

**SANITARY SEWER SERVICE  
AREA FOR THE VILLAGES  
OF FONTANA AND  
WALWORTH AND  
ENVIRONS**

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WISCONSIN**

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

**COMMUNITY ASSISTANCE PLANNING REPORT  
NUMBER 219**

**SANITARY SEWER SERVICE AREA FOR THE VILLAGES OF  
FONTANA AND WALWORTH AND ENVIRONS,  
WALWORTH COUNTY, WISCONSIN**

Prepared by the

Southeastern Wisconsin Regional Planning Commission  
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June 1995

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# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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June 30, 1995

TO: The Village Boards of the Villages of Fontana and Walworth, the Town Boards of the Towns of Linn and Walworth, the Town of Linn Sanitary District, the Fontana-Walworth Water Pollution Control Commission, and the County Board of Walworth County

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

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

Acting in response to the recommendations made in the adopted regional water quality management plan, the Fontana-Walworth Water Pollution Control Commission (FWWPCC) on January 24, 1994, requested that the Regional Planning Commission assist the FWWPCC in refining and detailing the recommended sanitary sewer service area tributary to the Fontana-Walworth Water Pollution Control Commission sewage treatment plant. This report documents the results of the refinement process.

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

A public hearing was held on May 30, 1995, to discuss the preliminary findings and recommendations of the sewer service area refinement process and to receive the comments and suggestions of the local elected officials concerned and of interested citizens. The recommendations contained in this report reflect the pertinent comments and suggestions made at the hearing.

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

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

Respectfully submitted,



Kurt W. Bauer,  
Executive Director

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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."<sup>1</sup>

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, 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 on the urban land use configuration identified in the Commission-adopted regional land use plan for the year 2000.<sup>2</sup> As such, the delineation of the areas was necessarily general, and may not have reflected detailed local planning considerations.

Section NR 110.08(4) and Section ILHR 82.20(4) of the Wisconsin Administrative Code require that the Wisconsin Department of Natural Resources, with respect to public sanitary sewers, and the Wisconsin Department of Industry, Labor and Human Relations, with respect to private sanitary sewers, make a finding that all proposed sanitary sewer extensions be in conformance with adopted areawide water quality management plans and the sanitary sewer service areas identified in such plans. These Departments, in carrying out their responsibilities in this respect, require that the Southeastern Wisconsin Regional Planning Commission, as the designated areawide water quality management planning agency for the Southeastern Wisconsin Region, review and comment on each proposed sewer extension as to its relationship to the approved plan and sewer service areas. In order to properly reflect local, as well as areawide, planning concerns in the execution of this review responsibility, the Regional

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

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



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. Preparation of a base map at an appropriate scale for each sanitary sewer service area identified in the areawide water quality management plan.
2. 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.<sup>3</sup>
3. 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. 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. 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. 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 FONTANA-WALWORTH SANITARY SEWER SERVICE AREA REFINEMENT PROCESS

By letter dated January 24, 1994, Strand Associates, Inc., consultants to the Fontana-Walworth Water Pollution Control Commission (FWWPCC), requested, on behalf of the FWWPCC, that the Regional Planning Commission undertake the refinement and detailing of the sanitary sewer service area tributary to the FWWPCC sewage treatment facility.

An interagency meeting regarding this refinement and detailing process was held on February 16, 1994. In attendance at that meeting were representatives of the Villages of Fontana and Walworth, the Town of Linn, the Fontana-Walworth Water Pollution Control Commission, and the Regional Planning Commission. Subsequent to this meeting, separate individual meetings were held between representatives of the Regional Planning Commission and the Village of Fontana, the Village of Walworth, and the Town of Linn Sanitary District. At the conclusion of these meetings, all parties concerned had agreed upon a preliminarily refined and detailed combined sanitary sewer service area

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<sup>3</sup>The sewer service areas in the water quality management plan were based on the urban land use configurations 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.

tributary to the Fontana-Walworth Water Pollution Control Commission sewage treatment facility for presentation at a public hearing.

Copies of the draft of this report setting forth a preliminarily refined sanitary sewer service area were provided to the Town of Linn Sanitary District, the Towns of Linn and Walworth, the Villages of Fontana and Walworth, the Fontana-Walworth Water Pollution Control Commission, the Walworth County Park and Planning Commission, 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 May 30, 1995. The public reaction to the proposed sanitary sewer service area, as documented in the minutes contained in Appendix A, is summarized later in this report. The final, agreed-upon, sanitary sewer service area attendant to the Fontana-Walworth Water Pollution Control Commission sewage treatment facility is described in Chapter III of this report. The delineation of this area reflects the intergovernmental decisions made in the aforereferenced 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 Fontana-Walworth sanitary sewer service area is shown on Map 2. The area consists of all the lands encompassed within the corporate limits of the Villages of Fontana and Walworth, together with portions of the Village of Williams Bay and the Towns of Linn and Walworth. As indicated in Table 1, the total study area is about 26.1 square miles in extent, of which 3.9 square miles, or about 15 percent, lie within the Village of Fontana; 1.4 square miles, or about 5 percent, lie within the Village of Walworth; 0.5 square miles, or about 2 percent, lie within the Village of Williams Bay; 5.6 square miles, or about 22 percent, lie within the Town of Linn; and about 14.7 square miles, or about 56 percent, lie within the Town of Walworth. These areas are based on 1994 civil division boundaries.

As also shown on Map 2, the Town of Linn Sanitary District encompasses approximately 6.4 square miles, of which about 1.0 square mile, or about 15 percent, is located within the subject study area.

#### POPULATION

As further indicated in Table 1, the estimated resident population of the entire study area in 1990 was about 4,329 persons. Of this total, 1,635 persons, or about 38 percent, resided in the Village of Fontana; 1,614 persons, or about 37 percent, resided in the Village of Walworth; about 50 persons, or about 1 percent, resided in the Village of Williams Bay; about 270 persons, or about 6 percent, resided in the Town of Linn; and the remaining 760 persons, or 18 percent, resided in the Town of Walworth. Of these population totals, virtually the entire population of the Villages of Fontana and Walworth were served by sanitary sewers extended from the Fontana-Walworth sewage treatment plant. In addition, approximately 50 persons within the Village of Williams Bay were served by sewers extended from the Walworth County Metropolitan Sewerage District sewage treatment plant. The remaining 1,030 persons residing within the study area were served by onsite soil-absorption sewage disposal systems or by onsite sewage holding tanks.<sup>1</sup>

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

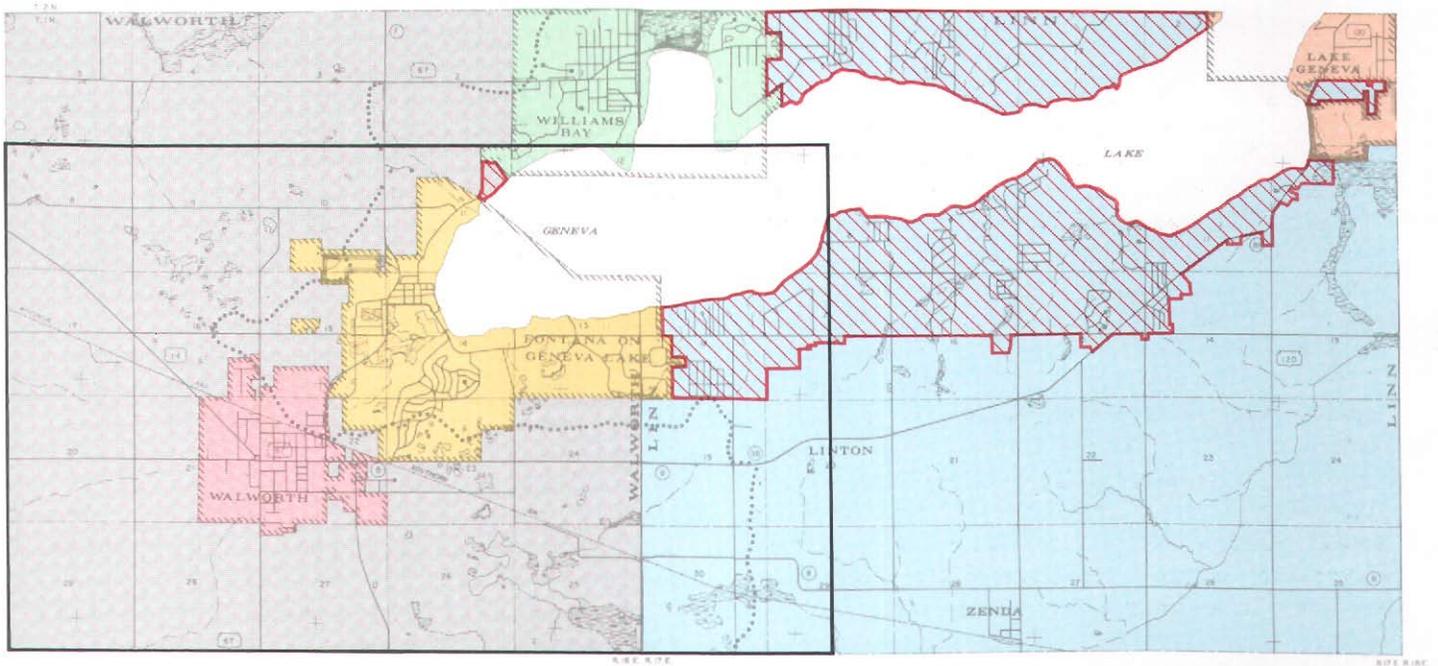
Recognizing the increasing uncertainty inherent in estimating future population levels under the rapidly changing socio-economic conditions existing in the United States, the Regional Planning Commission began to incorporate the alternative futures approach into its planning program in the late 1970s, the first known attempt to apply this approach to areawide and local planning in the United States. In the exploration of alternative futures for the Southeastern Wisconsin Region, an attempt was made first to identify all those external factors which may be expected to directly or indirectly affect development conditions in the

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<sup>1</sup>*It should also be noted that the Town of Linn Sanitary District as shown on Map 2, including that portion located within the subject study area, is not yet served by any centralized public sanitary sewer system.*

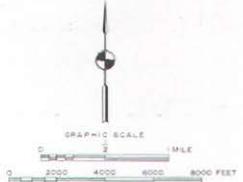
Map 2

TOWN OF LINN SANITARY DISTRICT AS IT RELATES TO THE STUDY AREA IDENTIFIED FOR PURPOSES OF REFINING AND DETAILING THE FONTANA-WALWORTH SANITARY SEWER SERVICE AREA



LEGEND

- |  |   |   |                         |
|--|---|---|-------------------------|
|  | TOWN OF LINN SANITARY DISTRICT  |  | VILLAGE OF WALWORTH     |
|  | STUDY AREA BOUNDARY IDENTIFIED FOR THE FONTANA-WALWORTH SANITARY SEWER SERVICE AREA |  | VILLAGE OF WILLIAMS BAY |
|  | CITY OF LAKE GENEVA   |  | TOWN OF LINN            |
|  | VILLAGE OF FONTANA  |  | TOWN OF WALWORTH        |



Source: SEWRPC.

