

SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK

MILWAUKEE COUNTY WISCONSIN

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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SUBJECT: Certification of Amendment to the Adopted Regional Water Quality Management Plan (Sanitary Sewer Service Area for the City of Oak Creek)

TO: The Legislative Bodies of Concerned Local Units of Government within the Southeastern Wisconsin Region, namely: the County of Milwaukee, the City of Oak Creek, and the Milwaukee Metropolitan Sewerage District

This is to certify that at the quarterly meeting of the Southeastern Wisconsin Regional Planning Commission, held at the Ozaukee County Courthouse, Port Washington, Wisconsin, on the 7th day of September 1994, the Commission did by unanimous vote by all Commissioners present, being 16 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 City of Oak Creek and consists of the inventory findings, maps, charts, figures, and supporting data, plans, and plan implementation recommendations contained in SEWRPC Community Assistance Planning Report No. 213, entitled Sanitary Sewer Service Area for the City of Oak Creek, Milwaukee County, Wisconsin, published in July 1994, 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 8th day of September 1994.



David B. Falstad, Chairman
Southeastern Wisconsin
Regional Planning Commission

ATTEST:



Kurt W. Bauer, Deputy Secretary

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RESOLUTION NO. 94-13

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 (SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK)

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, the adopted regional water quality management plan includes recommended delineations of urban sanitary sewer service areas and primary environmental corridors, together with a recommendation that new sewered urban development in the Region occur within such delineated sewer service areas but not within such primary environmental corridors; and

WHEREAS, the adopted regional water quality management plan specifically recommended that the concerned local units of government work cooperatively with the Commission toward the refinement and detailing of the delineated sanitary sewer service areas and primary environmental corridors so as to properly reflect local, as well as regional, needs and objectives; and

WHEREAS, the City of Oak Creek, on February 15, 1993, requested that the Commission assist the City in refining and detailing the recommended sanitary sewer service area for the City of Oak Creek; and

WHEREAS, the Commission, working with the City of Oak Creek and other concerned units and agencies of government, has completed a refined sanitary sewer service area plan for the area to be served, such plan being set forth in SEWRPC Community Assistance Planning Report No. 213, Sanitary Sewer Service Area for the City of Oak Creek, Milwaukee County, Wisconsin, dated July 1994; and

WHEREAS, the refined sanitary sewer service area, as documented in SEWRPC Community Assistance Planning Report No. 213, addressed the pertinent comments made at a public hearing held with the City of Oak Creek on January 17, 1994; and

WHEREAS, the Common Council of the City of Oak Creek on June 8, 1994, unanimously approved the refined and detailed sanitary sewer service area plan for the City of Oak Creek; 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, be and the same hereby is amended to include the refined sanitary sewer service area plan for the City of Oak Creek, as set forth in SEWRPC Community Assistance Planning Report No. 213.

SECOND: That said SEWRPC Community Assistance Planning Report No. 213, together with the maps, charts, programs, and descriptive and explanatory matter therein contained, is hereby made a matter of public record; the originals and true copies thereof shall be kept, at all times, at the offices of the Southeastern Wisconsin Regional Planning Commission presently located in the Old Courthouse Building in the City of Waukesha, County of Waukesha, and State of Wisconsin, or at any subsequent office the said Commission may occupy, for examination and study by whomsoever may desire to examine the same.

THIRD: That a true, correct, and exact copy of this resolution, together with a complete and exact copy of SEWRPC Community Assistance Planning Report No. 213, 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 7th day of September 1994, the vote being: Ayes 16; Nays 0.



David B. Falstad, Chairman

ATTEST:



Kurt W. Bauer, Deputy Secretary

**COMMUNITY ASSISTANCE PLANNING REPORT
NUMBER 213**

**SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK
MILWAUKEE COUNTY, WISCONSIN**

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

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

July 1994

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July 28, 1994

TO: The Common Council of the City of Oak Creek and the Milwaukee Metropolitan Sewerage District

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

These Departments, in carrying out their responsibilities in this respect, require that the Southeastern Wisconsin Regional Planning Commission, as the designated areawide water quality management planning agency for the Southeastern Wisconsin Region, review and comment on each proposed sewer extension as to its relationship to the approved plan and sewer service area. If such review can be based on a refined service area cooperatively identified by the local units of government concerned, then no conflicts concerning sanitary sewer extensions should arise, and the entire sewerage system and related land use development process can proceed in a smooth and efficient manner.

Acting in response to the recommendations made in the adopted regional water quality management plan, the City of Oak Creek, on February 15, 1993, requested that the Regional Planning Commission assist the City in refining and detailing the recommended sanitary sewer service area tributary to the Milwaukee Metropolitan Sewerage District sewage treatment facilities. This report documents the results of that refinement process.

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

A public hearing was held on January 17, 1994, to discuss the preliminary findings and recommendations of the sewer service area refinement process and to receive the comments and suggestions of the local elected officials concerned and of interested citizens. The recommendations contained in this report reflect the pertinent comments and suggestions made at the hearing.

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

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

Respectfully submitted,



Kurt W. Bauer
Executive Director

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Chapter I

INTRODUCTION

BACKGROUND

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

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

The plan was formally certified over the period July 23 to September 20, 1979, to all of the local units of government in the Region and to the concerned State and Federal agencies. The plan was formally endorsed by the Wisconsin Natural

Resources Board on July 25, 1979. Such endorsement is particularly important because under State law and administrative rules, certain actions by the Wisconsin Department of Natural Resources (DNR) must be found to be in accordance with the adopted and endorsed plan. These actions include, among others, DNR approval of waste discharge permits, DNR approval of State and Federal grants for the construction of wastewater treatment and conveyance facilities, and DNR approval of locally proposed sanitary sewer extensions.

NEED FOR REFINEMENT AND DETAILING OF LOCAL SANITARY SEWER SERVICE AREAS

The adopted regional water quality management plan includes recommended sanitary sewer service areas attendant to each recommended sewage treatment facility (see Map 1). There were in the plan, as initially adopted, a total of 85 such identified sanitary sewer service areas. The initially recommended sanitary sewer service areas were based upon the urban land use configuration identified in the Commission-adopted regional land use plan for the year 2000.² As such, the delineation of the areas was necessarily general, and may not have reflected detailed local planning considerations.

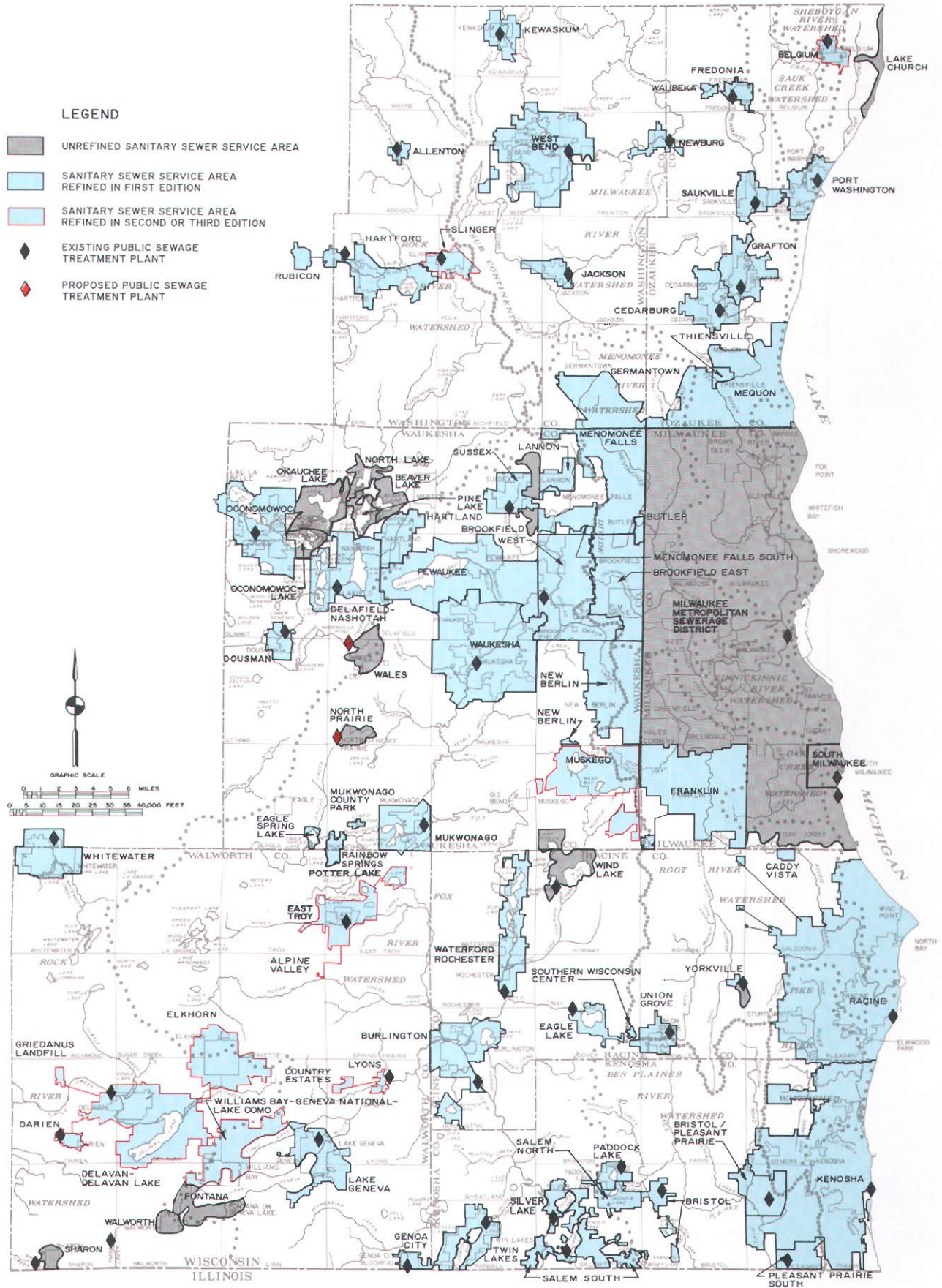
Section NR 110.08(4) and Section ILHR 82.20(4) of the Wisconsin Administrative Code require that the Wisconsin Department of Natural Resources, with respect to public sanitary sewers, and the Wisconsin Department of Industry, Labor and Human Relations, with respect to private sanitary sewers, make a finding that all proposed sanitary sewer extensions be in conformance with adopted areawide water quality

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

²See SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin—2000, Volume One, Inventory Findings, April 1975; and Volume Two, Alternative and Recommended Plans May 1978.

Map 1

RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION: 2010



management plans and the sanitary sewer service areas identified in such plans. These Departments, in carrying out their responsibilities in this respect, require that the Southeastern Wisconsin Regional Planning Commission, as the designated areawide water quality management planning agency for the Southeastern Wisconsin Region, review and comment on each proposed sewer extension as to its relationship to the approved plan and sewer service areas. In order to properly reflect local, as well as areawide, planning concerns in the execution of this review responsibility, the Regional Planning Commission, in adopting the areawide water quality management plan, recommended that steps be taken to refine and detail each of the 85 sanitary sewer service areas delineated in the plan in cooperation with the local units of government concerned. The refinement and detailing process consists of the following seven steps:

1. The preparation of a base map at an appropriate scale for each sanitary sewer service area identified in the areawide water quality management plan.
2. The delineation on that base map of the design year 2010 sanitary sewer service area consistent with the objectives set forth in the adopted regional land use plan.³
3. The conduct of intergovernmental meetings involving the local or areawide unit or units of government operating the sewage treatment facility or facilities concerned and the other local units of government that are to be provided sanitary sewer service by the sewage treatment facility or facilities concerned. At these meetings, the initial sanitary sewer service area delineation is to be presented and discussed and the positions of each of the units of government concerned solicited.
4. The preparation of modifications to the initially proposed sanitary sewer service

area to reflect the agreements reached at the intergovernmental meetings, meeting to the fullest extent practicable the objectives expressed both in the adopted areawide water quality management and regional land use plans and in any adopted local land use and sanitary sewerage system plans.

5. The holding of a public hearing jointly by the Commission and the local or areawide unit or units of government operating the treatment facility or facilities concerned to obtain public reaction to site-specific sewer service area issues that might be raised by the proposed sewer service area delineation.
6. The preparation of a final sanitary sewer service area map and accompanying report.
7. Adoption of the final sewer service area map by the Commission and certification of the map to the Wisconsin Department of Natural Resources and the U. S. Environmental Protection Agency as an amendment to the adopted, areawide, water quality management plan. Desirably, such adoption by the Commission would follow endorsement of the map by the local or areawide unit or units of government operating the sewage treatment facility or facilities concerned and by the governing bodies of the local units of government that are to be served by the sewage treatment facility or facilities. While such a consensus by the local governments concerned will always be sought by the Commission, it is recognized that in some cases unanimous support of the refined and detailed sanitary sewer service areas may not be achieved. In those cases, the Commission will have to weigh the positions of the parties concerned and make a final determination concerning the issues involved.

