AMENDMENT TO THE

REGIONAL WATER QUALITY MANAGEMENT PLAN

CADDY VISTA SANITARY DISTRICT

AS ADOPTED BY THE

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

JUNE 2005

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SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607 •

TELEPHONE (262) 547-6721 (262) 547-1103

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SUBJECT: Certification of Amendment to the Adopted Regional Water Quality

Management Plan (Caddy Vista Sewer Service Area)

TO: The Legislative Bodies of Concerned Local Units of Government within the

> Southeastern Wisconsin Region, namely: the County of Racine, the Town of Caledonia, the Caddy Vista Sanitary District, and the Milwaukee Metropolitan

Sewerage District

This is to certify that at the meeting of the Southeastern Wisconsin Regional Planning Commission, held at the Washington County Fair Park Pavilion, Jackson, Wisconsin, on the 15th day of June 2005, the Commission did by unanimous vote of all Commissioners present, being 16 ayes and 0 nays, and by appropriate Resolution, a copy of which is made a part hereof and incorporated by reference to the same force and effect as if it had been specifically set forth herein in detail, adopt an amendment to the regional water quality management plan, which plan was originally adopted by the Commission on the 12th day of July 1979, as part of the master plan for the physical development of the Region. Said amendment to the regional water quality management plan pertains to the revised Caddy Vista 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 Pewaukee, Wisconsin, this 16th day of June 2005.

> Thomas H. Buestrin, Chairman Southeastern Wisconsin

> **Regional Planning Commission**

ATTEST:

Philip C. Evenson, Deputy Secretary

Rhilip C- Evenson

RESOLUTION NO. 2005-10

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 CONSISTING OF THE COUNTIES OF KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH, WASHINGTON, AND WAUKESHA IN THE STATE OF WISCONSIN (CADDY VISTA SANITARY SEWER SERVICE AREA)

WHEREAS, pursuant to Section 66.0309(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 June 2003, the Commission duly adopted an amendment to the regional water quality management plan refining and detailing the Caddy Vista sanitary sewer service area as documented in SEWRPC Community Assistance Planning Report No. 147 (2nd Edition), *Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin*, June 2003; and

WHEREAS, by letter dated April 28, 2005, the Caddy Vista Sanitary District requested that the Commission amend the Caddy Vista sanitary sewer service area to remove certain lands from the currently adopted sewer service area, and to add certain lands located outside of the currently adopted sewer service area; 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 Caddy Vista Sanitary District to Amend the Caddy Vista Sanitary Sewer Service Area," attached hereto and made a part hereof; 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 Caddy Vista Sanitary District and the Regional Planning Commission on May 25, 2005; and

WHEREAS, Section 66.0309(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:

<u>FIRST</u>: 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 June 2003 to include the refined Caddy Vista sewer service area, as set forth in SEWRPC Community Assistance Planning Report No. 147 (2nd Edition), be and the same hereby is amended in the manner identified on Map 1 of the aforementioned SEWRPC staff memorandum.

<u>SECOND</u>: That the Executive Director is authorized to submit findings to the Wisconsin Department of Natural Resources and the Wisconsin Department of Commerce 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.

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

The foregoing resolution, upon motion duly made and seconded, was regularly adopted at the meeting of the Southeastern Wisconsin Regional Planning Commission held on the 15th day of June 2005, the vote being: Ayes 16; Nays 0.

Thomas H. Buestrin, Chairman

ATTEST:

Philip C. Evenson, Deputy Secretary

SEWRPC STAFF MEMORANDUM

RESPONSE TO REQUEST BY THE CADDY VISTA SANITARY DISTRICT TO AMEND THE CADDY VISTA SANITARY SEWER SERVICE AREA

INTRODUCTION AND BACKGROUND

By letter dated April 28, 2005, the Caddy Vista Sanitary District requested that the Southeastern Wisconsin Regional Planning Commission amend the Caddy Vista sanitary sewer service area tributary to the Milwaukee Metropolitan Sewerage District (MMSD) South Shore sewage treatment facility. The Caddy Vista sewer service area is currently documented in SEWRPC Community Assistance Planning Report No. 147 (2nd Edition), Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin, dated June 2003. The basic purpose of this amendment would be to include within the Caddy Vista sewer service area certain lands located immediately adjacent to, but outside of, the currently adopted sewer service area, and also to remove certain lands from that sewer service area.

AREA DESCRIPTION

The area proposed to be added to the Caddy Vista sanitary sewer service area is shown on Map 1. This area encompasses a total of 180 acres of land located in U.S. Public Land Survey Sections 3 and 4, Township 4 North, Range 22 East, in the Town of Caledonia. The area contains 9 acres of environmentally significant lands, all located within one isolated natural resource area. Of the 171 acres remaining, 31 acres are in recreational use as a Town park; 14 acres are in residential use occupied by 17 existing housing units; 5 acres are occupied by roads; and 121 acres are in agricultural use. The area currently in agricultural use is envisioned to be developed for residential use to accommodate about 100 housing units. Such development, combined with the population of the aforementioned 17 existing housing units, would add a population of about 300 persons to the sewer service area.