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 aforescribed 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

**Table 1**

**STUDY AREA INFORMATION BY CIVIL DIVISION**

Civil Division	Square Miles	Percent	1990 Population	
			Number	Percent of Study Area
Village of Fontana .....	3.9	14.9	1,635	37.8
Village of Walworth .....	1.4	5.4	1,614	37.3
Village of Williams Bay ....	0.5	1.9	50 <sup>a</sup>	1.2
Town of Linn .....	5.6	21.5	270 <sup>a</sup>	6.2
Town of Walworth .....	14.7	56.3	760 <sup>a</sup>	17.5
Study Area	26.1	100.0	4,329	100.0

<sup>a</sup>Estimated.

Source: U. S. Bureau of the Census, Wisconsin Department of Administration, and SEWRPC.

accommodated the continued diffusion of population and 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 adopted land use plan, would accommodate a year 2010 resident population level of about 5,500 persons in the Fontana-Walworth study area. 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 4,300 persons, under the low-growth decentralized land use plan, to a high of about 8,400 persons, under the high-growth decentralized 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 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, 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 Fontana-Walworth sanitary sewer service area was to Map in detail the environmentally significant lands in the study area. Accordingly, Commission inventories were reviewed and updated as necessary with respect to the following elements of the natural resource base: lakes, streams, and associated shorelands and floodlands; wetlands; woodlands; wildlife habitat areas; areas of rugged terrain and high-relief topography; wet, poorly drained, and organic soils; and remnant prairies. In addition, inventories were reviewed and updated as necessary with respect to such natural resource-related features as existing parks, potential park sites, sites of historic and archaeological value, areas 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 2). 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 Fontana-Walworth 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 drainage-ways, 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, 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.

Because a portion of a major lake lies within the study area, a relatively large portion of the study area, about 6.0 square miles, or about 23 percent, is encompassed within primary environmental corridors. Lands encompassed within the secondary environmental corridors totaled about 0.6 square miles, or about 2 percent of the study area. Lands encompassed within isolated natural resource areas totaled about 0.3 square miles, or about 1 percent of the study area. Thus, all environmentally signifi-

Table 2

**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
<b>Natural Resource Base</b>	
Lake	
Major (50 acres or more) .....	20
Minor (5 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 to 19 Percent .....	5
Prairie .....	10
<b>Natural Resource Base-Related</b>	
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
Archeological .....	2
Scenic Viewpoint .....	5
Scientific Area	
State Scientific Area .....	15
State Significance .....	15
County Significance .....	10
Local Significance .....	5

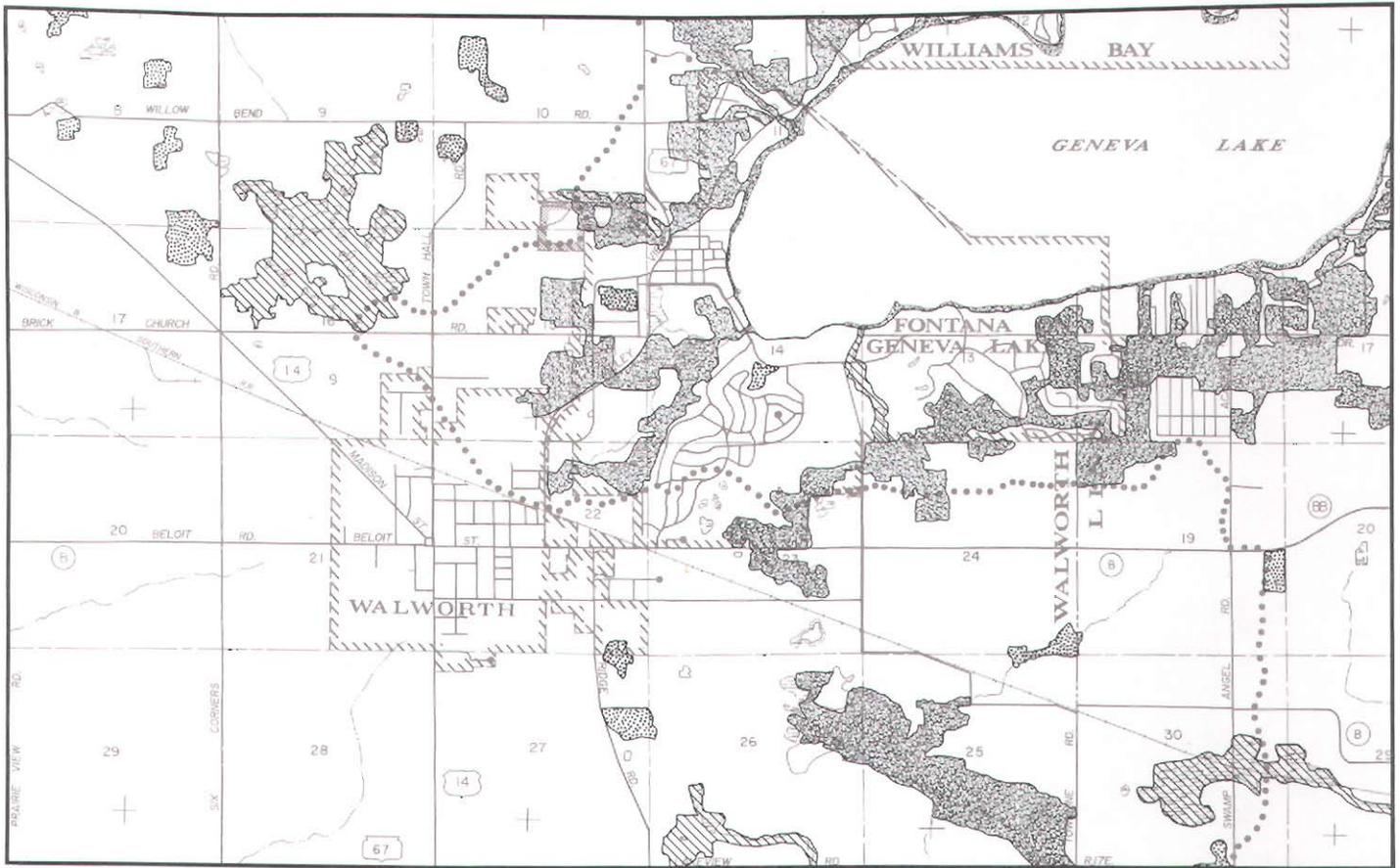
Source: SEWRPC.

cant lands in the Fontana-Walworth study area comprise about 6.9 square miles, or 26 percent of the study area.

While the adopted regional water quality management plan places great emphasis on the protection of the lands identified as primary environmental corridors in essentially natural, open uses, it recognizes that there may be situations in which the objective of preserving the corridor lands directly conflicts with other legitimate regional and local development objectives. For example, the regional

Map 3

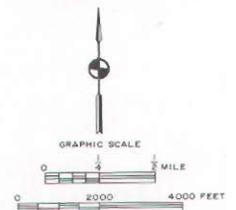
ENVIRONMENTALLY SIGNIFICANT LANDS IN THE FONTANA-WALWORTH STUDY AREA



LEGEND

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

Source: SEWRPC.



plan recognizes that if a community were to determine the need for a strategic arterial street extension through 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 sensitively, so that any damage to the natural environment in the corridors be minimized.

In addition, the adopted regional water quality management plan recognizes that certain second-

ary environmental corridors and isolated natural resource areas may, at the discretion of local units of government, be converted to urban uses over the plan design period. However, it should be noted that current Federal, State, and local regulations may effectively preclude development of such areas. Of particular importance in this regard are natural resource protection regulations dealing with wetlands, floodplains, shorelands, stormwater runoff, and erosion control. Therefore, it is important that the developer or local unit of government concerned determine if it is necessary to obtain any applicable Federal, State, or local permits prior to any proposed disturbance of wetlands, floodplains, or other regulated lands.

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## 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 rule changes, DNR and DILHR review and approval of locally proposed sanitary sewer extensions was confined primarily to engineering considerations and was intended to ensure that the sewers were properly sized and constructed. The rule changes significantly expanded the scope of the State review process to include water quality-oriented land use planning considerations. Before the two State agencies concerned can approve a locally proposed sanitary sewer extension, they must make a finding that the lands to be served by the proposed extension lie within an approved sanitary sewer service area. Such areas are identified in the Commission's adopted, areawide water quality management plan and any subsequent amendments thereto. If a locally proposed sanitary sewer extension is designed to serve areas not recommended for sewer service in an areawide water quality management plan, the State agencies concerned must deny approval of the extension. Consequently, it is important that an intergovernmental consensus be reached in the delineation of proposed sanitary sewer service areas.

#### CURRENTLY APPROVED FONTANA-WALWORTH SANITARY SEWER SERVICE AREA

The plan year 2000 Fontana-Walworth sanitary sewer service area tributary to the Fontana-Walworth Water Pollution Control Commission sewage treatment facility, as set forth in the Commission adopted regional water quality management plan, as amended, is shown on Map 4. This service area totals about 5.8 square miles, or about 22 percent of

the total study area of 26.1 square miles and had, in 1990, a resident population of about 3,500 persons.<sup>1</sup> As previously noted, in 1990, approximately 3,200 persons, or about 91 percent of the 3,500 persons within the currently approved sewer service area, were provided sanitary sewer service from the Fontana-Walworth Water Pollution Control sewage treatment plant.

#### REFINED FONTANA-WALWORTH SANITARY SEWER SERVICE AREA

Factors taken into account in the delineation of the refined Fontana-Walworth sanitary sewer service area included the year 2010 adopted and alternative futures regional land use plans as prepared by the Regional Planning Commission and the suggestions made by representatives of the Villages of Fontana and Walworth and the Town of Linn Sanitary District.

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.

