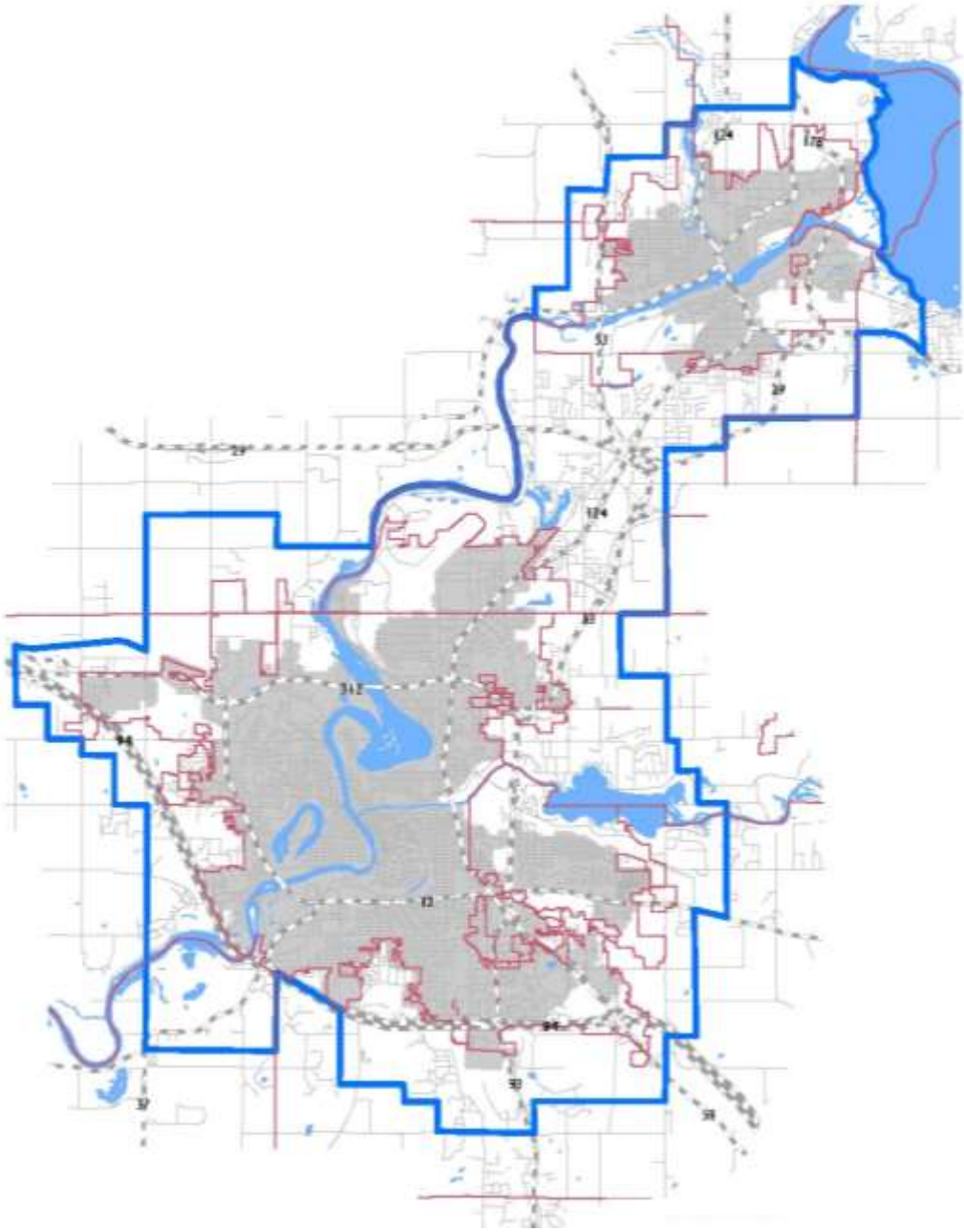
CHIPPEWA FALLS-EAU CLAIRE URBAN SEWER SERVICE AREA PLAN FOR 2025

WITH 2017-2018 POLICY UPDATE



MPO
Chippewa - Eau Claire Metropolitan Planning Organization

WCWRPC
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State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Daniel L. Meyer, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

February 15, 2018

DNR Project No.WC0013

Ms. Lynn Nelson, Executive Director
Mr. Chris Straight, Senior Planner
West Central Wisconsin Regional Planning Commission
800 Wisconsin Street
Building D2-401, Mail Box 9
Eau Claire, WI 54703-3606

Subject: Chippewa Falls/Eau Claire Sewer Service Area Plan 2025 Policies and Criteria Update 2018

Dear Ms. Nelson and Mr. Straight:

Congratulations on the recent update of the Chippewa Falls/Eau Claire SSA Plan. We have completed our review of the subject plan update submitted to the Department by on February 8, 2018 via Transmittal letter and Commission Recommendations. This update to the Chippewa Falls/Eau Claire Urban Sewer Service Area Plan for 2025 clarifies policies and procedures, streamlining the plan review process for the local communities in the Chippewa Falls/Eau Claire Sewer Service Area as well as for the West Central RPC and the DNR. This is a significant step forward in the quality and process of SSA Planning in this area.

This amendment is a formal update to the state's Areawide Water Quality Management Plan and the Chippewa Falls/Eau Claire Urban Service Area Plan for 2025 and will be forwarded to the US Environmental Protection Agency to meet the requirements of the Clean Water Act of 1987 (Public Law 92-500 as amended by Public Law 95-217) and outlined in the federal regulations 40 CFR, Part 35. This review is an integrated analysis action under s. NR 150.20 (2) (a) 3, Wis. Adm. Code. By means of this review, the Department has complied with ch. NR 150, Wis. Adm. Code, and with s. 1.11, Stats. The approval of this sewer service area amendment does not constitute approval of any other local, state, or federal permit that may be required for sewer construction or associated land development activities.