The area proposed to be removed from the Caddy Vista sewer service area is also shown on Map 1. This area encompasses 15 acres of land located in a strip on the west side of STH 38 in U.S. Public Land Survey Section 5, Township 4 North, Range 22 East, in the Town of Caledonia. The area is comprised primarily of wetlands and agricultural use, with 2 existing housing units. A sewerage system capacity study completed in 1999¹ concluded that most of this area cannot be served by gravity sewers.

A more detailed delineation of the revised sewer service area and of the environmentally significant lands within is shown on the aerial photograph reproduced as Map 2.

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

With regard to areal extent, the currently adopted Caddy Vista sanitary sewer service area encompasses 457 acres. The net effect of the proposed changes would be to increase the size of the sewer service area by 165 acres, or about 36 percent, to 622 acres.

With regard to population, the proposed changes would increase the population of the Caddy Vista sewer service area by 300 persons, from 715 to 1,015 persons. The "buildout" population of the sewer service area—that is, the population level that would be achieved upon full development of the area in accordance with local plans—is estimated at about 1,700 persons. Both the current sewer service area amendment proposal and buildout conditions exceed the year 2020 population projection range of 840 to 900 persons for the Caddy Vista area embodied in the adopted regional land use plan.

¹Crispell-Snyder, Inc., Sewer Capacity Study, Caddy Vista Sanitary District, Racine County, Wisconsin, September 1999.

PROPOSED AMENDMENT TO THE CADDY VISTA SANITARY SEWER SERVICE AREA

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



PRIMARY ENVIRONMENTAL CORRIDOR



ISOLATED NATURAL RESOURCE AREA



WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE



CURRENTLY APPROVED CADDY VISTA SANITARY SEWER SERVICE AREA

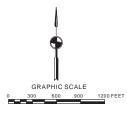


AREA PROPOSED TO BE ADDED TO THE CADDY VISTA SANITARY SEWER SERVICE AREA



AREA PROPOSED TO BE REMOVED FROM THE CADDY VISTA SANITARY SEWER SERVICE AREA

Source: SEWRPC.



The Regional Planning Commission is currently updating and extending the regional land use plan further into the future, to the year 2035; that plan will be completed later this year. The new regional plan will include new population projections, including a new projected population range for the Caddy Vista sewer service area. It is anticipated that the buildout population of the Caddy Vista sewer service area, expanded as indicated on Map 1, will lie within the projection range for the Caddy Vista area under the forthcoming regional land use plan.

WATER QUALITY IMPACTS

Under the adopted regional water quality management plan and the amended sanitary sewer service area plan herein set forth, it is envisioned that all urban lands within the planned urban service area would receive sanitary sewer service. In addition, the provision of public sanitary sewer service to those lands within the planned sanitary sewer service area which are currently developed and served by onsite sewage disposal systems may be expected to reduce the pollutant loadings from the existing onsite sewage disposal systems to both surface and ground waters. Assuming that all 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

The proposed addition to the Caddy Vista sanitary sewer service area is immediately adjacent to the currently approved sewer service area tributary to the MMSD South Shore sewage treatment plant. The nearest other public sanitary sewer system, tributary to the City of Racine sewage treatment facility, is located in the Town of Caledonia about 4 miles from the subject area. Consequently, no further analysis is deemed necessary to conclude that the subject area would be served most cost-effectively through connection to the Caddy Vista Sanitary District sewerage system.

SEWERAGE SYSTEM CAPACITY IMPACT ANALYSIS

Sewage from the Caddy Vista Sanitary District is conveyed to MMSD for treatment via a lift station and an 8-inch force main. The force main travels through the northern portion of the District, then north along Nicholson Road for about one-half mile to a 27-inch MMSD interceptor sewer located in the City of Oak Creek. The current flow rate from the Caddy Vista sewer service area is about 110,000 gallons per day (gpd) on an average annual basis, with peak flows reaching between 500,000 and 600,000 gpd. The lift station has a firm capacity of about 540,000 gpd with one pump operating, and the 8-inch force main has an estimated capacity of about 1.37 million gallons per day.

The size and capacity of the MMSD sewage conveyance and treatment facilities are set forth in the MMSD 2010 facility plan completed in 1998,² That facility plan is based upon a sewage flow estimate of 410,000 gpd, on a maximum hourly basis, for the Caddy Vista Sanitary District. The proposed addition to the sewer service area would add a flow of about 40,000 to 50,000 gpd on an average annual basis, and about 150,000 to 200,000 gpd on a peak flow basis, possibly resulting in peak hourly flows of 650,000 to 800,000 gpd. It appears that the firm pump capacity under existing conditions is marginal and that it would be exceeded under the proposed sewer service area amendment.

