

OAKFIELD

SEWER SERVICE AREA PLAN

Prepared by the

East Central Wisconsin Regional Planning Commission

in cooperation with the

State of Wisconsin

Department of Natural Resources

Approved by WDNR: June 10, 1999

The preparation of this document was financed in part through a Water Quality Planning Assistance Grant from the Wisconsin Department of Natural Resources and Section 205(j) of the Clean Water Act.

EAST CENTRAL WISCONSIN REGIONAL PLANNING COMMISSION

Joseph Maehl, Chair
Claire Alexander, Vice-Chair

COMMISSION MEMBERS

CALUMET COUNTY

Wilma Springer
Clarence Wolf*
Vern Gonzo

OUTAGAMIE COUNTY

James Schuette
Marvin Fox
Tim Hanna*
Alfred Krause
Donald De Groot*

WAUSHARA COUNTY

Yvonne Feavel
Norman Weiss
Lester Van Loon

MARQUETTE COUNTY

Claire Alexander*
Don Wilson
Walter Cacic

FOND DU LAC COUNTY

Herbert Tauchen
Clarence Natzke
M. Eugene Zueske

WINNEBAGO COUNTY

Joseph Maehl
Ernie Bellin*
Marigen Carpenter*
Jane VanDeHey*
Richard Wollangk

MENOMINEE COUNTY

Randy Reiter
Roger F. Mosher
Bruce Wilbur, Sr.

WAUPACA COUNTY

Duane Brown
Henry J. Steenbock
LaVerne Grunwald

* Regional Development Committee Members

ABSTRACT

Title: OAKFIELD SEWER SERVICE AREA PLAN UPDATE

Staff: Eric W. Fowle, Environmental Planner II
Joe Huffman, Planning Technician

Subject: Sanitary sewer service area delineation for future community growth.

Date: October, 1999

Planning Agency: East Central Wisconsin Regional Planning Commission
132 Main Street
Menasha, WI 54952

This plan updates and supersedes the 1985 Oakfield Sewer Service Area Plan which is an element of the Water Quality Management Plan, Wolf River Watershed, Wisconsin. The plan was prepared by the East Central Wisconsin Regional Planning Commission and was certified by the Wisconsin Department of Natural Resources on June 10, 1999 as part of the State of Wisconsin Water Quality Management Plan. It provides population and land use projections and delineates future growth areas for the Oakfield Sewer Service Area. Also identified are environmentally sensitive areas which should not be developed. This plan contains policy recommendations encourage cost-effective and environmentally sound development patterns.

TABLE OF CONTENTS

| | |
|---|----|
| CHAPTER 1 - INTRODUCTION..... | 1 |
| CHAPTER 2 - BACKGROUND..... | 3 |
| CHAPTER 3 - OAKFIELD SEWER SERVICE AREA PLAN | 9 |
| CHAPTER 4 - SSA DELINEATION / PLANNING PROCESS..... | 25 |
| CHAPTER 5 - SEWER SERVICE AREA AMENDMENT PROCESS..... | 37 |

APPENDICES

| | |
|--|----|
| APPENDIX A – PUBLIC PARTICIPATION AND APPROVAL DOCUMENTS | 43 |
| APPENDIX B - GOALS , OBJECTIVES AND POLICIES | 59 |

EXHIBITS

| | |
|--|----|
| EXHIBIT 1 - OAKFIELD SEWER SERVICE AREA MAP..... | 7 |
| EXHIBIT 2 - OAKFIELD PLANNING AREA GROWTH PROJECTIONS..... | 16 |
| EXHIBIT 3 - OAKFIELD SSA ACREAGE SUMMARY..... | 18 |
| EXHIBIT 4 - ENVIRONMENTALLY SENSITIVE AREA STANDARDS | 27 |

CHAPTER 1 - INTRODUCTION

This report represents the first update of the Oakfield Sewer Service Area Plan, a formal element of the State of Wisconsin's Water Quality Management Plan, which for this area includes the Lower Fox River Basin Water Quality Management Plan (1996). In the sixteen years sewer service areas have been in effect, they have had significant impacts on urban development. Both communities and land developers are now more aware of sewer service areas and are using the plans and policies in planning of future growth.

PURPOSE

This Oakfield Sewer Service Area Plan Update amends the 1985 sewer service area plan. The update is part of a regularly scheduled re-evaluation of sewer service area plans. Water quality plan elements, including sewer service areas, are to be updated every five years as provided by Wisconsin Administrative Code NR 121.07(2)(a)1. However, this schedule is dependent upon available funds and priorities established within the WDNR.

Sewer service area plans serve as a basis for Department of Natural Resources (WDNR) approval of state and federal grants for the planning and construction of wastewater collection and treatment facilities. They also serve as a basis for WDNR approval of locally proposed sanitary sewer extensions and Department of Workforce Development (formerly Department of Industry, Labor and Human Relations, or DILHR) approval of private sewer laterals. In addition, environmentally sensitive areas identified in the service area plans serve as a guide for environmental permit decisions by federal and state agencies.

Sewer service area plans are intended to be an important planning and development guide for local communities. The updated plans:

- Identify wastewater treatment and collection needs for sewer service areas through the year 2020.
- Forecast the amount and location of future urban development areas.
- Identify environmentally sensitive areas where development should be limited to protect water quality.
- Contain land use development forecasts and recommendations for implementing wastewater treatment and collection plans for individual sewer service areas.
- Establish "holding tank" service areas for isolated and rural special uses.

CHAPTER 2 - BACKGROUND

SEWER SERVICE AREA PLANNING AUTHORITY

The passage of the Federal Water Pollution Control Act Amendment (P.L. 92-500) in 1972 marked the beginning of a new approach to the planning, design and construction of municipal wastewater collection and treatment facilities. This law established Areawide Water Quality Management Planning under Section 208 and also the Facility Planning Grant Program under Section 201. The preparation of sewer service area plans for major urban areas was a significant part of this planning process.

In recent years, the State of Wisconsin has embodied many of the federal areawide and facility planning requirements in the Wisconsin Administrative Code. These administrative rules set forth clear procedures and standards regarding the preparation of these plans and their implementation. Specific sections of the code directly pertaining to these activities are NR121, concerning areawide waste treatment management planning; and NR110, concerning facility planning and sanitary sewer extensions.

In June 1977, East Central completed initial sewer service area plans for 23 communities within the Fox Valley area under contract with the Fox Valley Water Quality Planning Agency. These plans delineated sewer service areas through the year 2000. The service area plans were adopted as part of the Point Source element of the Fox Valley Water Quality Management Plan in January, 1979. In 1985, the East Central Wisconsin Regional Planning Commission entered into a memorandum of understanding with the Wisconsin Department of Natural Resources to initiate sewer service area planning for the non-designated portions of the East Central ten county region. This memorandum sets out the responsibilities and relationships among the parties relative to the planning, management and implementation of sewer service area plans.

The contractual agreement provides that East Central will periodically review, revise and update the service area plans, and review proposed sewer extensions for conformance with the approved areawide water quality plan. As provided by Chapter NR121, the WDNR's role is to review and approve every sewer service area plan and plan amendment taking into account water quality impacts and cost effectiveness. The WDNR and East Central Planning also reviews and approves plans for wastewater treatment facilities and sewer extensions based upon conformance with the areawide plan. The contract agreement outlines rather broadly the responsibilities of each of the agencies involved in managing sewer service areas.

In order to address specific development proposals which impact sewer service area plans on a day-to-day basis, East Central has adopted an "Amendment Policy and Procedure for Sewer Service Areas." The amendment policies and procedures, initially adopted in 1978, were revised in 1984, 1990, with additional amendments regarding the urban areas (Fox-Cities/Oshkosh/Fond Du Lac) in late 1996 and early 1997. These policies and procedures established standards and criteria for amending sewer service area boundaries and also describes the procedure for amending sewer service area plans. The amendment policy (Chapter 5) provides a mechanism whereby communities can alter service area boundaries in response to changes in both the rate and direction of development.

The amendment process provides the flexibility for communities to adjust to short-term changes in development trends and thus provides a means of accommodating changing development trends between the five-year updates.

The Oakfield Sewer Service Area Plan was adopted by East Central's Regional Development Committee on October 15, 1998 and by its full Commission on October 30, 1998. The plan update was certified by the Wisconsin Department of Natural Resources and became effective on June 10, 1999 (Appendix A).

GOALS, OBJECTIVES AND POLICIES

In the ten-county region of the East Central Wisconsin Regional Planning Commission, sewer service area plans are prepared within the context of the regional land use plan, New Directions for Growth and Development (ECWRPC, 1977). The process used for the 1977 land use plan established goals, objectives and policies formulated in response to citizens' desires and needs brought forth in East Central's public participation program. Appropriate goals, objectives and policies were referenced as the groundwork for the establishment of 104 urban service area plans and boundaries.

The initial goals, objectives and policies were re-evaluated and refined in 1985 and in 1990, with additional refinements regarding the urban areas (Fox-Cities/Oshkosh/Fond Du Lac) in late 1996 and early 1997. Two overall goals have been identified. The first goal and its related objectives and policies pertain to land use and urban development issues. The second goal addresses public facilities, specifically sanitary sewerage systems. Objectives and policies related to both goals point out the significant interrelationship between urban land use and sanitary sewerage planning and also provide a sound basis for determining a community's future development and sewerage system needs. The adopted goals, objectives and policies are listed in Appendix B.

NON- DESIGNATED WATER QUALITY MANAGEMENT AREA

The Statewide Water Quality Management Plan identifies three designated (complex) water quality management planning areas within the State of Wisconsin with the remainder of the state identified as a "non-designated" area. Within the East Central region, the Fox Valley Designated Water Quality Management Area comprises major portions of the four urban counties surrounding Lake Winnebago. The 1,580 square mile area has been specially designated for water quality planning because of the concentration of industries and urbanization along the Fox River and Lake Winnebago. Within this overall area 23 different sewer service areas have been delineated and individual plans prepared. The remainder of the region is identified as a non-designated water quality management area. To date, East Central has prepared twenty-six sewer service area plan elements within the non-designated area.

The "non-designated" portion of the East Central region, as well as the remainder of the state, are further divided into major river basins. For each river basin the WDNR has prepared a water quality plan. The Oakfield Sewer Service Area is within the West Branch, Fond du Lac River subwatershed which is part of the Upper Fox River Basin.

REPORT FORMAT

This plan describes and delineates the Oakfield Sewer Service Area. The plan was developed in accordance with state and federal guidelines and involved public input and review. This SSA Plan update was also developed in conjunction with the recent joint land use planning activities of both the Town and Village of Oakfield. Therefore, numerous informational meetings were held during this process which address issues pertaining to this plan. Formal informal information meetings and public hearings were held as part of the land use planning process, and separately in conjunction with ECWRPC's Regional Development Committee. Summaries of Proceedings of these meetings are kept on file at the East Central offices. The following sections of the plan discuss the:

1. Oakfield Sewer Service Area characteristics, projected growth and service area plan map (Exhibit 1)
2. Service area delineation and planning process; and
3. Service area amendment process.

Additional information describing the sewer service area planning process and copies of supporting documentation (such as population and growth projection methodologies) is available at the Commission offices.

EXHIBIT 1 - OAKFIELD SEWER SERVICE AREA MAP (see separate .pdf file)

CHAPTER 3 - OAKFIELD SEWER SERVICE AREA

PLANNING AREA DESCRIPTION

The Oakfield Planning Area and Sewer Service Area is located in the south-central part of Fond du Lac County along the USH 151 corridor. The planning area includes the Village of Oakfield as well as portions of the adjacent Town of Oakfield. Encompassing 13.2 square miles, the planning area is located in T14N-R16E and includes all of Sections 11, 12, 13, 14, 15, 23, and 24; and portions of Sections 1, 2, 3, 9, 10, 16, 20, 21, 22, 25, 26, 27, 28, and 29.

This plan update incorporates the concept of the “extraterritorial area” as part of the Planning Area designation. Traditionally, the Planning Area was defined partially by what was felt to be a crude approximation of the “ultimate service” area of the treatment plant based on capacity, as well as delineating and including nearby clusters of development currently on on-site systems which may have long-term needs for sanitary sewer (more than 20 years).

During the plan update process, it was recognized that in many rural towns adjacent to incorporated communities have seen increased development on on-site systems near incorporated boundaries. Such development adjacent or near corporate boundaries can have a long-term impacts regarding the logical expansion of development and service provision by the Village of Oakfield. The cost-effective provision of sewer service as well as road layouts, road access, etc. by a growing municipality is somewhat dictated by the patterns of existing development as it is annexed.

Wisconsin State Statutes 62.23 and 236.45(3) define the extraterritorial area and the limited planning powers given to the incorporated community within this area. These powers include official mapping, land use planning, subdivision review, and zoning (with a joint committee). Therefore, in recognition of these planning powers, the Planning Area Boundary for the areas adjacent to the Village of Oakfield has been defined 1-1/2 miles from the existing corporate boundary.

