

FOREST JUNCTION

SEWER SERVICE AREA PLAN

Prepared by the
East Central Wisconsin Regional Planning Commission
in cooperation with the
State of Wisconsin
Department of Natural Resources

January, 2000

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ABSTRACT

UPDATE

Title: FOREST JUNCTION SEWER SERVICE AREA PLAN

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

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Planning Agency: East Central Wisconsin Regional Planning Commission
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This plan updates and supersedes the 1985 Forest Junction Sewer Service Area Plan which is an element of the Manitowoc River Basin Water Quality Management Plan and the Lower Fox River Basin Water Quality Management Plan, Wisconsin. The plan was prepared by the East Central Wisconsin Regional Planning Commission and was certified by the Wisconsin Department of Natural Resources on January 21, 2000 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 Forest Junction 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.

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CHAPTER 1 - INTRODUCTION

This report represents the first update of the Forest Junction Sewer Service Area Plan, a formal element of the State of Wisconsin's Water Quality Management Plan, which for this area includes the both the Manitowoc River Basin Water Quality Management Plan (WDNR, 1991), and the Lower Fox River Basin Water Quality Management Plan (WDNR, 1991). 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 Forest Junction 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 NR-121, concerning areawide waste treatment management planning; and NR-110, 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 NR-121, 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 Forest Junction Sewer Service Area Plan was adopted by East Central's Regional Development Committee on July 19th, 1999 and by its full Commission on July 30th, 1999. The plan update was certified by the Wisconsin Department of Natural Resources and became effective on January 21st, 2000 (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 there are now 20 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 now prepared 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 Forest Junction Sewer Service Area is located within a "designated" water quality management area and lies within both the Manitowoc River Basin and the Lower Fox River Basin.

REPORT FORMAT

This plan describes and delineates the Forest Junction Sewer Service Area. The plan was developed in accordance with state and federal guidelines and involved public input and review. Formal informational meetings and public hearings were held as part of the SSA Plan Update process with the Forest Junction Utility District as well as with ECWRPC's Regional Development Committee and full Commission. Summaries of Proceedings of these meetings are contained in Appendix A.

The following sections are formatted as follows and discuss the:

1. Forest Junction 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.

CHAPTER 3 - FOREST JUNCTION SEWER SERVICE AREA

PLANNING AREA DESCRIPTION

The Forest Junction Planning Area and Sewer Service Area are located in the north central part of Calumet County along the USH 10 and STH 32/57 corridor. The planning area is located entirely within the Town of Brillion and includes the Forest Junction Utility District as well as adjacent lands. Encompassing 3.25 square miles, the planning area is located in T.20N. – R.20E. and includes portions of Sections 7, 8, 9, 17, and 18.

The Planning Area is 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).

This plan update added approximately 0.5 square miles (320 acres) to the Planning Area located between Cemetery Road on the west, Holmes Road on the east, and bounded by Schmidt Road on the north. This area was added due to the recent development pressure in the northern portion of the Utility District.

LAND USE AND DEVELOPMENT

A mixture of urban, agricultural, recreational and rural development is present in the Planning Area. The unincorporated community of Forest Junction (Utility District) is the core of denser urban development. With a 1998 estimated population of 580 persons, the Forest Junction Utility District covers an area of approximately 773 acres, of which approximately one sixth is developed.

The predominant land use is single family residential homes with an older downtown commercial area located south of USH 10. An improved industrial area exist south of USH 10 and east of STH 32/57. Additional highway related commercial uses are located along the USH 10 corridor. The total estimated dwelling units for the Forest Junction Utility District was 200 in 1998 based on the current number of residential connections.

ENVIRONMENTAL CONDITIONS

Environmentally sensitive lands within the Planning Area are generally associated with wetlands and with a number of intermittent streams passing through the area. The following text describes these features in more detail.

Watersheds

As stated previously, the Forest Junction Sewer Service Area and its Planning Area falls within both the Upper Fox River Basin and the Manitowoc River Basin with all drainage flowing either directly or indirectly into Lake Michigan via existing ditches, wetland areas, and stream corridors (Exhibit 1). More precisely, about nine-tenths of the Forest Junction Planning Area lies in the Plum Creek Subwatershed (Upper Fox River Basin), while the southern one-tenth is in the North Branch Manitowoc River Watershed (Manitowoc River Basin). This area serves as the headwaters for many of creeks, streams and rivers.

According to the Lower Fox River Basin Water Quality Management Plan (WDNR, 1991), the Plum Creek Watershed has little information to judge present conditions. Previous surveys indicate very poor to fair water quality and habitat resulting mainly from non-point source pollution. Recommendations from this plan include considering the Plum Creek Watershed as a “medium” ranking for potential NPS projects and that additional assessments of water quality should take place.

The North Branch Manitowoc River subwatershed covers most of northeastern Calumet County and encompasses approximately 42,746 acres (66.8 square miles). This subwatershed was recommended for additional study and assessment to determine the watershed’s ranking for the NPS priority selection process according to the Manitowoc River Basin Plan (WDNR, 1991).