THE CITY OF OAK CREEK SANITARY SEWER SERVICE AREA REFINEMENT PROCESS

By letter dated February 15, 1993, the City of Oak Creek requested that the Regional Planning Commission undertake the refinement and detailing of the proposed year 2010 sanitary sewer service area for the City. Two interagency staff meetings attended by representatives of the City of Oak Creek and the Regional Planning

³The sewer service areas in the water quality management plan were based upon the urban land use configurations as set forth in the Commission's year 2000 land use plan. The Commission has since completed a series of alternative year 2010 land use plans, which plans served as a point of departure in the delineation of the sewer service area set forth in this report.

Commission were held regarding the refinement and detailing process. At the conclusion of these meetings, both parties had agreed upon a preliminarily refined sanitary sewer service area for presentation at a public hearing.

A copy of the draft of this report setting forth the preliminary sanitary sewer service area was provided to the City of Oak Creek, the Milwaukee Metropolitan Sewerage District, and the Wisconsin Department of Natural Resources for review and comment prior to the public hearing on the plan proposal. A public hearing was held

on the preliminary sewer service area on January 17, 1994. A copy of the public reaction to the proposed sewer service area, as documented in the minutes of the hearing, is on file at the offices of the City of Oak Creek and of the Regional Planning Commission. The final, agreed-upon, refined sanitary sewer service area for the City of Oak Creek is described in Chapter III of this report. The delineation of this area reflects the intergovernmental decisions made in the aforementioned meetings and pertinent comments made at the public hearing held on this matter.

Chapter II

STUDY AREA DESCRIPTION

LOCATION

The study area considered in the refinement of the City of Oak Creek sanitary sewer service area is shown on Map 2. The area consists of all the lands encompassed within the corporate limits of the City of Oak Creek and is 28.4 square miles in extent.

POPULATION

The resident population of the study area in 1990, as determined by the U. S. Bureau of the Census, was 19,513 persons. Of this total, about 19,050 persons, or about 98 percent of the population of the City, were provided with centralized sanitary sewer extended from the Milwaukee Metropolitan Sewerage District sanitary sewerage facilities. The remaining 463 persons in the City were served by onsite soil-absorption sewage disposal systems or by onsite sewage holding tanks.

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

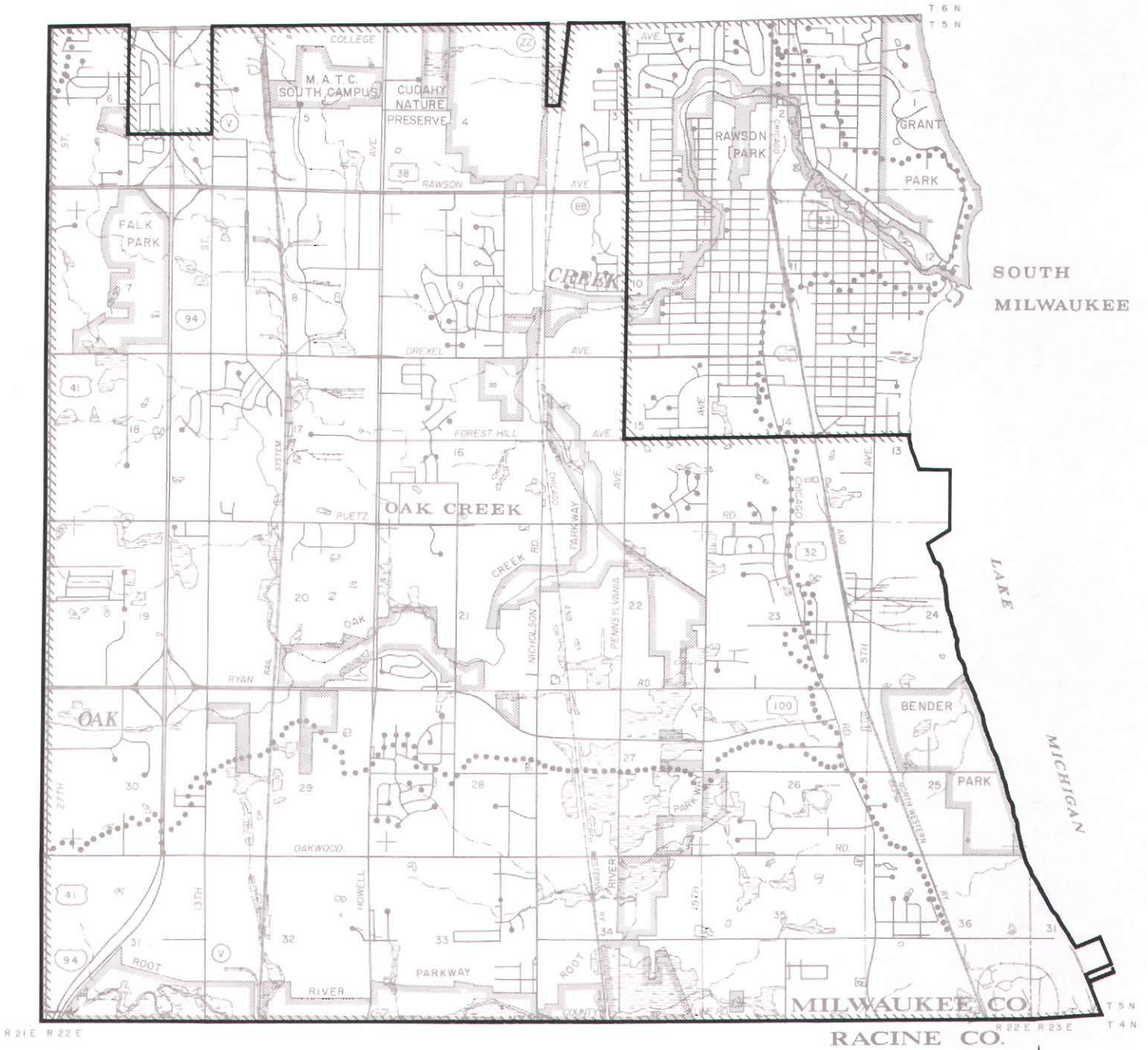
of conditions which may be expected to occur over the plan design period.

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

The Commission's year 2010 land use plan also considered alternative development patterns for accommodating the incremental population and employment levels envisioned under the afore-described growth scenarios. Two development patterns were considered in the preparation of the alternative land use plans: a centralized development pattern, which, like the first- and second-generation adopted regional land use plans, accommodated increases in population and economic activity by promoting a more compact regional settlement pattern, moderating to the extent practicable the current trend toward diffusion of population, employment, and attendant urban development; and a decentralized development pattern, which accommodated the continued diffusion of population and

Map 2

STUDY AREA IDENTIFIED FOR PURPOSES OF REFINING AND
DETAILING THE CITY OF OAK CREEK SANITARY SEWER SERVICE AREA



Source: SEWRPC.

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

The intermediate-growth centralized land use plan, the Commission's recommended land use plan, would accommodate a year 2010 resident population level of about 33,700 persons in the City of Oak Creek. Under the alternative futures approach utilized by the Commission for its work, however, the population level within the study area could range from a low of about 27,000 persons, under the low-growth, decentralized land use plan, to a high of about 51,800 persons, under the high-growth, centralized land use plan.

ENVIRONMENTALLY SIGNIFICANT LANDS

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

The land use element of the adopted regional water quality management plan recommends that lands identified as primary environmental corridors not be developed for intensive urban use. Accordingly, the plan further recommends that sanitary sewers not be extended into such corridors for the purpose of accommodating urban development in the corridors. It was, however, recognized in the plan that it would be necessary in some cases to construct sanitary sewers across and through primary environmental corridors and that certain land uses requiring sanitary sewer service could be properly located in the corridors, including park and outdoor

recreation facilities and certain institutional uses. In some cases, extremely low-density residential development at a density not to exceed one housing unit per five acres of upland corridor land, compatible with the preservation of the corridors in essentially natural, open uses, may also be permitted to occupy corridor lands; it may be desirable to extend sewers into the corridors to serve such uses. Basically, however, the adopted regional land use plan seeks to ensure that the primary environmental corridor lands are not destroyed through conversion to intensive urban uses.

One of the first steps in refining the City of Oak Creek sanitary sewer service area was to map in detail the environmentally significant lands. Accordingly, Commission inventories were reviewed and updated as necessary with respect to the following elements of the natural resource base: lakes, streams, and associated shorelands and floodlands; wetlands; woodlands; wildlife habitat areas; areas of rugged terrain and high-relief topography; wet, poorly drained, and organic soils; and remnant prairies. In addition, inventories were reviewed and updated as necessary with respect to such natural resource-related features as existing parks, potential park sites, sites of historic and archaeological value, areas possessing scenic vistas or viewpoints, and areas of scientific value.

Each of these natural resource and resource-related elements was mapped on one inch equals 400 feet scale, ratioed and rectified aerial photographs. A point system for value rating the various elements of the resource base was established (see Table 1). The primary environmental corridors were delineated using this rating system. To qualify for inclusion in a primary environmental corridor, an area must exhibit a point value of 10 or more. In addition, a primary environmental corridor must be at least 400 acres in size, be at least two miles long, and have a minimum width of 200 feet. This environmental corridor refinement process is more fully described in SEWRPC Technical Record, Vol. 4, No. 2, in an article entitled, "Refining the Delineation of Environmental Corridors in Southeastern Wisconsin." The primary environmental corridors as delineated in the Oak Creek study area are shown on Map 3.

In addition, Map 3 identifies secondary environmental corridors. The secondary environmental

corridors, while not as significant as the primary environmental corridors in terms of overall resource values, should be considered for preservation as the process of urban development proceeds, because such corridors often provide economical drainageways, as well as needed "green" space, through developing residential neighborhoods. To qualify for inclusion in a secondary environmental corridor, an area must exhibit a point value of 10 or more and have a minimum area of 100 acres and a minimum length of one mile.

Also identified on Map 3 are isolated natural resource areas. Isolated natural resource areas generally consist of those natural resource-base elements that have "inherent natural" value such as wetlands, woodlands, wildlife habitat areas, and surface water areas, but that are separated physically from the primary and secondary environmental corridors by intensive urban or agricultural land uses. Since isolated natural resource areas may provide the only available wildlife habitat in an area, provide good locations for local parks and nature study areas, and lend aesthetic character and natural diversity to an area, they should also be protected and preserved in a natural state to the extent practicable. An isolated natural resource area must be at least five acres in size.

Lands encompassed within the primary environmental corridors of the City of Oak Creek in 1990 totaled 2.0 square miles, or about 7 percent of the total study area. Lands encompassed within the secondary environmental corridors totaled about 1.6 square miles, or about 6 percent of the study area. Lands encompassed within isolated natural resource areas totaled about 0.5 square mile, or about 2 percent of the study area. Thus, all environmentally significant lands in the City of Oak Creek study area together comprise about 4.1 square miles, or 15 percent of the study area.

While the adopted regional water quality management plan places great emphasis upon the protection of the lands identified as primary environmental corridors in essentially natural, open-space uses, it recognizes that there may be situations in which the objective of preserving the corridor lands directly conflicts with other legitimate regional and local development objectives. For example, the regional plan recognizes that if a community were to determine the need for a strategic arterial street extension through

