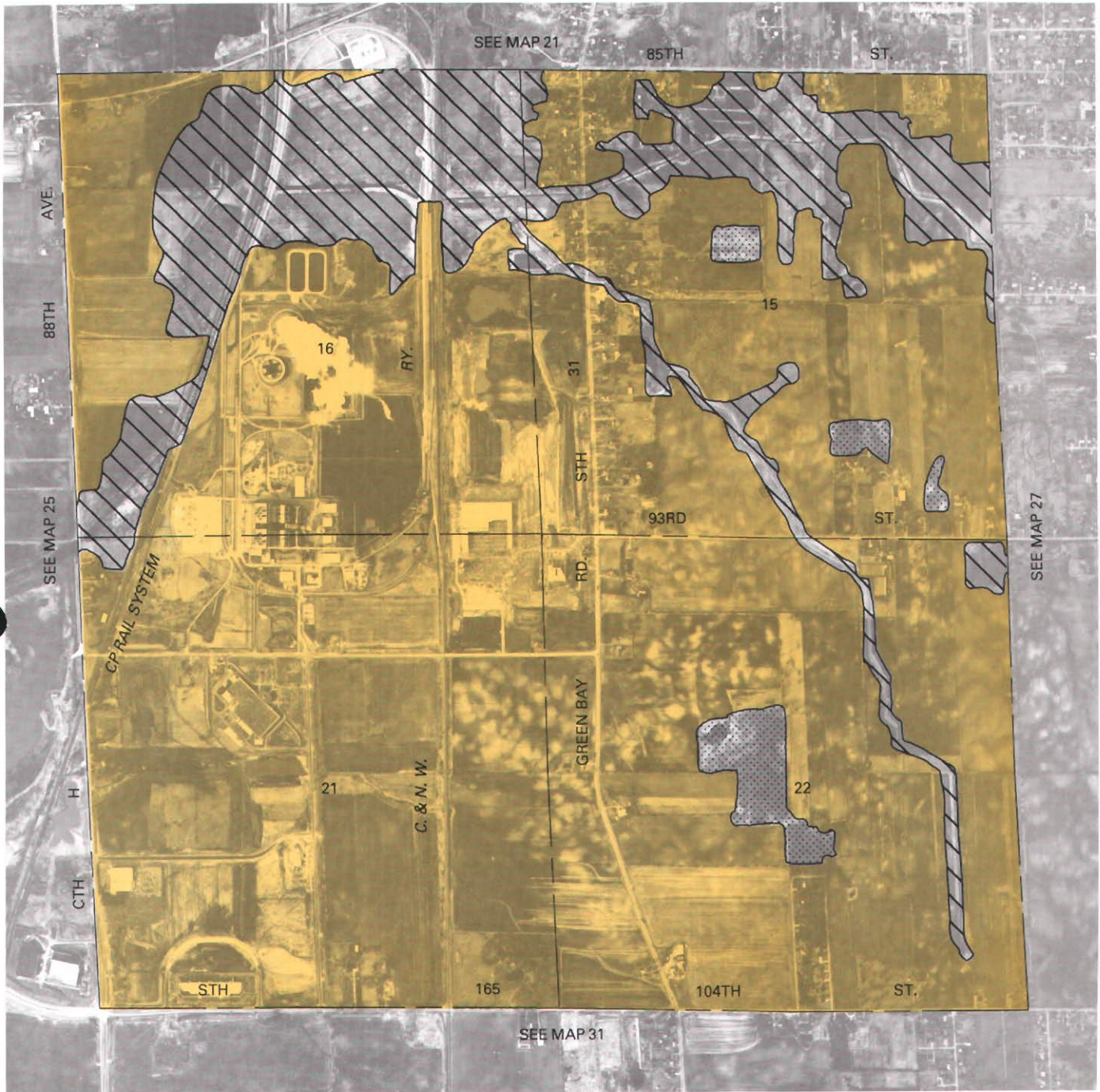


Source: SEWRPC.