LAND USE AND DEVELOPMENT

A mixture of urban, agricultural, recreational and rural development is present in the planning area. The Village of Oakfield is the core of denser urban development. With a 1996 estimated population of 986 persons, the Village of Oakfield covers an area of approximately 602 acres, of which approximately one half is developed. The predominant land use is single family residential homes with a downtown commercial area. The village does not have an improved industrial park, however limited industrial uses exist within the western portion of the Village. The total estimated dwelling units for the Village of Oakfield was 356 in 1990.

The unincorporated community of Oak Center is located to the southwest of the Village and consists of limited single family residential and commercial uses. The Oak Center Sanitary District was formed in this area in 1987 to address problems with existing on-site wastewater treatment systems and encompasses approximately 75 acres on either side of Oak Center Road. The Sanitary District had an estimated 1992 population of 57 persons in and contained approximately 19 dwelling units and three businesses. No public sewer service exists at this time within the Sanitary District.

ENVIRONMENTAL CONDITIONS

Environmentally sensitive lands within the planning area are generally associated with wetlands and with a number of streams passing through the area.

Watersheds

As stated previously, the Oakfield Sewer Service Area Planning Boundary falls entirely within the Fond du Lac River subwatershed of the Upper Fox River Basin with all drainage flowing directly into Lake Winnebago via existing ditches, wetland areas, and stream corridors. According to the draft Upper Fox River Basin Water Quality Management Plan (October, 1996) this watershed encompasses 225 square miles with the Fond du Lac River and Lake Winnebago as the main water resources. Lake Winnebago is an important year round recreational waterbody which experiences excessive weed growth during July and August which is likely associated with non-point source pollution (i.e., phosphorus from lawn fertilizers, etc.).

The Fond du Lac River Watershed was designated as a "Priority Watershed Project" by the Wisconsin Department of Natural Resources in 1996 in hopes of improving water quality within the watershed. Once the inventory and assessment phases of the project are complete, cost-shared grants and technical assistance will be available to landowners to improve streambank and soil erosion conditions as well as agricultural practices.

Major surface water features within the Oakfield Planning Area include the East Branch Fond du Lac River, Campground Creek (which originates from several springs at the base of the Niagara Escarpment), Seven Mile Creek, Raspberry Lake, and several unnamed intermittent streams and ponds. Campground Creek serves as the discharge point for the village's wastewater treatment plant and flows into the East Branch Fond du Lac River located north of the village.

Important fisheries are located along Campground Creek, east of the Village, which is one of only six trout streams in the county as noted in the Fond du Lac County 1967 Comprehensive Plan.

Wetlands

A majority of the areas along the previously mentioned water bodies which are not developed have been designated as Environmentally Sensitive Areas (ESA's). Feeder streams and all mapped wetlands have also been designated. These wetlands, found throughout the planning area, are essential environmental features for providing wildlife habitat, scenic open spaces, flood water retention, and groundwater discharge areas. Wetlands act as a natural filtering system for nutrients such as phosphorus and nitrates. They provide a buffer zone protecting shorelines and streambanks.

The Town of Oakfield has several large tracts of wetlands most of which are associated with river or stream features. These wetlands are mainly "emergent wet meadows" and "forested broad-leaved deciduous" types while several other varieties exist. The most significant wetland complexes are contained in the Planning Area.

The Village of Oakfield has several large tracts of wetlands within its corporate boundary associated with Campground Creek in its northern portion. These narrow leaved, emergent/wet meadow types of wetlands serve are contained within floodplain area and serve as important floodwater storage areas for the Fond du Lac River system.

Floodplains

Mapped FEMA Floodplains exist within various portions of the defined Planning Area. Areas susceptible to flooding are considered unsuitable for any type of development due to the potential health risks and property damage.

As revised in 1984, the Flood Insurance Rate Map (FIRM) for the unincorporated portions of Fond du Lac County identify areas within the Town of Oakfield near the Horicon Marsh, the East Branch Fond du Lac River, Campground Creek, and its unnamed tributaries which are subject to flooding within the 100-year floodplain. Flood Insurance Rate Map for the incorporated portions of Fond Du Lac County identify areas along Campground Creek and unnamed tributaries within the Village of Oakfield are subject to flooding within the 100-year floodplain. A majority of the floodplain areas within the Village are currently undeveloped at this time. The remaining floodplain areas place moderate restrictions on the overall development of the Village of Oakfield.

Soils

Soils support the physical base for development within the Planning Area. Knowledge of the limitations and potential difficulties of soil types is important in evaluating land use proposals such as residential development, utility installation and other various projects. Some soils exhibit characteristics such as slumping, compaction, erosion, and high water tables which place limits on development. Severe soil limitations do not necessarily indicate areas cannot be developed, but rather indicate more extensive construction measures must be taken to prevent environmental and property damage. These construction techniques generally increase the costs of development and the utilities needed to service that development.

The fact that most of the soils within the Oakfield Area have either relatively rapid permeability, and general wetness (central portion), or thin layers of soil over fractured bedrock (southeastern portion) draws a concern over the potential for groundwater contamination. Failing on-site waste disposal systems, abandoned and active landfills, agricultural practices, quarries, and other land uses have the potential to be a direct source of contamination of groundwater if not managed properly. Since all of the town residents rely on individual wells and groundwater for potable uses (drinking water, cooking, etc.) the threat of contamination of the groundwater may be of serious concern.

According to the Soil Survey of Fond du Lac County, prepared by the USDA in 1973, four major soil associations are present within the Oakfield SSA Planning Area:

- **Lomira-Virgil Association:** This soil association is located in two distinct areas of the town; in the northwest on the northern side of U.S.H. 151, and in the southeast generally south of C.T.H. B. This association is part of a ground moraine underlain by calcareous loam glacial till and comprises approximately 40 percent of the town. the landscape is mostly one of low ridges and knobs, and between the ridges, nearly level uplands and depressions. The Lomira soils are deep and well drained, while the Virgil soils are somewhat poorly drained and contained in areas adjacent to wide depressions which are subject to occasional flooding. This association is used mainly for crops with slight to moderate limitations.
- **Beecher-Elliott Association:** This soil association comprises approximately 50 percent of the town's area and is located primarily in a wide southwest to northeast band in the central portion. A second area juts southward into the southeast region of the town. This association occupies a ground moraine of calcareous clay loam to silty clay glacial till that has a high shale content. The landscape is one of nearly level to moderately steep uplands, nearly level depressions, waterways, and broad lowlands. This association has no well-defined drainage pattern. These soils are somewhat poorly drained, silty and clayey, and moderately to slowly permeable. Most areas are used for crops, permanent pasture and woodlots.
- **Kewaunee-Manawa-Poygan Association:** This soil association is located in the extreme northeast portion of the town and occupies approximately 5 percent of the total area. This association occupies glacial ground marines, terminal moraines, and areas underlain by lacustrine deposits. The well drained, nearly level to steep Kewaunee soils formed under forest and are subject to erosion if they are used for row crops. The Manawa and Poygan soils are somewhat poorly drained and nearly level to gently sloping. Their use is limited mainly by wetness. Most of this association is used for crops with a few steep areas used for permanent pasture or woodlots.
- **Houghton-Palms Association:** This soil association is located in two distinct areas of the town and comprise approximately five percent of the total area. One area is located in the north-central portion of the town between STH 103 and the Fond du Lac River, while the second area is contained in the extreme southwest which is associated with the Horicon Marsh. This association occupies large,

nearly level depressions and wetland areas and is formed from fibrous plant remains. They are poorly drained and subject to ponding. If drainage is improved, this association can be used for crops with wetness being the main limitation. Undrained areas are in permanent pasture or swamp forest. Residential development is not suitable in these areas.

Additionally, based on this soils information, steep slopes are identified in several portions of the Planning Area; primarily associated with the face of the Niagara Escarpment, located south of the existing Village limits.

Groundwater

Bedrock located near the surface is of concern within the southern portion of the planning area, south of the Village Limits. This area, known as the Niagara Escarpment is composed of highly fractured dolomitic limestone referred to as Silurian Dolomite or Niagara Limestone. The origins of this escarpment rock are traced to a warm shallow sea which existed more than 400 million years ago. At that time coral reefs outlined the sea of the Michigan basin. (The Michigan basin is a major geographic feature which is encircled by the Niagara Cuesta and has its center in the heart of the state Michigan). Layers of living material eventually settled to the bottom, as it does in modern lakes, and was compressed and sandwiched into rock layers over hundreds of millions of years. The dolomite rock of the Niagara Cuesta does not solely exist in the escarpment cliffs above ground. In fact, most of the rock lies underneath a surface of sand and gravel left over from the last glaciation. High bedrock may not only hinder development due to the cost of rock excavation, but it also coincides with a lack of soil which can filter pollutants before they reach groundwater; thus, the potential for groundwater contamination in high or exposed bedrock areas can be extremely high.

The groundwater resources of area are generally plentiful and of good quality. Groundwater resources within the Oakfield area are linked directly to the surficial glacial deposits and underlying bedrock structure as described previously. The Niagara Escarpment splits the town, and therefore the northern portions of the Planning Area has three aquifers, while the area above the Escarpment contains four aquifers. These aquifers can be generally described as follows:

- The Water Table Aquifer is present in all areas of the town and village and consists of glacial sediments deposited by several glacial advances that covered portions of all of Fond du Lac County. The thickness of this aquifer is variable, being greatest in pre-glacial bedrock valleys and least over topographic highs in the bedrock surface. Sand and gravel seams, present throughout the aquifer, transmit adequate amounts of water for private well systems.
- The Niagara Aquifer is specific to the area underlying the Niagara Cuesta in the southeast portion of the town and forms an important regional aquifer along the western side of Lake Michigan. The Niagara Aquifer is underlain by Mequoketa Shale which does not transmit water easily and, therefore, acts as a confining layer between the Niagara Aquifer and the much more expansive Sandstone Aquifer of

Wisconsin. The Niagara Aquifer consists of water stored in cracks and fractures located randomly throughout the rock. Fractured rock aquifers are particularly susceptible to pollution. In such areas, human activities and land uses take place in close proximity to features that provide relatively direct point source input routes for aquifer recharge. Dissolved and suspended contaminants can be moved rapidly across the land and into the subsurface with little or nothing to inhibit them. Examples of affected water supply wells, springs, and surface water bodies are common in such geologic settings. The potential for groundwater contamination is classified as high throughout most of the Niagara escarpment.

- The Platteville-Galena Aquifer is located below the Water Table Aquifer in the northwest portion of the Oakfield Area, and below the layer of Mequoketa Shale in the southeast portion. This aquifer is comprised primarily of dolomite and acts as a leaky confining layer over the sandstone aquifer. It does not transmit water as readily as the underlying sandstone, but it is capable of supplying adequate amounts of water to private water systems due to secondary fractures.
- The Cambrian (St. Peter's) Sandstone Aquifer is the areas thickest and is the most important in the western portion of Fond du Lac County. Of the four aquifers, the Cambrian Sandstone aquifer is the most widely used for sustained high capacity wells for municipal and industrial uses.

The vertical flow of groundwater is present in all areas of Oakfield with the exception of those areas where Mequoketa Shale is present. The horizontal movement of groundwater is generally northeast in areas below the escarpment, while above it, northwesterly directions of flow occur. Groundwater recharge areas consist of local wetland areas, while the main recharge area exists to the southeast of the Town of Oakfield.

Additionally, the Village of Oakfield has recently approved a "Wellhead Protection Plan" for its municipal wells which inventories existing features that may potentially cause contamination and recommends specific actions to address these concerns. The wellhead protection plan encompasses an area within one mile of the municipal wells.

EXISTING SEWERAGE TREATMENT AND COLLECTION SYSTEM

No public sewerage system is present within the town at this time, therefore; a majority of residents rely on individual on-site wastewater treatment systems (conventional, mound, and holding tank). Fond du Lac County does not currently have a ban on holding tank installations. Additionally, the Oak Center Sanitary District, formed in 1987, had completed plans for the phased installation of a prototype "community" mound system developed in conjunction with the University of Wisconsin, which would have accommodated the 22 existing structures located in Oak Center. Several of these systems have recently been installed, however recent correspondence from the University indicated the project will be terminated due to work loads.

The Sanitary District will now have to re-evaluate previous plans, which may include revisiting the feasibility of constructing a public sewerage system and forcemain to pump waste to the Village of Oakfield's wastewater treatment facility.

The Village of Oakfield's wastewater treatment facility (WWTF) is located in the northwestern portion of the community, adjacent to Campground Creek. This facility was originally constructed in the mid-1950's with major modifications occurring in 1982. The treatment plant uses an activated sludge treatment system to process raw sewerage. The treated effluent is discharged into Campground Creek with sludge stored on-site and eventually spread on agricultural lands near USH 151 and Wolf Road.

The plant was designed for a maximum average design flow of 305,300 gallons per day (.3053 mgd) and a peak design flow of 690,910 gallons per day (.691 mgd). The designed loadings for biological oxygen demand (BOD) are 337 lbs/day and suspended solids (SS) loadings are designed for 392 lbs/day. Discussions with officials suggest that the plant could accommodate flows from approximately 100 additional households. Future expansions of service into outlying areas may require lift stations due to the topography of the areas.