Table 1

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

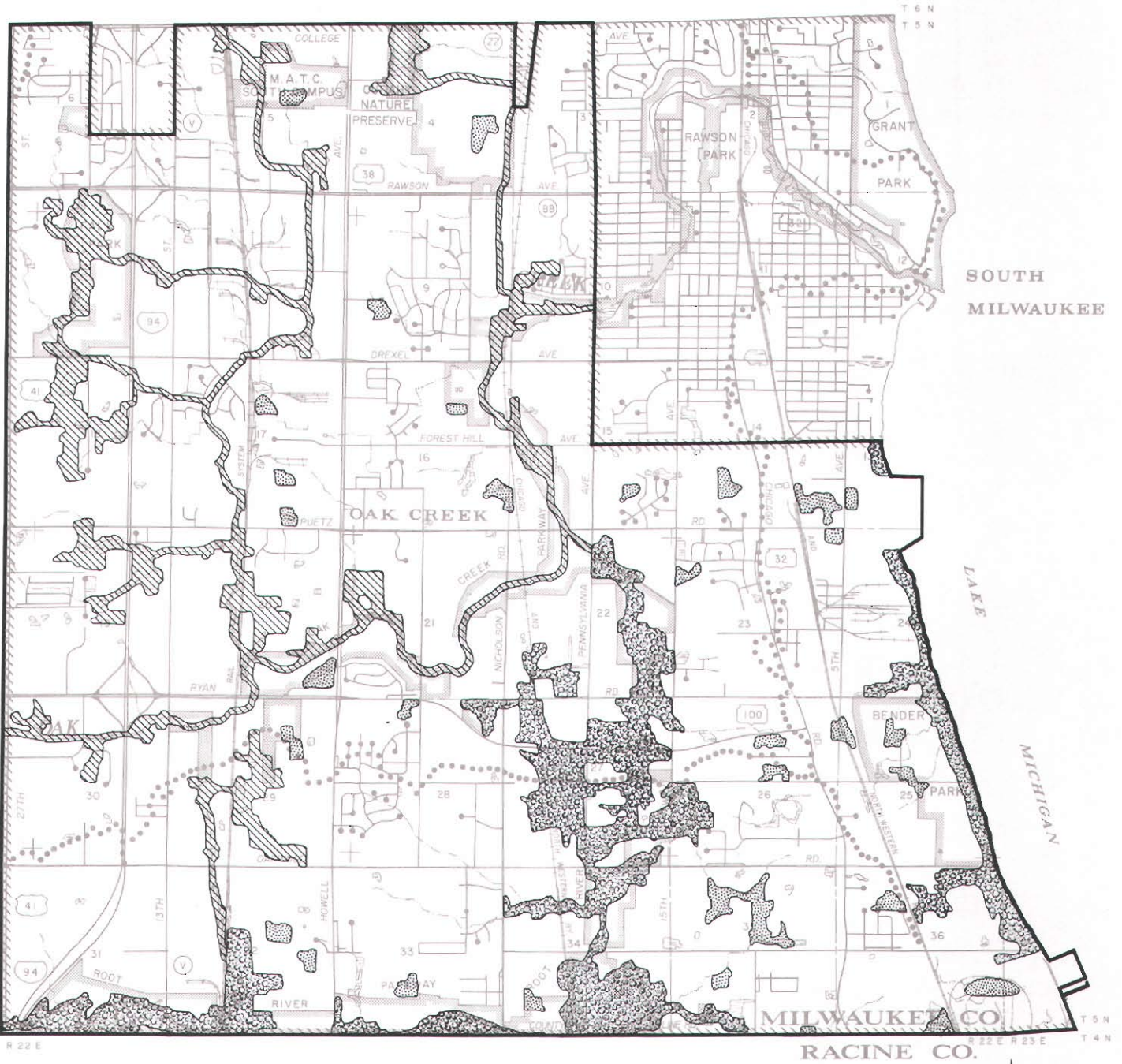
Resource Base or Related Element	Point Value
Natural Resource Base	
Lake	
Major (50 acres or more)	20
Minor (five to 49 acres)	20
Rivers or Streams (perennial)	10
Shoreland	
Lake or Perennial River or Stream	10
Intermittent Stream	5
Floodland (100-year recurrence interval)	3
Wetland	10
Wet, Poorly Drained,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

Source: SEWRPC.




the primary environmental corridor lands in order to serve an important local development project, the street extension may be considered to be of greater community benefit than the preservation of a small segment of the primary environmental corridor. When such conflicts in legitimate community development objectives occur, it is important that they be resolved

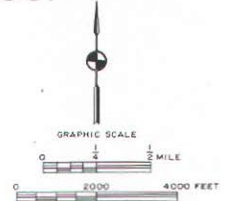
Map 3

ENVIRONMENTALLY SIGNIFICANT LANDS IN THE CITY OF OAK CREEK STUDY AREA



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA



Source: SEWRPC.

sensitively and that any damage to the natural environment in the corridors be minimized.

It should also be noted that while a significant portion of the delineated floodlands in the City of Oak Creek study area are contained within the environmental corridors, there are large areas of the floodlands utilized for agricultural or other open-space uses located outside such

corridors. The Regional Planning Commission recognizes that such floodlands are generally unsuitable for intensive urban development owing to poor soil conditions and periodic flood inundation. The Commission thus recommends that as development of lands located within urban areas and adjacent to these floodland areas occurs, such floodland areas be preserved in essentially natural, open uses.

Chapter III

PROPOSED SANITARY SEWER SERVICE AREA

SIGNIFICANCE OF SANITARY SEWER SERVICE AREA DELINEATION

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

CURRENTLY APPROVED CITY OF OAK CREEK SANITARY SEWER SERVICE AREA

The City of Oak Creek sanitary sewer service area tributary to the Milwaukee Metropolitan Sewerage District treatment facilities, as set forth in the Commission adopted regional water quality management plan, is shown on Map 4. This service area totals about 26.5 square miles, or about 93 percent of the total study area of 28.4 square miles and had, in 1990, a resident population of about 19,450 persons.

REFINED CITY OF OAK CREEK SANITARY SEWER SERVICE AREA

Factors taken into account in the delineation of the refined City of Oak Creek sanitary sewer service area included the Oak Creek Watershed plan, the year 2010 recommended and alternative futures regional land use plans as prepared by the Regional Planning Commission, and the suggestions made at a series of interagency meetings attended by representatives of the City of Oak Creek and the Regional Planning Commission.

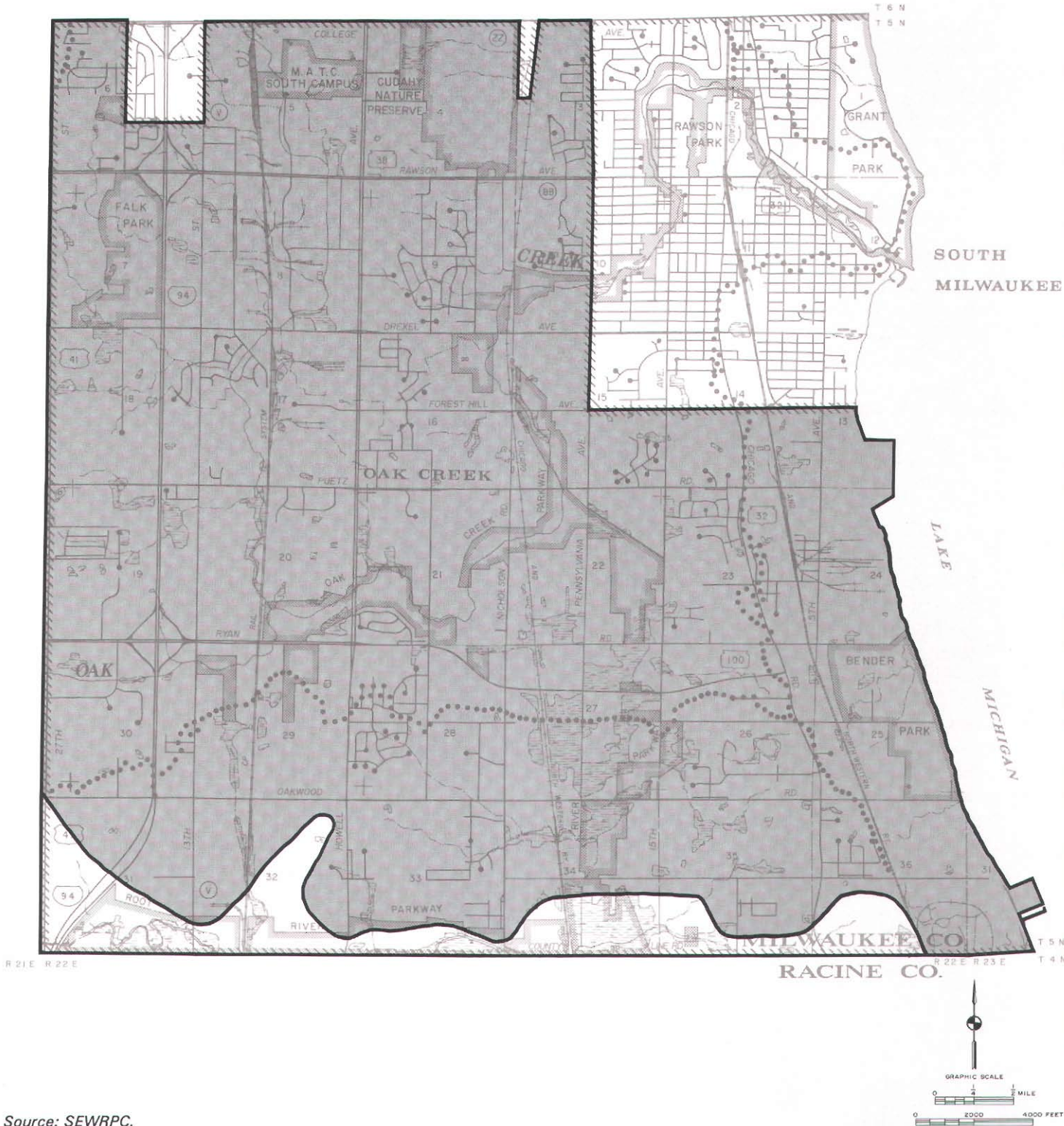
The refinement effort also considered the location, type, and extent of existing urban land use development; the location of areas where onsite soil absorption sewage disposal systems were known to be failing; the location and extent of gravity drainage areas tributary to major sewerage system pumping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

As previously noted, the Commission, as part of its regional planning program, including the delineation of sanitary sewer service areas, and the subsequent refinements thereof, utilizes the "alternative futures" concept to deal with the uncertainties regarding factors affecting future growth and development within the Region. The sewer service area refinement effort for the City of Oak Creek thus incorporates a range of population levels, with the most reasonable lower end of the population range based upon the Commission's intermediate-growth centralized land use plan and most reasonable upper end of the population range based upon the Commission's high-growth centralized land use plan.

Indeed, local sanitary sewer service area and sewerage facility planning work should consider a range of population levels in the evaluation of alternative facility plans in order to identify alternatives which perform well under a reason-

Map 4

CITY OF OAK CREEK SANITARY SEWER SERVICE AREA AS DEFINED IN SEWRPC PLANNING REPORT NO. 30



Source: SEWRPC.

able range of possible future conditions. Construction of such facilities and mechanical and electrical components as pumps, compressors, and chemical feed equipment, of sewage treatment facilities are typically based upon relatively short-term population and loading forecasts. These facilities are often replaced or rebuilt at intervals of 10 to 15 years and are amenable to expansion in a staged manner. Accordingly, capital investment in such facilities are often limited to those relatively certain to be needed over a 15- to 20-year design period. The use of the intermediate population forecast, thus, may be most appropriate for use in the design of such facilities.

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

The refined year 2010 sanitary sewer service area for the City of Oak Creek, as submitted to public hearing, is shown on Map 5, together with existing trunk sewers.

The City of Oak Creek sanitary sewer service area is based upon the Commission's high-growth centralized land use plan and encompasses the entire City of Oak Creek of about 28.4 square miles. This gross sewer service area includes 3.7 square miles of primary environmental corridors, about 1.1 square miles of

secondary environmental corridors, and about 0.5 square mile of isolated natural resource areas. Therefore, a total of about 5.3 square miles, or about 20 percent of the sewer service area, would be encompassed in environmentally sensitive areas, consisting of primary and secondary environmental corridor and isolated natural resource area lands.