Map 26

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

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



LEGEND

-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA

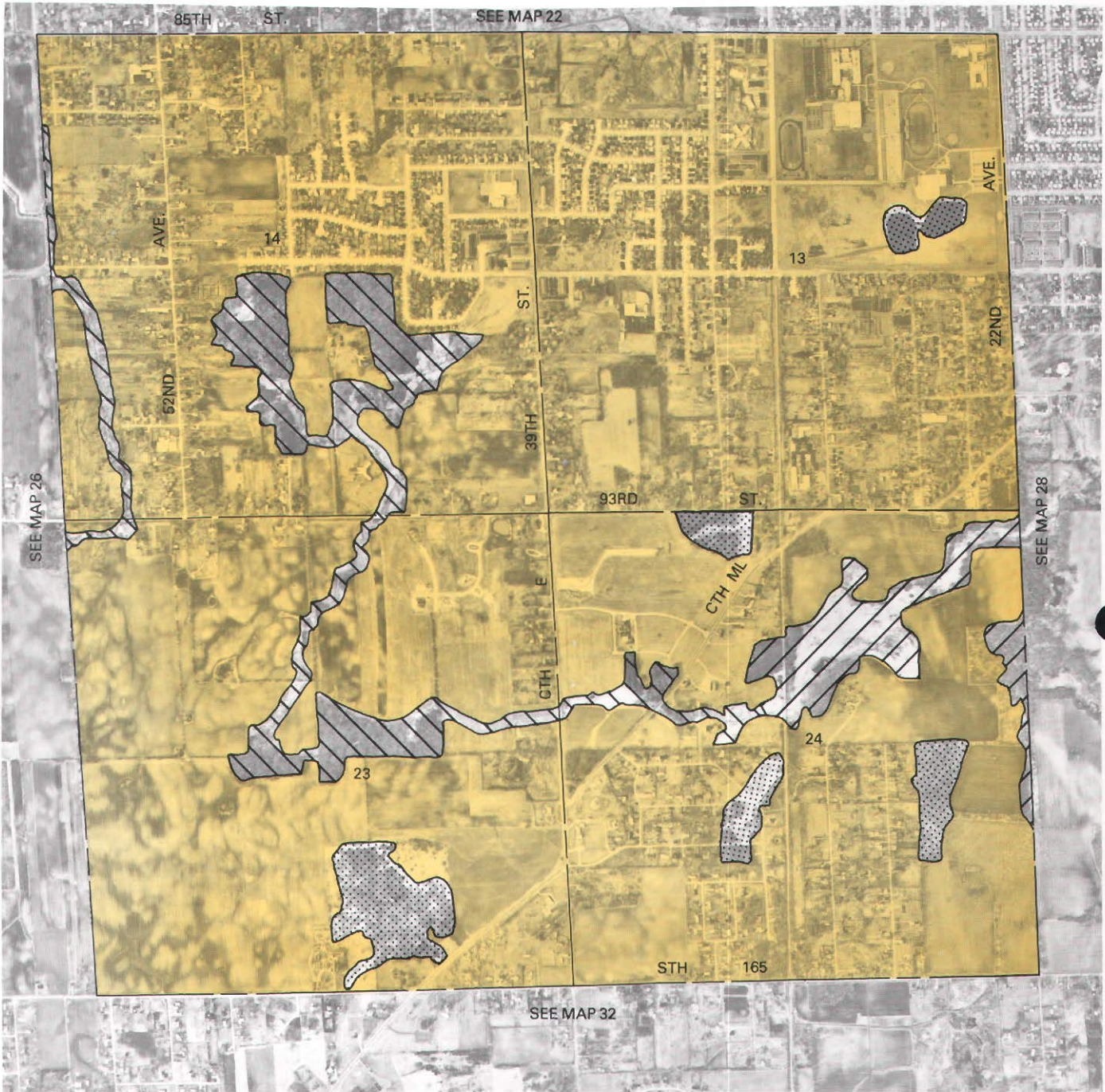


Source: SEWRPC.