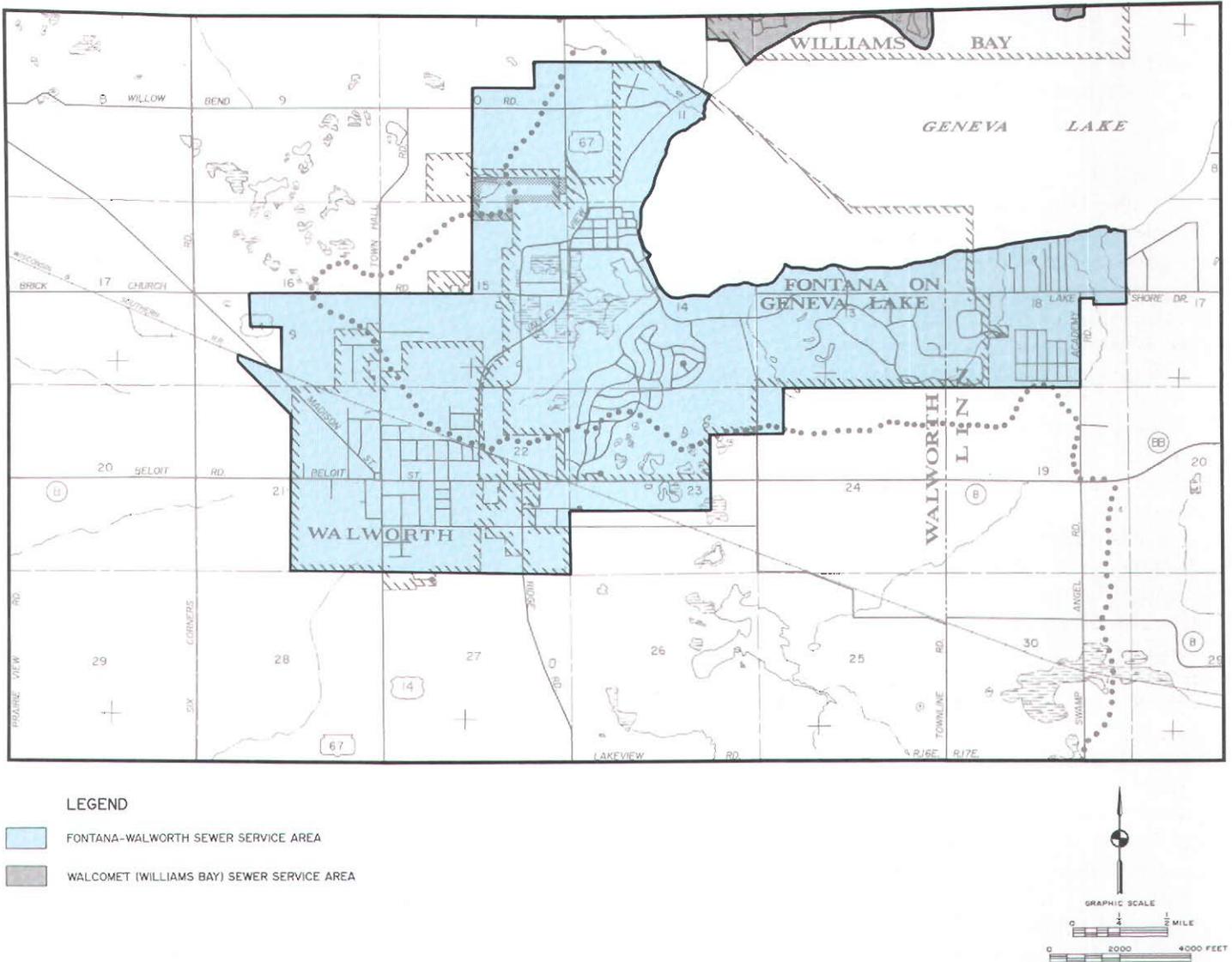
As previously noted, the Commission, as part of its regional planning program, including the delineation of sanitary sewer service areas and the subsequent refinements thereof, utilizes the "alternative futures" concept to deal with the uncertainties regarding factors affecting future growth and development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

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<sup>1</sup>This does not include a seasonal population of about 3,600 persons.

Map 4

FONTANA-WALWORTH SANITARY SEWER SERVICE AREA AS IDENTIFIED IN SEWRPC PLANNING REPORT NO. 30, AS AMENDED



Source: SEWRPC.

growth centralized land use plan and the most reasonable upper end of the population range based on the Commission's high-growth decentralized 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 reasonable range of possible future conditions. Construction of certain facilities and mechanical and electrical

components, such as pumps, compressors, and chemical-feed equipment, of sewage treatment facilities, are typically based on 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 is often limited to those relatively certain to be needed over a 15- to 20-year design period. The use of the intermediate population forecast, thus, may be most appropriate for use in the design of such facilities.

Consideration of a high-growth population forecast, however, may be appropriate in delineating a service area and in the design of certain components of the sewerage system that have a longer life, including gravity-flow conveyance facilities and such treatment plant components as hydraulic conduits and tanks. With respect to the size of the service area, the high-growth population forecast may be the most logical to use since the Commission forecasting methodology analyses indicate that such a level is indeed potentially achievable within the Southeastern Wisconsin Region. A sanitary sewer service area size based on 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 on 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 resident population levels within the combined Fontana-Walworth sanitary sewer service area tributary to the Fontana Walworth Water Pollution Control Commission sewage treatment plant would, under the Commission's high-growth decentralized land use plan, approximate about 7,700 persons by the plan year 2010. Under the Commission's adopted land use plan however, population levels would approximate about 4,900 persons. On the basis of the suggestions made by representatives of the Villages of Fontana and Walworth and the Town of Linn Sanitary District at the interagency meetings held to consider the delineation of the refined sanitary sewer service area and the planned land uses envisioned to occur within this area, it was determined that the combined Fontana-Walworth sanitary sewer service area should be delineated to accommodate a design year 2010 resident population of about 6,700 persons, with about 2,500 persons, or about 37 percent, envisioned to reside in the Fontana portion; about 3,800 persons, or about 57 percent, envisioned to reside in the Walworth portion; and about 400 persons, or about 6 percent, envisioned to reside in the Linn portion of the combined Fontana-Walworth sewer service area (see Table 3). This population level lies within the range of population levels for this area envisioned in the regional land use plan.

**Table 3**

**SANITARY SEWER SERVICE  
AREA INFORMATION FOR THE FONTANA-  
WALWORTH WATER POLLUTION CONTROL  
COMMISSION SEWAGE TREATMENT PLANT**

Combined Sanitary Sewer Service Area	Square Miles	1990 Population		2010 Population	
		Existing	Percent	Planned	Areal Extent
Fontana .....	4.7	1,600 <sup>a</sup>	43.3	2,500 <sup>b</sup>	37.3
Walworth .....	2.2	1,800	48.6	3,800	56.7
Linn .....	0.7	300 <sup>c</sup>	8.1	400 <sup>d</sup>	6.0
<b>Total</b>	<b>7.6</b>	<b>3,700</b>	<b>100.0</b>	<b>6,700</b>	<b>100.0</b>

<sup>a</sup> Does not include a seasonal population of about 3,200 persons within the Fontana portion of the combined Fontana-Walworth sewer service area.

<sup>b</sup> Does not include a planned seasonal population of about 4,000 persons within the Fontana portion of the combined Fontana-Walworth sewer service area.

<sup>c</sup> Does not include a seasonal population of about 400 persons within the Linn portion of the combined Fontana-Walworth sewer service area.

<sup>d</sup> Does not include a planned seasonal population of about 500 persons within the Linn portion of the combined Fontana-Walworth sewer service area.

Source: U. S. Bureau of the Census and SEWRPC.

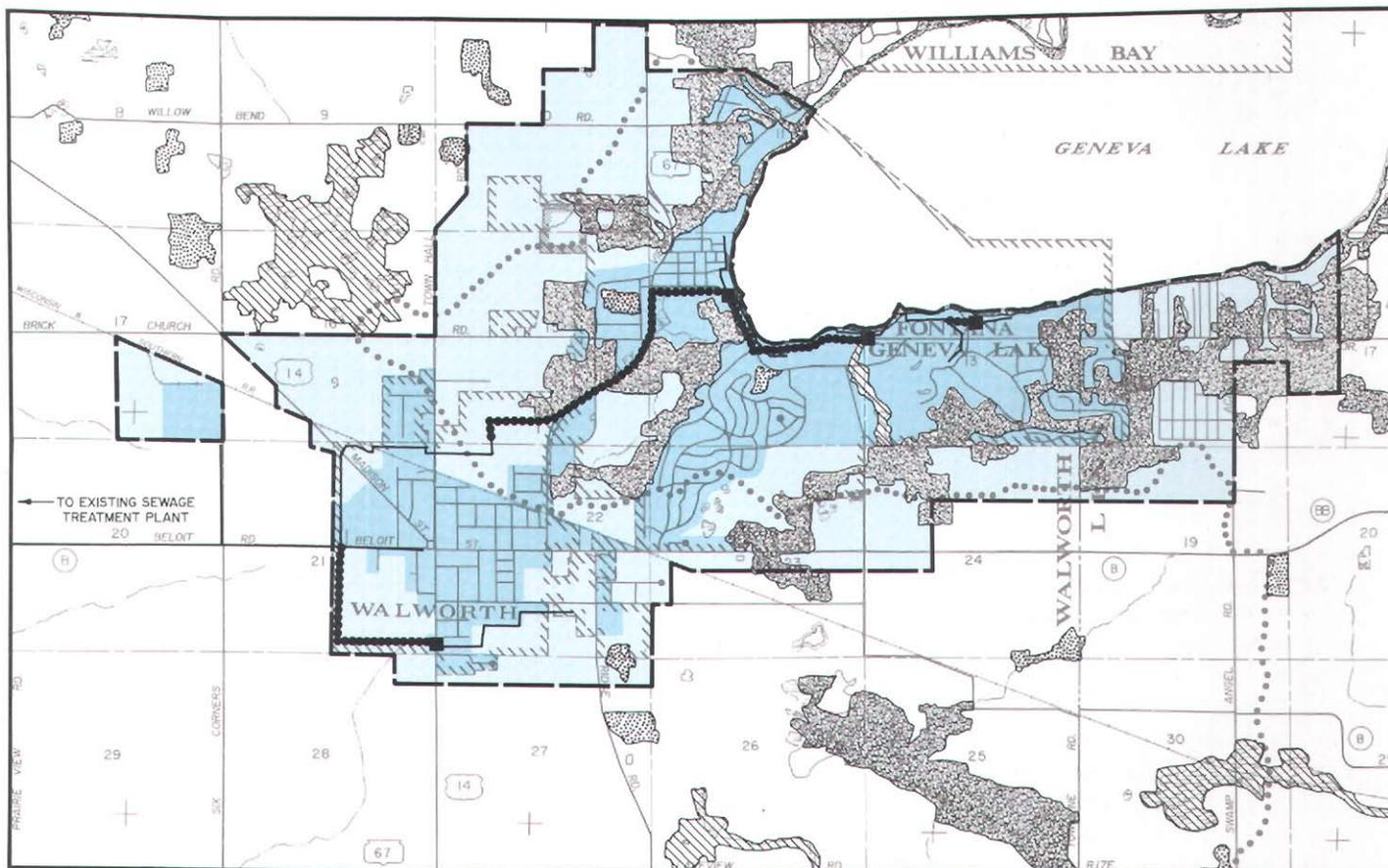
The refined year 2010 sanitary sewer service area anticipated to be tributary to the Fontana-Walworth Water Pollution Control Commission sewage treatment plant, as submitted to public hearing, together with existing trunk sewers, is shown on Map 5.