Other than Plum Creek, no major surface water features within the Forest Junction Planning Area. However, several intermittent tributary streams are contained in the northern portion of the Planning Area. Plum Creek serves as the discharge point for the Utility District’s wastewater treatment plant and flows into Lower Fox River located well to the northwest of the Utility District.

Wetlands

A minimal amount of WDNR designated wetlands exist within the Forest Junction Planning Area per the WDNR Wetland Inventory Maps. Wetlands 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 two areas of major wetlands exist behind the elementary school in the southern portion of the Planning Area, and along an abandoned railroad corridor in the southeast portion of the Planning Area. Both of these wetland complexes are forested scrub shrub or forested emergent types. The existing wetlands should place minimal restrictions on the future development of the Forest Junction Utility District.

Exhibit 1 – Forest Junction SSA Map (see separate .pdf file)

Back of Exhibit 1

Floodplains

As revised in 1984, the Flood Insurance Rate Map (FIRM) for the unincorporated portions of Calumet County do not identify any 100-year floodplains within the Forest Junction Planning Area.

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.

According to the Soil Survey of Calumet County, prepared by the USDA in 1980, only one major soil association is present within the Forest Junction Planning Area:

- **Kewaunee-Manawa-Poygan Association:** This soil association encompasses a majority of the Planning Area (~80 percent). This association consists of soils on undulating ground moraines made up of knolls, ridges, and plains that are dissected by drainageways and broad depressions. The soils are mostly nearly level to sloping, but along the sides of drainageways and on escarpments, they are steeper. These soils are well drained to poorly drained that have a dominantly clayey subsoils and substratum. They have good potential for cultivated crops but have severe limitations for use as septic tank absorption fields.

Based on this soils information no steep slopes are identified within the Forest Junction Planning Area.

Groundwater

The groundwater resources of area are generally plentiful but of poor quality. Groundwater resources within the Forest Junction Utility District area are linked directly to the surficial glacial deposits and underlying bedrock structure. The Utility District is located just to the west of the Niagara Dolomite (escarpment) formation and therefore has only three aquifers present. These aquifers can be generally described as follows:

- The Water Table Aquifer is present in all areas of the Town of Brillion and consists of glacial sediments deposited by several glacial advances that covered portions of all of Calumet 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 Platteville-Galena Aquifer is located below the Water Table Aquifer and below the layer of Mequoketa Shale. 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 Calumet County. Of the four aquifers, the Cambrian Sandstone aquifer is the most widely uses for sustained high capacity wells for municipal and industrial uses.

The vertical flow of groundwater is limited due to the presence of the Mequoketa Shale which acts as a confining units. Groundwater recharge areas consist of wetlands and permeable soils within the immediate area for the Water Table Aquifer, while the main recharge area for the Platteville-Galena and Sandstone Aquifers are further to the west. Areas of high groundwater exist throughout a majority of the Planning Area.

The fact that most of the soils within the Forest Junction Planning Area are of a clayey nature and have relatively slow permeability, coupled with no significant areas of bedrock close to the surface, reduces concerns over the potential for groundwater contamination of the Platteville-Galena and Sandstone Aquifers. However, failing on-site waste disposal systems, abandoned and active landfills, agricultural practices, quarries, and other land uses the potential to be a direct source of contamination of the Water Table Aquifer if not managed properly.

All Forest Junction Utility District residents are provided public drinking water from a municipal system drawing water from the Sandstone aquifer. This deeper aquifer is not as susceptible to contamination due to a confining layer of Mequoketa Shale. Individual shallow wells outside of the Utility District are more susceptible to the threat of contamination and may be of serious concern.

EXISTING SEWERAGE TREATMENT AND COLLECTION SYSTEM

A majority of residents within the Town of Brillion rely on individual on-site wastewater treatment systems (conventional, mound, and holding tank). Calumet County does currently have a ban on holding tank installations for new development, however; they may be used as replacement systems.

The Forest Junction Utility District is the only entity within the Town that provides public sewerage collection and treatment. The District was formed in 1977 by the Town of Brillion to address numerous problems with existing on-site system failures related to high groundwater and low soil permeability. Facilities planning efforts dictated that a public treatment system be constructed.

The Forest Junction Utility District's wastewater treatment facility (WWTF) is located in the northeastern portion of the community and discharges into Plum Creek, a tributary of the Lower Fox River. This facility was originally constructed in 1980 with major modifications occurring in 1982. The treatment plant uses two stabilization lagoons with periodic agricultural landspreading of sludge. The plant was designed for a maximum average design flow of 29,000 gallons per day (.029 mgd). The designed loadings for biological oxygen demand (BOD) are 54.9 lbs/day.

The collection system for the Utility District consists mainly of eight-inch gravity sewers with several sections of four-inch gravity sewer within the mobile home park. A series of ten-inch collector sewers exist within the central portion of the District transports waste to a lift station and then into a six-inch forcemain directing it to the treatment plant. An additional lift station and four-inch forcemain exists along CTH FJ which allows for existing and future gravity service in the northern portion of the District.

No major problems existing regarding inflow and infiltration (I/I) of clearwater due to the relatively young age of the collection system. However, the District is planning to do some work in the near future to recondition manholes which have had some infiltration problems. Such problems can affect the operation of the treatment plant significantly in terms of capacity should they occur.