Map 27

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 13, 14, 23, and 24
Township 1 North, Range 22 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA

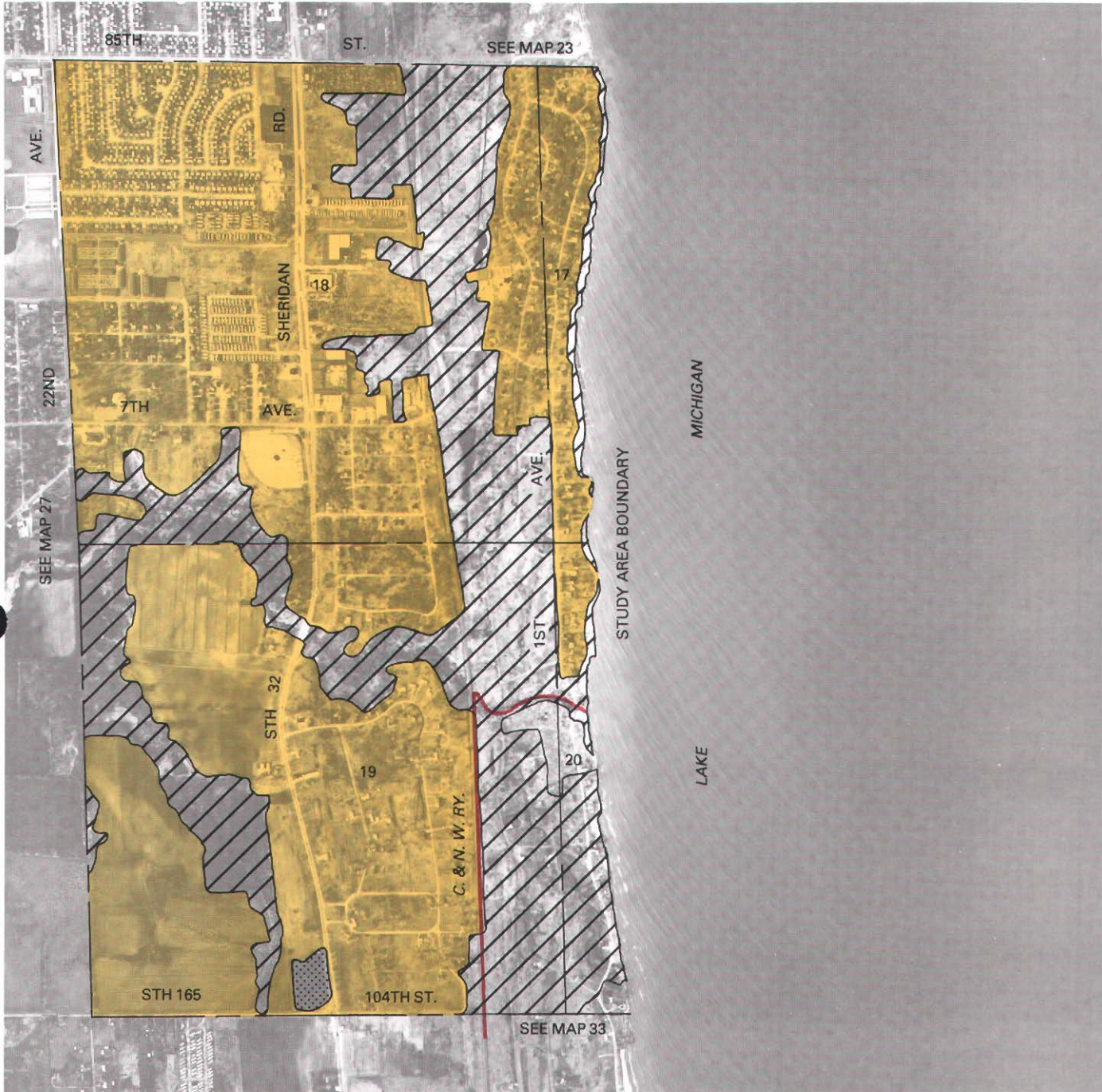
Source: SEWRPC.







Map 28

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 17, 18, 19, and 20
Township 1 North, Range 23 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

Source: SEWRPC.