As further indicated in Table 3, the combined Fontana-Walworth sanitary sewer service area encompasses about 7.6 square miles, or about 29 percent of the total study area of 26.1 square miles. This gross sewer service area includes 1.5 square miles of primary environmental corridors and less than 0.1 square mile of secondary environmental corridors and isolated natural resource areas. Therefore, a total of about 1.5 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.

The refined year 2010 sanitary sewer service area tributary to the Fontana-Walworth Water Pollution Control Commission sewage treatment plant, as already noted, would accommodate a year 2010 resident population of about 6,700 persons, not including a planned seasonal population level of about 4,500 persons. The incremental population and housing unit levels envisioned in the combined Fontana-Walworth sanitary sewer service area would be accommodated at a density of about 3.2 dwelling units per net residential acre. This density lies within the recommended density range for the

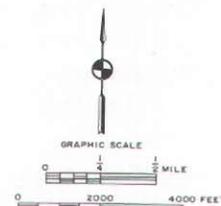
Map 5

PRE-PUBLIC HEARING FONTANA-WALWORTH SANITARY SEWER SERVICE AREA



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY
-  NET SANITARY SEWER SERVICE AREA (EXISTING)
-  NET SANITARY SEWER SERVICE AREA (2010)
-  EXISTING PUMPING STATION
-  EXISTING GRAVITY SEWER
-  EXISTING FORCE MAIN



Source: SEWRPC.

Fontana-Walworth area of the Region as identified in the Commission-adopted regional land use plan for the year 2010. Information concerning the methodology utilized in the determination of net incremental residential densities in the combined Fontana-Walworth sanitary sewer service area is set forth in Appendix B.

WATER QUALITY IMPACTS

Under the adopted regional water quality management plan and the refined sanitary sewer service

area plan herein set forth, it is envisioned that all urban lands located 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 properly be located in the primary environmental corridors, including park and outdoor recreation facilities, certain institutional uses, and, in some cases, extremely low-density residential development at a density not

to exceed one housing unit per five acres of upland corridor land, compatible with the preservation of the corridors in essentially natural, open uses. These plans also recognize that certain secondary environmental corridors and isolated natural resource areas may, at the discretion of a local unit of government, be converted to urban uses over the plan design period. However, it should be noted that current Federal, State, and local regulations may effectively preclude development of such areas. Of particular importance in this regard are natural resource protection regulations dealing with wetlands, floodplains, shorelands, stormwater runoff, and erosion control. Therefore, it is important that the developer or local unit of government concerned determine if it is necessary to obtain any applicable Federal, State, or local permits prior to any proposed disturbance or wetlands, floodplains, or other regulated lands.<sup>2</sup>

In addition, provision of public sewer service to those portions of the refined sanitary sewer service area currently developed, but not yet served by public sewers, will reduce the pollutant loadings from the onsite sewage disposal systems to both surface water and ground water.

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

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

The planned combined Fontana-Walworth sanitary sewer service area set forth in this report is about 1.8 square miles larger than the currently approved

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<sup>2</sup> *It should be noted that the sanitary sewer service area map set forth herein, particularly the environmental corridors and isolated natural resource areas shown thereon, are a representation of conditions at the time of map preparation; 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 the developer and applicable permits obtained prior to any land disturbing activity.*

sewer service area, as set forth in the regional water quality management plan. All of the planned sewer service area lies adjacent to the current sewer service area of the Fontana-Walworth Water Pollution Control Commission sewage treatment plant. The nearest other public sanitary sewer system, the Walworth County Metropolitan Sewerage District (WALCOMET) system, is located about one mile away. While the outer limits of the WALCOMET sewerage district sewer service area are located relatively close to the outer limits of the Fontana-Walworth service area, the nearest connection point in the WALCOMET system with significant conveyance capacity is located about seven miles from the Fontana-Walworth Water Pollution Control Commission sewage treatment plant. In addition, the sewer service area set forth herein is consistent with the long-term sewer service area envisioned for the Walworth County Metropolitan Sewerage District. Furthermore, the type of development envisioned in the Fontana-Walworth sewer service area should be provided with public sewer services. Therefore, given the above, the most cost-effective means of providing public sewer service to the entire service area is through the Fontana-Walworth sewerage system and sewage treatment plant.

#### **SEWAGE TREATMENT PLANT CAPACITY IMPACT ANALYSIS**

The Fontana-Walworth Water Pollution Control Commission sewage treatment plant has a design capacity of 1.7 million gallons per day (mgd) on a maximum monthly basis and was used in the design of the sewage treatment facility to account for seasonal loadings. The current average annual flow rate is about 1.1 mgd, with a maximum monthly flow rate of about 1.4 mgd. This includes wastewater flows from the Kikkoman Foods, Inc., processing plant, located about two miles northeast of the sewage treatment plant, as well as sewage flows generated in the Villages of Fontana and Walworth. The planned increase in sewered population from about 3,200 year-round residents and about 3,200 seasonal residents in 1990, to about 6,700 year-round residents and about 4,500 seasonal residents by the design year 2010, is estimated to result in a flow rate of 1.8 mgd on an average annual basis, with a flow rate of 2.0 mgd on a maximum monthly basis. Thus, facility planning for a plant expansion will probably be needed during the planning period. In addition, prior to plant expansion, facility planning for upgrading of the plant to meet anticipated phosphorus removal requirements is expected to be needed.

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

A public hearing was held on May 30, 1995, for the purpose of receiving comments on the proposed Fontana-Walworth sanitary sewer service area plan as shown on Map 5. The hearing was sponsored jointly by the Fontana-Walworth Water Pollution Control Commission (FWWPCC) and the Regional Planning Commission. Summary minutes of the public hearing are presented in Appendix A.

A brief summary of the findings and recommendations of the sewer service area refinement effort was presented prior to receiving public comment. The rationale for refining and detailing the Fontana-Walworth sanitary sewer service area was presented and the importance of the delineation of the outer boundaries of the sewer service area was described, as was the importance of the delineation of the environmentally sensitive lands within the service area. Comments on the report and accompanying maps were then solicited.

A review of the hearing record indicates that one substantive issue was raised regarding the delineation of the external boundaries of the sanitary sewer service area. That issue, expressed by a representative of the Town of Linn Sanitary District, related to the possible deletion from the preliminarily refined sewer service area of an approximately 113-acre area located immediately east of the currently adopted sewer service area boundary, north and south of South Lake Shore Drive, in the northwest and southwest one-quarters of U. S. Public Land Survey Section 17, and the southeast one-quarter of U. S. Public Land Survey Section 18, Township 1 North, Range 17 East, Town of Linn, Walworth County. It was noted that at a Town of Linn Sanitary District meeting held on July 27, 1994, to discuss the proposed Fontana-Walworth sanitary sewer service area, the Commissioner's of the Town of Linn Sanitary District determined that the sanitary sewer service area should be adjusted to approximate more closely the currently adopted sewer service area. There was no objection expressed to this change by any of those in attendance at the public hearing. The suggested revision to the preliminarily refined sewer service area boundary is shown on Map 6.

Detailed delineations of the refined Fontana-Walworth sanitary sewer service area and of the environmentally significant lands within this area are shown on a series of aerial photographs repro-

duced as Map 7, beginning on page 18 and age continuing through page 30 of this report.