According to the 1998 CMAR, the Forest Junction Utility District WWTF has a total rating of 78 points (departmental recommendation range). A majority of these points resulted from periodic exceedences in either flow, BOD, or TSS. As a result of the CMAR and WDNR recommendations the Utility District has hired Robert E. Lee & Associates to prepared a study which address these concerns as well as future capacity issues.

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

- **WPDES Permit Number:** WI-0032123
- **Receiving water:** Plum Creek, Lower Fox River Basin
- **Design Flow:** 0.29 mgd
- **Average Flow (Jan.- Dec., 1998):** 0.02675 mgd
- **Design BOD (lb./day):** 54.9
- **Average BOD (lb./day, Jan.-Dec., 1998):** 26.0
- **Treatment Type:** Stabilization Lagoons
- **Sludge Treatment:** None Required. When sludge blanket becomes to deep, the lagoons are drained, sludge removed, and spread on agricultural lands.

FORECAST GROWTH

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

Exhibit 2
Forest Junction Planning Area Growth Projections, 1990-2020

	Year								1998-2020
	1990	1995	1998	2000	2005	2010	2015	2020	Change
Total Population*	n/a	n/a	580	581	567	562	552	538	-42
Total Dwelling Units**	n/a	n/a	200	202	203	208	209	211	+11
Persons Per Household***	n/a	n/a	2.90	2.88	2.79	2.70	2.64	2.55	-0.35

* Based on Forest Junction Utility District sewer connections (1998) x T. Brillion persons per household figure.

** Based on Forest Junction Utility District sewer connections (1999).

*** Town of Brillion figures.

The total sewer service area is projected to decrease by 42 persons thus bringing the permanent population of 580 in 1998 to 538 persons in the year 2020. However, with a continuing reduction in household size, there is still a projected increase in dwelling units from 200 to 211 during this time period. Assuming that all single family units are at an average density of 3.0 units per acre, approximately 3.67 acres of vacant land are required within the sewer service area to accommodate residential development and 5 acres for additional commercial/industrial development. Adding an addition twenty percent to accommodate market factors results in a justifiable need for 4.4 acres for residential development and 6.0 acres for commercial/industrial development.

Due to the overall decline in population and the amount of existing acreage within the SSA, there is no justifiable need for additional vacant lands based on this projection method. However, due to concerns on the relative marketability of existing vacant infill parcels and land ownership patterns, the Utility District has limited opportunities for future developments (whether residential, commercial, or industrial) should they be proposed. The Utility District's proximity to the Fox Cities urbanized area, as well as recent building activity within the District coupled with building permit trends within the Town of Brillion, support a slight increase in population over the planning period. It is also likely that additional commercial and industrial construction will occur in this area due to its location at the intersection of two major traffic corridors. Plans are already in place for an addition to an existing commercial/industrial area located in the southeast quadrant of the STH 32/57 and USH 10. Given these constraints, approximately 58.9 additional acres of vacant lands have been added to the existing service area to accommodate future development.

The year 2020 Forest Junction Sewer Service Area Plan, as updated, now has a total of 380.8 acres of land, up 63.6 acres from the 1985 plan. Within the service area boundary 9.7 acres have been identified as environmentally sensitive areas. Developed lands within the updated service area total 173.4 acres while 193.0 acres of lands are now available for sewer development. This updated SSA results in an excess of approximately 182 acres as compared to the development projections. Exhibit 3 contains details of the acreages associated with the updated sewer service area.

Exhibit 3
Forest Junction SSA Update Acreage Summary

SSA Characteristic	1985 SSA	1999 SSA Allocations	Forest Junction Updated SSA
Total SSA Acreage	317.2	63.6	380.80
Deletions	n/a	32.3	n/a
Total Developed Acres (incl. road & RR row)	173.4	0.0	173.4
Total Undeveloped Acres	143.8	91.2	202.7
Water	0.0	0.0	0.0
Environmentally Sensitive Area	5.0	4.7	9.7
Total Developable Acreage	138.8	58.9	193.0
Justified Acreage Needs (total)	10.4	n/a	10.4
“Excess” Acreage	+128.4	n/a	+182.6

Source: ECWRPC, 1999.

GROWTH ALLOCATION AREAS

The policy basis for allocating acreage for future development is outlined on page 33. 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 193.0 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 Forest Junction Sewer Service Area. The Forest Junction Utility District plans on infilling remaining single-family lots when possible. New sewer residential development is proposed within two areas of the SSA:

- Approximately 50 acres of land in the northern portion of the Utility District, located along either side of CTH FJ (Church St.) and north of USH 10, is planned for medium density single-family residential development. This area should be serviceable with gravity sewers which utilize the recently constructed lift station and forcemain;
- Approximately 20 acres of land located south of USH 10 and east of CTH FJ (Church St.) is proposed for continued medium density residential development. This area is already partially platted with a second phased planned for long-term development. This area should be serviceable by existing gravity sewer lines.

Commercial Development

Commercial development has been primarily allocated within the Forest Junction Utility District along its existing USH 10 business corridor. Future development potential consists through infilling of vacant or developable parcels along this corridor.