Given the existing topography within the village, the existing wastewater collection system for the village consists entirely of eight inch gravity sewers except for a short segment of 10 inch sewer which leads from two interceptors into the treatment plant. No lift stations or forcemains are present in this system. This collection system was originally laid in 1956 and services the entire village, however; a small number of homes on the fringe still have on-site treatment systems due to the high cost of, or inability to extend sewers at this time. These systems will be eliminated as growth and services are expanded. Problems with infiltration and inflow (I/I) of clearwater has been noted as a concern in recent years and can affect the operation of the treatment plant significantly in terms of capacity.

According to the 1996 CMAR, the Village of Oakfield WWTF has a total rating of 81 points (departmental action range). A majority of these points (58) came from concerns related to the three months which the facility exceeded the design flow of the plant and the four months which monthly BOD loadings were exceeded.

As a result of the CMAR recommendations the village has agreed to increase general maintenance of equipment, investigate the sources and methods of elimination of clearwater flows to the system, and investigate additional on-site sludge storage capacity and land disposal sites for digested sludge. The village currently visually inspects one-quarter of the sewer lines each year with televising occurring every three to four years. Other planned improvements include improvements to reduce the amount of phosphorus contained in the final effluent. The village's TIF District No. 1, identifies the funding for the potential expansion of the existing facility should it be necessary to accommodate new industrial development.

In summary, the permit and design information for the plant is as follows:

- **WPDES Permit Number:** WI-0024988
- **Receiving water:** Campground Creek, Fond du Lac River Subwatershed
- **Design Flow:** 0.3053 mgd
- **Design BOD (lb./day):** 337
- **Treatment Type:** Activated sludge
- **Sludge Treatment:** On-site storage and land spreading

FORECAST GROWTH

Based on East Central’s population projection methodology, the Oakfield Sewer Service Area is projected to have minimal growth in the future (Exhibit 2).

Exhibit 2
Oakfield Planning Area Growth Projections, 1997-2020

| | Year | | | | | | | | 1997-2020 Change |
|--------------------------------|------|------|------|------|------|------|------|------|---------------------|
| | 1992 | 1995 | 1997 | 2000 | 2005 | 2010 | 2015 | 2020 | |
| Total Population* | 1060 | 1043 | 1028 | 1060 | 1048 | 1034 | 1016 | 992 | -36 |
| Total Dwelling Units* | 369 | 370 | 373 | 378 | 380 | 382 | 381 | 407 | 33 |
| Persons Per Household** | 2.93 | 2.84 | 2.81 | 2.78 | 2.71 | 2.65 | 2.59 | 2.36 | -0.57 |

* Based on Village projections and growth assumptions applied to 1992 Oak Center Sanitary District data.

** Average of Village and Town Person Per Household figures.

Source: Wisconsin Dept. of Administration & ECWRPC, 1998.

The total sewer service area is projected to decrease by 36 people thus bringing the permanent population of 1,028 in 1997 to 992 persons in the year 2020. Even with a continuing reduction in household size, there is a projected increase in dwelling units from 373 to 407 during this time period. Assuming that all single family units are at an average density of 2.0 units per acre, approximately 16 acres of vacant land are required within the sewer service area to accommodate this residential development.

Due to the overall decline in population, there is no justifiable need for additional vacant lands within the existing SSA based on this projection method. However, due to concerns on the relative marketability of existing vacant infill parcels and land ownership patterns, the village has limited opportunities for future developments if they should be proposed. Additionally, the village’s proximity to the Fond du Lac urbanized area, as well as recent building permit trends, indicate that a slight increase in population will likely occur. A land use plan has recently been completed with the assistance of ECWRPC and recommends limited expansion for new developments with a focus on the redevelopment and infill of the village core areas.

The Town of Oakfield has indicated that if sewer is made available in Oak Center, that it would attempt to direct town-wide growth to this area. Therefore, for the purposes of this update, it is assumed that an additional 65 homes will be constructed between 1998 and 2020. Given these constraints, approximately 105 additional acres of vacant lands have been added to the existing service area to accommodate future development.

The year 2020 Oakfield Sewer Service Area Plan as updated now has a total of 594.7 acres of land, up 105.1 acres from the 1985 plan. Within the service area boundary 40.6 acres have been identified as environmentally sensitive areas and 0.5 acres are open water. Developed lands within the updated service area total 297.1 acres while 251.5 acres of lands are now available for sewer development. Exhibit 3 contains details of the acreages associated with the updated sewer service area.

GROWTH ALLOCATION AREAS

The policy basis for allocating acreage for future development is outlined on page 30. These policies take into account a broad range of land use and environmental concerns directed toward encouraging orderly, cost-effective and environmentally sound development. Working within the broad policy base, the sewer service area plan also considers sewer system capacities, land development market trends, and development plans and preferences of the individual communities. New vacant lands available for development within the updated SSA boundary total 251.5 acres.

Environmentally Sensitive Areas

Other than slight modifications to the existing ESA's based on more accurate mapping data, no ESA's have been added or removed from the updated sewer service area.

Residential Development

Two major areas are proposed for future residential development within the updated Oakfield Sewer Service Area. The Village and Town of Oakfield plan on infilling remaining single-family lots located in the central areas of the village and sanitary district when possible. If public sewer is made available to the Oak Center Sanitary District, additional lands outside of the district may be available for sewer development based on the land use plan. An amendment to this updated SSA Boundary will be necessary to accommodate such development. New sewer residential development is proposed within three areas of the SSA:

**EXHIBIT 3
Oakfield SSA Acreage Summary**

| Sewer Service Area Information | Existing (1997) SSA | | Calculated SSA Acreage Needs | | Proposed SSA Additions (Village only) | Proposed SSA Deletions (village only) | Total Proposed 1998 SSA |
|-----------------------------------|---------------------|---------------|------------------------------|--------------|---------------------------------------|---------------------------------------|-------------------------|
| | Town | Village | Town* | Village** | | | |
| Total Developed Acres | 30.60 | 266.50 | N/A | N/A | 0.00 | 0.00 | 297.10 |
| Total Undeveloped Acres | 35.50 | 157.05 | 79.71 | 48.40 | 105.10 | 5.00 | 292.65 |
| SF Share: | 35.50 | 115.95 | 33.45 | 25.38 | 56.70 | 0.00 | 208.15 |
| MF Share: | 0.00 | 0.00 | 0.00 | 2.68 | 0.00 | 0.00 | 0.00 |
| Com./Ind. Share: | 0.00 | 0.00 | 26.01 | 5.16 | 48.40 | 5.00 | 43.40 |
| 20% Market Factor (above items) | N/A | N/A | 11.89 | 6.64 | 0.00 | 0.00 | 0.00 |
| Public Share: | 0.00 | 0.00 | 3.34 | 6.21 | 0.00 | 0.00 | 0.00 |
| Road Share: | 6.70 | 45.30 | 5.02 | 2.33 | 0.00 | 0.00 | 52.00 |
| Open Water Share: | 0.00 | 0.50 | N/A | N/A | 0.00 | 0.00 | 0.50 |
| Env. Sensitive Area Share: | 0.00 | 40.60 | N/A | N/A | 0.00 | 0.00 | 40.60 |
| Total SSA Acreage: | 66.10 | 423.55 | N/A | N/A | 105.10 | 0.00 | 594.75 |
| Total Developable Acreage: | 35.50 | 115.95 | N/A | N/A | 105.10 | 5.00 | 251.55 |
| Calculated Excess Acreage* | -44.21 | 108.65 | N/A | N/A | N/A | N/A | 123.43 |

* Assumes a need for approximately 65 additional housing units. Assumed that all new development is directed toward sewered areas.

** Assumes a need for 38 additional housing units

- Approximately 50 acres of land in the northwestern portion of the village, north of Church Street, is planned for medium density single-family residential development. This area should be serviceable with gravity sewers;
- Approximately 40 acres of land in the southern portion of the service area, south of Waupun Street is proposed for medium density residential development which will be serviceable by gravity sewers.
- Approximately 55 acres land in the eastern portion of the service area is planned for short and long term, medium density residential development and should be serviceable with gravity sewers.

Commercial Development

Commercial development has been primarily allocated within the Village of Oakfield along its existing central business district (downtown). Future development potential consists of the enhancement or re-development of portions of the downtown.

Industrial Development

The only area with significant industrial potential is located in the northernmost portion of the Village of Oakfield, south of CTH Y and north of the existing wastewater treatment plant. This area is outlined in the land use plan to accommodate a joint industrial park which will be developed cooperatively between the Village and the Town. Approximately 48 acres have been allocated within this area to accommodate this development.

Holding Tank Service Areas

A complete inventory of existing private holding tanks and alternative septic systems is not available for the planning area through the Fond du Lac County sanitary program. However local officials have stated that no holding tanks exist within the planning area.

FUTURE WASTEWATER FLOWS

Based on ECWRPC's original growth projection for the village, no significant change in flows should result. However, it is assumed that some additional development will occur within the next twenty years. If all vacant lands allocated within the SSA were to develop in the future, the anticipated flows for all 251.5 acres are calculated to be 273,741 gallons per day (0.273 mgd) using the following assumptions:

- 203 acres of residential development at an average density of two units per acre, 2.36 persons per household [year 2020 projection], and 80 gallons per day per capita;
- 48.4 acres of industrial land which can accommodate 10 businesses with 25,000 gallon per day per business

If new development occurs as this level, the associated flows would likely exceed the design capacity within a short period of time. Realistically, such a level of development will not likely occur. The Village will need to monitor new growth and loadings to the plant continuously in order to determine if, and when, the village needs undertake facility planning efforts to address any future capacity deficiencies.

WATER QUALITY ASSESSMENT

Continued urbanization of the Oakfield Planning Area will impact surface and groundwater resources. Short term impacts include the increase in surface water runoff and pollutant loadings as well as a reduction in groundwater recharge areas. Long term, cumulative development impacts include the loss of baseflow in streams and enhanced stream flashiness (flooding). The scope of these impacts cannot be precisely determined because specific development characteristics (location, type, density) are unknown. However, it is possible to generally estimate water quality impacts by applying assumptions concerning the nature of future development.

Point Source Water Quality Impacts

Population growth and commercial / industrial development will increase loadings to the wastewater treatment plant, and ultimately to the groundwater aquifer which is used for discharge. At current treatment levels, projected residential growth as illustrated above will result in the daily discharge of an additional 50.4 pounds of BOD, and 59.3 pounds of suspended solids (TSS) and 1.78 pounds of phosphorus. Impacts of increased discharge levels will be periodically evaluated by the Department of Natural Resources in conjunction with WPDES permit renewals. Assimilative capacity of the receiving areas will be used to establish discharge limits if existing categorical limits are inadequate to maintain water quality standards.

Non-point Source Water Quality Impacts

The 1998 sewer service area update includes 251.5 acres of undeveloped land within the sewer service area boundary. As this land comes under development, surface water runoff and pollutant loadings are likely to increase. The placement of buildings, roads and parking areas increase the amount of impervious area, and hence, more water runs off the land surface, carrying organic and inorganic pollutants associated with more intensive urban uses. The conversion of the allocated acreage from rural/agricultural to urban uses (assuming full development which is not likely given the population growth projected) is estimated to increase annual pollutant yields by 41.44 tons for sediment, 0.09 tons for phosphorus and 0.15 tons for zinc and lead.

On a watershed basis, conversion of these lands will result in less than a one percent increase in pollutant loadings. However, localized impacts on receiving waters may be significant. Utilization of stormwater detention facilities, site development controls, preservation of green space and other measures can help mitigate urban non-point source impacts on water quality.

Groundwater

Conversion of rural/agricultural lands to urban uses may impact the quality and quantity of groundwater. Groundwater recharge will decrease as areas which are paved over or built upon. At the same time, withdrawal of groundwater is likely to increase for domestic, commercial and industrial use. All residents within the village have public water. While the installation of the sanitary sewer system eliminates a major contamination potential, the permeability of the soils in the area poses risks of contamination from urban related land uses such as parking lot runoff, lawn pesticides and commercial activities.

Water Quality Protection

Where sanitary sewer extensions are proposed in mapped environmentally sensitive areas or on other lands whose physical characteristics indicate susceptibility to erosion or flooding, or where development of such lands is likely to impair surface or groundwater quality, East Central may identify mitigating conditions to be incorporated into the development proposal. As part of the sewer service area plan review East Central may request the WDNR attach conditions for mitigation to any sewer extension prior to the approval for the proposed development.

RECOMMENDATIONS

1. Continue to implement existing plans to control infiltration and inflow to the wastewater treatment plant so as to increase capacity for new developments.
2. Monitor new development and loadings to the WWTF in order to determine the appropriate time for the Village to initiate facility planning efforts to address potential capacity deficiencies for the forecasted growth areas.
3. Close coordination for the planning of any sewer development in the transitional areas should be undertaken by the Village and the Town.
4. Efforts should be made to direct development to areas where sewers are already in place before extending new sewers into undeveloped areas. Efforts should also be made to maximize use of gravity sewers as well as capacity of existing wastewater pumping stations to avoid the capital, operating and maintenance costs associated with constructing new pumping facilities.
5. Environmental conditions in the planning area warrants concern with regard to construction site erosion, destruction of wetlands and impacts on ground and surface water quality. Development should either be directed away from wetlands and areas of steep slopes or appropriate erosion control measures should be applied to minimize the erosion hazard. Seasonal high groundwater and groundwater seepage are potential hazards to buildings constructed in the northern and western portions of the service area. Mitigation measures should be addressed.