Map 29

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

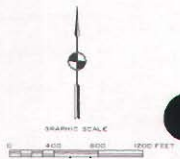
U. S. Public Land Survey Sections 25 and 36
Township 1 North, Range 21 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

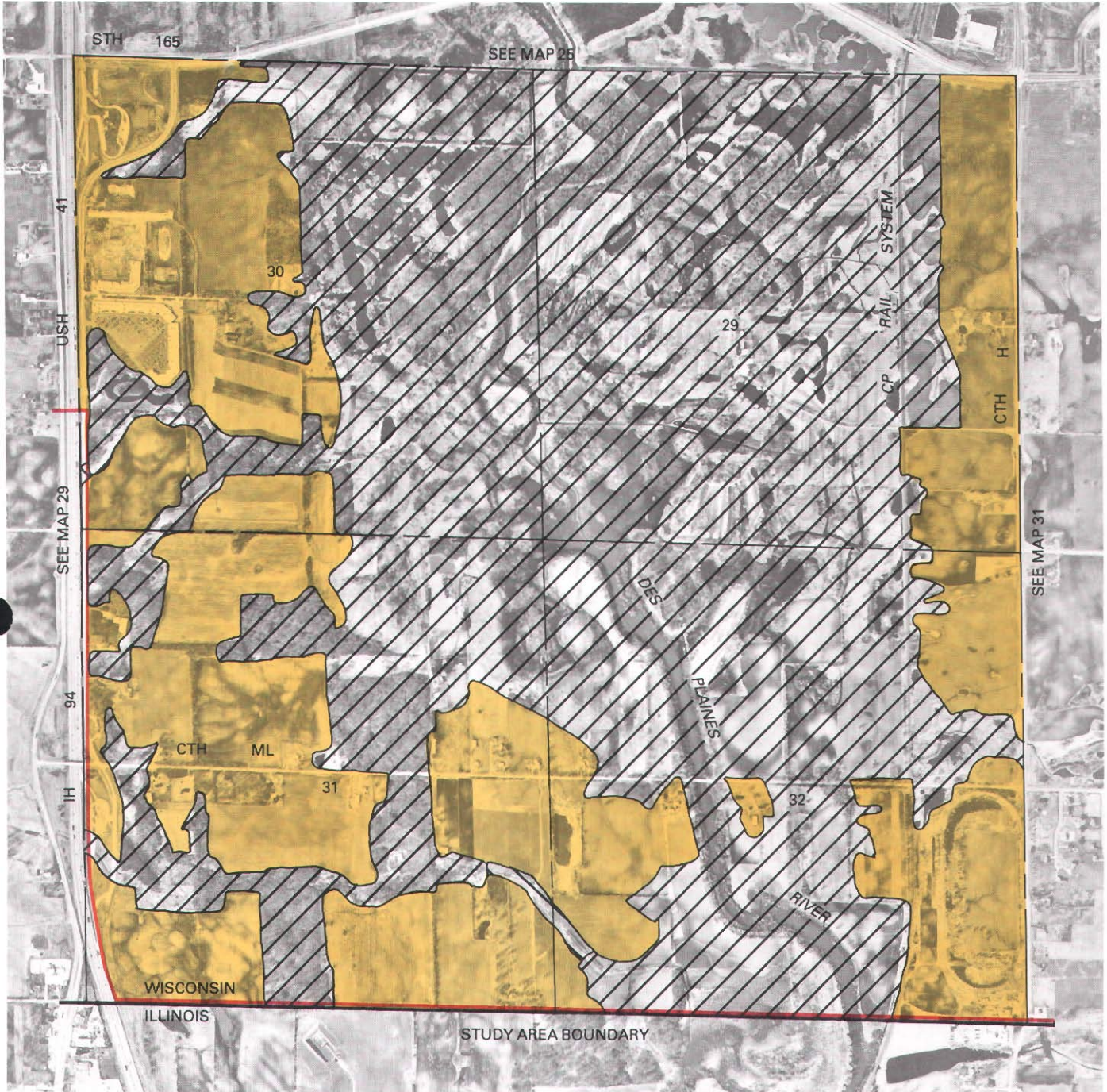
Source: SEWRPC.