Industrial Development

The only area with significant industrial potential is located south of USH 10 and east of STH 32/57. This area has been identified by the Utility District and local landowners as a logical area for continued expansion of industrial uses. Approximately 20 acres of vacant lands have been allocated within this area to accommodate continued industrial development.

FUTURE WASTEWATER FLOWS

Based on ECWRPC's original growth projection for the Forest Junction SSA, 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 the 193.0 acres are calculated to be 349,756 gallons per day (0.3498 mgd) using the following assumptions:

- 163 acres of residential development at an average density of three units per acre, 2.55 persons per household [year 2020 projection], and 80 gallons per day per capita;

- 30 acres of commercial / industrial land which can accommodate 10 businesses with 25,000 gallon per day per business;

Current flows average 0.0267 mgd with a design flow of .029 mgd for the current treatment system. If new development occurs at this level, the associated flows will certainly exceed the design capacity in a relatively short period of time. Realistically, such a level of development will not likely occur. However, the Utility District will need to monitor new growth and loadings to the plant continuously in order to determine if, and when, the Utility District needs to make improvements in the treatment plant capacity. The District is currently undertaking facility planning efforts to address these and other concerns.

WATER QUALITY ASSESSMENT

Continued urbanization of the Forest Junction 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 surface waters and groundwater aquifers. At current treatment levels, projected residential growth as illustrated above will result in an additional daily discharge of an additional 212.0 pounds of BOD, and 249.4 pounds of suspended solids (TSS) and 7.5 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 1999 sewer service area update includes 193.0 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 29.49 tons for sediment, 0.06 tons for phosphorus and 0.09 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 Utility District have public water. While the installation of the sanitary sewer system eliminates a major contamination potential, the impermeability of the soils in the area poses risks of contamination to the surficial aquifer 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 existing planning efforts to address capacity deficiency and treatment problems. Monitor new development and loadings to the WWTF in order to determine the appropriate time for facility upgrades.
2. Continue to implement existing plans to control infiltration and inflow to the wastewater treatment plant so as to maintain or increase capacity for new developments.
3. Close coordination for the planning of any sewered development in the transitional areas should be undertaken by the Forest Junction Utility District and the Town of Brillion.

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 within many areas 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 for portions of the planning area within their jurisdictions. The Forest Junction Utility District has been designated as a Class III Designated Management Agency (DMA) to provide wastewater collection and treatment within its planning area.

As a Designated Management Agency for wastewater treatment and collection the Utility District should do the following:

1. Adopt the Forest Junction 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 sewerred 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 sewer 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, sometimes 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 a 40 to 50 year planning period (through the year 2040). Planning Area boundaries generally include all areas within existing city, Utility District 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. Areas which could be serviced by the existing infrastructure (lift station service areas or gravity sewers) are generally included within this boundary. Planning Areas generally extend beyond the existing or potential development areas to the nearest quarter section line. 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 4. 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 Commission's GIS system 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 sewered 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."

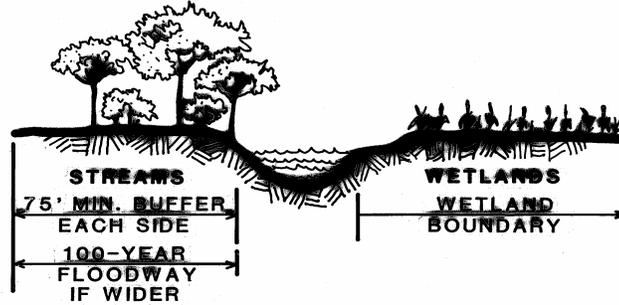
East Central, after deliberations with technical and policy advisory committees, defined environmentally sensitive areas in a manner that complements existing local, state and federal regulations which protect various environmental amenities. While NR 121 authorizes sewer service area plans to identify 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.