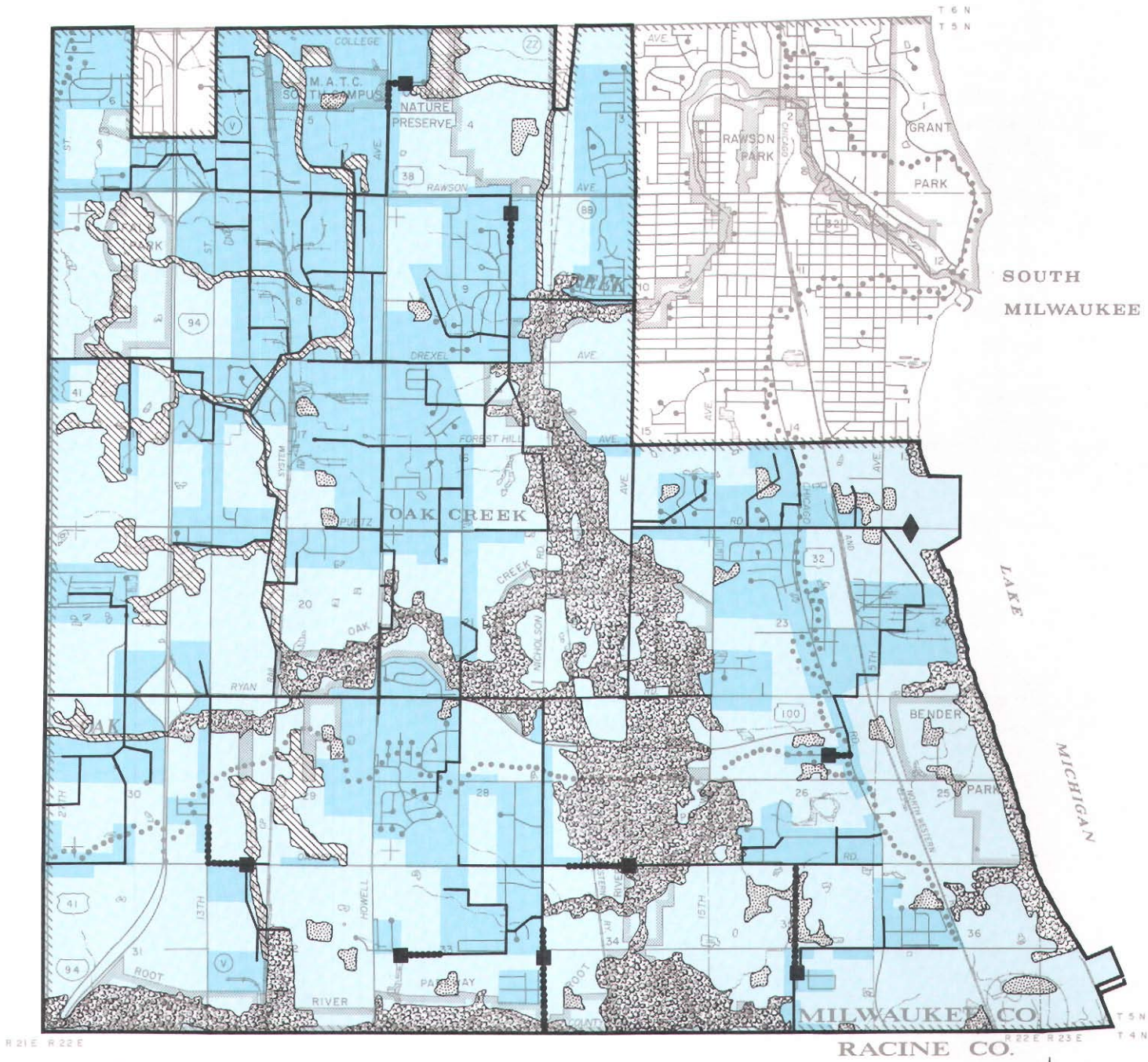
It should be noted that the environmentally significant lands indicated on Map 5 total approximately 785 acres more than the environmentally significant lands indicated on Map 3. As shown on Map 6 and indicated on Table 2, about 283 acres located in 20 areas within the 100-year recurrence interval floodplain, primarily adjacent to the Root River, are currently undeveloped but lie adjacent to primary environmental corridor lands. It is anticipated that, over time, these lands will be withdrawn from agricultural and other open-space uses and revegetated to possess the characteristics of a primary environmental corridor. In addition, 214 acres currently classified as secondary environmental corridor and 33 acres currently classified as isolated natural resource area, together with 604 acres of adjacent floodplain, would be reclassified as primary environmental corridor. Also shown on Map 6 and indicated in Table 2 are six areas adjacent to primary environmental corridor lands, encompassing about 15 acres, which are anticipated to remain undeveloped and be restored to natural, open-space uses, thereby allowing these areas to be added to the primary environmental corridor.

As further shown on Map 6 and indicated in Table 2, there is one area of primary environmental corridor, encompassing about 13 acres, and seven areas of secondary environmental corridor, encompassing about 104 acres, which are anticipated to be converted to urban uses primarily based upon locally committed development proposals. None of these areas encompasses any identified wetlands.

The refined year 2010 sanitary sewer service area for the City of Oak Creek anticipated to be tributary to the Milwaukee Metropolitan Sewerage District sewage treatment facilities would, under the Commission's high-growth centralized land use plan, accommodate a planned year 2010 resident population of about 51,800 persons. Population levels within this area, however, would approximate about 33,700 persons under the Commission intermediate-growth centralized

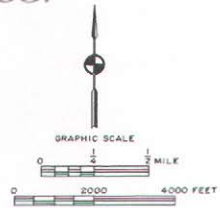
Map 5

CITY OF OAK CREEK SANITARY SEWER SERVICE AREA



LEGEND

- | | | | |
|--|--|--|--|
| | PRIMARY ENVIRONMENTAL CORRIDOR | | GROSS SANITARY SEWER SERVICE AREA BOUNDARY (SAME AS STUDY AREA BOUNDARY) |
| | SECONDARY ENVIRONMENTAL CORRIDOR | | EXISTING PUBLIC SEWAGE TREATMENT FACILITY |
| | ISOLATED NATURAL RESOURCE AREA | | EXISTING PUMPING STATION |
| | NET SANITARY SEWER SERVICE AREA (EXISTING) | | EXISTING TRUNK SEWER |
| | NET SANITARY SEWER SERVICE AREA (2010) | | EXISTING FORCE MAIN |



Source: SEWRPC.

land use plan. The incremental population and housing unit levels envisioned in the City of Oak Creek sewer service area under the high-growth centralized land use plan would be accommodated at a density of about 3.3 dwelling units per net residential acre.¹ This density lies within the recommended density range for the City of Oak Creek area of the Region as identified in the Commission-adopted regional land use plan for the year 2010.

¹*Net incremental residential density in the refined City of Oak Creek sewer service area, as set forth under the Commission's high-growth centralized land use plan, 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 City of Oak Creek sewer service area, 9,946 units, was determined by first identifying the total number of dwelling units anticipated in that area by the year 2010, 17,175, minus the number of existing dwelling units in that area in 1990, 7,229.

Incremental net residential land anticipated in the City of Oak Creek sewer service area was determined by first identifying all net developable land in the sewer service area. Net developable land, 6,513 acres, equals gross developable land, 8,101 acres, that is, all undeveloped land within the proposed sewer service area except environmental corridors, isolated natural resource areas, and areas covered by soils poorly suited for urban development, minus any lands committed to multi-community, county or regional level, land uses, which, within the envisioned Oak Creek sewer service area, encompass about 1,588 acres. Incremental net residential land for this area, 3,009 acres, equals net developable land, 6,513 acres, minus lands allocated to other urban land uses, 40 percent or 2,605 acres, then minus lands allocated to local streets, 23 percent or 899 acres. The total number of incremental dwelling units anticipated in the sewer service area in the design year, 9,946 units, divided by the incremental net residential land within the sewer service area, 3,009 acres, results in an incremental net residential density of 3.3 dwelling units per acre.

WATER QUALITY IMPACTS

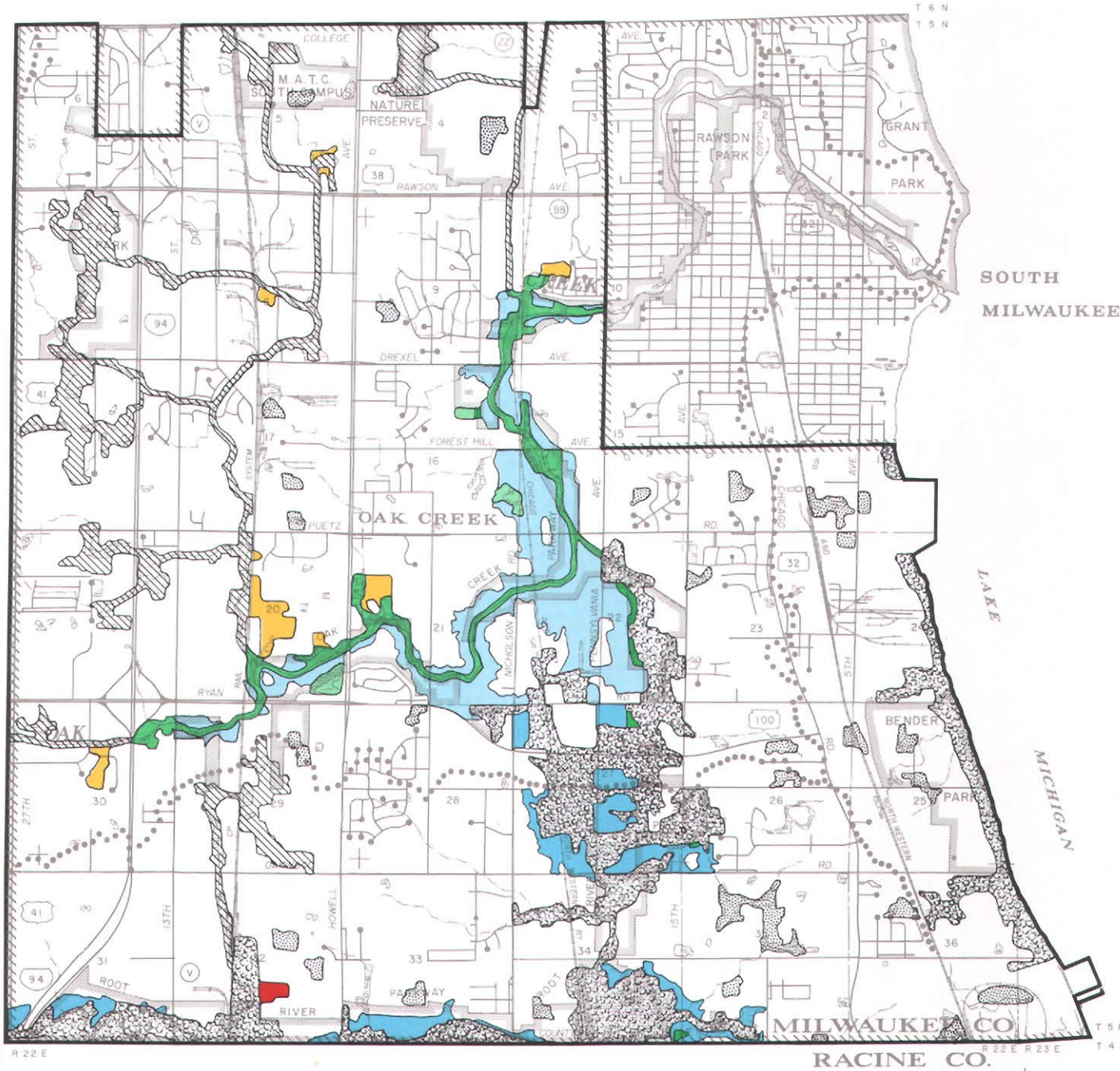
Under the recommended sanitary sewer service area plan, it is envisioned that all urban lands within the planned urban service area would receive sanitary sewer service. It is also envisioned that all lands identified as primary environmental corridor would not be developed for intensive urban use. It is recognized, however, that certain land uses requiring sanitary sewer service could be properly located in the corridors, including park and outdoor recreation facilities, certain institutional uses, and, in some cases, extremely low-density residential development at a density not to exceed one housing unit per five acres of upland corridor land. In addition, provision of public sewer service within that portion of the identified sewer service area currently developed, but outside the area served by public sewers, will reduce the pollutant loadings from the onsite sewage disposal systems to both surface and groundwater. Accordingly, assuming proper site development and construction practices, including appropriate construction erosion control practices² and compatible development within primary and secondary environmental corridors, isolated natural resource areas, or lands adjacent to such areas, there should be no significant adverse water quality impacts attributable to the development of the planned sanitary sewer service area.

COST-EFFECTIVENESS ANALYSIS OF SEWERAGE CONVEYANCE AND TREATMENT ALTERNATIVES











The planned year 2010 sanitary sewer service area for the City of Oak Creek, as shown on Map 5, is approximately 1.9 square miles larger than the currently adopted year 2000 sanitary sewer service area as set forth in the regional water quality management plan as shown on Map 4. Those lands proposed to be added lie immediately adjacent to the currently adopted city of Oak Creek sanitary sewer service area. In addition, the major facilities needed to provide connection of the subject planned sewer service area to the Milwaukee Metropolitan Sewerage District system, including conveyance and

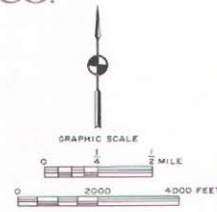
²*As set forth in the City of Oak Creek Erosion Control Ordinance.*

**ANTICIPATED CHANGE IN THE ENVIRONMENTALLY SIGNIFICANT LANDS
IN THE CITY OF OAK CREEK SANITARY SEWER SERVICE AREA: 1993-2010**



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PORTION OF EXISTING PRIMARY ENVIRONMENTAL CORRIDOR ANTICIPATED TO BE CONVERTED TO URBAN USES BY THE YEAR 2010
-  PORTION OF EXISTING SECONDARY ENVIRONMENTAL CORRIDOR ANTICIPATED TO BE CONVERTED TO URBAN USES BY THE YEAR 2010
-  FLOODLANDS PROPOSED TO REMAIN UNDEVELOPED AND ADDED TO THE PRIMARY ENVIRONMENTAL CORRIDOR
-  AREA PROPOSED TO REMAIN UNDEVELOPED AND ADDED TO THE PRIMARY ENVIRONMENTAL CORRIDOR
-  FLOODLANDS PROPOSED TO REMAIN UNDEVELOPED AND ADDED TO THE SECONDARY ENVIRONMENTAL CORRIDOR AND THEN TO BE RECLASSIFIED AS PRIMARY ENVIRONMENTAL CORRIDOR
-  PORTION OF EXISTING SECONDARY ENVIRONMENTAL CORRIDOR TO BE RECLASSIFIED AS PRIMARY ENVIRONMENTAL CORRIDOR
-  PORTION OF EXISTING ISOLATED NATURAL RESOURCE AREA TO BE RECLASSIFIED AS PRIMARY ENVIRONMENTAL CORRIDOR



Source: SEWRPC.