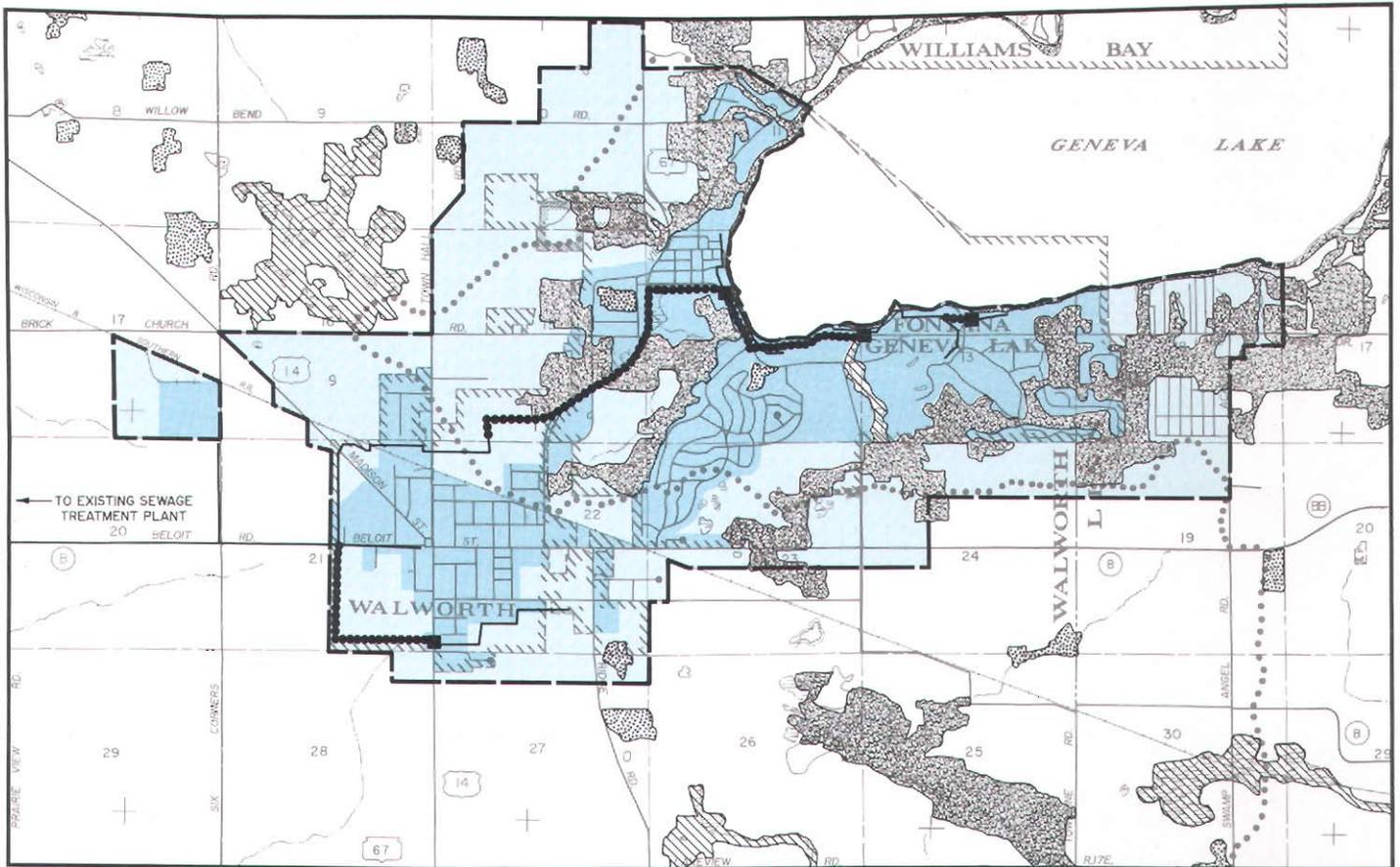
## **IMPLEMENTING RECOMMENDATIONS**

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

1. Formal adoption or endorsement of SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, and this SEWRPC Community Assistance Planning Report by the Fontana-Walworth Water Pollution Control Commission as the operator of the sewage treatment facility; by the Village Boards of the Village's of Fontana and Walworth and by the Town Boards of the Towns of Linn and Walworth as having lands affected by the planned sanitary sewer service area; by the Walworth County Park and Planning Commission as the county planning agency having joint responsibility with the Towns in planning and zoning and otherwise regulating the development of lands in the study area outside the incorporated area; and by the Commissioners of the Town of Linn Sanitary District.
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 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 Fontana-Walworth sanitary sewer service area as shown on Maps 6 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 Village's of Fontana and Walworth, the Town of Linn Sanitary District, and

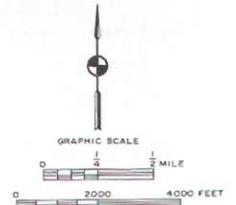
Map 6

POST-PUBLIC HEARING FONTANA-WALWORTH SANITARY SEWER SERVICE AREA



LEGEND

-  PRIMARY ENVIRONMENTAL CORRIDOR
-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA
-  GROSS SANITARY SEWER SERVICE AREA BOUNDARY
-  NET SANITARY SEWER SERVICE AREA (EXISTING)
-  NET SANITARY SEWER SERVICE AREA (2010)
-  EXISTING PUMPING STATION
-  EXISTING GRAVITY SEWER
-  EXISTING FORCE MAIN



Source: SEWRPC.

Walworth County, of utility extension policies to ensure that such policies are consistent with the urban land development recommendations inherent in the delineation of the planned sanitary sewer service area.

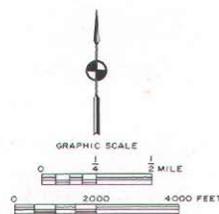
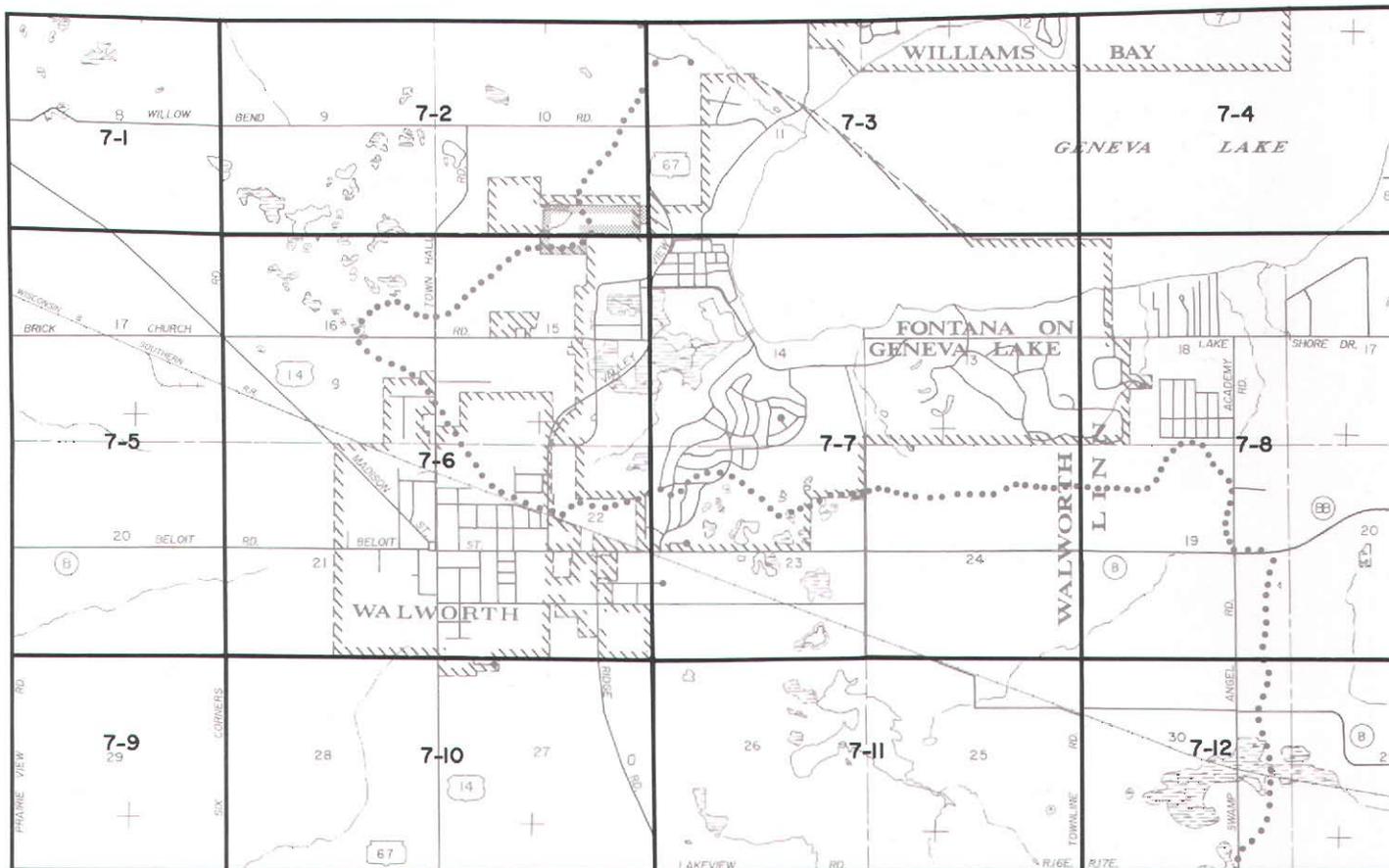
SUBSEQUENT REFINEMENTS TO THE FONTANA-WALWORTH SEWER SERVICE AREA

This report presents the refined combined Fontana-Walworth sanitary sewer service area. 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 Fontana-Walworth area to the year 2010. Like other long-range plans, however, this sewer service area plan should be periodically reviewed, every five years, to assure that it continues to reflect properly the urban development objectives of the communities involved, especially as such objectives may relate to the amount and spatial distribution of new urban development requiring sewer service. Should it be determined by the Fontana-Walworth Water Pollution Control Commission, as the operator of the sewage treat-

Map 7

INDEX OF MAPS SHOWING ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF FONTANA AND WALWORTH AND ENVIRONS



Source: SEWRPC.

ment facility involved, or by the communities involved, that amendments to the sewer service area plan as presented herein are necessary, the particular unit of government should ask the Southeastern Wisconsin Regional Planning Commission for assistance in undertaking the technical work required to amend the plan properly. Any such plan revision should be carried out in a manner similar to that utilized in the refinement effort described in this report. While plan amendment may be expedited because study area base maps have been prepared and certain inventories completed as part of the sewer service area planning documented

herein, such amendment should be subject to the same analyses and interagency review and should include a public hearing to obtain the comments and suggestions of those citizens and landowners most affected by the proposed changes to the sewer service area boundary. Upon agreement on a revised sewer service area, the new plan map should be endorsed by the governing bodies of the appropriate local units of government 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 7-1

ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE  
VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Section 8  
Township 1 North, Range 16 East



LEGEND

 ISOLATED NATURAL RESOURCE AREA



Source: SEWRPC.