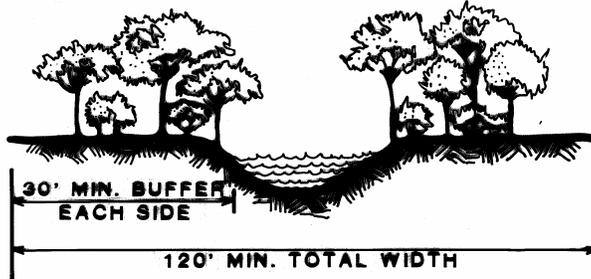
Exhibit 4

ENVIRONMENTALLY SENSITIVE AREA STANDARDS

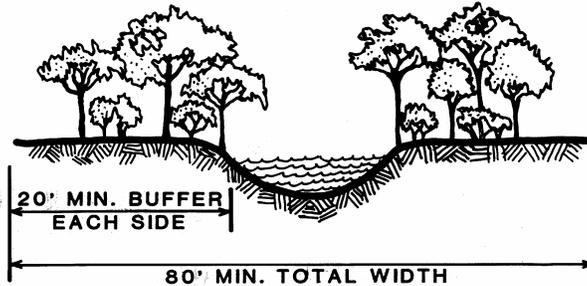
NAVIGABLE STREAMS & WETLANDS



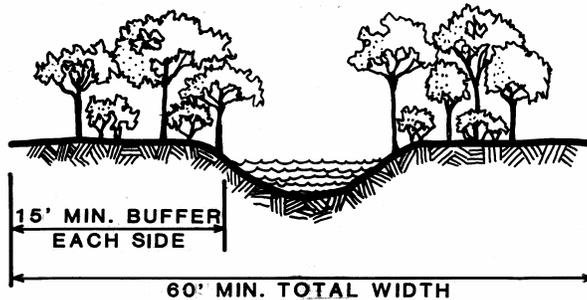
NON-NAVIGABLE STREAMS & DRAINAGEWAYS
DRAINAGE AREA GREATER THAN APPROXIMATELY 2000 ACRES



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 4;
- 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 sewered residential, commercial or industrial development in the corridors would not be permitted.

It should be noted, that as of the date of this plan, ECWRPC and WDNR staff are considering a revision of the regional definition of Environmentally Sensitive Areas which may include additional features based on water quality concerns. Communities with existing SSAs will be notified and offered an opportunity to give input during this process.

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 conducting land use inventories for the individual SSAs. Comparing aerial photos (land use inventories) 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 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.

Important for analyzing the planning areas, existing urban development areas were delineated as part of the original land use inventory. 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, 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.

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 this information, 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 over time to the 1985 goals, objectives and policies. This effort was done 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. NR-121 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 non-residential 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 Commission's GIS system was 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 may 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 Forest Junction Utility District and the Town of Brillion was sought during and after the 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 any comments received 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's full Commission.

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 1,000 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 45 days after submittal. If the proposal is over 1,000 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 under NR-150 with public comment period Type 2 Actions. This may lengthen the approval period to three months or greater. Once WDNR decision is made, and if approved, 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 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.
 - 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 Oshkosh)
- *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 – July 19, 1999.
3. ECWRPC Commission Summary of Proceedings – July 30, 1999.
4. ECWRPC - Commission Resolution No. 15-99.
5. WDNR Certification Letter – January 21, 2000.

Forest Junction Sewer Service Area Plan Update Meeting / Correspondence List

<u>Date</u>	<u>Description</u>
December 8, 1998	Meetings and phone conversations with several individual residents of Forest Junction Utility District to discuss potential for amendments / update.
May 6, 1999	Meeting with Forest Junction Utility District (public noticed)
June 3, 1999	Meeting with Forest Junction Utility District (public noticed)
July 1, 1999	Meeting with Forest Junction Utility District (public noticed)
July 12, 1999	Draft Plan reviewed by Town of Brillion, Town Board (public noticed)
July 19 th , 1999	ECWRPC Regional Development Committee Meeting & Public Hearing (public noticed) – no comments received.
July 30 th , 1999	ECWRPC Commission Meeting (public noticed) – no comments received.

SUMMARY OF PROCEEDINGS

Regional Development Committee
East Central Wisconsin Regional Planning Commission
ECWRPC Offices
July 19, 1999

The meeting was called to order by Donald De Groot at 9:30 A.M.

Those Committee members present were:

Ken Hurlbut Waupaca County
Lester Van Loon Waushara County
Richard Wollangk Winnebago County
Clarence Wolf Calumet County
Donald De Groot Outagamie County

Other persons in attendance were:

Debbie Vander Heiden Town of Kaukauna
Eric Fowle ECWRPC Staff
Joe Huffman ECWRPC Staff

1. Roll Call

Donald De Groot acknowledged the committee members present and other introductions were made.

2. Forest Junction Sewer Service Area Plan Update Public Hearing and Approval Process

This public hearing for the Forest Junction Sewer Service Area Plan Update was unattended and no public comments were received. Mr. Fowle presented the Forest Junction Sewer Service Area Plan Update to committee members indicating that the planning effort included affected landowners, the Forest Junction Utility District and the Town of Brillion. Mr. Fowle described the allocation areas pointing out the proposed development areas and their associated land uses. Mr. Fowle noted that a minor adjustment to the planning area boundary located in the northern portion of the SSA was necessary. This adjustment enlarges the planning area for future long-term planning activities. Mr. Fowle introduced Resolution 15-99 to committee members for adoption. There being no further discussion Lester Van Loon moved to approve the Forest Junction Sewer Service Area Plan Update with the planning area modifications. Clarence Wolf made the second. Motion passed unanimously.

3. Eden Sewer Service Area Plan Update Public Hearing and Approval Process

This public hearing for the Eden Sewer Service Area Plan Update was unattended and no public comments were received. Mr. Fowle presented the committee with the proposed plan changes stating that the allocation areas reflect population projections and land use development trends. East Central was also involved in developing a land use plan for the village and town. Mr. Fowle explained that the sewer service area plan was to be integrated into the Eden Area Joint Land Use Plan the village has approved, however the town board has yet to approve that plan. Town and village officials had no problem with the sewer service area plan being approved as a separate plan at this time. With no further discussion Richard Wollangk moved to approve Resolution 16-99 that adopts the Eden Sewer Service Area Plan Update. Ken Hurlbut made the second. Motion passed unanimously.

