

Rogers
S.A.S.



**AMENDMENT TO THE
REGIONAL WATER QUALITY
MANAGEMENT PLAN - 2000**

CITY OF DELAFIELD

**AS ADOPTED BY THE
SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION**

DECEMBER 1996

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REGIONAL PLANNING COMMISSION**

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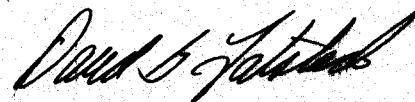
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SUBJECT: Certification of Amendment to the Adopted Regional Water Quality Management Plan (Delafield-Nashotah and Environs Sanitary Sewer Service Area)

TO: The Legislative Bodies of Concerned Local Units of Government within the Southeastern Wisconsin Region, namely: the County of Waukesha, the City of Delafield, the Village of Nashotah, the Towns of Delafield and Summit, and the Delafield-Hartland Water Pollution Control Commission

This is to certify that at the quarterly meeting of the Southeastern Wisconsin Regional Planning Commission, held at the Waukesha County Courthouse, Waukesha, Wisconsin, on the 4th day of December 1996, the Commission did by unanimous vote by all Commissioners present, being 19 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 Delafield-Nashotah and Environs sanitary sewer service area and consists of the documents attached hereto and made a part hereof. Such action taken by the Commission is recorded on, and is a part of, said plan, and the plan as amended is hereby transmitted to the constituent local units of government for consideration, adoption, and implementation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal and cause the Seal of the Southeastern Wisconsin Regional Planning Commission to be hereto affixed. Dated at the City of Waukesha, Wisconsin, this 4th day of December 1996.



David B. Falstad, Chairman
Southeastern Wisconsin
Regional Planning Commission

ATTEST:



Kurt W. Bauer, Deputy Secretary

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RESOLUTION NO. 96-17

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 (DELAFIELD-NASHOTAH SANITARY SEWER SERVICE AREA)

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

WHEREAS, at a meeting held on the 18th day of January 1993, the Commission duly adopted an amendment to the regional water quality management plan refining and detailing the Delafield-Nashotah sanitary sewer service area attendant to the Delafield-Hartland Water Pollution Control Commission sewage treatment plant as documented in SEWRPC Community Assistance Planning Report No. 127, Sanitary Sewer Service Area for the City of Delafield and the Village of Nashotah and Environs, Waukesha County, Wisconsin, dated November 1992; and

WHEREAS, by letter dated August 13, 1996, the City of Delafield requested that the Commission amend the Delafield-Nashotah sanitary sewer service area to include certain lands located adjacent to, but outside of, the currently adopted sewer service area envisioned for residential and institutional purposes; and

WHEREAS, the proposed amendment to the regional water quality management plan is documented in a Commission staff memorandum entitled, "Response to Request by the City of Delafield to Amend the Delafield-Nashotah Sanitary Sewer Service Area," dated November 4, 1996, attached hereto and made a part hereof, which memorandum concludes that the plan amendment requested by the City of Delafield is sound and in the public interest; and

WHEREAS, the requested change to the regional water quality management plan, as documented in the aforementioned staff memorandum, was the subject of a public hearing held jointly by the City of Delafield and the Regional Planning Commission on November 18, 1996; and

WHEREAS, the Common Council of the City of Delafield on November 18, 1996, after considering the comments made at the public hearing, approved the amendment to the regional water quality management plan as set forth in the aforementioned Commission staff memorandum; and

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

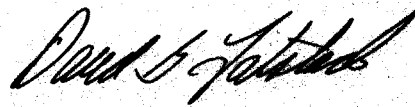
NOW, THEREFORE, BE IT HEREBY RESOLVED:

FIRST: That the regional water quality management plan for the Southeastern Wisconsin Region, being a part of the master plan for the physical development of the Region and comprised of SEWRPC Planning Report No. 30, Volumes One, Two, and Three, which was adopted by the Commission as a part of the master plan on the 12th day of July 1979, and which was amended on the 18th day of January 1993 to include the initial refined Delafield-Nashotah sanitary sewer service area, as set forth in SEWRPC Community Assistance Planning Report No. 127, be, and the same hereby is, amended in the manner identified on Map 1 of the aforementioned SEWRPC Staff Memorandum.

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

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

The foregoing resolution, upon motion duly made and seconded, was regularly adopted at the meeting of the Southeastern Wisconsin Regional Planning Commission held on the 4th day of December 1996, the vote being: Ayes 19; Nays 0.