Table 2

**ANTICIPATED CHANGE IN THE ENVIRONMENTALLY
SIGNIFICANT LANDS IN THE CITY OF OAK CREEK: 1993-2010**

Natural Resource Feature Affected			U. S. Public Land Survey Section	Comments
Corridor Type	Element	Acreage		
Unclassified	Floodplain	+283	Sections 26, 27, 31, 32, 33, 34, 35	Floodlands at 20 locations are proposed to remain in natural, open space uses and ultimately be added to the primary corridor
Unclassified	Floodplain	+604	Sections 9, 10, 15, 16, 20, 21, 22, 28, 29	Floodlands at 24 locations are proposed to remain as natural, open space, be added to the secondary corridor, and ultimately be reclassified as primary corridor
Unclassified	--	+15	Sections 16, 22, 26, 27, 35	Lands at six locations are proposed to remain undeveloped and ultimately be added to the primary corridor
Secondary Environmental Corridor	Lowland	-214/+214	Sections 9, 10, 15, 16, 20, 21, 22, 29	Proposed to be reclassified from secondary corridor to primary corridor
Isolated Natural Resource Area	Wetland, woodland	-33/+33	Sections 15, 16, 20	Three isolated natural resource areas proposed to be reclassified as primary corridor
Primary Environmental Corridor	Upland	-13	Section 32	Corridor proposed for conversion to residential uses
Secondary Environmental Corridor	Upland	-6	Section 5	Corridor proposed for conversion to industrial uses
	Upland	-6	Section 8	Corridor proposed for conversion to industrial uses
	Upland	-10	Section 10	Corridor proposed for conversion to residential uses
	Upland	-40	Section 20	Corridor proposed for conversion to residential uses
	Upland	-8	Section 20	Corridor proposed for conversion to residential uses
	Upland	-22	Section 21	Corridor proposed for conversion to commercial uses
	Upland	-12	Section 30	Corridor proposed for conversion to industrial uses

NOTE: Plus and minus indications show gain or loss of acreage. In some cases one corridor being changed to another has both indications.

Source: SEWRPC.

treatment systems, have, for the most part, been put in place. The nearest other public sanitary sewer system, the City of Racine system, is located approximately two miles south of the subject area. A 1992 utility system plan³ prepared for the Greater Racine Area concluded that the most cost-effective sewerage system plan for the Racine area would be limited to provision of services to planned service areas in Racine County, excluding the Caddy Vista area, with no services to be provided to Milwaukee County. It should also be noted that the City of South Milwaukee system is located immediately adjacent to the northeast portion of the study area. However, the sewage treatment plant was

designed to exclusively serve the City of South Milwaukee and is a relatively small sewerage system which does not have the capacity to serve the area under consideration herein.

A review of the previous sewerage system planning efforts and the status of the facilities needed to serve the subject planned sewer service area indicate that the most cost-effective alternative to serve the City of Oak Creek sewer service area is through the Milwaukee Metropolitan Sewerage District sewerage system. Consequently, no further analyses were deemed to be required.

SEWAGE TREATMENT PLANT CAPACITY IMPACT ANALYSIS

The size and capacity of the Milwaukee Metropolitan Sewerage District sewerage facilities were developed as part of the District's facility

³*Alvord, Burdick & Howsen and Applied Technologies, Inc., A Coordinated Sanitary Sewerage and Water Supply System Plan for the Greater Racine Area, September 1992.*

planning program.⁴ That plan was based upon an estimated year 2005 sewer service area population of 47,000 persons in the City of Oak Creek. It should be noted that in a letter dated April 21, 1994, from the MMSD to the City of Oak Creek, it was indicated that the District's facilities had the capacity to serve an additional 31,000 persons over and above the current City of Oak Creek population level of about 19,000 persons, or a total of about 50,000 persons. The sewer service area planning set forth herein is based upon a range of planned year 2010 population levels for the City of Oak Creek of from 33,700 persons, under the Commission's intermediate-growth centralized land use plan, to 51,800 persons, under the high-growth centralized land use plan. Thus, while the area of the City of Oak Creek sewer service area is slightly larger than the area set forth in the adopted regional water quality management plan, the planned population levels remain consistent with the year 2005 planned population used in the design of the Milwaukee Metropolitan Sewerage District sewerage facilities. Since the range of planned population levels now envisioned in the City of Oak Creek sewer service area is consistent with the planned population level used in the Milwaukee Metropolitan Sewerage District facility planning, with the planned year 2010 intermediate-growth population scenario being less than, and the planned year 2010 high-growth population scenario being only 3 percent more than, the population level used in the facility plan, the District's sewerage facilities, including the sewage treatment plant, should have adequate capacity to serve the City of Oak Creek, at least through its design year 2005.

PUBLIC REACTION TO THE PROPOSED SANITARY SEWER SERVICE AREA

A public hearing was held on January 17, 1994, for the purpose of receiving comment on the proposed refined sanitary sewer service area as shown on Map 5. The hearing was sponsored by the City of Oak Creek and the Regional Planning Commission. Copies of the minutes of the

public hearing are on file at the offices of the City of Oak Creek and at the Regional Planning Commission.

A brief summary of the sewer service area refinement report for the City of Oak Creek was presented prior to receiving public comment. The rationale for refining and detailing the sanitary sewer service area tributary to the sewage treatment facilities operated by the Milwaukee Metropolitan Sewerage District was discussed, as was the importance of the final delineation of the service area. In addition, the significance of environmentally sensitive lands within the City of Oak Creek was discussed. Comments on the report and accompanying maps were then solicited.

A review of the hearing record indicates that no substantive concerns were raised at the hearing in regard to the delineation of the sewer service area or of the environmentally sensitive lands within this area. The only questions raised at the hearing, from representatives of the City of Oak Creek, concerned the relationship between the preliminarily refined sanitary sewer service area boundary for the City as set forth on Map 5, and the current contract limits of the Milwaukee Metropolitan Sewerage District. The City, therefore, held in abeyance approval of the sewer service area report pending receipt of Milwaukee Metropolitan Sewerage District comments regarding their review of the sewer service area report.

Subsequent to the public hearing, the City of Oak Creek received a letter dated April 21, 1994, from the Executive Director of the Milwaukee Metropolitan Sewerage District concerning their review of the sewer service area report. A copy of this letter is presented in Appendix A. In that letter, the Milwaukee Metropolitan Sewerage District indicated that it concurred with the delineation of the City of Oak Creek sanitary sewer service area boundary and with the forecast population levels for that area as set forth in the plan.

Subsequently, the City of Oak Creek, on June 7, 1994, adopted the sanitary sewer service area plan as presented at the public hearing and as reflected on Map 5.

Detailed delineations of the final City of Oak Creek sanitary sewer service area and environ-

⁴*Milwaukee Metropolitan Sewerage District, Milwaukee Metropolitan Sewerage District Facility Plan, June 1980.*

mentally significant lands within that area are shown on a series of aerial photographs reproduced as Map 7 beginning on page 20 and continuing through page 29 of this report.

development recommendations inherent in the delineation of the planned sanitary sewer service area.

IMPLEMENTING RECOMMENDATIONS

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

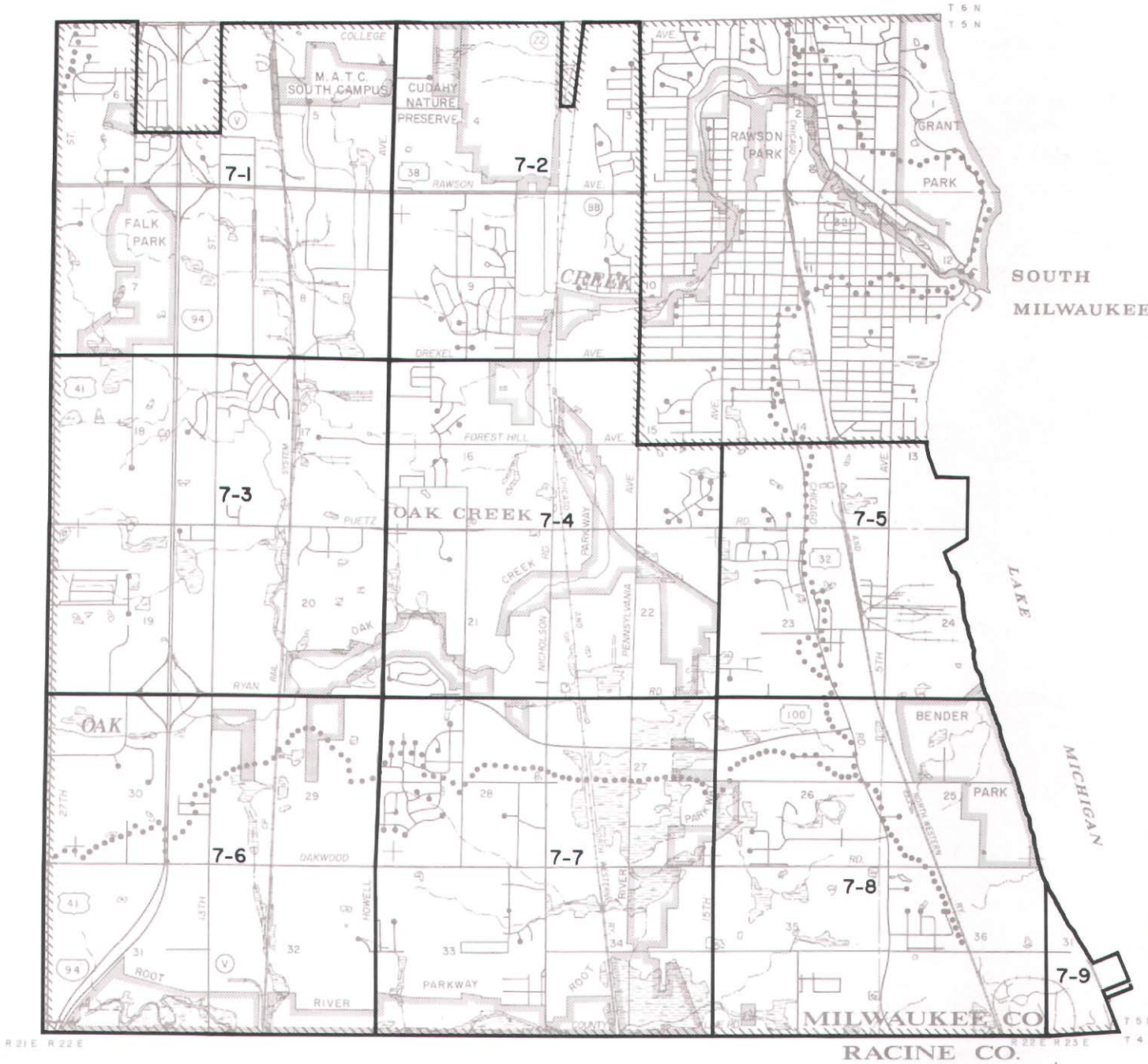
1. Formal adoption or endorsement of SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, and this SEWRPC Community Assistance Planning Report by the Common Council of the City of Oak Creek as the operator of the sanitary sewer collection system in the City and by the Milwaukee Metropolitan Sewerage District as the operators of the sewerage treatment facilities and trunk sewer systems utilized by the City of Oak Creek.
2. Formal adoption of this SEWRPC Community Assistance Planning Report by the Regional Planning Commission as an amendment to the regional water quality management plan set forth in SEWRPC Planning Report No. 30, with certification of this report as a plan amendment to all parties concerned, including the Wisconsin Natural Resources Board and the U. S. Environmental Protection Agency.
3. Review by all of the local units of government concerned of their zoning, land subdivision control, and related ordinances to ensure that the policies expressed in such ordinances reflect the urban development recommendations inherent in the final delineated City of Oak Creek sanitary sewer service area as shown on Maps 5 and 7. In particular, steps should be taken to ensure that those lands identified as being environmentally significant in this report are properly zoned to reflect a policy of retaining such lands, insofar as possible, in essentially natural, open uses.
4. Review by the City of Oak Creek of utility extension policies to ensure that such policies are consistent with the urban land

SUBSEQUENT REFINEMENTS TO THE CITY OF OAK CREEK SEWER SERVICE AREA

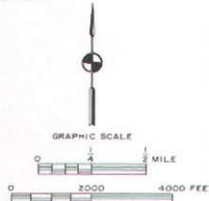
This report presents the refined sewer service area for the City of Oak Creek. The refined sewer service area was delineated cooperatively by the units and agencies of government concerned and was subjected to review at a public hearing. It is envisioned that the delineated sewer service area will accommodate all new urban development anticipated in the City of Oak Creek area to the year 2010. Like other long-range plans, however, this sewer service area plan should be reviewed periodically, every five years, to assure that it continues to properly reflect the urban development objectives of the communities involved, especially as such objectives may relate to the amount and spatial distribution of new urban development requiring sewer service. Should it be determined by the City of Oak Creek, as the operator of the sanitary sewer collection system involved, that amendments to the sewer service area plan as presented herein are necessary, the City should ask the Southeastern Wisconsin Regional Planning Commission for assistance in undertaking the technical work required to properly amend the plan. Any such plan revision should be carried out in a manner similar to that utilized in the refinement effort described in this report. While plan amendment may be expedited because study area base maps have been prepared and certain inventories completed as part of the sewer service area planning documented herein, such amendment should be subject to the same analyses and interagency review, and should include a public hearing to obtain the comments and suggestions of those citizens and landowners most affected by the proposed changes to the sewer service area boundary. Upon agreement on a revised sewer service area, the new plan map should be endorsed by the Common Council of the City of Oak Creek and by the Southeastern Wisconsin Regional Planning Commission prior to certification to the Wisconsin Department of Natural Resources and the U. S. Environmental Protection Agency.