If the remaining vacant developable lands within the existing Caddy Vista sewer service area—in addition to the lands proposed to be added to the sewer service area—were fully developed in accordance with the Town of Caledonia land use plan, sewage flows could approximate from 210,000 to 270,000 gpd on an average annual basis, and 0.85 to 1.1 million gallons per day on a peak flow basis.

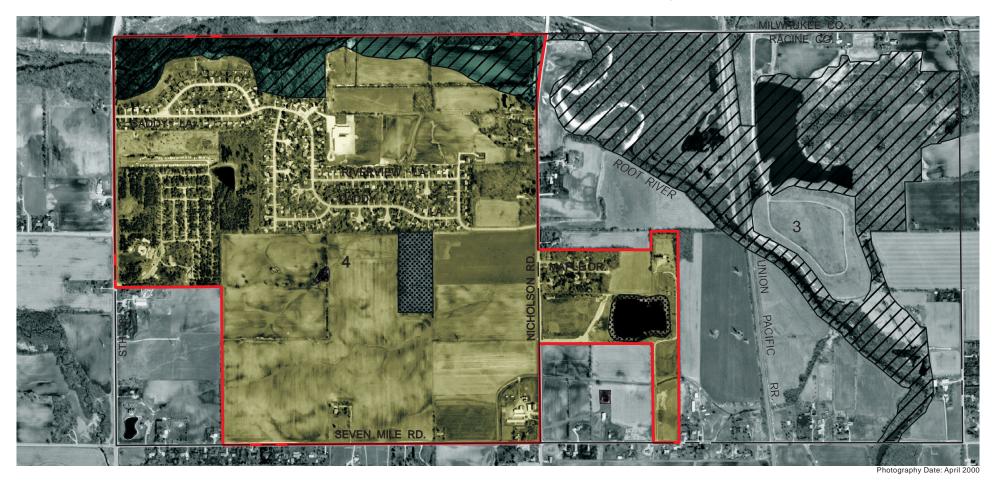
It is unclear how the flows from the Caddy Vista Sanitary district system translate into peak flows in the MMSD system. However, both the peak flows upon development of the proposed addition to the sewer service area and the peak flows upon full development of the entire planned sewer service area exceed the facility plan planning value. The MMSD is

²Milwaukee Metropolitan Sewerage District 2010 Facilities Plan, *May 1998*.

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PLANNED SANITARY SEWER SERVICE AREA FOR THE CADDY VISTA SANITARY DISTRICT

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



ISOLATED NATURAL RESOURCE AREA
WETLANDS AND SURFACE WATER
AREAS LESS THAN FIVE ACRES IN SIZE

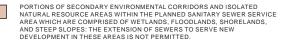
PLANNED SANITARY SEWER SERVICE AREA

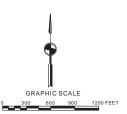
PRIMARY ENVIRONMENTAL CORRIDOR

GROSS SANITARY SEWER SERVICE AREA BOUNDARY

RESTRICTIONS ON SEWERED DEVELOPMENT

PRIMARY ENVIRONMENTAL CORRIDORS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA: THE EXTENSION OF SEWERS TO SERVE NEW DEVELOPMENT IS CONFINED TO LIMITED RECREATIONAL AND INSTITUTIONAL USES AND RURAL-DENSITY RESIDENTIAL DEVELOPMENT IN AREAS OTHER THAN WETLANDS, FLOODLANDS, SHORELANDS, AND STEEP SLOPES.





Source: SEWRPC.

currently preparing a year 2020 facility plan and the proposed sewer service area expansion can be factored into that planning program. The total population of 1,700 persons upon full development of the planned sewer service area falls within the range being considered under the facility planning effort. **Based on the forgoing comments, it is recommended that the Caddy Vista Sanitary District conduct a facility planning program for its pumping and conveyance system and upgrade facilities as needed, according to the recommendations of that program, prior to significant new development being approved in the sewer service area.**

PUBLIC REACTION TO THE PLAN AMENDMENT

A public hearing was held on May 25, 2005 at the offices of the Caddy Vista Sanitary District to receive public comment on, and reaction to, the proposed plan amendment. The hearing was sponsored by the Caddy Vista Sanitary District and the Regional Planning Commission. A summary of the plan amendment was presented prior to receiving public comment, including a description of the lands proposed to be added to the sewer service area and any environmentally significant land located within.

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.

LOCAL GOVERNMENT SUPPORT FOR THE PLAN AMENDMENT

The Commissioners of the Caddy Vista Sanitary District adopted the plan amendment on June 6, 2005.

CONCLUDING RECOMMENDATION

Based on the foregoing, it is recommended that the Southeastern Wisconsin Regional Planning Commission formally amend the sanitary sewer service area for the Caddy Vista area as documented in SEWRPC Community Assistance Planning Report No. 147 (2nd Edition).