Map 30

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 29, 30, 31, and 32
Township 1 North, Range 22 East



LEGEND

- PRIMARY ENVIRONMENTAL CORRIDOR
- SECONDARY ENVIRONMENTAL CORRIDOR
- PLANNED SANITARY SEWER SERVICE AREA
- GROSS SANITARY SEWER SERVICE AREA BOUNDARY

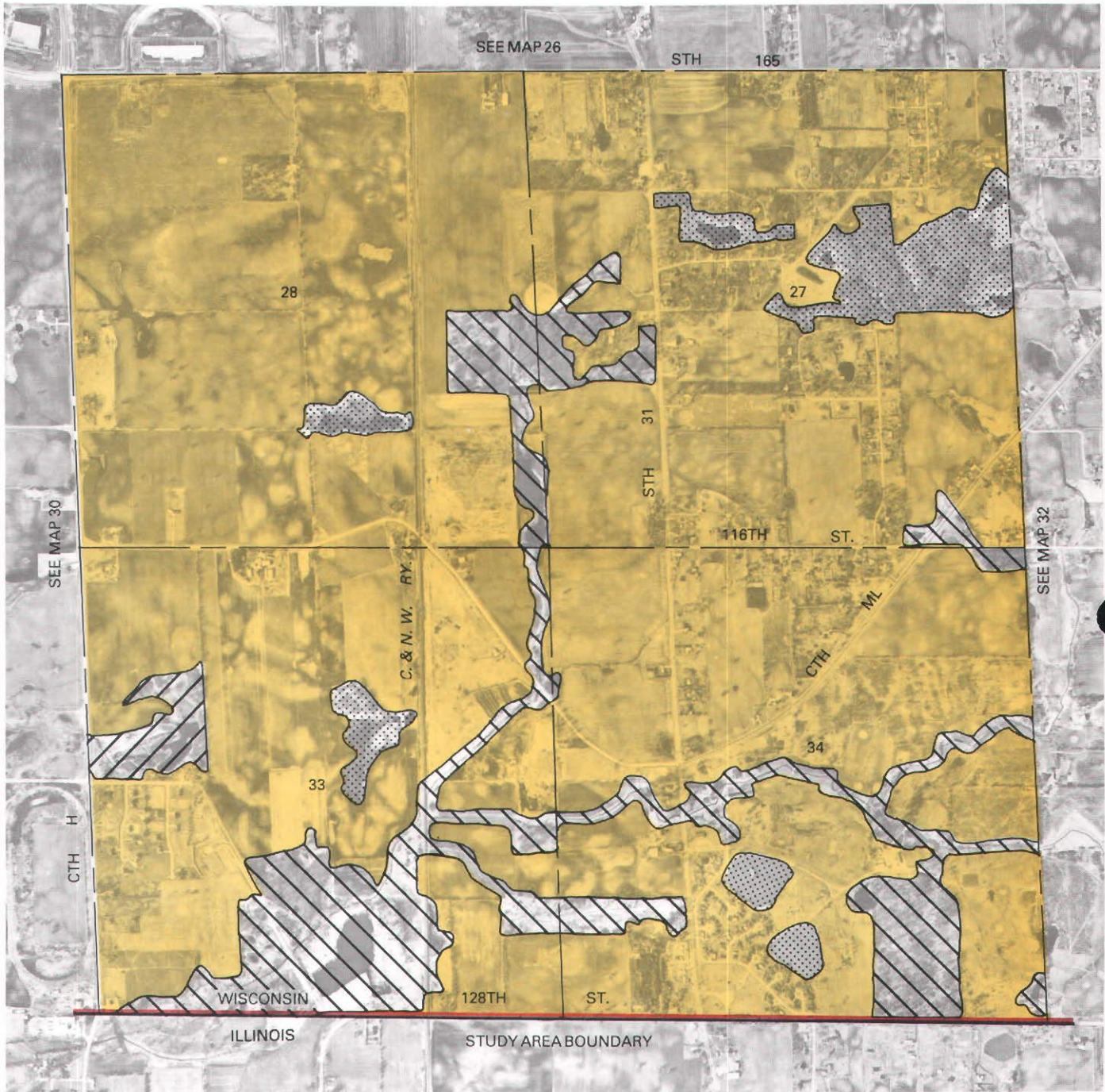


Source: SEWRPC.