Map 7

INDEX OF MAPS SHOWING THE ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK



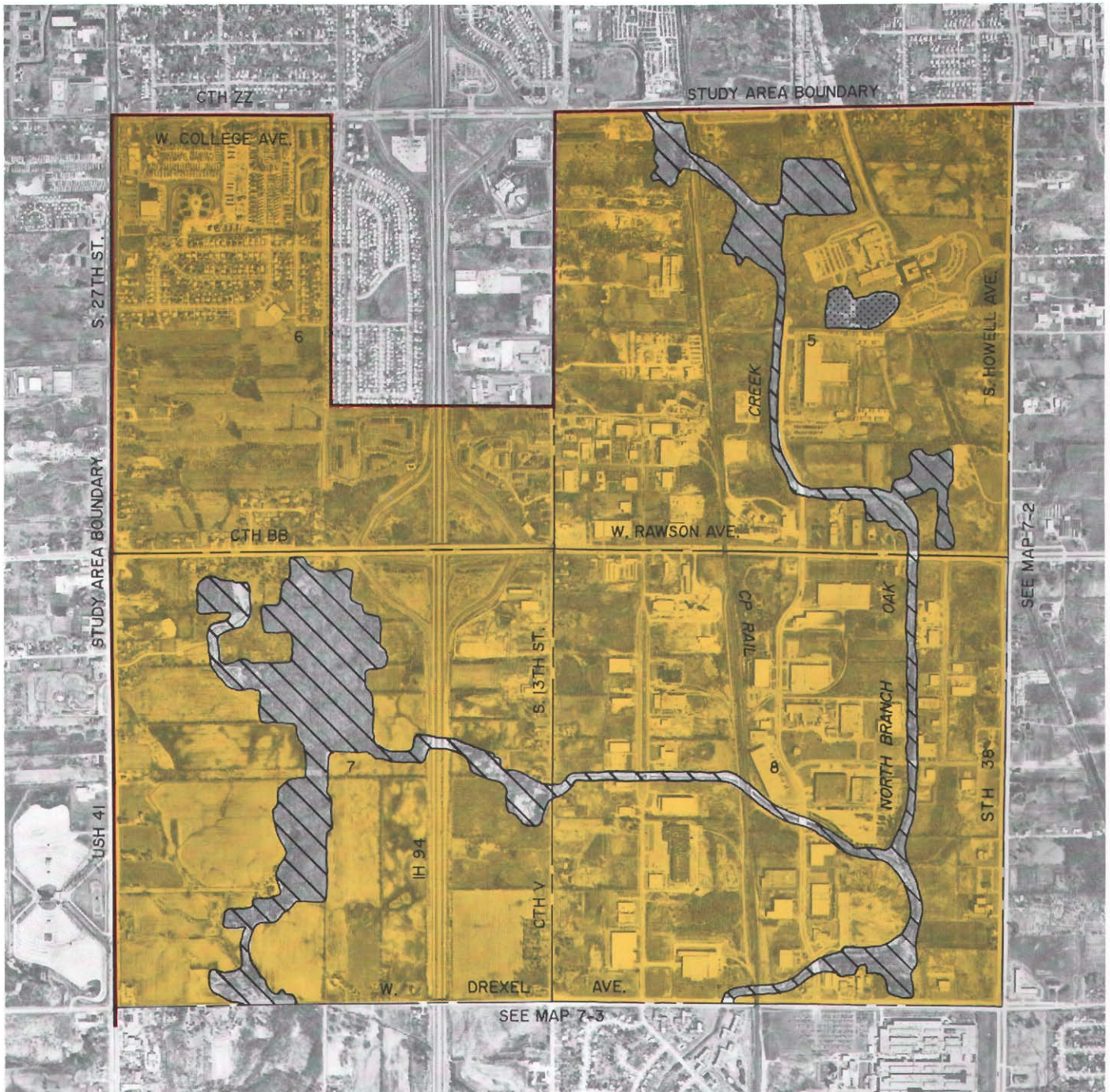
Source: SEWRPC.



Map 7-1

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK

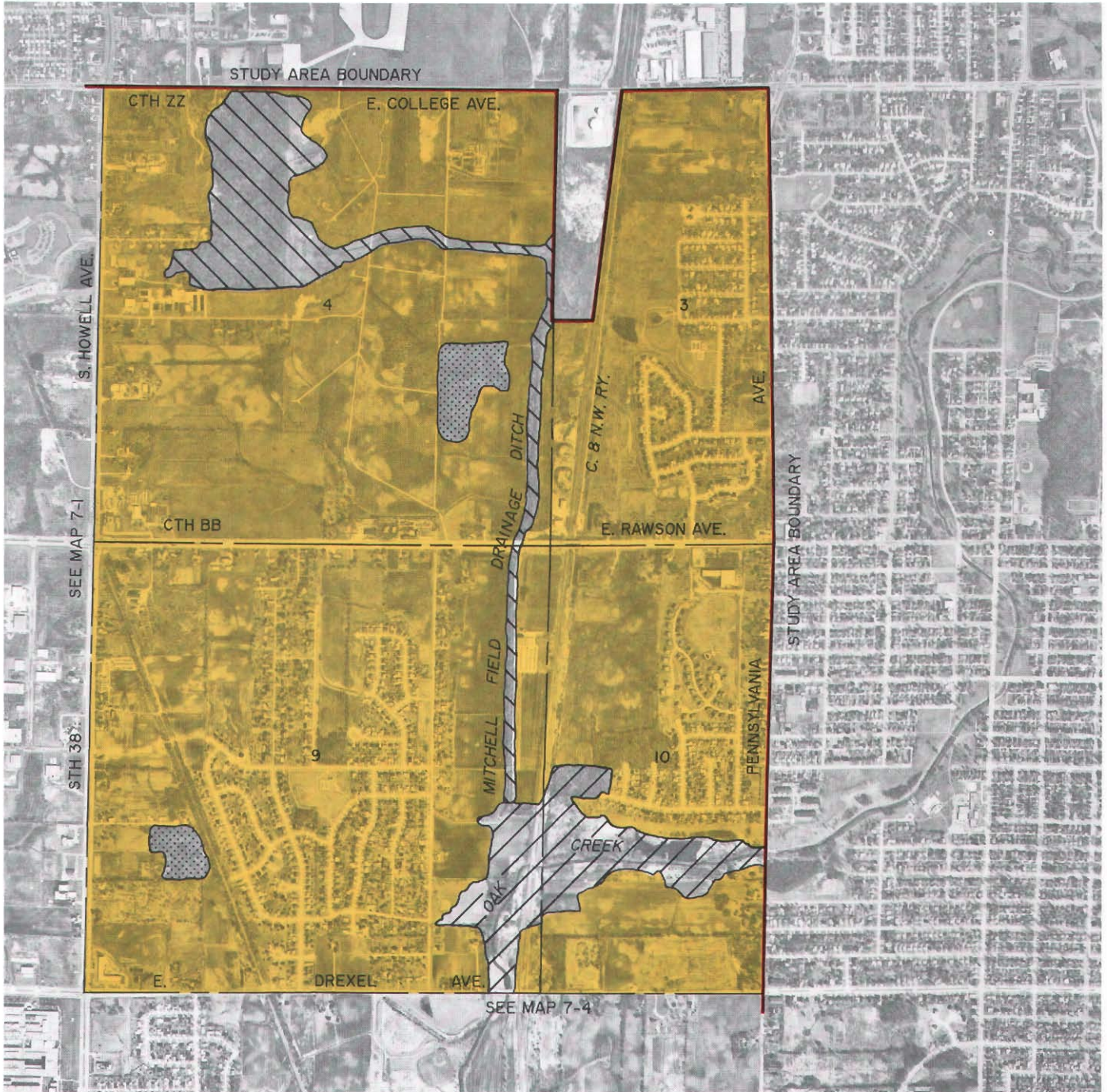
U. S. Public Land Survey Sections 5, 6, 7, and 8
Township 5 North, Range 22 East








Source: SEWRPC.

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK

U. S. Public Land Survey Sections 3, 4, 9, and 10
Township 5 North, Range 22 East



LEGEND

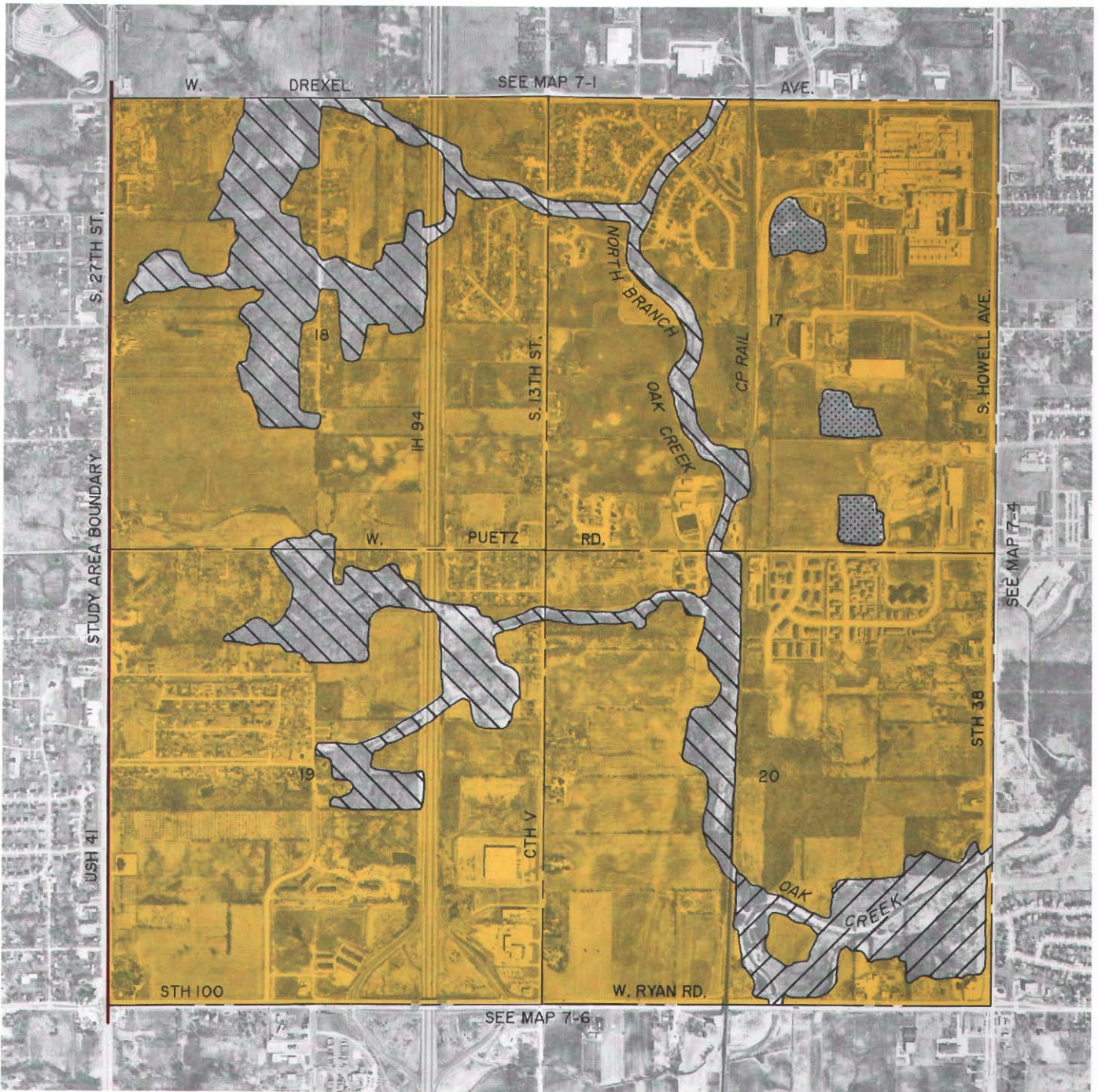
-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY

Source: SEWRPC.