Map 7-2

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Sections 9 and 10  
Township 1 North, Range 16 East



LEGEND

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

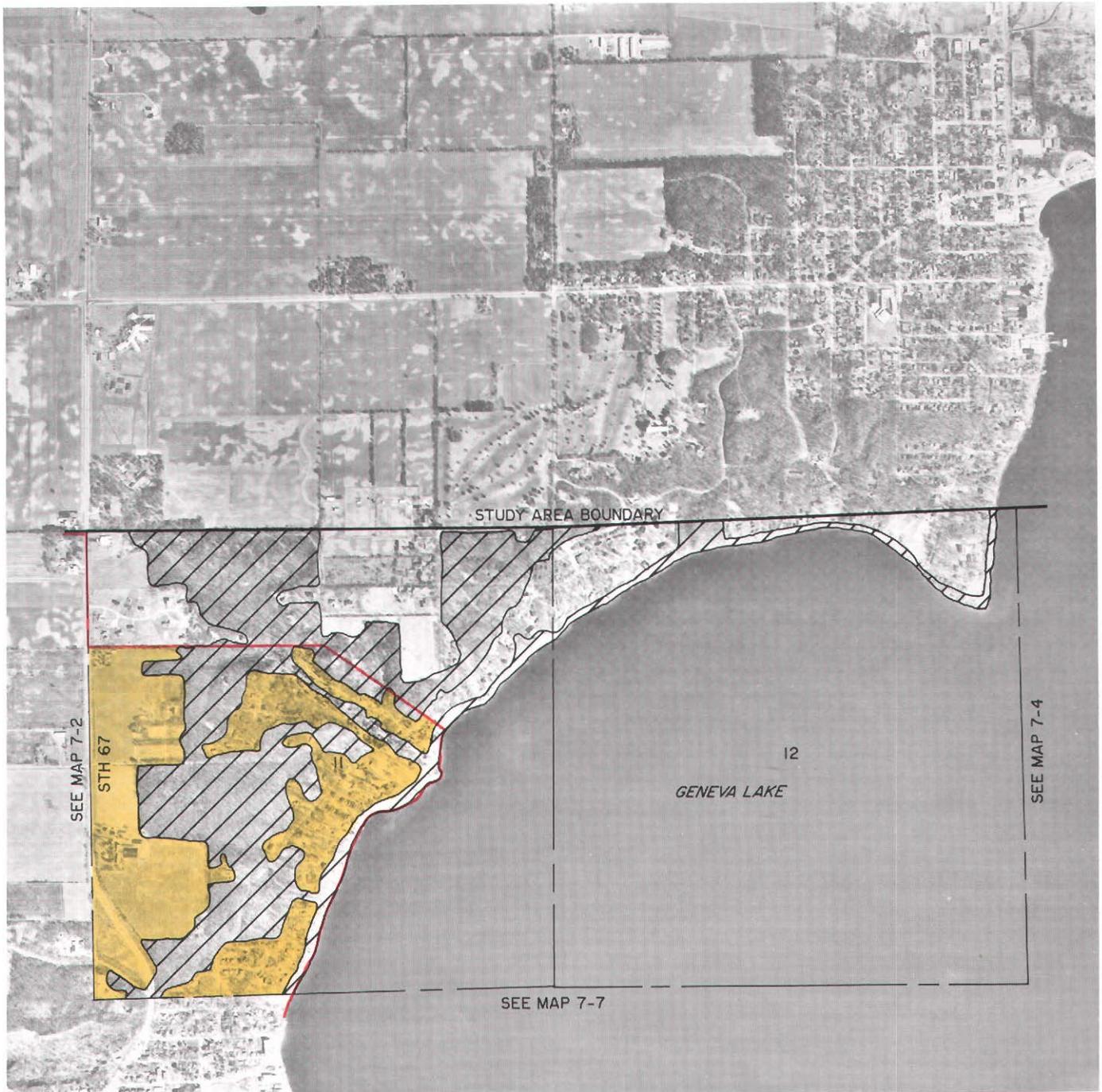


Source: SEWRPC.

Map 7-3

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Sections 11 and 12  
Township 1 North, Range 16 East



LEGEND

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

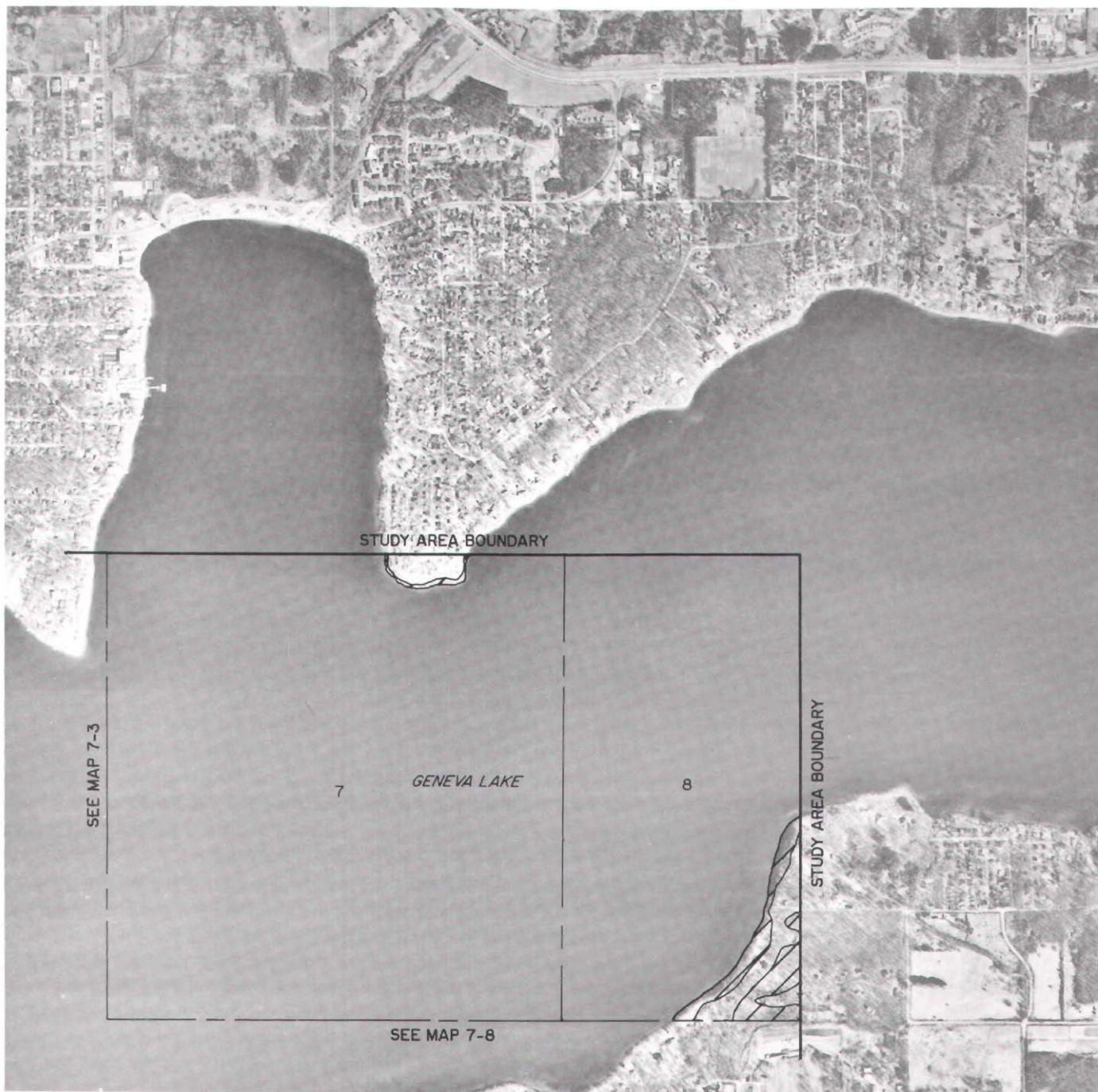


Source: SEWRPC.

Map 7-4

ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE  
VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Section 7 and the West One-Half of Section 8  
Township 1 North, Range 17 East



LEGEND

 PRIMARY ENVIRONMENTAL CORRIDOR



Source: SEWRPC.

Map 7-5

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Sections 17 and 20  
Township 1 North, Range 16 East



LEGEND

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

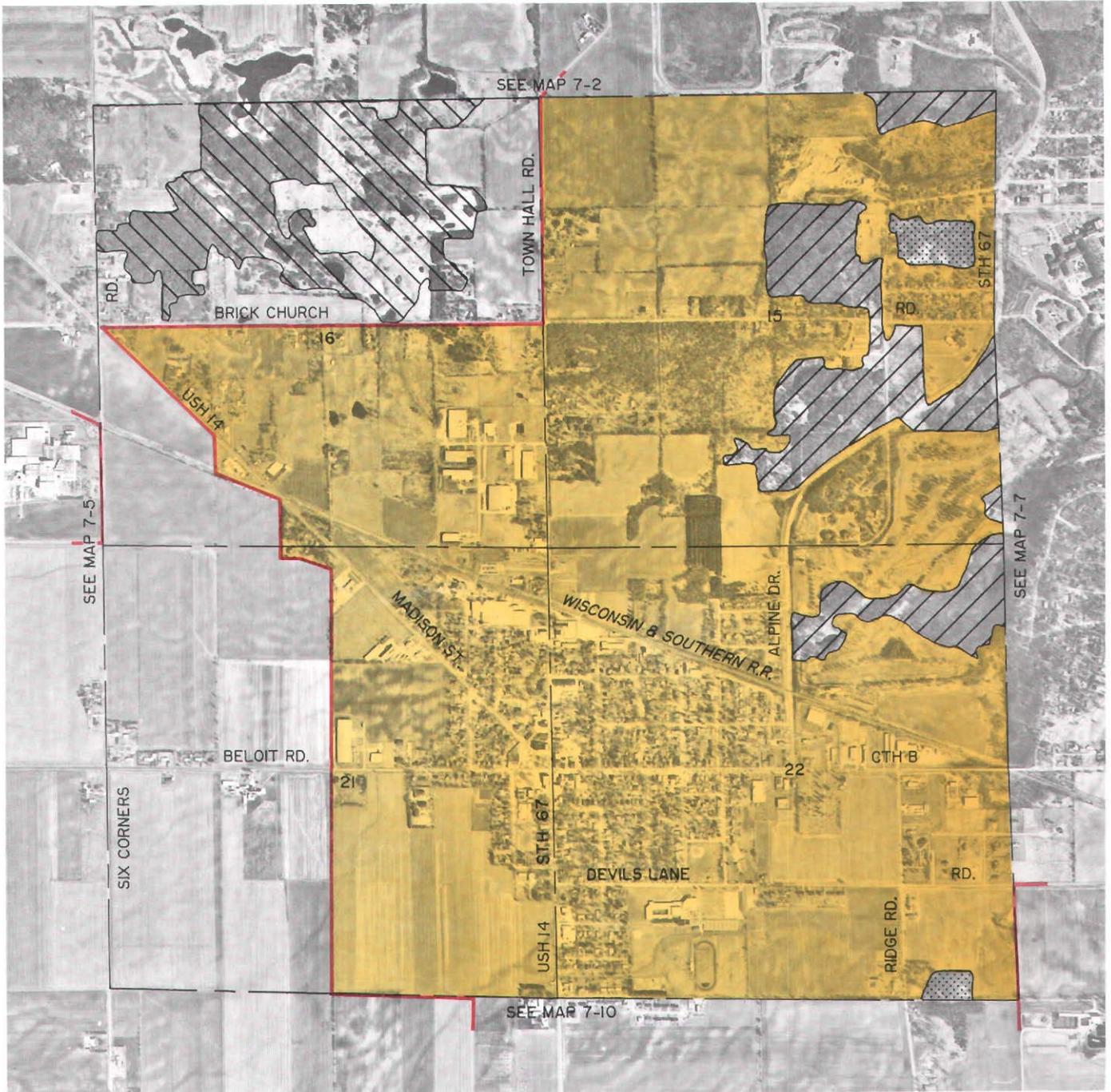


Source: SEWRPC.