David B. Falstad, Chairman

ATTEST:



Kurt W. Bauer, Deputy Secretary

SEWRPC STAFF MEMORANDUM

RESPONSE TO REQUEST BY THE CITY OF DELAFIELD TO AMEND THE DELAFIELD-NASHOTAH SANITARY SEWER SERVICE AREA

INTRODUCTION

By letter dated August 13, 1996, the City of Delafield requested that the Southeastern Wisconsin Regional Planning Commission amend the Delafield-Nashotah sanitary sewer service area as that area is currently documented in SEWRPC Community Assistance Planning Report No. 127, Sanitary Sewer Service Area for the City of Delafield and the Village of Nashotah and Environs, Waukesha County, Wisconsin, dated November 1992. The basic purpose of the amendment would be to include within the planned Delafield-Nashotah sewer service area certain lands located immediately adjacent to, but outside of, the currently adopted sewer service area to accommodate proposed residential and institutional land uses.

BACKGROUND

On July 12, 1979, the Southeastern Wisconsin Regional Planning Commission formally adopted an areawide water quality management plan for Southeastern Wisconsin, as documented in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings, September 1978; Volume Two, Alternative Plans, February 1979; and Volume Three, Recommended Plan, June 1979, to meet the planning requirements established by Section 208 of the Federal Clean Water Act and corresponding State legislation. At that time, a process was also established whereby local, as well as areawide, planning concerns would be properly reflected in any refinement and detailing effort initiated subsequent to the Commission's adoption of the regional water quality management plan in July 1979. In this regard, the City of Delafield requested that the Regional Planning Commission undertake the initial refinement and detailing of the Delafield-Nashotah sanitary sewer service area tributary to the Delafield-Hartland Water Pollution Control Commission sewage treatment facility. Subsequent to a series of intergovernmental meetings regarding this refinement and detailing process, a public hearing held on this matter and the completion of certain planning efforts by the City of Delafield, the Delafield-Nashotah sanitary sewer service area plan, as documented in SEWRPC Community Assistance Planning Report No. 127, Sanitary Sewer Service Area for the City of Delafield and the Village of Nashotah and Environs, Waukesha County, Wisconsin, dated November 1992, was adopted by the Common Council of the City of Delafield on November 16, 1992; by the Regional Planning Commission on January 18, 1993; and was endorsed by the Wisconsin Department of Natural Resources on April 29, 1993.

The Regional Planning Commission recognizes that, like other long-range plans, sanitary sewer service area plans should be periodically reviewed to assure that the plans continue to properly reflect regional and local development objectives. As previously noted, the City of Delafield, by letter dated August 13, 1996, did request the Regional Planning Commission to refine further the currently adopted Delafield-Nashotah sanitary sewer service area to include within the planned sewer service area lands located within the northwestern quadrant of the City not yet within the currently adopted sanitary sewer service area.