PLAN IMPLEMENTATION

Although sewer service area planning was initiated at the state and federal levels, successful implementation of each plan rests primarily at the local level with some guidance provided by East Central Planning. In the state-approved Areawide Water Quality Management Plan, certain local units of government were assigned water quality-related management functions. Entities with adequate authority to plan, construct, operate and maintain wastewater collection and treatment facilities were designated as management agencies (DMA) for portions of the planning area within their jurisdictions. The Village of Oakfield has been designated as a Class III Designated Management Agency to provide wastewater collection and treatment within its planning area. The Oak Center Sanitary District has been designated as a Class I DMA to provide for the collection of wastewater only.

As designated management agencies for wastewater treatment and collection the Village and sanitary district should do the following:

1. Adopt the Oakfield Sewer Service Area Plan;
2. Review and update development policies and regulations in light of the sewer service plan and recommendations;
3. Submit preliminary land subdivision plats which are proposed to be sewered to the East Central Wisconsin Regional Planning Commission for review for consistency with sewer service area plans for the area;
4. Submit sanitary sewer extension requests to the East Central Wisconsin Regional Planning Commission for review for consistency with sewer service area plans prior to being submitted to the WDNR for approval;
5. Submit wastewater facilities plan elements and amended plan elements to the East Central Wisconsin Regional Planning Commission for review for consistency with sewer service area plans prior to submittal to the WDNR for approval; and
6. Carry out their management responsibilities for treatment facilities and collection systems as specified by state and federal requirements.

Implementation of the SSA Plan relies mainly on local government actions which use the plan recommendations as a guide for the extensions of new sewers to service development. However, ECWRPC plays an advisory role in these decisions in two distinct ways:

1. ECWRPC requests that communities within the region require developers to submit "preliminary" subdivision plats for staff review and comment (advisory only). Staff not only checks the proposed plat (whether sewered or using on-site treatment) for conformance with the municipality's SSA Plan, but also reviews the subdivision's overall design and, more specifically, check the following items: potential water quality impacts to environmental corridors; groundwater aquifer / private well concerns; impacts to other natural and cultural features; construction site erosion control methods; storm-water management methods and concerns; internal vehicle/bicycle/pedestrian transportation system design; and other social / service provision impacts (i.e., parks, adjacent land use conflicts, police and fire protection, etc.).

2. Sewer extension requests are required to be submitted to ECWRPC for review and comment. Hopefully, staff has reviewed the preliminary plat prior to the extension request which can reduce conflicts at this point. However, staff normally requests that a copy of the final plat be submitted with the extension request. ECWRPC then issues a "208 Water Quality" letter if the extension request is in conformance with the municipality's current SSA Plan. In general, if the extension request is within the designated SSA and does not have negative impacts to defined environmental corridors, a letter will be issued. Sometimes, requests fall outside of the SSA Boundary and thereby, usually initiates an SSA Amendment Request for continued consideration. If negative water quality impacts will occur to designated environmental corridors, a denial of the extension will occur, or recommended mitigation measures (i.e., stormwater management / erosion control devices, etc.) will be attached to the approval.

Utilizing these two methods, a majority of the water quality concerns relating to construction and development can be effectively monitored by ECWRPC for individual projects; thereby, assisting to attain the water quality objectives outlined within the plan's goals."

In addition to ECWRPC's role in implementing sewer service area plans, local units of government may exercise other authority conferred upon them by state statute to preserve and protect water quality. Local units may use this authority to plan and manage land use and development through subdivision, zoning and other development ordinances. Criteria can be written into existing ordinances or new ordinances can be adopted which promote orderly development and address water quality concerns. Additional actions by local units of government which are recommended for water quality protection include the adoption of construction site erosion and stormwater management ordinances and the preservation of greenways along existing drainage corridors.

CHAPTER 4 - SEWER SERVICE AREA DELINEATION / PLANNING PROCESS

GENERAL DESCRIPTION

A sewer service area is a geographic area which is currently served or anticipated to be served with sanitary sewers within a 20-year planning period. Sewer service areas, called "urban service areas," were first delineated for the East Central region in 1978 in the plan New Directions for Growth and Development. In the initial plan, a generalized methodology was used for the estimation and allocation of growth which led to the identification of service area boundaries. Various state and federal guidelines, as well as regional policies, were utilized in the planning process. Since the initial delineation of service areas, the planning and management process has become much more complex and multi-faceted, thus greater detail in the explanation of the updating process is required.

The process of updating and refining sewer service area plans consists of the following major steps:

1. Identification of planning area limits;
2. Delineation of environmentally sensitive areas;
3. Identification and quantification of existing conditions;
4. Refinement of goals, objectives and policies;
5. Forecast of urban growth and re-delineation of service area limits;
6. Public and community input; and
7. Adoption and publication of final plans.

IDENTIFICATION OF PLANNING AREA LIMITS

The first step in delineating sewer service areas is the outlining of broad planning areas which include all feasible options for where urban growth might occur within the 20-year planning period (through the year 2020). Planning area boundaries generally include all areas within existing city, village or sanitary district limits. These areas may also include clusters of development and adjacent areas where there is potential for the installation of a sanitary sewerage system in the foreseeable future. Planning areas generally extend beyond the existing or potential development areas to the nearest quarter section line. The planning areas are delineated on aerial photos at a scale of 1 inch to 400 feet. These aerial photos serve as detailed file photos for all sewer service area delineation purposes. The planning areas are also shown on the one inch to 2000 foot maps contained in this plan. Planning areas serve as the study areas for wastewater facilities planning efforts.

DELINEATION OF ENVIRONMENTALLY SENSITIVE AREAS

Environmentally sensitive areas are geographic areas consisting of all lakes and streams shown on the USGS quadrangle maps and adjacent shoreland buffer areas as defined in Exhibit 3. All wetlands shown on the state Wisconsin Wetland Inventory Maps and floodways as delineated on the official Federal Emergency Management Administration Flood Boundary and Floodway Maps are also designated environmentally sensitive. The environmentally sensitive areas are mapped on the sewer service area file photos and are also shown on the maps contained in this plan.

The purpose of designating environmentally sensitive areas is to preserve significant environmental features from encroachment by sewer development. Environmentally sensitive areas perform a variety of important environmental functions including stormwater drainage, flood water storage, pollutant entrapment, and the provision of wildlife habitat. They can also provide desirable green space to enhance urban aesthetics.

In the 1978 sewer service area plans only major wetlands as shown on the USGS quadrangle maps were considered environmentally sensitive. Since that time, the Department of Natural Resources through Wisconsin Administrative Code NR 121.05(g)(2)(c), has developed guidelines which serve as minimum criteria for the identification and delineation of environmentally sensitive areas. Department of Natural Resource guidance states, "Environmentally sensitive areas will be used for all environmental features that should be excluded from sanitary sewer service areas."

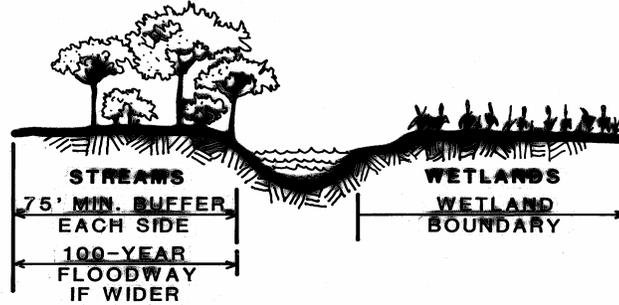
East Central, after deliberations with technical and policy advisory committees, defined environmentally sensitive areas in a manner that complements existing local, state and federal regulations which protect various environmental amenities. While NR 121 authorizes sewer service area plans to identify a broad array of natural features as environmentally sensitive areas, only those features which were believed vital in the East Central Wisconsin Region to preserve environmental quality were so designated.

Although the delineation of environmentally sensitive areas is intended to provide adequate long term and uniform environmental protection for all sewer service areas within the East Central Wisconsin Region, the environmentally sensitive area classification may be changed in two ways in response to specific local development proposals.

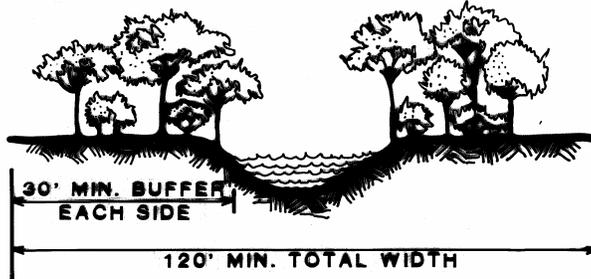
Exhibit 4

ENVIRONMENTALLY SENSITIVE AREA STANDARDS

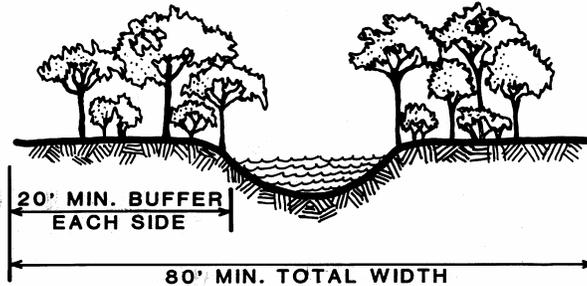
NAVIGABLE STREAMS & WETLANDS



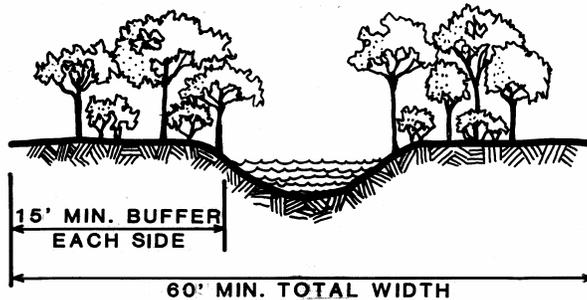
NON-NAVIGABLE STREAMS & DRAINAGEWAYS
DRAINAGE AREA GREATER THAN APPROXIMATELY 2000 ACRES



NON-NAVIGABLE STREAMS & DRAINAGEWAYS
DRAINAGE AREA APPROXIMATELY 300-2000 ACRES



NON-NAVIGABLE STREAMS & DRAINAGEWAYS
DRAINAGE AREA LESS THAN APPROXIMATELY 300 ACRES



First, the classification can be removed provided that the conditions outlined in Section (E) of the Sewer Service Area Amendment Process are met. This re-designation is considered a major change. Major changes have the potential for significant impacts on water quality and would require the concurrence of the East Central Wisconsin Regional Planning Commission and the Department of Natural Resources before these changes would become effective for the purpose of reviewing sanitary sewer extensions. Examples include:

1. Removal of any mapped wetland area for sewered development, unless resulting from an activity exempted by state administrative rules governing wetland protection [NR 117.05(2)] or state approved rezoning of wetlands;
2. Reduction of a delineated floodway of any navigable stream or river, or removal of any area below the ordinary high water mark of a navigable stream, pond, or lake;
3. Total removal or change in the continuity of any corridor segment including floodways, wetlands, shoreland buffer strips or steep slopes adjacent to water bodies. The water quality benefit that was associated with the portion of the corridor removed must be provided in the development proposal.

In the second instance, the environmentally sensitive areas may be modified by a minor change. Refinements and minor changes would not require prior approval of the East Central Wisconsin Regional Planning Commission or the Department of Natural Resources. However, East Central would have to be informed of the change before it would be effective for the purposes of reviewing sanitary sewer extensions. East Central would then be responsible for informing the Department of Natural Resources of the change.

Refinements and minor changes are generally of two types. The first type involves changes resulting from revised, improved or more detailed background resource information to include:

- a) Improved or revised WDNR certified floodway delineations resulting from revised flood studies;
- b) Revised wetland boundaries on the Wisconsin Wetland Inventory Maps resulting from field inspections by WDNR personnel or resulting from an approved rezoning.

The second type involves changes which would not seriously affect water quality and are the result of specific development proposals to include:

- a) Relocation of a non-navigable stream or drainageway as long as the environmental integrity of the stream or drainageway is preserved;

- b) Shortening of a non-navigable stream or drainageway based upon field determination of its point of origin;
- c) Adjustments to the widths of shoreland buffer strips along non-navigable streams and drainageways within the guidelines established in Figure 1;
- d) Changes which would reduce the width of shoreland buffer strips below the minimum guidelines provided there are locally adopted stormwater drainage criteria that establish corridor widths for drainageway preservation. Locally adopted criteria must be based upon sound engineering and environmental protection criteria; and
- e) Changes which result from utility or roadway maintenance or construction which meet the criteria set forth in NR 115 or 117. It is not the intent of the environmental corridors to prevent or obstruct maintenance, expansion or construction of transportation or utility facilities intended to serve areas outside of the corridors, needed to maintain or improve continuity of those systems, or designed to serve compatible uses in the corridors, such as park shelters or facilities. Facilities intended to serve new sewer residential, commercial or industrial development in the corridors would not be permitted.