Map 7-6

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

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



LEGEND

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

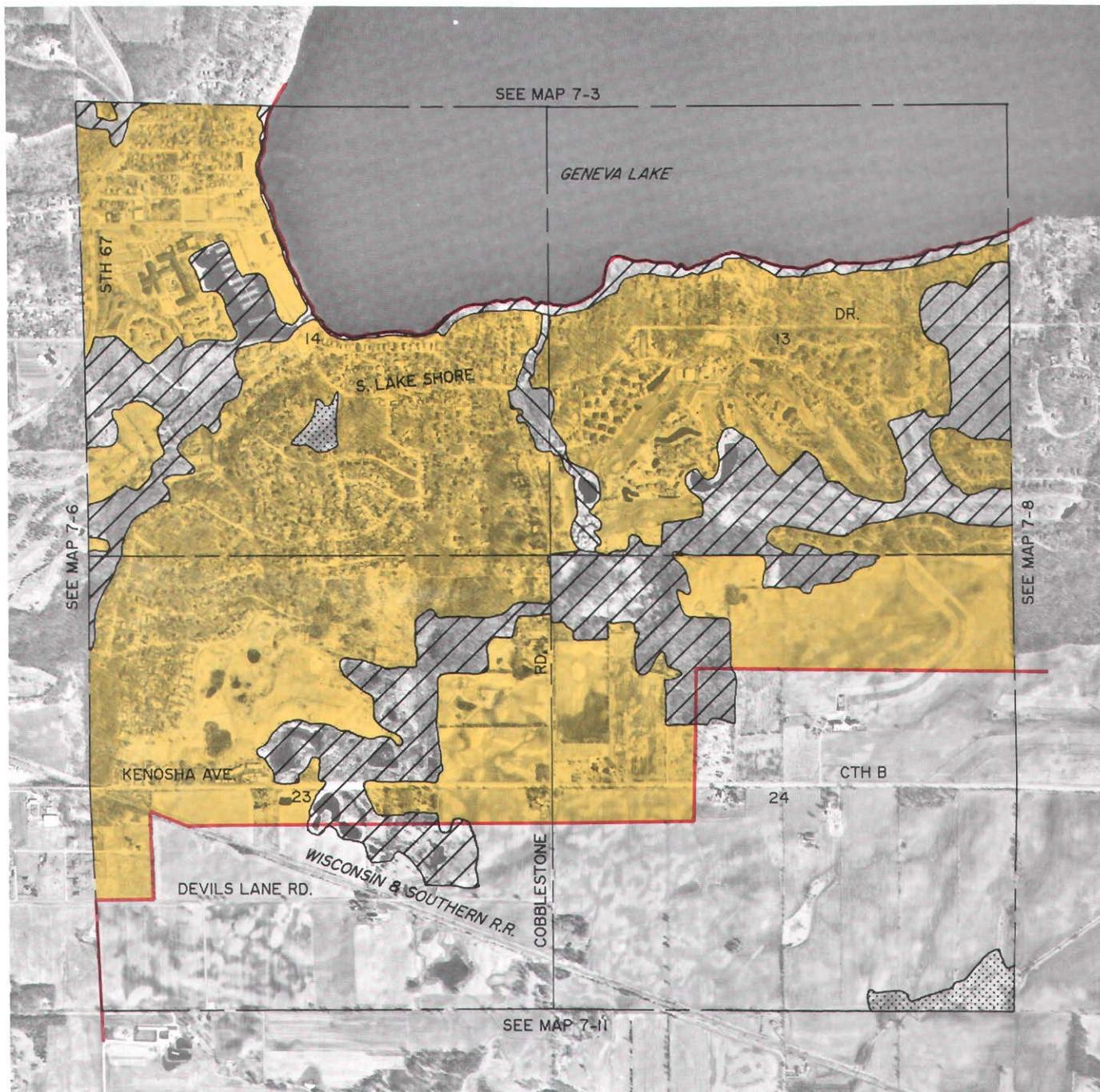


Source: SEWRPC.

Map 7-7

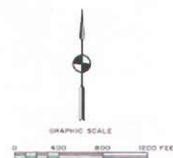
ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Sections 13, 14, 23, and 24  
Township 1 North, Range 16 East



LEGEND

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

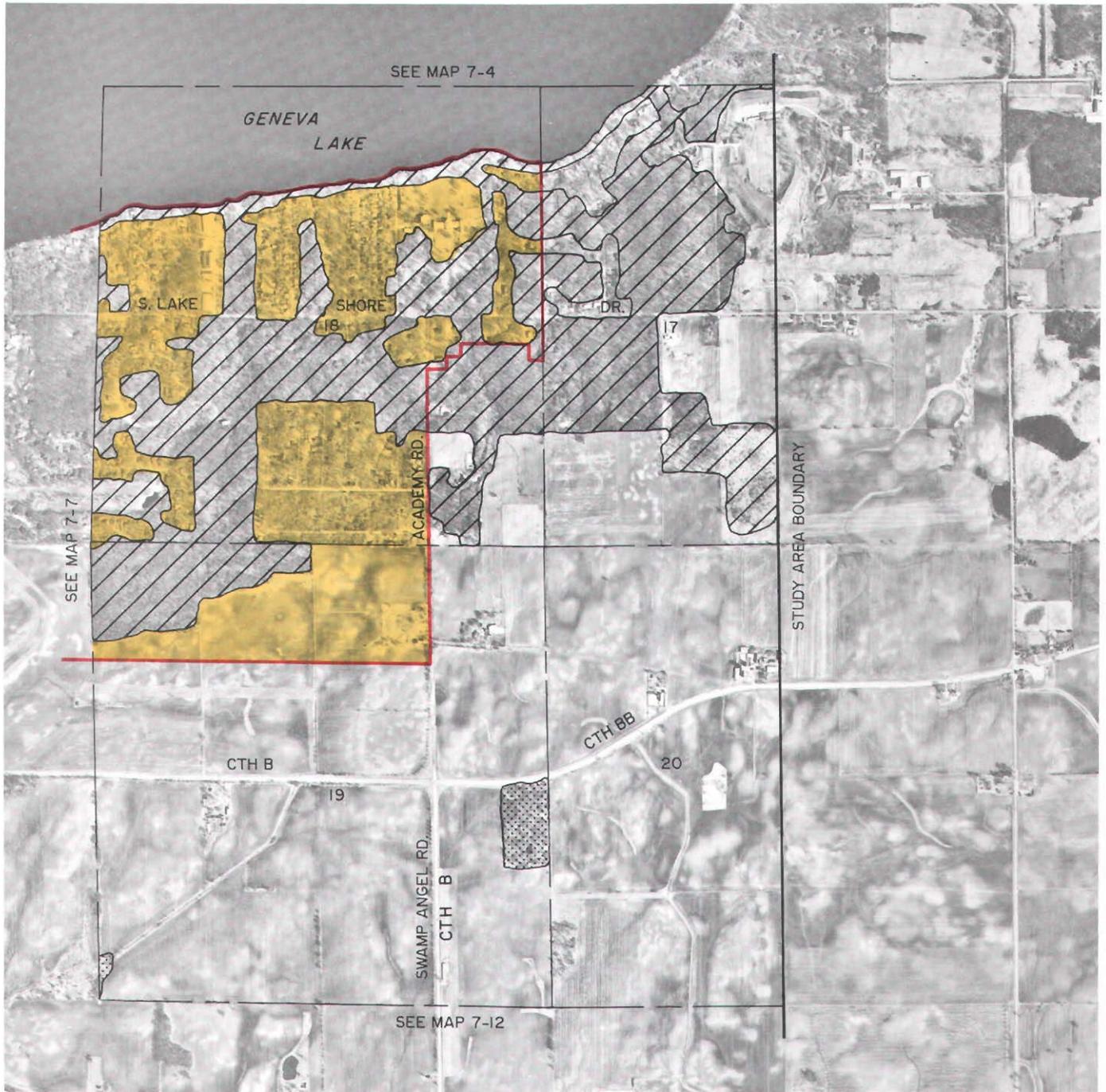


Source: SEWRPC.

Map 7-8

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Sections 18 and 19, the West One-Half of Section 17, and the West One-Half of Section 20, Township 1 North, Range 17 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 FOR THE  
VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Section 29  
Township 1 North, Range 16 East



NOTE: There are no environmentally significant lands in Section 29,  
Township 1 North, Range 16 East



Source: SEWRPC.

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Sections 27 and 28  
Township 1 North, Range 16 East



LEGEND

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



Source: SEWRPC.