4. Heart of the Valley Sewer Service Area Amendment – Industrial Park Swap

Mr. Fowle presented the Heart of the Valley Sewer Service Area amendment request that was tabled at the June 29, 1999 Regional Development Committee meeting. This amendment request has been altered from its original version. Mr. Fowle explained that the original swap area was met with objections from property owners who had development plans for the proposed deleted areas. Due to this circumstance the City of Kaukauna selected an alternative site to satisfy the swap amendment policy criteria. Debbie VanderHeiden, Clerk, Town of Kaukauna indicated that annexations from the city in the past have been negotiated with success. She stated that communication with this particular project, at times were lacking, could be addressed amicably. Staff recommended that approval of this request be contingent upon the City of Kaukauna's written commitment to meet the Long Range Transportation/Land Use Plan requirements. Clarence Wolf moved to approve the amendment request contingent upon the city meeting time specific land use plan requirements. Lester Van Loon made the second. Motion passed unanimously.

5. Land Use Advisory Committee Update

Mr. Fowle stated that the LUAC meetings were progressing smoothly with little conflict. Mr. Fowle sensed that the members were taking a regional approach to the issues being debated. The July 8, 1999 meeting focused on the sewer service area planning process and its terminology. Also discussed were possible policy re-writes for clarity. Mr. Fowle indicated that participation was good and well balanced.

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

SUMMARY OF PROCEEDINGS

East Central Wisconsin Regional Planning Commission
Shawano County Courthouse, Shawano
July 30, 1999

- 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 Claire Alexander at 1:30 P.M. Roll call was taken showing the following attendance:

Commission Members Present

Allison Blackmer	Calumet County
Wilma Springer	Calumet County
Claire Alexander (Alt. For Howard Zellmer)	Marquette County
Walter Cacic	Marquette County
Ruth Winter	Menominee County
Brian Kowalkowski	Menominee County
Robert "Toby" Paltzer	Outagamie County
James Schuette (Alt.)	Outagamie County
Marvin Fox	Outagamie County
Timothy Hanna	Outagamie County
Alfred Krause	Outagamie County
Donald De Groot	Outagamie County
M. Eugene Zeuske	Shawano County
Clarence Natzke	Shawano County
Duane Brown	Waupaca County
La Verne Grunwald	Waupaca County
Ken Hurlbut	Waupaca County
Yvonne Feavel (Alt. for George Sorenson)	Waushara County
Norman Weiss	Waushara County
Lester Van Loon	Waushara County
Arden Schroeder	Winnebago County
Richard Wollangk (Alt. for Melaine Bloechl)	Winnebago County

Commission Members Absent

Clarence Wolf	Calumet County
Don Wilson	Marquette County
Randy Reiter	Menominee County
Vernon Ainsworth	Shawano County
Joseph Maehl	Winnebago County
Jane Van De Hey	Winnebago County
Ernie Bellin	Winnebago County

Staff Members Present

Harlan Kiesow	Executive Director
Ann Z. Schell	Assistant Director
Fred Scharnke	Principal Planner
Walt Raith	Principal Planner
Eric Fowle	Associate Planner

Gary Taylor Associate Planner
 Tom Faella Information Technology Manager
 Betty Nordeng Planner
 Chris Washburn Planner
 Vicky Johnson Administrative Specialist

IV. **MINUTES OF THE MAY 26, 1999 MEETING**

Mr. Van Loon motioned to approve the minutes of the May 26, 1999 meeting, seconded by Mr. Zeuske. The motion was passed unanimously.

V. **BUSINESS**

A. Steering Committee

1. Acceptance of the Summaries of Proceedings for the April 30 and July 19, 1999 Meetings.

Mr. Weiss motioned to accept the Summaries of Proceedings for the April 30 and July 19, 1999 meetings. The motion was seconded by Ms. Springer and passed unanimously.

2. Proposed Resolution No. 11-99: **Adoption of the 2000 Work Program, Staffing Plan, Budget and Tax Levy for the East Central Wisconsin Regional Planning Commission**

Mr. Kiesow referred to the handout entitled "Budget Comparisons" which gives the Commissioners a history of past years versus what is being proposed. The Work Program document outlines all the work that is being done, the staffing needs and the budgetary implementations.

All Standing Committees have meet and approved the various elements of the work program. Mr. Kiesow provided a brief summary of the work program document highlighting the staffing needs indicated by the different work elements and the summary table showing the budgetary costs and funding sources. He stated one item that will have an affect on the budget for 2000 is in the transportation element involving aerial photography during the year 2000 in our region. He also indicated that the staffing needs will remain the same with a 1.8% cost of living increase and a 2.5% merit fund. The Steering Committee recommended to hold the levy rate constant.

Following a brief discussion, Mr. Cacic moved for approval of Proposed Resolution No. 11-99, seconded by Mr. Schuette. Motion passed unanimously.

3. Proposed Resolution No. 9-99: **Authorizing the Commission to Enter into an Agreement with Shawano County and the Town of Germania for the Preparation of a Land Management Plan**

Mr. Kiesow explained that Proposed Resolution No. 9-99 was for a local contract with Shawano County, which falls under East Central's project services program. This project will take a year to eighteen months to complete with the County's cost on the project being \$8,000 plus cost sharing from East Central of \$3,000.