IDENTIFICATION AND QUANTIFICATION OF EXISTING CONDITIONS

The ability to inventory existing conditions both quantitatively and qualitatively are paramount to evaluating land use and development trends and impacts. Aerial photos are the basis for identifying and quantifying land uses within the East Central region. Comparing aerial photos at different time intervals can establish trends in types and magnitude of land uses. East Central's 1980 land use inventory has been updated utilizing more recent photos (where available) or spot field surveys for this purpose. Acreages for major land use categories have been computer digitized and aggregated by section and township-range. Totals were also calculated for each unit of government within the planning area. In conjunction with the land use mapping program, all village and city municipal boundaries, as well as sanitary district limits, were identified on the aerial photos and transferred to the sewer service area maps.

Sanitary sewerage systems for all communities have been identified on the sewer service area file aerial photos. The location and size of all sewer collectors, mains, interceptors and forcemains are mapped in detail. In addition, the locations of all lift stations, pump stations and wastewater treatment facilities are shown. These maps are continually updated as new sewer extensions are reviewed by East Central.

New to this updated plan is the development of "holding tank" service areas and the mapping of on-site septic systems within the planning areas. On-site systems have been located, quantified and qualified for the purpose of determining individual septic system disposal requirements. Estimates of septage treatment are utilized in the treatment plant design recommendations.

Important for analyzing the planning areas, existing urban development areas were delineated on mylar overlays to the file photos. Urban development areas consist of all concentrations of development within the planning area, together with undeveloped lands which are either sewered or otherwise committed for development. These urban development areas are, in most instances, the minimal land areas which should be designated as sewer service areas.

The urban development areas have been further broken down into areas which are (1) both developed and sewered, (2) developed and unsewered, (3) undeveloped and sewered and (4) undeveloped and unsewered. In order to be classified as sewered, areas must be adjacent to public sewer lines, with the ability to connect either through private laterals or, in certain instances, private sewers. In general, lands within 200 feet of a public sewer are assumed to connect via a private sewer lateral.

In addition to the development information included on the mylar overlay, the existing sewer service area boundaries were identified to determine the location and amount of land currently available for development outside of the urban development areas. This land, in most instances, is the area which had been the primary growth area forecast in the 1985 sewer service area plan. These lands were automatically included within the updated sewer service area.

In addition to the designations of environmental sensitive areas (shorelands, wetlands and floodways), other areas with natural characteristics that could impact environmental quality or development potential have been identified. These areas have been termed areas with "limiting environmental conditions" and include areas with seasonal high groundwater (within one foot of the surface), floodplain areas, lands with shallow bedrock (within five feet of the surface) and areas with steep slopes (12 percent or greater).

Unlike the environmentally sensitive areas, development is not excluded from land with limiting environmental conditions. The primary purpose of identifying these areas is to alert communities and potential developers of environmental conditions which should be considered prior to the development of such an area.

Complementing the information placed upon the aerial photos, additional data was collected on existing population, numbers of dwelling units, mixes and densities of residential development, existing employment by type and amount, and densities of industrial and commercial development.

Much of this information was available from the 1990 and later census materials; other information was gathered from state and local sources. This data is contained in East Central's information files for each sewer service area.

REFINEMENT OF GOALS, OBJECTIVES AND POLICIES

The conceptual and philosophical bases for sewer service area planning are the goals, objectives and policies. As stated earlier, the service area planning process has become much more complex since it was first initiated. In response to changing conditions, minor refinements have been made to the 1985 goals, objectives and policies. This effort was accomplished early in the planning process in order to give direction to decisions involving the amount of growth in a given service area, especially the allocation and location of future growth.

FORECAST OF URBAN GROWTH

The forecasting of urban growth and development within the East Central region involves two primary analytical processes. These are 1) population projections and related dwelling unit and employment estimates, and 2) allocation of land use acreage. This process answers the question of the quantity and location of new growth. The process utilizes the sewer service area policies and various planning and development standards as a technical basis.

Population Projections

Population projections are the key factor in forecasting urban growth. The projections used are the 1990-2020 Department of Administration (DOA) population projections by five year increments for individual counties. DOA utilizes the cohort component method of population projection. These are the official state projections, consistent with U.S. Bureau of Census State of Wisconsin projections. The DOA county projections are required to be used as control totals in accordance with Wis. Admin. Code. NR121 for the development of sewer service area plans. A detailed description of the population projection process is included in the East Central report Population Characteristics of the East Central Region, April 1994. The official DOA projections, first received in 1992, have been updated using the DOA annual population estimates for the counties and individual MCD's.

East Central has developed a process for breaking down the county population projections to the minor civil division (MCD) level. This estimating process uses the "share-of-the-county trending methodology." This methodology was used for all communities within the East Central region, with the exception of the Fox Cities, Sherwood and Fond du Lac. In these areas, a special procedure was used which established "urban area" control totals. These control totals were then broken down into Transportation Analysis Zones (TAZ's) in the Fox Cities and Sherwood areas and Special Analysis Zones (SAZ's) in the Fond du Lac area. This special projection process was needed because of the complex jurisdictional interrelationships of cities, villages and sanitary districts within these areas.

Residential Development

In addition to population projections, household size and housing densities are required to determine residential land needs. Household formation rates were estimated and translated into household size. The household size thus represents a typical dwelling unit which can be compared to population projections for estimating future dwelling units. The household size for the East Central region has been steadily declining and is anticipated to continue to decline. Thus, an anomaly occurs in which a community may not be increasing in population, but still is forming new households which require new housing construction.

Once household size was established, residential development densities and the mixture of single-family/multifamily uses was determined. The number of dwelling units per acre were determined from existing residential development densities for the three major urban areas. These densities were also used for larger outlying urban communities. Several smaller communities in the outlying areas were found to have less dense development and therefore a somewhat lower density was used.

The mix of residential development was determined from development and construction records from various communities as well as census materials for the urbanized area. The residential mix was found to vary greatly from community to community. Community specific mixes were used for freestanding communities; however, standardized splits for the Fox Cities, Sherwood and Fond du Lac areas were developed and applied within the growth forecast method.

Population projections divided by household size established the number of dwelling units. The number of dwelling units by type (single or multifamily) divided by the density per acre resulted in the number of acres of residential land required. The resultant acreage was allocated as residential growth for land areas within each planning area.

Non-Residential Development

Forecasts of nonresidential development were also based upon population projections for sewer service area planning. There is, however, a significant difference between the methodology used for the three urban areas and the outlying planning areas. Within the urban areas the population projections served as a basis for estimating future employment. These employment estimates were used in conjunction with documented employment densities (number of employees per acre) for various land use types and employment categories to determine acreage needs for future nonresidential employment. Similar to the household participation rates for calculating dwelling units, labor force participation rates were used to calculate employment for various employment categories. These employment categories were broken down into two types of nonresidential development consisting of commercial and industrial land uses. After future employment was estimated for commercial and industrial uses, densities were applied (employees per acre) and total acres of the land needs were calculated. This acreage was then allocated within particular planning areas.

In the outlying areas, a much simpler process for forecasting nonresidential growth was required because of deficiencies in labor force and employment data available for small communities. Furthermore, because of the small commercial and industrial base of these communities, a refined process for estimating future employment could be subject to extreme error.

Local initiative for promoting development is a greater factor in future growth than statistical trends. A simple forecast method was used which calculated the existing amount of nonresidential development per capita within the area then multiplying this amount by the population growth for the planning period resulting in the amount of non-residential acreage required.

Growth Allocation

After the amount of growth is calculated for residential and nonresidential uses within each planning area, the process of allocating this growth acreage is undertaken. The allocation process (where growth should occur) is complex, and must integrate service area growth policies, planning standards and criteria as well as historical and market growth trends for a particular planning area. The allocation process establishes the future growth areas within each sewer service area.

A major product of the allocation process is the mapping of growth areas. Again, the file aerial photos were used to designate these growth areas. The following criteria and standards were utilized in the designation of growth areas:

1. All areas within a planning area which are currently served with public sanitary sewers shall be designated sewer service areas. Areas along existing and proposed (WDNR approved) sewer collector or interceptor lines (forcemains excluded) shall be designated sewer service areas. The depth of the sewer service area boundary line shall be to the average lot depth (maximum 400 feet) bordering the sewer or where average lot depths cannot be distinguished to line 200 feet from the sewer line. Development within this area is generally considered to be serviceable by a private sewer lateral.
2. Unsewered areas of development within close proximity to existing sanitary sewer lines where the cost-effectiveness of the extension of sewers is not questionable shall be included in the service area. These areas have generally been designated as an urban development area.
3. Areas of existing development with approved wastewater facility plans shall be designated sewer service areas. (Note: Various areas of existing development previously designated have been dropped because of lack of approved wastewater facilities plans.)
4. The acreage allocations of future development areas should approximate residential, commercial and industrial growth projections.
5. Environmentally sensitive areas shall be excluded from the sewer service area.
6. Holding tank service areas shall be designated for existing large holding tanks defined in NR113 and for areas of existing development where no cost-effective alternative to the installation of a large holding tank is available. The cost-effective analysis is to be prepared by the owner. All large and individual holding tank wastes are to be disposed of in accordance with NR113.

The standards and criteria for allocating future growth areas are policy based. These considerations are:

1. Urban development patterns should incorporate planned areas of mixed use and density that are clustered and compatible with adjacent uses.
2. The allocation of future urban development should maximize the use of existing urban facilities and services.
3. Future urban development should be encouraged to infill vacant developable lands within communities and then staged outward adjacent to existing development limits.

4. Future commercial and industrial development should expand upon existing areas and be readily accessible to major transportation systems.
5. The boundaries of urban development should consider natural and man-made features such as ridge lines, streams and major highways.
6. Residential land use patterns should maximize their accessibility to public and private supporting facilities.
7. Urban development should be directed to land suitable for development and discouraged on unsuitable land, such as floodplains, areas of high bedrock, and areas of high groundwater.
8. Environmentally sensitive areas shall be excluded from the sewer service area to protect water quality.
9. Future urban development should pose no significant adverse impacts to surface or groundwater.
10. Urban development should be located in areas which can be conveniently and economically served by public facilities.
11. The waiver of acreage allocations based on density standards for large lot developments will be considered if the installation of sewers is cost-effective, the community adopts a development plan and subdivision plat for the area specifying no smaller subdivision of parcels will be allowed.

Combined with the policy-based criteria for allocating future development areas were various considerations involving the direction of growth trends and short term "market" factors. These considerations primarily involved experienced judgments by planning staff and consultations with local planning officials.

Early in the planning process, a policy decision was made that the total allocated growth acreage for individual sewer service areas delineated in the 1985 adopted plans and subsequent amendments, would not be reduced in quantity. This policy was applied to all sewer service areas which have a sewerage system or which have WDNR approved wastewater facilities plans for a sewerage system. The impact of this policy is that the areas available for future growth in various sewer service areas sometimes were greater than the updated forecast growth which was to be allocated. The result of this policy is that there were fewer service areas where the existing service area boundaries needed to be expanded.

PUBLIC AND COMMUNITY PARTICIPATION

Citizen participation during the update of the service area plans was encouraged throughout the process. An ad hoc Technical Advisory Committee (TAC) was formed during the initial stages of policy development for the Designated Sewer Service Areas (urban areas). This committee met three times at critical stages in the process and provided a significant contribution to the refinement of the goals, objectives and policies.

General public participation from the Oakfield Planning Area was sought during and after the land use planning process as proposed sewer service area boundary maps were completed. Public information meetings were held with local officials within the planning areas and associated sewer service areas. The purpose of sewer service area planning, the planning process, existing conditions of the service area and growth forecasts were explained. In response to comment from these meetings, the boundaries of various sewer service areas were modified in accordance with the technical and policy criteria and standards described earlier.

After the preliminary changes were incorporated on the GIS maps, letters and draft maps showing the updated service areas were sent to all communities within the sewer service areas. Communities were notified to respond to East Central before the service areas were addressed by the Regional Development Committee for approval. A final round of these public information meetings was also held prior to adoption by East Central.

ADOPTION AND PUBLICATION OF FINAL PLANS

Each individual sewer service area is adopted by the East Central Wisconsin Regional Planning Commission as an element of the Commission's regional land use plan. After adoption, the plans are submitted to the Wisconsin Department of Natural Resources for certification as an element of the Water Quality Management Plan. After WDNR certification the plan becomes effective and copies of the final plans are distributed to the affected communities.

CHAPTER 5 - SEWER SERVICE AREA AMENDMENT PROCESS

POLICIES AND PROCEDURES

The East Central Wisconsin Regional Planning Commission has adopted "An Amendment Policy and Procedure For Sewer Service Areas" to enable sewer service area plans to be amended in response to changing conditions and community plans. This procedure provides a flexible, yet equitable and uniform basis for revising sewer service area boundaries.

East Central recommends that a representative from the government entity requesting the amendment meet with East Central staff to discuss the proposal. Most documentation and questions needed for the evaluation of the amendment can be addressed at that time.

EAST CENTRAL REVIEW AND RECOMMENDATION

East Central's Regional Development Committee will review the proposed amendment within approximately 30 days of receipt of the request. The review will include a staff evaluation of the consistency of the proposal with East Central's amendment policies and criteria. The review will also include an evaluation of comments and recommendations received from local units of government and agencies notified of the proposal by East Central. The applicant may be requested to appear at the Regional Development Committee meeting if there are significant issues involved. The Regional Development Committee shall recommend approval or disapproval of the amendment. Upon approval, the amendment request shall be submitted to the Wisconsin Department of Natural Resources to request revision of the Water Quality Management Plan.