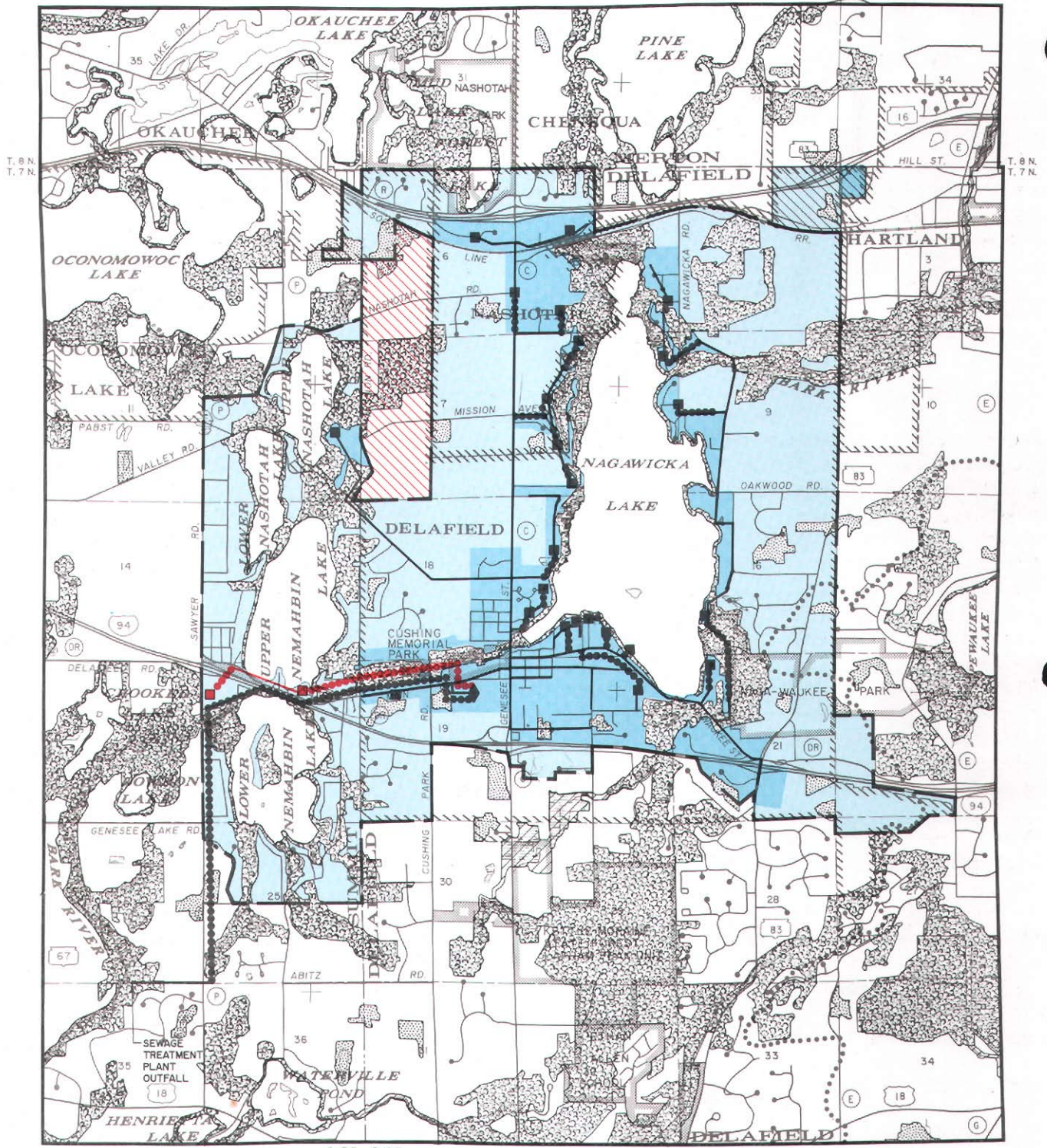
AREA DESCRIPTION

As shown on Map 1, the area proposed to be added to the Delafield-Nashotah sanitary sewer service area encompasses approximately 453 acres and is located in portions of U.S. Public Land Survey Sections 6 and 7, Township 7 North, Range 18 East, City of Delafield, Waukesha County, Wisconsin.

Currently, about 14 acres, or about 3 percent of the subject area, are devoted to residential land uses, including six housing units; about 19 acres, or about 4 percent of the subject area, are devoted to extractive land uses; about 94 acres, or about 21 percent of the subject area, are located within primary environmental corridor lands consisting of woodlands, steep slopes, and significant wildlife habitat, and a designated natural

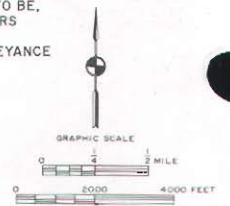
Map 1

RECOMMENDED REVISION TO THE DELAFIELD-NASHOTAH SANITARY SEWER SERVICE AREA



LEGEND

- | | | | | | |
|--|--|--|--|--|--|
| | PRIMARY ENVIRONMENTAL CORRIDOR | | GROSS SANITARY SEWER SERVICE AREA BOUNDARY | | PROPOSED FORCE MAIN |
| | SECONDARY ENVIRONMENTAL CORRIDOR | | EXISTING PUBLIC SEWAGE TREATMENT FACILITY | | LANDS IN THE CITY OF DELAFIELD WHICH ARE CURRENTLY, OR ARE PROPOSED TO BE, SERVED BY CITY OF DELAFIELD SEWERS WHICH CONNECT TO THE VILLAGE OF HARTLAND SEWER SYSTEM FOR CONVEYANCE TO THE DELAFIELD - HARTLAND SEWAGE TREATMENT FACILITY |
| | ISOLATED NATURAL RESOURCE AREA | | EXISTING PUMPING STATION | | LANDS PROPOSED TO BE ADDED TO THE DELAFIELD-NASHOTAH SANITARY SEWER SERVICE AREA |
| | NET SANITARY SEWER SERVICE AREA (EXISTING) | | EXISTING TRUNK SEWER | | |
| | NET SANITARY SEWER SERVICE AREA (2010) | | EXISTING FORCE MAIN | | |
| | | | PROPOSED PUMPING STATION | | |
| | | | PROPOSED TRUNK SEWER | | |



Source: SEWRPC.

area of local significance; and about 18 acres, or about 4 percent of the subject area, are located within an isolated natural resource area consisting of wetlands, woodlands, and significant wildlife habitat. The remaining 308 acres are devoted to agricultural and other open space uses.

It is anticipated that about 125 acres, or about 41 percent, of the 308 acres of vacant developable land within the area proposed to be added to the Delafield-Nashotah sewer service area would be developed for residential purposes, while the remaining 183 acres, or 59 percent, would be developed for institutional purposes, as set forth in the City of Delafield land use plan entitled, Comprehensive Plan, City of Delafield, Wisconsin, prepared by the consulting firm of Camiros, Ltd., and dated March 4, 1991

RELATIONSHIP OF THE PROPOSED CHANGE TO THE EXISTING SANITARY SEWER SERVICE AREA

The revised year 2010 Delafield-Nashotah sanitary sewer service area, incorporating the change noted above, would encompass about 14.5 square miles and would include 5.1 square miles of primary environmental corridor lands and about 0.3 square mile of isolated natural resource area lands. There are no secondary environmental corridor lands within the Delafield-Nashotah sewer service area. Thus, about 5.4 square miles, or about 37 percent of the sewer service area, would consist of primary environmental corridors and isolated natural resource area lands.