Map 7-3

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK

U. S. Public Land Survey Sections 17, 18, 19, and 20
Township 5 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 7-4

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK

U. S. Public Land Survey Sections 15, 16, 21, and 22
Township 5 North, Range 22 East



LEGEND

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

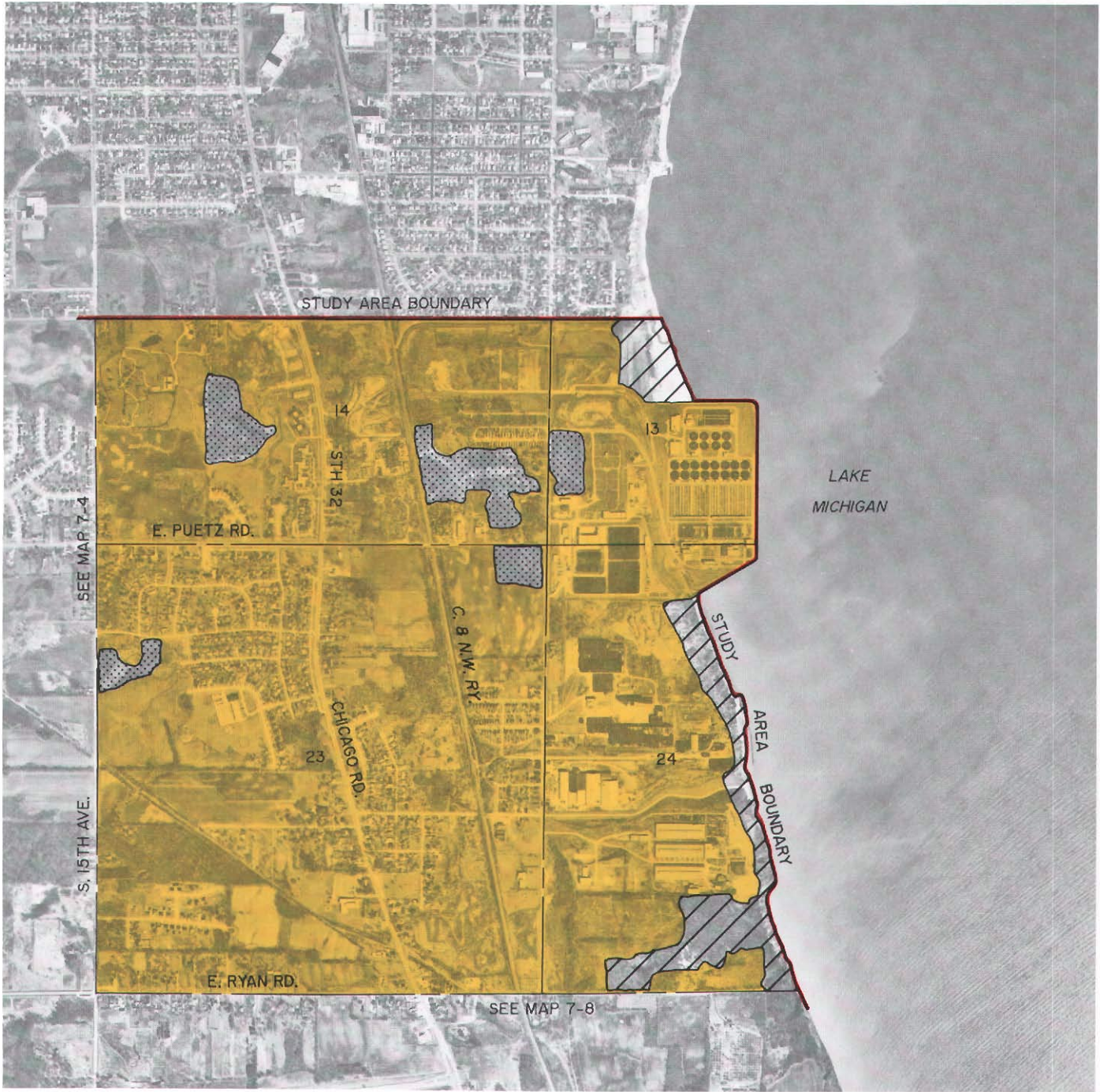


Source: SEWRPC.

Map 7-5

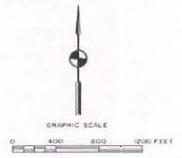
ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK

U. S. Public Land Survey Sections 13, 14, 23, and 24
Township 5 North, Range 22 East



LEGEND

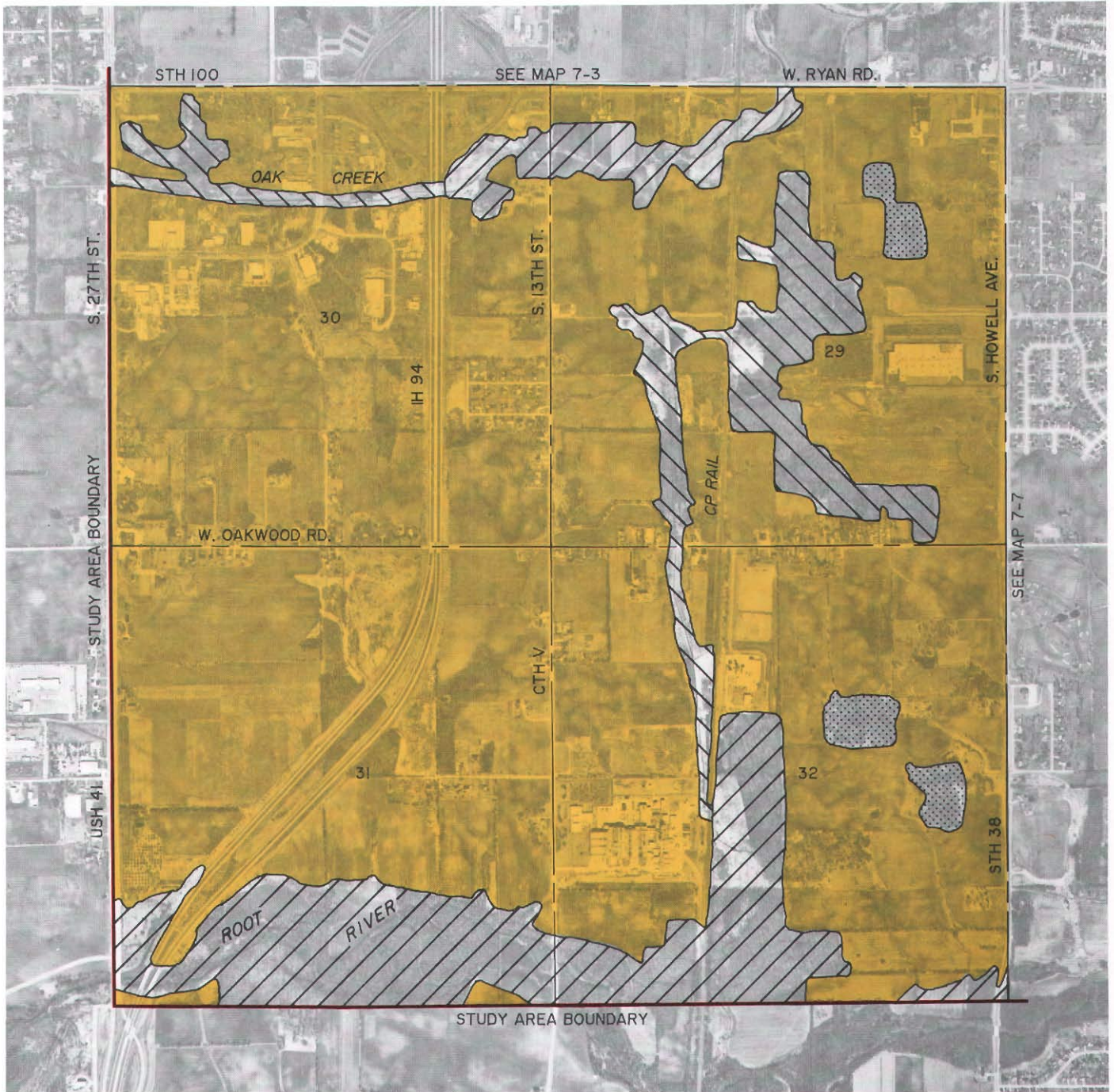
-  PRIMARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  PLANNED SANITARY SEWER SERVICE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY








Source: SEWRPC.

**ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK**

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

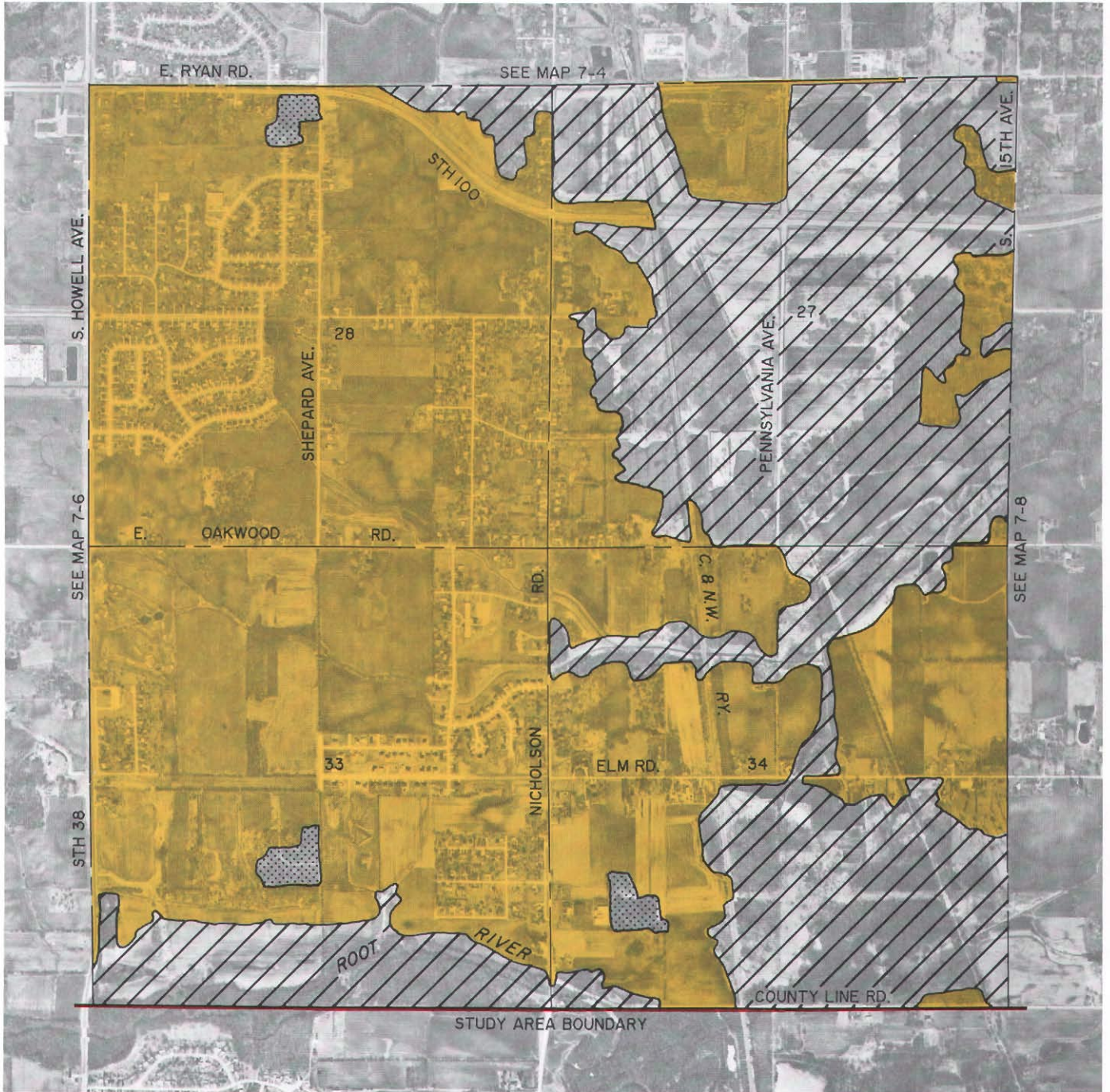
Source: SEWRPC.