Map 31

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

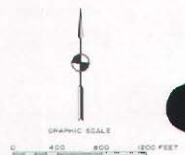
U. S. Public Land Survey Sections 27, 28, 33, and 34
Township 1 North, Range 22 East



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

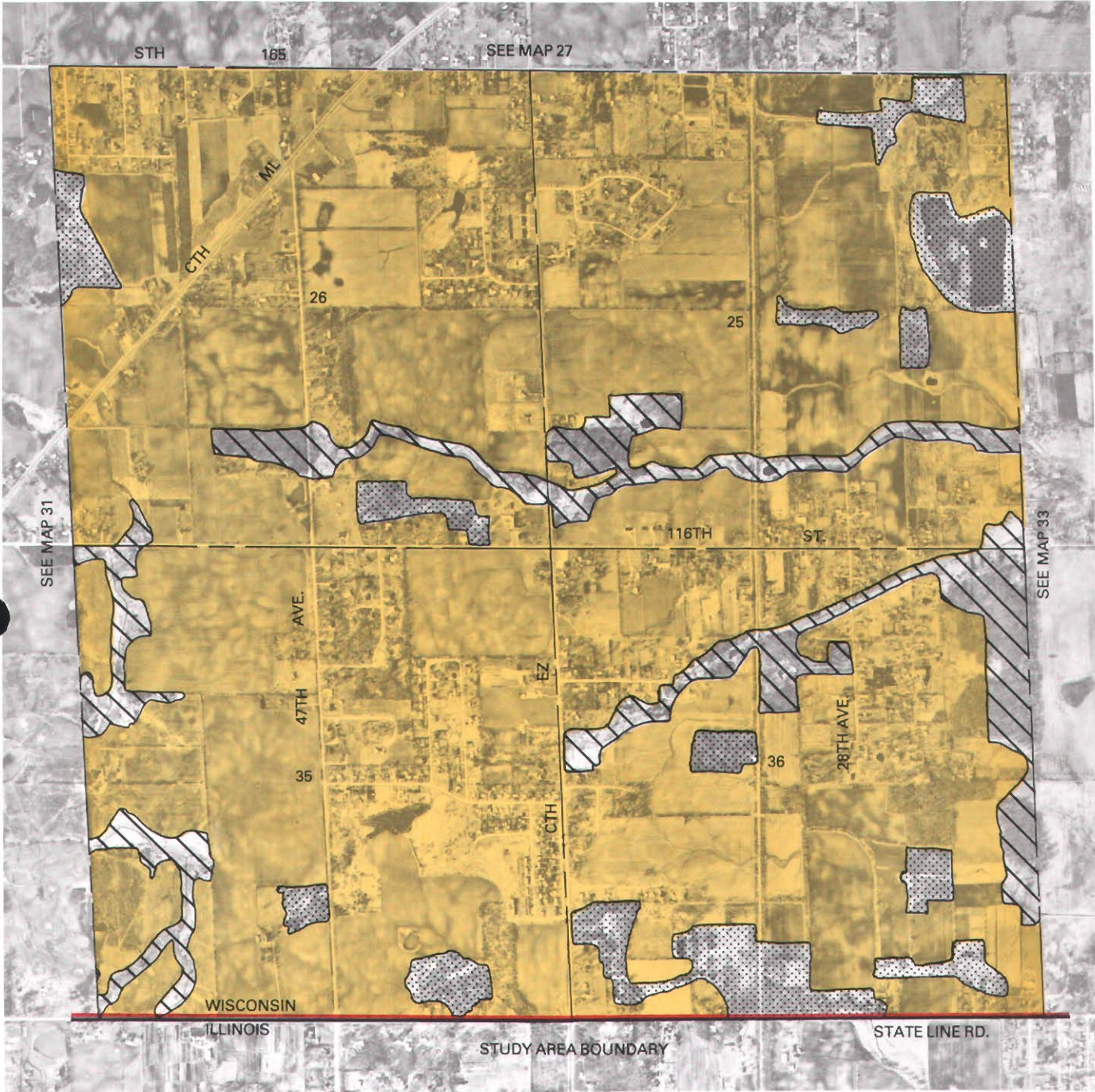
Source: SEWRPC.