WDNR REVIEW AND APPROVAL

The Wisconsin Department of Natural Resources will review the East Central recommendations for the service area amendment. If the service area amendment does not involve an area greater than 60 acres or greater than 5 percent of the total service area the Department should approve the amendment and certify the water quality plan within approximately 30 days after submittal. If the proposal is over 60 acres or 5 percent and/or if the project involves the development of an environmentally sensitive area the Department may require the preparation of an environmental assessment statement which may lengthen the approval period to three months or greater. Once WDNR approval is made, East Central can review sewer extensions and submit comments to the WDNR for sewer extension plan approval.

The formal amendment process includes the following elements:

Section I: Amendment Policies

- A. Sewer service area boundaries may be modified (acreage swap) provided there is no increase in the total acreage of the specific sewer service area.
- B. Sewer service area boundaries may be expanded provided there is a documented need for a sanitary sewer collection system for areas of existing urban development.
- C. Sewer service area boundaries may be expanded provided there is a documented need for sanitary sewers to serve a proposed unique facility or development.
- D. Sewer service areas may be expanded to provide communities with the flexibility to accommodate unanticipated short-term development. The community shall certify through plan commission action that the proposed amendment area is required for reasonable community growth and is consistent with adopted development plans.
- E. Sewer service area boundaries may be modified by the re-designation of previously identified environmentally sensitive areas consistent with all the following standards:
 - 1. The environmentally sensitive area is immediately adjacent to an existing sewer service area.
 - 2. Appropriate local, state and federal environmental permits are granted for the proposed development.
 - 3. Major re-designations shall pose no significant adverse water quality impacts. Major re-designations include:
 - a. removal of any mapped wetland area for sewer development unless resulting from an activity exempted by state administrative rules governing wetland protection [NR 117.05(2)] or state approved rezoning of wetlands.
 - b. any change which would reduce a delineated floodway of any navigable stream or river, or which would remove any area below the ordinary high water mark of a navigable stream, pond or lake.
 - c. any change resulting in the total removal or in the continuity of any corridor segment including floodways, wetlands, shoreland buffer strips or steep slopes adjacent to water bodies. The water quality benefit that was associated with the portion of the corridor removed must be provided for in the development.

4. The re-designated acreage will be added to the service area total acreage.
- F. Sewer service area boundaries may be modified or expanded to correct an error in the maps, data, projections or allocations of the adopted sewer service area plan.

Section II: Amendment Criteria

Any proposed amendment shall be reviewed according to the following criteria:

- A. The cost-effectiveness of the proposed amendment compared to other alternatives. East Central may require this determination from the applicant.
- B. The environmental impacts of the proposed amendment shall be assessed in accordance with the criteria established in the Wisconsin Department of Natural Resources environmental assessment checklist.
- C. The East Central Wisconsin Regional Planning Commission will provide a water quality impact assessment and also evaluate the ability of the existing sewerage facilities to transport and treat the projected flows. East Central may also prescribe safeguards or impose additional conditions deemed necessary to protect the water quality in the area.
- D. Amendment areas under Section I Policy A & D shall have a common boundary with the current sewer service area and shall not create a void within the service area.
- E. Service area amendments under Section I Policy D shall use as guidance the following:
 1. The expansion area generally shall not exceed 20 acres for residential development or 50 acres for nonresidential development.
 2. Not less than 15 percent of the expansion area boundary must be common to the boundary of a reference area within the current sewer service area. This reference area must be three times larger than the acreage in the proposed expansion and must be at least 50 percent developed.
 3. If any part of the reference area is part of a previously defined reference area, then the entire expansion area of the previous amendment should be included as part of the current reference area.
- G. The Commission may also prescribe safeguards or impose additional conditions deemed necessary to carry out the intent of the sewer service area amendment criteria.

Section III: Amendment Procedures

Proposed sewer service area amendments shall be reviewed according to the following procedure:

- A. Requests for sewer service area amendments should be made by the governmental entity that will be expected to serve the area. Units of government seeking an amendment to the sewer service area boundary should transmit a letter requesting the amendment to East Central along with the following documentation:
 - 1. A map of the proposed expansion area and, if required, reference area or any area to be deleted (swapped) which affects the boundary modification;
 - 2. Estimates of existing and anticipated population, wastewater generation and means of collection from the area;
 - 3. A description of the type of development expected to occur;
 - 4. Ability of the treatment facility to treat the anticipated wastewater;
 - 5. methods of stormwater management for added service area and surrounding areas which may be impacted; and
 - 6. Documentation that all property owners in areas proposed to be deleted (swapped) were notified of this request by the unit of government seeking the amendment.
 - 7. Plan Commission or Board action as required under Section I Policy D.
- B. Based on this information the Regional Development Committee, designated as the review committee by the East Central's bylaws, will review the proposed amendment to determine whether it meets the standards set forth in the Sewer Service Area Amendment Process. If no significant adverse water quality impacts are involved, the East Central shall recommend approval of the Plan amendment and submit it to the Wisconsin Department of Natural Resources for State plan certification.

Section IV: Appeal

If an applicant feels that a hardship exists in the strict interpretation and application of the amendment standards and criteria, consideration may be given to providing relief through a variance subject to the following requirements:

- A. The hardship is significant and widespread owing to substantial pre-existing financial or legal commitments for sanitary sewer service.
- B. The major objectives of the sewer service area plans can be met. The appeal shall be submitted to the Chairman of East Central for action at a regularly scheduled meeting of the Commission. Further appeals may be submitted to Wisconsin Department of Natural Resources.

Section V: Definitions

- *Sewer Service Area:* A geographic area currently or anticipated to be served with sanitary sewers within the planning period as specified in the Sewer Service Area Plan element of the Water Quality Management Plan.
- *Existing Urban Development:* A geographic area with densities of development suitable for the efficient and economic provision of urban services such as sanitary sewer, water, transportation and storm drainage. (e.g. single family residential development greater than two units per gross acre)
- *Reference Area:* A geographic area currently within the existing sewer service area which is at least 50 percent developed.
- *Unique Facility or Development:* Interpreted to represent a development which was not anticipated or projected in the Sewer Service Area Plan but, which if constructed, will provide a widespread benefit to the entire service area. It may also include a development which requires a specific geographic location for which no other location can be utilized. (i.e. Airport Industrial Park in Outagamie County, EAA complex and state prison site in Sherwood)
- *Expansion Area:* The geographic area proposed to be added to the existing sewer service area through the amendment process.

- *Cost-effectiveness:* Analysis of sanitary sewerage system alternatives. The analysis shall include monetary costs and environmental as well as other non-monetary costs.
- *Environmentally Sensitive Area:* Geographic areas consisting of all lakes and streams shown on USGS quadrangle maps and their adjacent shoreland buffer areas. Also all wetlands shown on the state Wisconsin Wetland Inventory Maps and floodways as delineated on the official Federal Emergency Management Administration Flood Boundary and Floodway Maps.

APPENDIX A – PUBLIC PARTICIPATION AND APPROVAL DOCUMENTS

Appendix Documents

1. List of Public Meetings Held.
2. Regional Development Committee Summary of Proceedings – October 15, 1998.
3. ECWRPC Commission Summary of Proceedings – October 30, 1998.
4. ECWRPC - Commission Resolution No. 21-98.
5. WDNR Certification Letter – June 10, 1999.

Oakfield Sewer Service Area Update Meetings

A majority of the meetings held during the SSA Plan Update process were coordinated with Oakfield Area Joint Land Use Plan Committee which was made up of Town and Village of Oakfield elected and appointed officials as well as several citizen members. The SSA Plan update was discussed, in some form, at virtually every meeting of the committee and formally adopted as part of the Oakfield Area Joint Land Use Plan document. All meetings were public noticed in the Fond du Lac County Reporter.

| <u>Date</u> | <u>Description</u> |
|--------------------|---|
| April 27, 1997 | Meeting of ECWRPC staff and Town of Oakfield Chair and Village of Oakfield President to initiate planning process for land use plan and SSA Plan. |
| May 28, 1997 | Initial meeting of Oakfield Area Joint Land Use Plan Committee. |
| June 25, 1997 | Meeting of Oakfield Area Joint Land Use Plan Committee. |
| July 23, 1997 | Meeting of Oakfield Area Joint Land Use Plan Committee (village members only). |
| August 27, 1997 | Meeting of Oakfield Area Joint Land Use Plan Committee. |
| September 24, 1997 | Meeting of Oakfield Area Joint Land Use Plan Committee. |
| October 22, 1997 | Meeting of Oakfield Area Joint Land Use Plan Committee. |
| January 28, 1998 | Meeting of Oakfield Area Joint Land Use Plan Committee. |
| February 18, 1998 | Meeting of Oakfield Area Joint Land Use Plan Committee. |
| March 19, 1998 | Meeting of Oakfield Area Joint Land Use Plan Committee. |
| April 2, 1998 | Meeting of Oakfield Area Joint Land Use Plan Committee. |
| June 17, 1998 | Public Hearing for Village portion of Oakfield Area Joint Land Use Plan document |
| July 21, 1998 | Public Hearing for Town portion of Oakfield Area Joint Land Use Plan document. |
| July 22, 1998 | Village of Oakfield Plan Commission meeting and adoption of Oakfield Area Joint Land Use Plan document. (including proposed SSA). |
| August, 24, 1998 | Town of Oakfield Plan Commission meeting and adoption of Oakfield Area Joint Land Use Plan document (including proposed SSA). |
| September, 1998 | Village of Oakfield Village Board meeting and adoption of Oakfield Area Joint Land Use Plan (including proposed SSA) |
| September, 1998 | Town of Oakfield Town Board meeting and adoption of Oakfield Area Joint Land Use Plan (including proposed SSA) |
| October 15, 1998 | ECWRPC Regional Development Committee Meeting & Public Hearing |
| October 30, 1998 | ECWRPC Commission Meeting |

SUMMARY OF PROCEEDINGS

Regional Development Committee
East Central Wisconsin Regional Planning Commission
ECWRPC Offices
October 15, 1998

The meeting was called to order by Claire Alexander at 9:30 A.M.

Those Committee members present were:

Claire Alexander Marquette County
Tim Hanna Outagamie County
Donald De Groot Outagamie County
Arden Schroeder Winnebago County
Clarence Wolf Calumet County
Don Wilson Marquette County

Those Committee members absent were:

Jane VanDeHey..... Winnebago County

Other persons in attendance were:

Alex Strupp Town of Oakfield
Mike Burns Flood Homes, Town of Friendship
Harlan P. Kiesow ECWRPC Staff
Eric Fowle ECWRPC Staff
Joe Huffman ECWRPC Staff

Roll Call

1. Claire Alexander acknowledged the committee members present and identified those who were absent.
2. Oakfield Sewer Service Area Plan Update – Public Information Hearing
Mr. Fowle began by distributing to the committee members acreage summaries pertaining to the Oakfield Sewer Service Area. These acreage figures included the Village of Oakfield and the Oak Center Sanitary District. Mr. Fowle explained that Oakfield SSA plan was not scheduled for an update ,however, due to the land use planning efforts for the Town of Oakfield, a sewer service area update made sense at this time. The expanded sewer service area boundary was justified by two major events within the Village of Oakfield. Mr. Fowle explained that 1) industrial acreage was lacking within the village and 2) a proposed school site may pose development pressures in the area. The allocated industrial acreage configuration was based largely on preliminary concept planning and has the potential to change slightly as actual development plans are developed. Mr. Fowle stressed to the committee that the flexibility to swap or shift acreage in the allocated areas for industrial development is essential. Existing sewer service area acreage was re-allocated within the village to accommodate future development thus making up the final proposed sewer service area boundary. Mr. Fowle then described the allocation areas using the display maps provided by staff. The Oak Center Sanitary District did not require allocation areas in this update period. Oak Center S.D. has the option of connecting to the village's wastewater treatment plant via force main as the need arises. There was very little discussion regarding the update process and the representative from the Town of Oakfield had no objections to the proposed sewer service area plan update. There being no further discussion by committee members, Mr. Fowle moved to Item #3 which included Resolution 21-98 that adopts the Oakfield Sewer Service Area Plan Update.

3. Oakfield Sewer Service Area Plan Update – Resolution 21-98

Mr. Fowle presented the committee with Resolution No. 21-98 that adopts the Oakfield Sewer Service Area Plan Update. There were no objections in the public information discussion and no controversial issues involved. Clarence Wolf moved to adopt and approve Resolution No. 21-98 with the understanding that potential industrial areas may be swapped to accommodate said developments as stated in the public information hearing. Don Wilson made the second. Motion passed unanimously.

4. Rosendale Sewer Service Area Plan Update – Public Information Hearing

Mr. Fowle introduced to the committee the Rosendale Sewer Service Area Plan Update. Acreage summaries were distributed with explanations justifying the minor excess in developable lands. The Rosendale Sewer Service Area was expanded approximately a year ago to accommodate a residential subdivision located in the eastern portion of the village. The residential acreage allocations were primarily targeted within this area as development pressure is expected. A small industrial allocation was granted in the village's northwestern limits to accommodate a proposed industrial park. Mr. Fowle indicated that portions of the existing developable acreage was re-allocated within the service area plan update and still other areas completely eliminated. The resulting map configuration shows that the service area expansion was slightly greater than the existing SSA.