Mr. Natzke moved for adoption of Proposed Resolution No. 9-99, seconded by Mr. Brown. Passed unanimously.

4. Proposed Resolution No. 12-99: **Authorizing the Commission to Enter into an Agreement for Professional Services for Spring 2000 Aerial Photography and Related Services**

Mr. Faella stated that Proposed Resolution No. 12-99 is a contract for aerial photography to be implemented in 2000. At that last Commission meeting he was directed to issue a request for proposal, select a vendor and negotiate a contract for aerial photography in 2000. Those processes have been completed and Ayers Associates of Madison was selected as the contractor. East Central will act as the administrator of the project, and will be responsible for quality control and distributing of all aerial photos. Mr. Faella mentioned that three counties, Outagamie, Fond du Lac and Green Lake, are also contracting with Ayers Associates for secondary projects.

Mr. Faella referred to the contract that was included in the Commission packet. He explained the funding of the three items shown in the contract. Item 1 - \$89,500 for the actual flight and photography, of which \$70,000 will come directly out of East Central's reserves with the balance anticipated from WisDOT. Item 2 - \$8,500 is for contact prints, (direct exposure onto regular photograph paper). This cost is for the whole region, although at this time East Central is not considering buying a whole set, but wanted to know the cost per county in the event the county needed to know. Item 3 - \$44,500 for diapositive creation, imaging scanning, compression and delivery – this is the digital product. This cost will be included in the Federal Highway (DOT) dollars that have been requested. East Central is not obligated to that cost by signing the contract, only the installation. After commitment of the funds is received, East Central will authorize the contractor to go ahead.

Following a brief discussion to clarify the sources of funds, Mr. Brown motioned to approve Proposed Resolution No. 12-99, seconded by Ms. Feavel. Passed unanimously.

B. Economic Development Committee

1. Chairman's Report.
2. Acceptance of the Summary of Proceedings for the June 23, 1999 meeting.

Ms. Blackmer moved to accept the Chairman's Report and the Summary of Proceedings for the June 23, 1999 meeting, seconded by Ms. Winter. Passed unanimously.

3. Proposed Resolution No. 6-99: **Adopting the Comprehensive Economic Development Strategy (CEDS) 1999 Annual Report**

Mr. Kiesow explained that the Overall Economic Development Plan (OEDP) had been brought before the Commission for adoption annually. This year the name has been changed to the Comprehensive Economic Development Strategy (CEDS) Report. Mr. Kiesow briefly explained the contents of the report and the changes to the program.

Mr. Fox motioned for adoption of Proposed Resolution No. 6-99, seconded by Mr. Wollangk. Passed unanimously.

4. Proposed Resolution No. 7-99: **Authorizing the Commission as an Economic Development District to Make Application to the Economic Development Administration for a Planning Assistance Grant and to Execute the Necessary Agreements**

Mr. Kiesow explained that Proposed Resolution No. 7-99 is also a resolution that is brought before the Commission annually to apply for the planning funds from the Economic Development Administration. Typically this amounts to \$52,000.

Ms. Blackmer motioned to approve Proposed Resolution No. 7-99, seconded by Mr. Weiss. Resolution passed unanimously.

C. Open Space and Environmental Management Committee

1. Chairman's Report.
2. Acceptance of the Summary of Proceedings for the July 6, 1999 meeting.

Mr. Schuette moved to accept the Chairman's Report and the Summary of Proceedings for the July 6, 1999 meeting, seconded by Mr. Kowalkowski. Passed unanimously.

D. Regional Development Committee

1. Chairman's Report.
2. Acceptance of the Summary of Proceedings for the May 12, June 29 and July 19, 1999 meetings.

Ms. Blackmer moved to accept the Chairman's Report and the Summary of Proceedings for the May 12, June 29 and July 19, 1999 meetings, seconded by Mr. Natzke. Passed unanimously.

3. Proposed Resolution No. 15-99: **Approval of the Forest Junction Sewer Service Area Plan Update**

Mr. Fowle stated that there have been several amendments to the Forest Junction SSA in recent years due to development pressures. Working with the Forest Junction Utility District in the Town of Brillion, the boundary has been updated to current development trends and needs of the community. Mr. Fowle referred to a handout showing the acreage allocations for the service area, as well as population development projections. Based on methodology and calculations there is a slight decline projected for that area in terms of total population, but with the service area's proximity to Green Bay, there is still a need for new homes. A total of 59 acres will be added to the service area in several locations. Mr. Fowle indicated the areas on the display map.

A motion was made by Ms. Feavel to approve Proposed Resolution No. 15-99, seconded by Mr. Van Loon, passing unanimously.