Map 7-11

ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Sections 25 and 26  
Township 1 North, Range 16 East



LEGEND

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

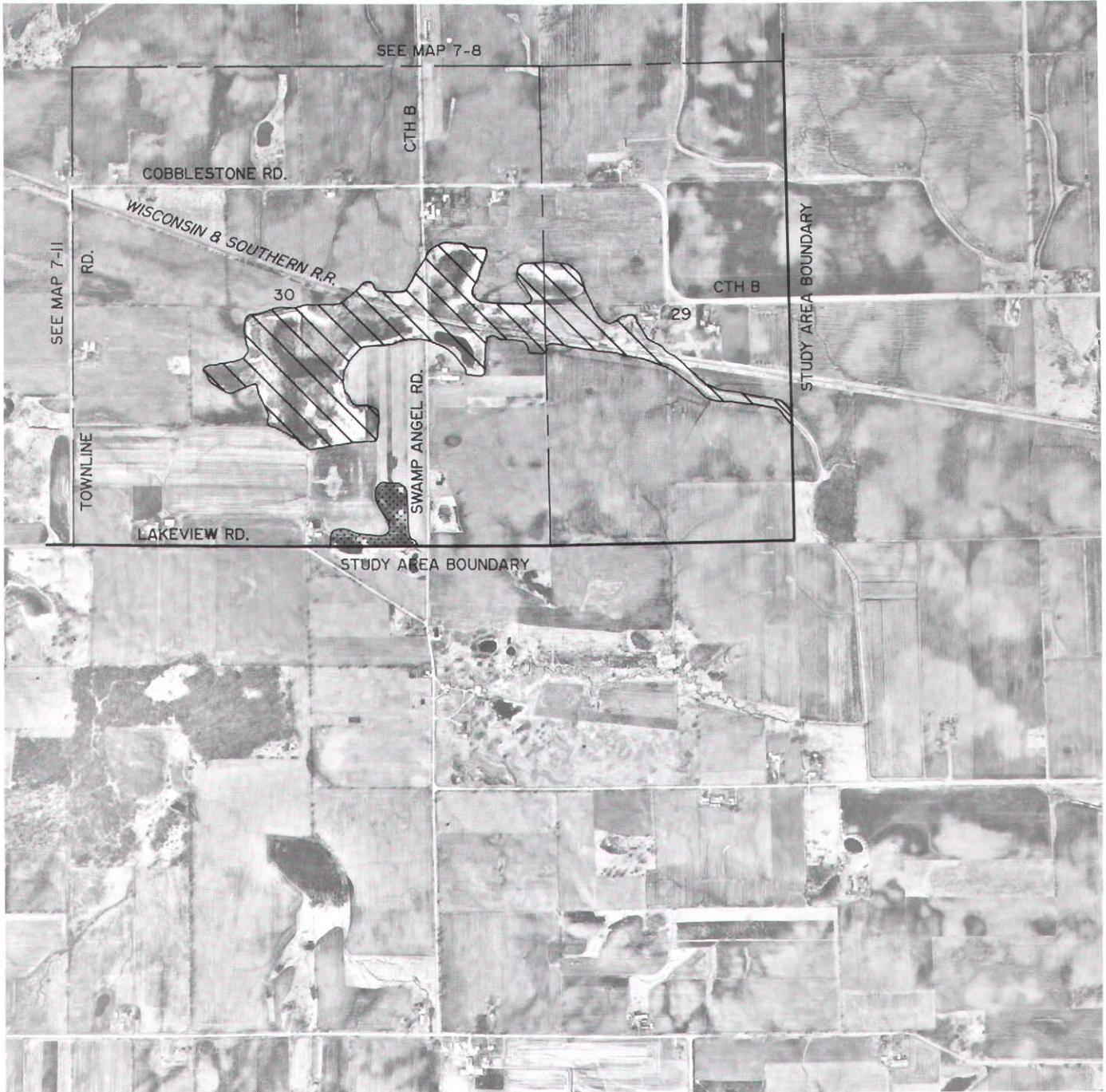


Source: SEWRPC.

Map 7-12

ENVIRONMENTALLY SIGNIFICANT LANDS FOR THE VILLAGES OF FONTANA AND WALWORTH AND ENVIRONS

U. S. Public Land Survey Section 30 and the West One-Half of Section 29  
Township 1 North, Range 17 East



LEGEND

-  SECONDARY ENVIRONMENTAL CORRIDOR
-  ISOLATED NATURAL RESOURCE AREA



Source: SEWRPC.

## **APPENDICES**

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## Appendix A

### MINUTES OF PUBLIC HEARING

#### Sanitary Sewer Service Area for the Village of Fontana and Walworth and Environs

May 30, 1995

#### FONTANA/WALWORTH WATER POLLUTION CONTROL COMMISSION

1. Call to order. Vice President Rasmussen called the meeting to order at 7:07 P.M.
2. Roll call: PRESENT: Tim Gorman, Ross Harmon, Jim Johnson, Jim Long, Mel Nordmeyer, David Rasmussen, and Ray Voss.  
Quorum.  
ABSENT: Don Frankel and Bill Nelson.  
Also present: Commission Engineer Phil Budde, Commission Attorney Larry Steen, Plant Superintendent Dean Donner, Chief Land Use Planner from SEWRPC Bruce Rubin, Director Walworth County Planning, Zoning and Sanitation Department Frank Dobbs, President Town of Linn Sanitary District Ted Peters, and Village of Walworth Citizens Dolores Pophal and Carolyn Rambow.
3. Public Hearing on the Southeastern Wisconsin Regional Planning Commissions proposed year 2010 Fontana/Walworth Water Pollution Control Commission sanitary sewer service area plan.

Rasmussen opened the Public Hearing.

- (a) F/WWPCC introduction of Public Officials present. Rasmussen introduced everyone present.
- (b) Presentation by SEWRPC representative -- Briefing on SEWRPC Community Assistance Planning Report No. 219, Sanitary Sewer Service Area for the Fontana/Walworth Water Pollution Control Commission, Walworth County, Wisconsin.

Rubin presented the Preliminary Draft Community Assistance Planning Report No. 219.

In 1979, the Southeastern Wisconsin Regional Planning Commission adopted a water quality management plan. In part of the plan they identify urban service areas-lands that are attendant to the treatment plants in the seven (7) county region. The DNR adopted the plan. They use the urban service areas, identified in the plan, as a basis for their decisions concerning sewer extensions.

DNR requested that SEWRPC work with the communities and treatment plant operators to refine and detail the sewer service areas. Planning Report No. 219 is the refining and detailing of the Town of Linn and the Villages of Fontana and Walworth's sewer service areas.

3. (b) continued.

The plan identifies the service area and all environmentally significant lands in that area. The service area is a geographic area large enough to accommodate the anticipated residential, commercial and industrial growth in the communities. DNR requires the identification of all environmentally significant lands with the key emphasis on primary environmental corridors. These lands are not for development.

Rubin referred to Map 5 (on display). Map 5, Fontana-Walworth Sanitary Sewer Service Area, shows the existing sewer service area and the revised, refined sewer service area to the year 2010. The revised, refined area came about after working with the communities (Fontana, Walworth and Linn) involved. The existing area encompasses about 5.8 square miles. The revised, refined area encompasses about 7.4 square miles of which 1.5 square miles are primary environmental corridors. Based on the forecast of population of about 6,700, this will provide sufficient land to accommodate growth and development until 2010. The forecast doesn't include the seasonal population. The plan will help when planning for a treatment plant expansion.

Upon adoption by the Fontana/Walworth Water Pollution Control Commission (treatment plant operators) and the communities, SEWRPC will send the plan to DNR for their consideration.

(c) Visitors Heard

Discussion followed.

Lands not in the service area will not get sewered without amending the plan. Depending upon the magnitude of the change, SEWRPC will, upon request from the treatment plant operators, draft a new report or a minor ad hoc amendment. Both require a public hearing and approval by the treatment plant operator, the community(s) and DNR.

Rambow requested a sewer service area expansion to the West of Walworth. Rubin explained that DNR would not approve as the West is not reasonable and relative to Walworth's anticipated growth. When it is, the treatment plant operator can request an amendment to the area.

Pophal asked if the Commission was anticipating a plant expansion. She also questioned Walworth's purchased capacity numbers.

The Commission hasn't decided about a plant expansion. They are looking at costs and future customer (Fontana, Walworth and Kikkoman) needs. To comply with DNR regulations, they will add phosphorus removal equipment.

Donner said there is a discrepancy in the Planning Report. The average, annual design capacity of the treatment plant is 1.45 mgd, not 1.7 mgd. The 1.7 mgd is a 30 day maximum average. Rubin will correct the Report.

3. (c) continued.

Budde will meet with Pophal to go over Walworth's numbers.

Peters commented. In August of 1994, Linn requested a sewer service area revision from SEWRPC. They asked for a refinement of the boundary line along the southern boundary of the Academy Estates Subdivision. Linn asked to exclude a small parcel, of a larger parcel, of woods and to include one home located on Academy Road. Map 5 does not show the requested revision. Rubin will make the change.

The Map is missing pumping stations and force mains. Budde will take care of this.

SEWRPC will adjust the map to show Kikkoman Foods, Inc. as a Commission customer. Rubin will check with their engineer to make sure that the calculations include Kikkoman's loading to the plant.

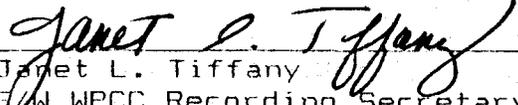
Rasmussen closed the Public Hearing.

4. Consideration and action on SEWRPC Planning Report No 219-Resolution No. 3-95.

Discussion followed. The Commission agreed to request approval of the Report from the Villages of Walworth and Fontana. SEWRPC should have the corrected Map to the Villages by their July Meetings.

A motion by Harmon approved amended Resolution No. 3-95. Johnson seconded. Motion carried. Signing will take place at the June 13, 1995, Regular Commission Meeting.

5. Adjournment. A motion by Nordmeyer adjourned the meeting at 8:07 P.M. Johnson seconded. Motion carried.

  
Janet L. Tiffany  
FW WPCO Recording Secretary  
June 5, 1995

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## Appendix B

### DETERMINATION OF NET INCREMENTAL RESIDENTIAL DENSITIES IN THE COMBINED FONTANA-WALWORTH SANITARY SEWER SERVICE AREA

Net incremental residential density in the refined combined Fontana-Walworth sewer service area is determined by dividing the total number of incremental dwelling units anticipated in the combined sewer service area in the design year by the net incremental residential land area anticipated within that area in that year. Prior to determining an overall net residential density of the combined sewer service area, incremental residential densities for each subarea, Fontana, Walworth and Linn, were determined.

#### Fontana

The total number of incremental dwelling units anticipated in the Fontana portion of the combined Fontana-Walworth sewer service area in the design year, 1,381 units, divided by the incremental net residential land within that area, 410 acres, results in a net incremental residential density of 3.4 dwelling units per acre.

#### Walworth

The total number of incremental dwelling units anticipated in the Walworth portion of the combined Fontana-Walworth sewer service area in the design year, 1,039 units, divided by the incremental net residential land within that area, 306 acres, results in a net incremental residential density of 3.4 dwelling units per acre.

#### Linn

The total number of incremental dwelling units anticipated in the Linn portion of the combined Fontana-Walworth sewer service area in the design year, 91 units, divided by the incremental net residential land within that area, 68 acres, results in a net incremental residential density of 1.3 dwelling units per acre.

The net incremental residential density for the refined combined Fontana-Walworth sewer service area, 3.2 dwelling units per acre, was determined by dividing the total number of incremental dwelling units in the combined sewer service area in the design year, 2,511 units, by the net incremental residential land area anticipated in the combined sewer service area in the design year, 784 acres.