There were no representatives available for comment from either the surrounding townships or the Village of Rosendale and therefore no objections were filed. Mr. Fowle then ended the public information hearing and moved to Item #5 that included Resolution No. 22-98 that adopts the Rosendale Sewer Service Area Plan Update.

5. Rosendale Sewer Service Area Plan Update – Resolution 22-98

Mr. Fowle presented the committee with Resolution No. 22-98 that adopts the Rosendale Sewer Service Area Plan Update. There were no objections in the public information discussion and no controversial issues involved. Don DeGroot moved to adopt and approve Resolution No. 22-98. Arden Schroeder made the second. Motion passed unanimously.

6. Fond du Lac Sewer Service Area Amendment – Town of Friendship S.D. #2

Mr. Fowle presented the T. Friendship Sanitary District's amendment request that would add approximately twelve acres to the Fond du Lac Sewer Service Area via East Central's swap amendment policy. The amendment request, if approved, would allow the expansion of a mobile home park located within the Town of Friendship, directly west of the Village of North Fond du Lac. Mr. Fowle described the areas to be removed from the service area and distributed the proposed concept plan for the mobile home development. The overall concept plan calls for staged development with this amendment being Phase I. The intent was to include the balance of the development during the Fond du Lac Sewer Service Area Plan Update slated for completion by the end of calendar year 1998. It was also anticipated that the acreage being removed by today's action would be re-instated during the plan update. Mike Burns, representing the Flood Homes project, was present and had no additional comments.

No further discussion ensued and Clarence Wolf moved to approve the swap amendment request. Don DeGroot made the second. Motion passed unanimously.

There being no additional business the meeting was adjourned at 10:45 A.M.

SUMMARY OF PROCEEDINGS

East Central Wisconsin Regional Planning Commission
Outagamie County Courthouse, Appleton
October 30, 1998

- I. PLEDGE OF ALLEGIANCE
- II. MOMENT OF SILENT MEDITATION
- III. ROLL CALL

The meeting of the East Central Wisconsin Regional Planning Commission was called to order by Chair Joseph Maehl at 1:30 P.M. Roll call was taken showing the following attendance:

Commission Members Present

| | |
|--|------------------|
| Vern Gonzo | Calumet County |
| Wilma Springer | Calumet County |
| Clarence Wolf | Calumet County |
| Howard Zellmer | Marquette County |
| Claire Alexander (Alternate) | Marquette County |
| Walter Cacic | Marquette County |
| Don Wilson | Marquette County |
| James Schuette | Outagamie County |
| Marvin Fox | Outagamie County |
| Tim Hanna | Outagamie County |
| Alfred Krause | Outagamie County |
| Donald De Groot | Outagamie County |
| Vernon Ainsworth | Shawano County |
| M. Eugene Zeuske | Shawano County |
| Clarence Natzke | Shawano County |
| Duane Brown | Waupaca County |
| La Vern Grunwald | Waupaca County |
| Ken Hurlbut | Waupaca County |
| Yvonne Peavel (Alt. for George Sorenson) | Waushara County |
| Norman Weiss | Waushara County |
| Lester Van Loan | Waushara County |
| Joseph Maehl | Winnebago County |
| Eric Bollin | Winnebago County |
| Arden Schroeder | Winnebago County |

Commission Members Absent

| | |
|-----------------|------------------|
| Roger Mosher | Nenominee County |
| Randy Reiter | Nenominee County |
| Melaine Eloechi | Winnebago County |
| Jane Van De Hey | Winnebago County |

Staff Members Present

| | |
|---------------|--------------------|
| Harlan Kiesow | Executive Director |
| Ann E. Schell | Assistant Director |
| Fred Scharnka | Principal Planner |
| Walt Raith | Associate Planner |

Tom FaellaInformation Technology Manager
 Julie KautzaAssociate Planner
 Eric FowleAssociate Planner
 Gary TaylorPlanner
 Betty NordengPlanner
 Kathy ThunesPlanner
 Elizabeth RungePlanner
 Dave MoeschPlanning Specialist
 Vicky JohnsonAdministrative Specialist
 Andrea BeckGIS Planning Assistant

IV. MINUTES OF THE JULY 24, 1998 MEETING

Mr. Bellin motioned to approve the minutes of the July 24, 1998 meeting, seconded by Mr. Brown. The motion was passed unanimously.

V. BUSINESS

A. Steering Committee

1. Acceptance of the Summaries of Proceedings for the August 21 and October 9, 1998 Meetings.

Mr. Gonz motioned to accept the Summaries of Proceedings for the August 21 and October 9, 1998 meetings. The motion was seconded by Mr. Bellin and passed unanimously.

2. Proposed Resolution No. 17-98: Authorizing the Commission to Enter into an Agreement with the Wisconsin Department of Transportation For the Preparation of a USH 10 (Fox Cities to Stevens Point) Corridor Plan

Mr. Kiesow gave a brief introduction to this resolution, stating that over the last year the Commission has become more involved with highway corridor planning. One project underway is the Hwy. 21 Corridor in the Oshkosh area. The Commission also has a contract with WisDOT to do the Hwy. 45 Corridor from Oshkosh to New London, which is presently underway. The Commission has been requested to work on another corridor, Hwy. 10 from the Fox Cities to Stevens Point. This is a bigger project and more complicated involving North Central RPC, and a sub-contract with a local consultant.

Mr. Raith explained in the late 80's, early 90's the Corridors 2020 Plan for the State Department of Transportation was initiated. The plan stated that HWY. 10 would be a backbone highway from the Fox Cities to Stevens Point connecting HWY. 41 with I 39 and USH 51 in Stevens Point. Mr. Raith explained changes that have taken place on Hwy. 10 over the past few years. As part of our long range planning effort in 1997 we collected land use and socioeconomic information for the corridor out to about the Hwy. 45 Corridor in towns of Clayton and Winchester. He stated the display on the wall includes the STH 41/41 interchange at the Fox Cities and marks the beginning of the project. This is

a critical infrastructure element and one of the busiest interchanges in the Fox Valley.

What is being proposed out past Winchester is a freeway section which means that there are no accesses. The only way to get onto the facility is at an interchange. It is proposed to be grade separated, and would go over Oakwood Avenue, over Fairview Road pass Fairview School, over Center Road and the Wisconsin Central Railroad tracks. Pioneer Road would go over the top of Hwy. 10. This is a result of the towns or jurisdictions along this corridor working closely with the department to express ideas of what they want to do out there. Mr. Raith indicated that through the Rat River Marsh area the new HWY 10 and the new HWY 45 are going to run together. This section is proposed to be a freeway facility. District 4, District 3, and East Central have met several times and have concluded that the future of the whole corridor needs to be looked at.

The Commission is going to do a corridor land use plan similar to the Fox Cities plan, completed in 1997. Mr. Raith stated that the Commission will be looking at future development, including incorporating any plans the jurisdictions may have completed or underway. The plan should present alternatives for future access and connecting roads that will provide safe intersections along the corridor. Mr. Raith noted that public involvement will be an important element of the planning process.

Mr. Kiesow clarified the resolution by explaining that the study would develop a land use transportation plan which involves all the communities along that corridor and provide that plan to all the communities and DOT to determine what the facility should look like in terms of access points. This is a project that will require entering into a local contract, where we will be paid by DOT to do this particular work, with some of those monies going to North Central for the Portage County portion of the work. Also included is a subcontract with Martenson & Eisele to prepare a portion of the document for the Towns of Clayton and Winchester where they are already doing comprehensive planning.

Mr. Raith reiterated that part of this is incorporating the planning that has already been completed into the corridor plan. He anticipates the jurisdictions involved will approve of the plan. With the plan approved by all jurisdictions, if someone comes to the department with an application for an access, denial or approval of access will then be based on some kind of structure.

Following a brief discussion concerning the staff time and personnel involved to do this project, Mr. Krause motioned to adopt Proposed Resolution No. 17-98, seconded by Mr. Brown. Motion passed unanimously.

2. Proposed Resolution No. 18-98: Adoption of the Annual Affirmative Action Program for Equal Employment Opportunities

Ms. Schell explained that the update of the Affirmative Action Program is required annually as part of the federal funding process. Ms. Schell briefly explained the report, stating that it compares the minority population and gender makeup of East Central's staff to that of the urbanized area, reviews the job actions that occurred throughout the year, projections of job actions for the coming year, affirmative actions goals, and goals for hiring.

Ms. Schell stated that there was a higher than typical turnover at East Central from July of 1997 through June of 1998 (5.5 employees), mainly in the technical category. The projections shown for the coming year, however, reflect a more typical turnover of three employees.

Mr. Bellin moved to accept Proposed Resolution No. 18-98, seconded by Ms. Springer. Passed unanimously.

3. Proposed Resolution No. 23-98: Amending the 1999 Work Program and Budget for the East Central Wisconsin Regional Planning Commission

Mr. Kiesow stated the Work Program was approved at the July meeting. Due to the provisions of a new federal transportation act signed in June, 1998, TEA 21, additional planning funds and requirements made it necessary to revise the Work Program. The changes in the revenue figures do not alter the bottom line figures in the budget, but do cause some sifting within the program. Mr. Kiesow briefly reviewed the changes with the Commissioners, pointing out the new schedules that have been added. (Transportation Long Range Planning Implementation Schedule and Work Schedule) Although there will be no staffing changes because of the additional monies, an increase in the cash reserves will be reflected.

A motion was made by Mr. Cacic to adopt Proposed Resolution No. 23-98, seconded by Mr. Van Loon. Unanimously passed.

5. Aerial Photo Update Proposal discussion

Mr. Kiesow explained that there has been an attempt to coordinate aerial photography across the region and to coincide with the decennial census. A coordinated effort in 2000 is critical to the region and the Regional Land Information Committee is taking on the effort. What is proposed is that East Central sponsor the coordination for the flight, contract for the plane, and contract to get contact prints and mylars for the region. These flights would also be available for customization or for further work at the county level for those counties willing to spend extra dollars to enhance their existing programs. The cost at this point in time for the commission would be \$60,000-70,000 for the base photography over the region and additional cost of approximately

\$100,000 for the prints and mylars. Mr. Kiesow stated the money for this project would be taken out of the Commission's reserve fund.

6. Renewal of Auditing Service Contract

Mr. Kiesow stated the initial agreement with Jonet & Fountain needs to be renewed. The proposed renewal contract amount is \$5,400. This cost will increase each year a little due to inflation. He stated that this item was discussed at the Steering Committee and they agreed that the quality of the work and the cost of the contract are comparable to other auditors. The recommendation of the Steering Committee was to stay with Jonet and Fountain and to renew the contract on an annually basis.

Mr. Schuette asked if any action has been taken regarding the past dues owed by Menominee County. Mr. Kiesow stated Menominee County has a new County Administrator and he has made arrangements to discuss this item and the participation of Commissioners with him.

B. Economic Development Committee

1. Chairman's Report.

2. Acceptance of the Summary of Proceedings for the October 8, 1998 meeting.

Mr. Brown moved to accept the Chairman's Report and the Summary of Proceedings for the October 8, 1998 meeting, seconded by Mr. Beilin. Passed unanimously.

4. Proposed Resolution No. 20-98: Amending the Overall Economic Development Program 1998 Update

Ms. Kautza stated the OEDP Update was presented to the Commissioners at the April Quarterly Meeting. Since that time two communities, Village of Bonduel and the Village of Redgranite, have submitted projects for inclusion in the Update. EDA has indicated that these projects are fundable but have to be included in the Update. Ms. Kautza briefly explained the change in the ranking system for projects, under the EDA-designated distress portion.

Mr. Brown moved for adoption of proposed Resolution No. 20-98, seconded by Mr. Ainsworth. Resolution passed unanimously.

C. Open Space and Environmental Management Committee

1. Chairman's Report.

2. Acceptance of the Summary of Proceedings for the October 19, 1998 meeting.

Mr. Natzke moved to accept the Chairman's Report and the Summary of Proceedings for the October 13, 1998 meeting, seconded by Mr. Schuette. Passed unanimously.

3. Status Report - Fox River Locks and Navigation System Negotiation Process

Mr. Kiesow updated the Commissioners on efforts to transfer the Fox River locks systems from the Corps of Engineers to the state/local levels. A local group of communities and organizations has been meeting and they have decided that each particular community and each organization would put together its intent and support and sent that to George Meyer for input. Funding has been the main issue. A financing mechanism, such as fund raising, was suggested, which would raise the money and support for the funding formula by not committing local tax dollars and by not giving the organization that would take over this system taxing power. Mr. Kiesow stated that this appears to be the direction this issue is going and it looks like this process may be successful. This all needs to come together over the next month or so, there is a deadline of the end of the year. He emphasized that this is a critical stage, the State needs a reply, the Corps' clock is ticking and if something isn't done at this point in time, it will all be over.