Map 32

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 25, 26, 35, and 36
Township 1 North, Range 22 East



LEGEND

-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

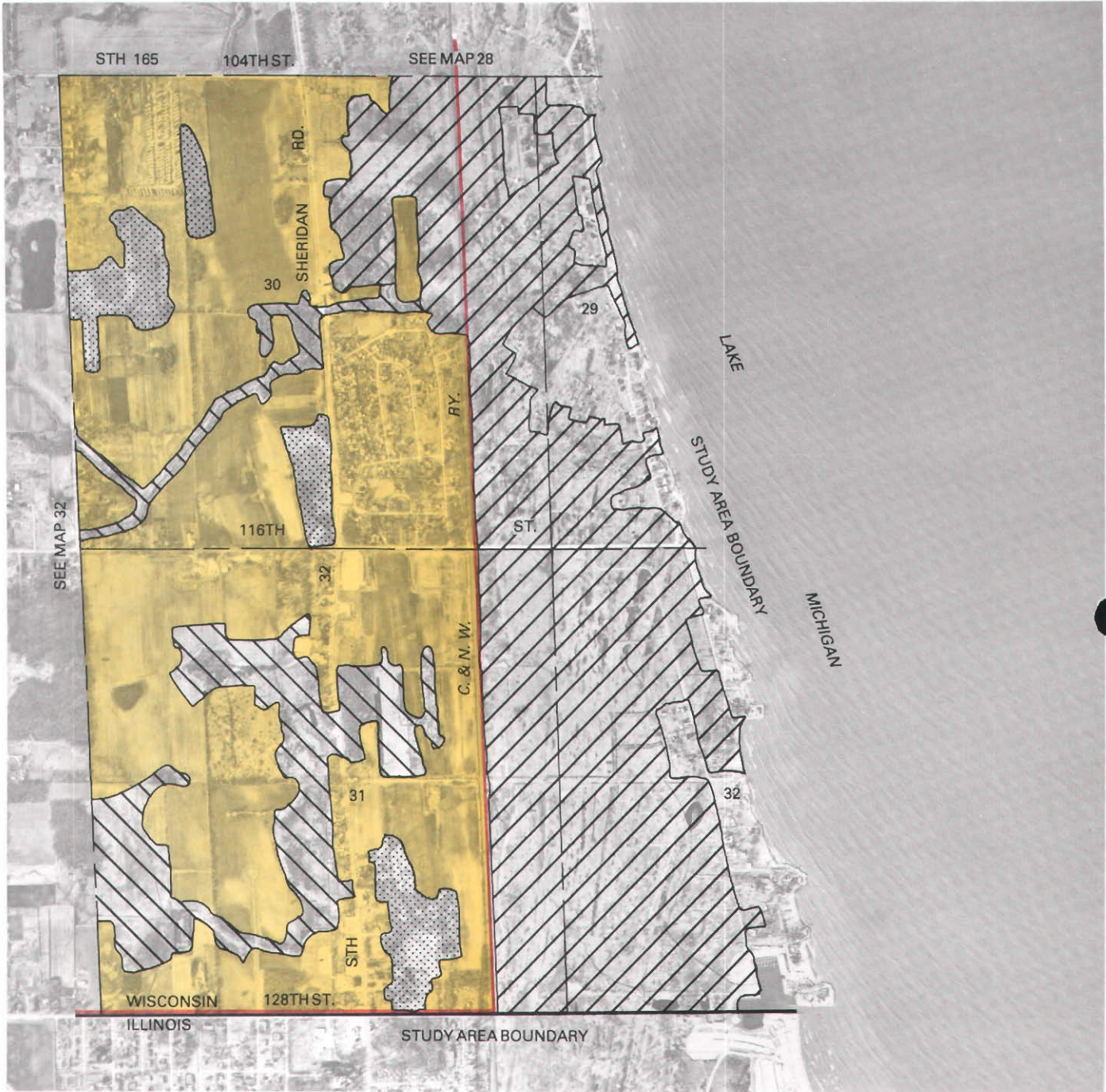


Source: SEWRPC.

Map 33

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE GREATER KENOSHA AREA

U. S. Public Land Survey Sections 29, 30, 31, and 32
Township 1 North, Range 23 East



LEGEND

- PRIMARY ENVIRONMENTAL CORRIDOR
- SECONDARY ENVIRONMENTAL CORRIDOR
- ISOLATED NATURAL RESOURCE AREA
- PLANNED SANITARY SEWER SERVICE AREA
- GROSS SANITARY SEWER SERVICE AREA BOUNDARY

Source: SEWRPC.