Map 7-7

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK

U. S. Public Land Survey Sections 27, 28, 33, and 34
Township 5 North, Range 22 East



LEGEND

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

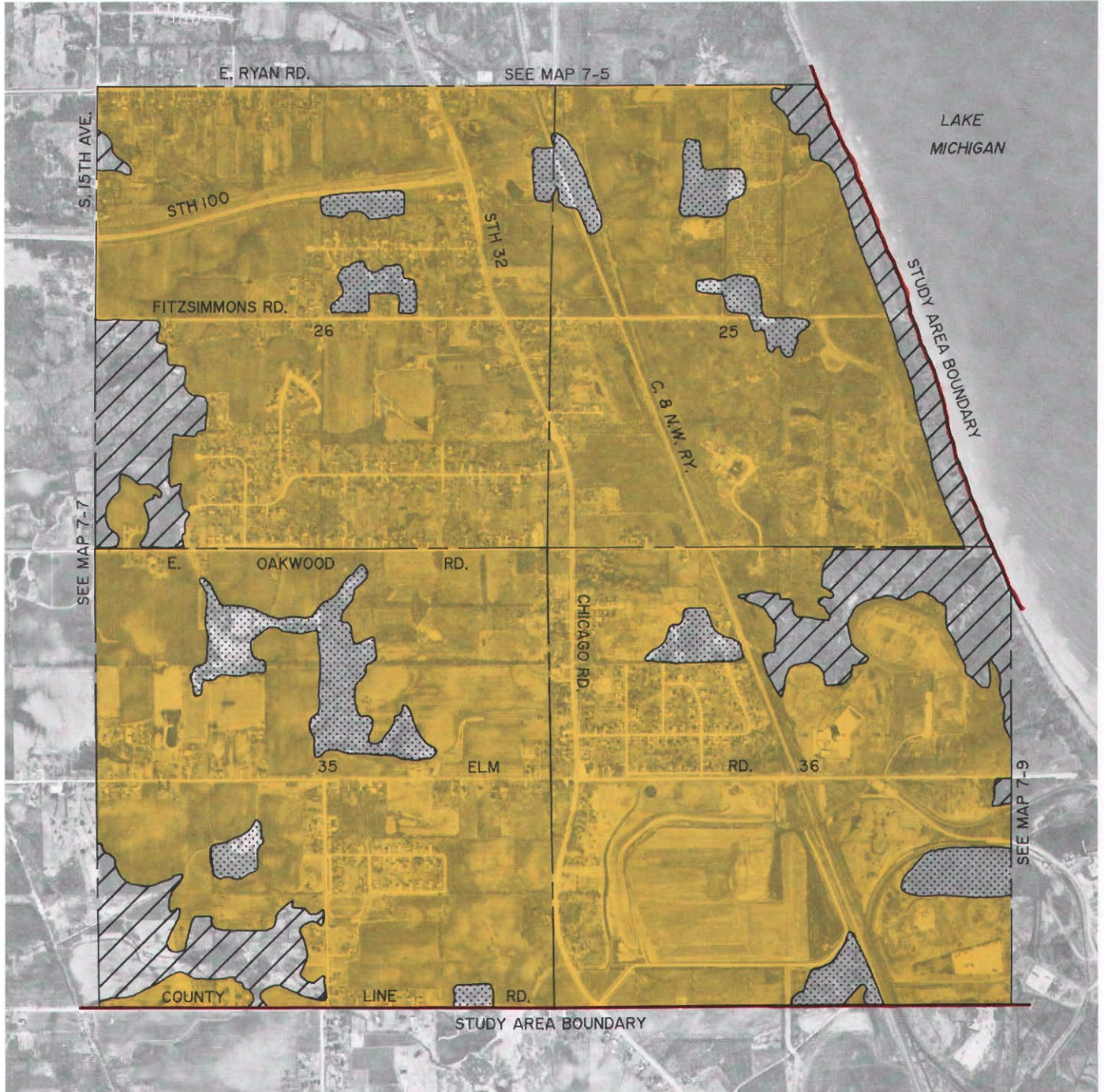


Source: SEWRPC.





Map 7-8

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK

U. S. Public Land Survey Sections 25, 26, 35, and 36
Township 5 North, Range 22 East



LEGEND

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

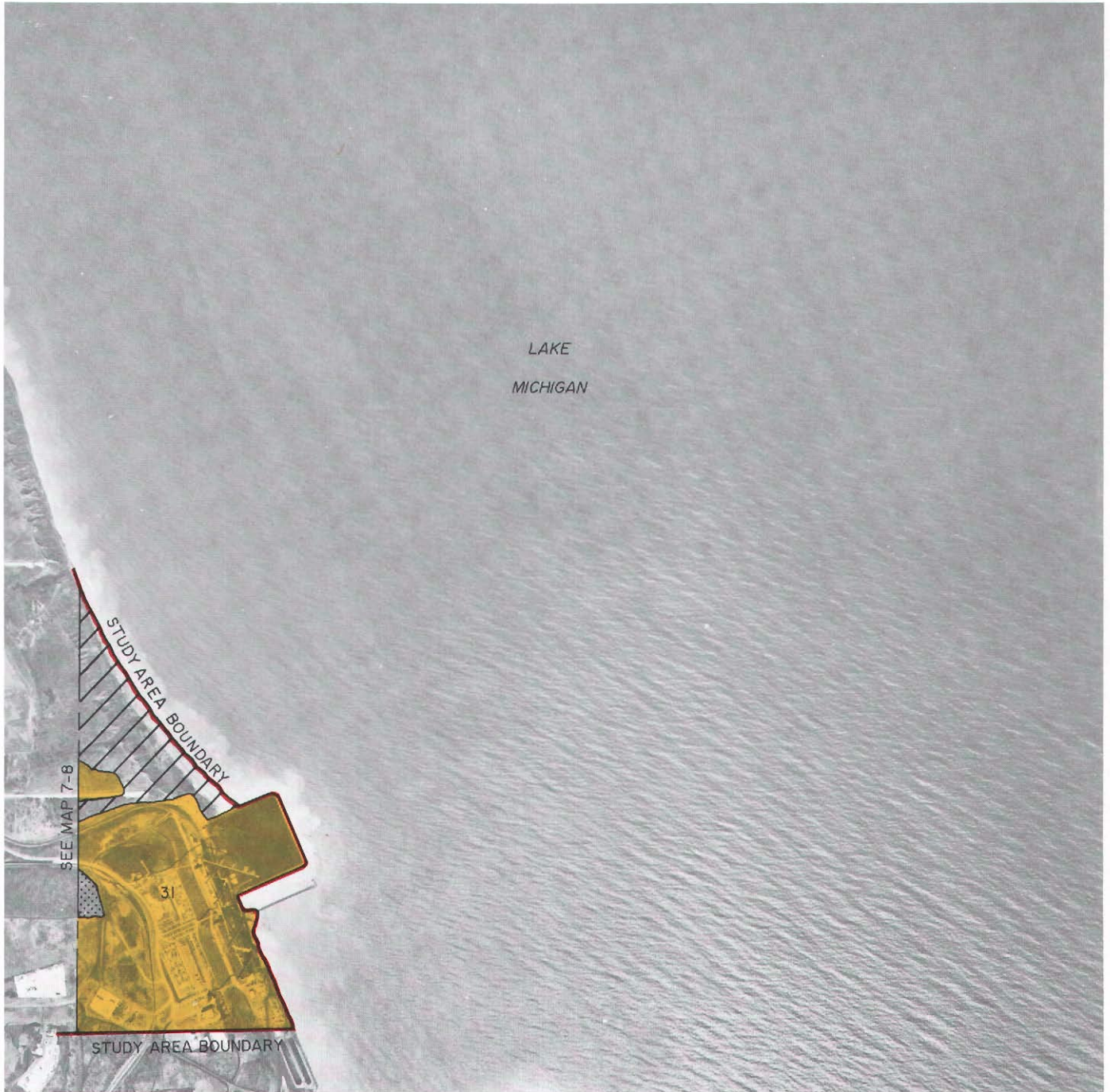


Source: SEWRPC.

Map 7-9

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED
SANITARY SEWER SERVICE AREA FOR THE CITY OF OAK CREEK

U. S. Public Land Survey Section 31
Township 5 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.

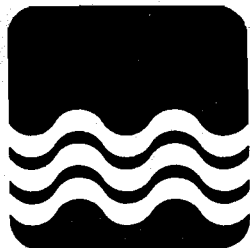
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APPENDIX

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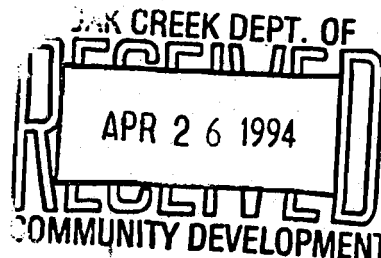
Appendix A

LETTER FROM THE MILWAUKEE METROPOLITAN
SEWERAGE DISTRICT TO THE CITY OF OAK CREEK



Milwaukee Metropolitan Sewerage District
260 West Seeboth Street
P.O. Box 3049
Milwaukee, Wisconsin 53201-3049
(414) 272-5100

April 21, 1994



Mr. Paul E. Milewski, AICP
Director of Community Development
City of Oak Creek
8640 South Howell Avenue
Oak Creek, Wisconsin 53154

Re: SEWRPC Update Of 208 Water Quality Management
Report

Dear Mr. Milewski:

Please pardon the delay in responding to your letter of inquiry dated January 21, 1994. Your letter came almost simultaneously with a similar request from another municipality which necessitated a careful review to assure, to the extent possible, consistent responses to the requests.

With regard to your first inquiry seeking the District's comments about SEWRPC's proposed amendment to increase the year 2010 sanitary sewerage service area, it should be initially recognized that SEWRPC's year 2010 planning horizon differs from the planning horizon used by the District in its most recent facilities planning effort. The District's Master Facilities Plan, adopted in June, 1980, and approved by the Wisconsin Department of Natural Resources and the United States Environmental Protection Agency in June, 1981, had a planning horizon of the year 2005. Accordingly, the service area populations may not coincide identically.

Nevertheless, when the Master Facilities Plan was adopted, it assumed that the entire geographic area comprising the City of Oak Creek would be within the District's sanitary sewerage service area. Accordingly, the District's Master Facilities Plan assumed much of SEWRPC's proposed amendment would be within the District.

Bearing these observations in mind, the District makes the following observations. SEWRPC identifies a range of planned year 2010 populations for the city from 33,700 to 51,800 persons. The current population in the sewerage service area was estimated at 19,050 persons. The District's records of sanitary sewer extension approvals for the city indicates a remaining available capacity to serve a population equivalent of approximately 31,000 persons

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April 21, 1994
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within the future growth projection accounted for in the District's Master Facilities Plan through the year 2005. This translates into the District's view that there is adequate capacity provided in the District's system for a significant amount of future growth in the City of Oak Creek.

You should be aware that within the next two or three years, the District will become involved in facility planning to extend its planning horizon to the year 2010. At that time, the District will determine what improvements to the District's system will be necessary, if any at all, to accommodate the growth expected by the year 2010. In the interim, there appears to be more than sufficient capacity for approval of additional sanitary sewer extensions as forecast by SEWRPC.

With regard to your questions concerning the relationship between the sanitary sewerage service area as forecast by SEWRPC and the District's boundary as used by the District for purposes of taxation, the District can offer the following comments for your consideration. There are basically two different manners in which the District can expand its boundary: 1) under sec. 4.03, MMSD Rules and Regulations, as authorized by sec. 66.888(1)(c)5., Wis. Stats., the District can biennially review the boundary established under sec. 66.888(1)(c)4.a., Wis. Stats., which boundary, in turn, was established in 1983; and 2) it can be expanded utilizing the procedure set forth in sec. 66.888(1)(d), Wis. Stats.

As to the first of these procedures for expansion through a biennial review, the Commission is to review the boundary to determine whether all areas likely to receive sanitary sewerage service within the next 10 years are within the boundary. The District has not utilized that procedure as yet. If and when it does, the District's boundary would be expanded upon the filing of an approving resolution of the Metropolitan Sewerage Commission expanding the boundary. Once adopted, the included areas would be subject to taxation thereafter.

As to the second procedure, both the Oak Creek common council and the Metropolitan Sewerage Commission must adopt resolutions approving changes in the boundary. Thus, nothing SEWRPC recommends can immediately result or even cause a change in the District's boundary.

SEWRPC's recommendations, however, can and do have an indirect effect on the District's boundary in two ways. If the Metropolitan

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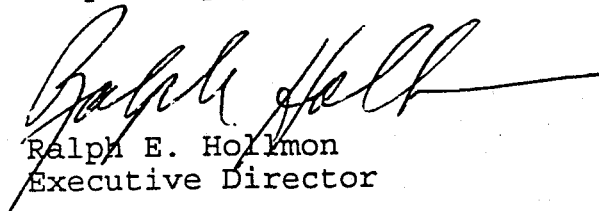
Sewerage Commission opts to conduct a biennial review of the boundary to assure that all areas likely to receive sanitary sewerage service from the District within the next 10 years, the fact that SEWRPC has designated areas as likely to receive such service within the next sixteen years is some proof of those areas likely to receive service within the next ten years.

Even if the Commission does not opt to biennially review the boundary, once an area has been accepted as being within the District's sanitary sewerage service area, it is not uncommon for developers to plan construction in those areas. Before those areas can receive sanitary sewerage service from the District, the areas must be included within the District's boundary. The developers often will then petition for incorporation of the area desired to be developed into the District's sanitary sewerage service area. In this regard, you should be aware that the procedure to add to the District boundary will probably take three to four months. Accordingly, the City of Oak Creek should plan additions to the boundary with those time limits in mind.

At this time, the District does not charge back taxes so long as the area receiving new service receives that service later than November 1, 1992. If the Commission does perform a biennial review, however, an included area would then be subject to taxation.

If the District can be of further assistance, please contact Mr. Gary A. Gagnon, Acting Director of Engineering, 225-2170 for facilities planning questions, and Mr. James H. Petersen, Senior Staff Attorney, 225-2102, for boundary related questions.

Very truly yours,



Ralph E. Hollmon
Executive Director

REH/JHP/st

cc: Mr. Gary A. Gagnon
Mr. James H. Petersen

03211153.AJP