Furthermore, based upon the aforementioned City of Delafield land use plan, which includes the subject area, it is anticipated that the Delafield-Nashotah sanitary sewer service area would accommodate a year 2010 resident population level of about 11,600 persons. This population level lies within the range forecast under the Commission's intermediate-growth centralized land use plan and its high-growth decentralized land use plan of about 7,900 persons and about 12,600 persons respectively. In addition, the planned incremental residential density within the Delafield-Nashotah sewer service area, including the subject area, would approximate 1.1 dwelling units per net residential acre. This density lies within the recommended density range for the Delafield-Nashotah area of 0.7 to 2.2 dwelling units per net residential acre as identified in the Commission-adopted regional land use plan for the year 2010.

WATER QUALITY IMPACTS

Under the adopted regional water quality management plan and the revised sanitary sewer service area plan herein set forth, it is envisioned that all urban lands within the planned urban service area, including those planned urban lands located within the subject area, would ultimately receive sanitary sewer service. The area to be added to the Delafield-Nashotah sewer service area is proposed to be developed for residential and institutional uses. Assuming proper site development and construction practices, including appropriate construction soil erosion-control and permanent nonpoint source-control practices, and compatible development within the primary environmental corridors, or lands adjacent to such areas, there should be no significant adverse water quality impacts attributable to the development of the subject area.

COST-EFFECTIVENESS ANALYSIS

The lands in question lie immediately adjacent to, and are almost entirely surrounded by, the currently approved Delafield-Nashotah sanitary sewer service area. The nearest other public sanitary sewer system, the City of Oconomowoc system, is located approximately three miles west of the subject area. Consequently, no further analyses were deemed to be required to conclude that the subject area would be sewered most cost-effectively through the public sewers of the City of Delafield sewerage system tributary to the Delafield-Hartland Water Pollution Control Commission sewage treatment facility.

SEWAGE TREATMENT PLANT CAPACITY IMPACT ANALYSIS

The existing Delafield-Hartland Water Pollution Control Commission sewage treatment plant has a hydraulic design capacity of 2.2 million gallons per day (mgd) on an average annual flow basis. The average annual flow

rate in 1995 was about 1.7 mgd. The anticipated sewage flow to be generated in the area proposed to be added to the Delafield-Nashotah sewer service area may be expected to range from 0.1 to 0.2 mgd on an average annual basis upon full development, dependent upon the exact nature of the development which actually occurs within the lands envisioned for institutional uses.

It should also be noted that while the 1995 total resident population served by the Delafield-Hartland Water Pollution Control Commission sewage treatment plant was about 13,000 persons, the year 2010 resident population of the combined Delafield-Hartland sewer service area may be expected to range from about 18,100 persons under the Regional Planning Commission's adopted land use plan, to about 26,700 persons under the Regional Planning Commission's high-growth decentralized land use plan. These increases in population may be expected to result in an increase of sewage flows on an average annual flow basis of from about 1.7 mgd in 1995, to about 2.4 mgd under the adopted year 2010 land use plan, and to about 3.4 mgd under the year 2010 high-growth decentralized land use plan. Thus, it will probably be necessary to initiate facility planning for a plant expansion some time between the years 2000 and 2010, depending on the rate of development within these sewer service areas and on the timing of the possible connection of the Nashotah-Nemahbin Lakes area to the Dela-Hart sewerage system.

PUBLIC REACTION TO THE PLAN AMENDMENT

A public hearing was held on November 18, 1996, at the Delafield City Hall to receive public comment on, and reaction to, the proposed plan amendment. The hearing was sponsored jointly by the City of Delafield and the Regional Planning Commission.

A review of the hearing record indicates that no substantive concerns were raised at the hearing. Accordingly, no changes were made to the proposed plan amendment as presented at the public hearing as reflected on Map 1.

LOCAL GOVERNMENT SUPPORT FOR THE PLAN AMENDMENT

The proposed plan amendment was adopted by the City of Delafield on November 18, 1996, and adopted by the Delafield-Hartland Water Pollution Control Commission on December 17, 1996.

CONCLUDING RECOMMENDATION

On the basis of the foregoing, it is recommended that the Southeastern Wisconsin Regional Planning Commission formally amend the Delafield-Nashotah sanitary sewer service area as documented in the aforementioned SEWRPC Community Assistance Planning Report No. 127 in the manner identified on Map 1.