4. Proposed Resolution No. 16-99: **Approval of the Eden Sewer Service Area Plan Update**

Mr. Fowle indicated that the land use planning process in Town/Village of Eden was integrated with the sewer service area planning. Several amendments have occurred over recent years due to increases in development within the village. With the projected population increase in the village around 160 persons, new subdivision activity and proximity to Fond du Lac urbanized area have increased some of those pressures. The Town through the land use planning process has chosen to direct some of the new development into the sewer service area and hopefully will be working with the village on developing a boundary and service agreement using the land use plan and the SSA update plan as a basis. Approximately 63 acres of land is needed for sewer development based on the configuration of the process. About 95 acres was added to what the service area was prior to the update of which 25-30 acres will be utilized for industrial development and the balance for residential.

Mr. Wollangk motioned for adoption of Proposed Resolution No. 16-99, seconded by Ms. Blackmer. Passed unanimously.

E. Transportation Committee

1. Chairman's Report.
2. Acceptance of the Summary of Proceedings for the July 15, 1999 meetings.

Mr. Weiss moved to accept the Chairman's Report and the Summary of Proceedings for the July 15, 1999 meetings, seconded by Mr. Cacic. Passed unanimously.

3. Proposed Resolution No. 13-99: **Adoption of the Transportation Improvement Program for the Fox Cities (Appleton-Neenah) and Oshkosh Urbanized Areas, 2000**

Ms. Schell stated the TIP is brought before the Commission annually and explained some of the requirements. This document is required by the Federal and State Departments of Transportation and must include all federally funded transportation projects, state funded projects, and significant local projects. Of all the different funding programs, the one that the MPO looks at and makes decisions on is the Surface Transportation Program Urban Funds (STP-Urban). East Central ranks the projects that are submitted and decides which projects receive this funding. STP-Urban funding is a relatively small amount of money for the large number of projects submitted. The process that is used to prioritize the projects is shown on page 7 and indicates all the criteria that is used to examine the projects that are submitted.

Ms. Schell stated that funding for the surface transportation program has increased for the year 2002 projects. This year, for the Fox Cities \$1.2 million was approved for the Calumet and Outagamie County CTH KK Project. The funds in the Oshkosh area are \$465,833 and one awarded to the City of Oshkosh/Town of Algoma for their Oakwood Road Project.

Mr. Grunwald motioned for approval of proposed resolution No. 13-99, seconded by Mr. Hanna. Passed unanimously.

4. Proposed Resolution No. 14-99: **Adoption of the Valley Transit Paratransit Coordinating Study**

Ms. Schell provided a brief background of events leading up to the preparation of the paratransit study. She indicated that a recommendation in the Fox Cities Transit Development Plan was that Valley Transit prepare a Paratransit Coordinating Study. Ms. Schell noted the Executive Summary of the report, prepared by McDonald Transit Associates, was included in the Commissioners packet. Ms. Schell highlighted the recommendations and indicated that the study showed the paratransit services are already providing a relatively low cost but will try to eliminate the duplicate services.

Mr. Hurlbut motioned to approve Proposed Resolution No. 14-99, seconded by Mr. Weiss, passed unanimously.

VI. **OTHER BUSINESS**

Mr. Natzke welcomed everyone to the Shawano County Courthouse and apologized for the lack of air conditioning. He explained Shawano County's future expansion to the courthouse.

VII. **ESTABLISH TIME AND PLACE FOR NEXT COMMISSION MEETING**

Quarterly Commission Meeting, Friday, October 29, 1999, Waupaca County Courthouse, 811 Harding Street, Waupaca

VIII. **ADJOURNMENT**

Mr. Cacic moved for adjournment, seconded by Ms. Springer. Motion passed unanimously. Meeting adjourned at 2:20 P.M.

RESOLUTION NO. 15-99

UPDATING THE FOREST JUNCTION 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:

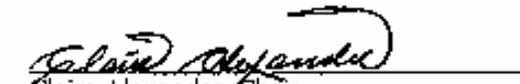
Section 1: That the Commission adopt the updated plan for the Forest Junction Sewer Service Area.

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: July 30, 1999

Submitted By: Regional Development Committee

Prepared By: Eric W. Fowle, Environmental Planner II



Claire Alexander, Chair



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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

Box 7921
101 South Webster Street
Madison, Wisconsin 53707-7921
TELEPHONE 608-266-2621
FAX 608-267-3579
TDD 608-267-6897

January 21, 2000

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

SUBJECT: Forest Junction SSA Plan Update

Dear Mr. Kiesow:

We have completed our review and approve of the update to the Forest Junction SSA plan (Resolution No. 15-99). This update adds 320 acres to the existing 773 acres. The amendment area involves environmentally sensitive areas (wetlands and intermittent streams) in the Plum Creek subwatershed and the North Branch Manitowoc River watershed of both the Upper Fox and Manitowoc River basins. The Forest Junction Utility District should ensure that stormwater management and erosion controls are implemented to protect the basins' surface water and groundwater before, during and after construction activities.

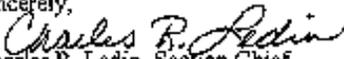
The approval of this revision does not constitute approval of any of the following:

- 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 404, 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, Section Chief
Great Lakes & Watershed Planning Section
Bureau of Watershed Management

c. Robin McLennan, NER-Oshkosh
Cheryl Rezabek, NER-Oshkosh
Otto Schley, Forest Jct. Utility Dist.

*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.