D. Regional Development Committee

1. Chairman's Report.
2. Acceptance of the Summary of Proceedings for the September 2, and October 15, 1998 meetings.

Mr. Alexander moved to accept the Chairman's Report and the Summary of Proceedings for the September 2 and October 15, 1998 meetings, seconded by Mr. Natzke. Passed unanimously.

3. Proposed Resolution No. 21-98: Approval of Oakfield Sewer Service Area Plan Update.

Mr. Fowle stated due to land use planning efforts, two smaller sewer service area updates, located in Fond du Lac County, that were not an initial part of the work program, were addressed. He indicated that a list of acreage calculations for these areas was distributed prior to the meeting. Based on population projections, in the Oakfield sewer service area, there was a defined need for 130 acres for future sewered development. There was an excess already within the service area of about 60 acres. Mr. Fowle stated efforts were taken to integrate the sewer service plan into the recently adopted Oakfield Area Joint Land Use Plan for the Town and Village. Based on that plan additional acres were included within and adjacent to the existing village boundaries based on specified planned land uses. About 100 additional acres were added over the village area which gives them an excess of 60 acres overall within the service area. No

additional acres were added in the Oak Center area. This area is still addressing problems with the existing on site systems that are failing. Mr. Fowle showed maps that illustrated the changes and the recently adopted land use plan for the town and village. Mr. Fowle also noted that there is a strong commitment between the town and village for a cooperative level of planning in terms of development locating in or around the village with services provided mostly from the village.

Following a brief discussion, Mr. Van Loon motioned for approval of proposed Resolution No. 21-98, seconded by Mr. Bellin. Passed unanimously.

4. Proposed Resolution No. 22-98: Approval of Rosendale Sewer Service Plan Update

Mr. Fowle reminded the Commissioners the Rosendale Sewer Service Plan Update was completed as an exchange for the Village of Rosendale becoming a member of the Commission. Mr. Fowle indicated that the updated plan had an increase of approximately 40 acres in the sewer service area. Sewer Service Areas that were not receiving development pressure were swapped with areas that are receiving pressure. Mr. Fowle stated the Village is also in the process of long range planning for the wastewater treatment plant, not necessarily based on capacities needs of future development, but potential increases in wastewater discharge permit limits. He noted that about 56 acres are going to be used for public uses in the near future based on existing park, school and community facility plans. The entire service area contains an excess of only forty acres.

Mr. Bellin motioned for adopted of proposed Resolution No. 22-98, seconded by Mr. Wilson. Motion passed unanimously.

E. Transportation Committee

1. Chairman's Report.
2. Acceptance of the Summary of Proceedings for the October 13, 1998 meeting.

Ms. Springer moved to accept the Chairman's Report and the Summary of Proceedings for the October 13, 1998 meeting, seconded by Mr. Krause. Passed unanimously.

Mr. Krause stated the Summary of Proceedings of the October 13 meeting indicated that Mr. Steenbock was in attendance. Mr. Steenbock is no longer a member of the Commission.

5. Proposed Resolution No. 19-98: Amending the Transportation Improvement Program (TIP) for the Fox Cities (Appleton-Neenah) and Oshkosh Urbanized Areas, 1999

Ms. Schell explained that due to provisions of TEA 21, the new federal transportation act, signed in June, additional project funds became available for construction years 1999 and 2000. In addition to the projects had been prioritized and approved for construction in the year 2001 by this year's TIP process, the amendment adds projects to be constructed sooner, in the year 1999 and 2000. She indicated these projects were shown on page 13 of the TIP under a new section, Interim STP-Urban Projects 1999-2000. Ms. Schell stated that in the Fox Cities urbanized area the money that was freed up was almost \$1.3 million. One of the projects in the Fox Cities that was pulled up on the list was a City of Kaukauna project, reconstruction of CTH 00 which will be funded with 73% federal funds. The remaining money went to fund 50% of the Village of Kimberly, Railroad Street project.

Ms. Schell stated that in the Oshkosh urbanized area the additional funds amounted to a total of almost \$500,000. Three projects will benefit: two preliminary engineering projects for the City of Oshkosh, Oakwood Road and Sawyer Street, and the reconstruction of CTH A, which was already slated for construction in 1999 but at a very low federal funding level.

Mr. Krause motioned to adopt proposed Resolution No. 19-98, Ms. Springer seconded the motion. Passed unanimously.

VI. OTHER BUSINESS

VII. ESTABLISH TIME AND PLACE FOR NEXT COMMISSION MEETING

Quarterly Commission Meeting, 1:30 P.M., Friday, January 29, 1998, Board Room, Winnebago County Courthouse.

VIII. ADJOURNMENT

Mr. Bellin moved for adjournment, seconded by Ms. Springer. Motion passed unanimously. Meeting adjourned at 2:35 P.M.

RESOLUTION NO. 21-98

UPDATING THE OAKFIELD SEWER SERVICE AREA PLAN

WHEREAS, the East Central Wisconsin Regional Planning Commission has been designated by the Wisconsin Department of Natural Resources as the sewer service area management agency for the ten county East Central region, and

WHEREAS, the East Central Wisconsin Regional Planning Commission has entered into a memorandum of agreement with the Wisconsin Department of Natural Resources to develop, update, and manage sewer service area plans for the designated area and select non-designated areas, and

WHEREAS, the East Central Wisconsin Regional Planning Agency is preparing updated sewer service area plans for communities through the year 2020, and

WHEREAS, the East Central Wisconsin Regional Planning Commission has held numerous public participation and community meetings for those areas affected during the planning process, and

WHEREAS, the Sewer Service Area Plans will be submitted to the Wisconsin Department of Natural Resources and certified as part of the Wisconsin Water Quality Plans, now therefore

BE IT RESOLVED BY THE EAST CENTRAL WISCONSIN REGIONAL PLANNING COMMISSION:

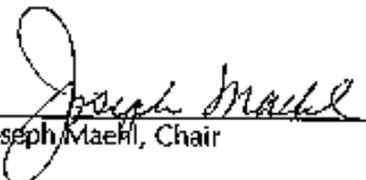
Section 1: That the Commission adopt the updated plan for the Oakfield Sewer Service Area.

Section 2: That the Commission provide continuing sewer service area planning and management functions including sewer service area amendments, the review of wastewater and sewer plans and the review of sewer extension requests.

Effective Date: October 30, 1998

Submitted By: Regional Development Committee

Prepared By: Eric W. Fowle, Environmental Planner II



Joseph Maekl, Chair



State of Wisconsin | DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary

101 S. Webster St.
Box 7921
Madison, Wisconsin 53707-7921
Telephone 608-266-2621
FAX 608-267-3579
TDD 608-267-6897

June 10, 1999

Mr. Harlan Kiesow
ECRPC
132 Main Street
Menasha, WI 54952

SUBJECT: Update to the Oakfield Sewer Service Area Plan

Dear Mr. Kiesow:

We have completed our review and approve of the update to the Oakfield SSA plan. This update adds 105 acres to the existing 594 acres. The amendment area involves environmentally sensitive areas (wetlands, streams, floodplains) in the Fond du Lac subwatershed of the Upper Fox River Basin. Both the village and town of Oakfield should ensure that stormwater management and erosion controls are implemented to protect the basin's surface water and groundwater before, during and after construction activities. The approval of this revision does not constitute approval of any of the following:

- private sewage systems pursuant to Chapter ILHR 83, (WI Admin. Code),
- sewer extension pursuant to Chapter NR 110, (WI Admin. Code),
- authority to alter the bed or banks of any navigable waterway (Chapter 30, WI Stats.),
- certification for any wetland alteration (Section 401, Federal Water Pollution Control Act, and NR 103, 299, WI Admin. Code),
- takings of threatened and endangered resources pursuant to Wisconsin Statutes 29.415

Those approvals must be obtained separately from the respective agencies. In addition, storm water management plan development is required for any construction site activity disturbing five or more acres of land pursuant to Chapter NR 216 (WI Admin. Code). Any person aggrieved by this approval has the right to appeal the decision. Wisconsin Statutes and Administrative Code establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to s. 227.52 and 227.53, Wisconsin Statutes, a petition for review must be filed within 30 days after service of the decision. The respondent in an action for judicial review is the Department of Natural Resources. This notice is provided pursuant to s. 227.48(20), Wisconsin Statutes.

Sincerely,

Charles R. Ledin
Charles R. Ledin, Section Chief
Great Lakes & Planning Section
Bureau of Watershed Management

c: Rob McLennan, NER-Oshkosh
Cheryl Rezabek, NER-Oshkosh
Raymond Panzer, T. of Oakfield
Anthony O'Malley, V. of Oakfield



Quality Natural Resources Management
Through Excellent Customer Service



APPENDIX B - GOALS, OBJECTIVES AND POLICIES

Goals represent common community ideals. They give statements of direction in which planning is aimed. Objectives are more specific targets along the path of satisfying community goals. Objectives may be measurable, adding to the community good. Policies are strategies for accomplishing the stated objectives. Specific policies can be used in the decision-making process.

As part of the updating process, the earlier set of goals, objectives and policies have been refined to provide more specific guidance for service area planning. The refinements are a result of additional community and technical advisory committee participation in the service area update planning process. The refinements also reflect various state and federal laws and regulations which impact sewer service area growth and development activities. They address three basic questions. How much development is anticipated to occur? What type of development can be expected? Where should this development occur?

Two overall goals have been identified. The first goal and related objectives and policies pertain to land use and urban development issues. The second goal addresses public facilities, specifically sanitary sewerage systems. Objectives and policies related to both goals point out the significant interrelationship between urban land use and sanitary sewerage planning and provide a sound basis for determining a community's future development and sewerage system needs.

GOAL

To encourage an orderly and planned pattern of community growth and development that will provide a high quality living environment.

OBJECTIVE: To promote a balanced and realistic allocation of land areas to accommodate current and future urban development needs.

Policies

- 1) The supply of land allocated for urban development should approximate current and future needs as determined from population, employment and land use projections.
- 2) Urban development patterns should incorporate planned areas of mixed use and density that are clustered and compatible with adjacent uses.

- 3) The allocation of future urban development should maximize the use of existing urban facilities and services.

OBJECTIVE: To promote compact communities which contain centralized, concentrated and compatible urban development patterns.

Policies

- 1) Future urban development should be encouraged to infill vacant developable lands within existing communities and then staged outward adjacent to existing development limits.
- 2) A greater proportion of subdivision development now occurring in rural areas should be encouraged within existing communities where urban services area are available.
- 3) Future commercial and industrial development should expand upon existing areas and be readily accessible to major transportation systems.
- 4) Urban development areas should consider existing political boundaries and jurisdictions.
- 5) The boundaries of urban development should consider natural and man-made features, such as ridge lines, streams and major highways.
- 6) Residential land use patterns should maximize their accessibility to public and private supporting facilities.
- 7) Urban development should occur only in designated urban service areas.

OBJECTIVE: To promote urban development which is environmentally sound and compatible with the natural resource base.

Policies

- 1) Urban development should be directed to land suitable for development and discouraged on unsuitable land, such as floodplains, wetlands, prime agricultural soils, areas of high bedrock and groundwater, prime wildlife habitat, unique scientific areas and areas of historical or archeological significance.
- 2) Environmentally sensitive areas should be preserved and protected from urban development.

- 3) Urban development should pose no significant adverse impacts to surface water and groundwater.

OBJECTIVE: To promote urban development in an efficient and economical manner.

Policies

- 1) Urban development should be encouraged at densities adequate to sustain reasonable urban service costs.
- 2) Future urban development should be located in areas which can be conveniently and economically served by public facilities.
- 3) Future residential development should provide an adequate variety of types, prices and locations of housing and convenience and choice in acquiring goods services.
- 4) Existing communities and their central businesses districts should be preserved and enhanced.

GOAL

To provide and maintain a full range of community facilities and services which are efficient, economical and environmentally sound.

OBJECTIVE: To promote sanitary sewerage systems which will effectively and economically serve urban development.

Policies

- 1) The number of waste treatment plants should be minimized to avoid duplication of facilities, institute economies of scale and lessen environmental degradation.
- 2) Urban development should be provided with sanitary sewer service which is reasonably sized.
- 3) Existing capacity in sanitary sewerage systems should be used before making substantial expansion or extensions.
- 4) Sanitary sewerage system construction and sizing should be staged to encourage lower capital investment and greater flexibility.

- 5) Sanitary sewerage systems should be provided for existing development whenever they are the most cost-effective alternative for addressing failing on-site disposal systems.
- 6) Gravity flow sanitary sewer and interceptor systems should be utilized whenever it is cost-effective.

OBJECTIVE: To promote sanitary sewerage systems which are environmentally sound.

Policies

- 1) Disturbances to natural resources should be minimized when constructing sanitary sewerage systems.
- 2) Constructing sanitary sewers through environmentally sensitive areas should be avoided whenever possible.
- 3) The design and construction of sanitary sewerage facilities should not promote development in environmentally sensitive areas.
- 4) Sanitary sewerage systems should meet water quality standards.
- 5) When feasible, sanitary sewer systems and stormwater drainage systems should be designed and constructed concurrently to achieve pollutant abatement, gain drainage benefits, and minimize disruption of natural resources.
- 6) Erosion and sediment control practices should be utilized in constructing sanitary sewer systems where the potential for erosion is high.