Appeal Rights:
Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., a party has 30 days after the decision is mailed, or otherwise served by the Department, to file a petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent. To request a contested case hearing pursuant to section 227.42, Wis. Stats., a party has 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with section NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30 day period for filing a petition for judicial review.

Sincerely,

Timothy R. Asplund
Monitoring Section Chief
Bureau of Water Quality

cc:
Mark Hazuga – DNR – WD Eau Claire
Greg Searle – DNR WQ/3
Andrew Simek – DNR - LS/8
Lisa Helmuth – DNR – WQ/3

Resolution No. 18-02

UPDATE OF THE
CHIPPEWA FALLS-EAU CLAIRE SEWER SERVICE AREA PLAN FOR 2025

WHEREAS, a Sewer Service Area Plan was adopted in 1990 and updated in 2010 for the Chippewa Falls-Eau Claire urban area, as required by the Federal Clean Water Act and State Administrative Code NR 121 to protect water quality; and

WHEREAS, the *Chippewa Falls-Eau Claire Sewer Service Area Plan for 2025* (SSA Plan) is a formal element of Wisconsin's areawide water quality management plan and serve as the basis for state and federal permit approvals and grant funding for the planning, construction, and extension of wastewater treatment and sewage facilities and infrastructure; and

WHEREAS, the Chippewa-Eau Claire Metropolitan Planning Organization (MPO) assists the Wisconsin Department of Natural Resources (WDNR) in the development of the municipal point source element of the State's Areawide Water Quality Management Plan and acts in an advisory role to the Department in matters concerning the implementation of the plan; and

WHEREAS, West Central Wisconsin Regional Planning Commission (WCWRPC) has been designated by WDNR as the sewer service area planning agency for the Chippewa Falls-Eau Claire urban area; and

WHEREAS, beginning in Fall 2017, WCWRPC formed a technical work group of municipality, private-sector, and WDNR representatives to consider and recommend changes to the SSA Plan policies, with the primary purpose of clarifying definitions and policies related to environmentally sensitive areas, as well as plan implementation procedures; and,

WHEREAS, the MPO's Technical Advisory Committee has considered the work group recommendations and has recommended approval of the SSA Plan update by the MPO Policy Committee; and

WHEREAS, the MPO has conducted a public hearing that was properly noticed and has considered any comments received in writing or at the hearing on the proposed SSA Plan update;

NOW, THEREFORE BE IT RESOLVED BY THE CHIPPEWA-EAU CLAIRE METROPOLITAN PLANNING ORGANIZATION:

i. That the Chippewa-Eau Claire MPO recommends to WDNR the approval of the update to the *Chippewa Falls-Eau Claire Sewer Service Area Plan for 2025*; and

ii. Upon final approval of the SSA Plan update by WDNR, WCWRPC should inform the municipalities within the sewer service area that the revised policies and procedures in the Plan are in effect, including needed local assistance in plan implementation and reporting.

Adopted this 7th day of February, 2018

APPROVED:

Greg Hoffman, Chairperson
Chippewa-Eau Claire Metropolitan
Planning Organization

ATTEST:

Ann Z. Schell, Secretary

CHIPPEWA FALLS-EAU CLAIRE URBAN SEWER SERVICE PLAN FOR 2025

WITH 2017-2018 POLICY UPDATE

Prepared by:

Chippewa-Eau Claire Metropolitan Planning Organization
West Central Wisconsin Regional Planning Commission

2007 Plan Approved by:

Chippewa-Eau Claire Metropolitan Planning Organization
May 3, 2006

Wisconsin Department of Natural Resources
July 5, 2007

2017-2018 Policy Update Approved by:

Chippewa-Eau Claire Metropolitan Planning Organization
February 7, 2018

Wisconsin Department of Natural Resources
February 15, 2018

The 2007 plan was been financed through a Section 205 (j) Federal Areawide Water Quality planning grant from the U.S. Environmental Protection Agency, passed through the Wisconsin Department of Natural Resources. A grant agreement was entered into by the West Central Wisconsin Regional Planning Commission and the Wisconsin Department of Natural Resources for the purpose of developing the Chippewa Fall/Eau Claire Area municipal point source element of the State's Areawide Water Quality Management Plan.

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Chippewa-Eau Claire Metropolitan Planning Organization (MPO)

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City of Chippewa Falls	--	Dan Hedrington (2007), Gregory Hoffman (2018)
City of Eau Claire	--	David Adler (2007), Bob Von Haden (2018)
Village of Lake Hallie	--	Peter Lehmann (2007), Wayne Walkoviak (2018)
Chippewa County	--	Michael Murphy (2007), Jason Bergeron (2018)
Eau Claire County	--	Bruce Willett (2007), James Dunning (2018)
Town of Anson	--	Gary Lazarz (2018)
Town of Brunswick	--	Jeffrey Smith (2007), Frederick Turk (2018)
Town of Eagle Point	--	Michael Sedlacek (2007), Dennis Ferstenou (2018)
Town of Hallie	--	Larry Marquardt (2007, 2018)
Town of Lafayette	--	David Staber (2007), Sharon McIquham (2018)
Town of Pleasant Valley	--	Dan Hanson (2007, 2018)
Town of Seymour	--	Douglas Kranig (2007, 2018)
Town of Tilden	--	Luke Bowe (2007), Daniel Adams (2018)
Town of Union	--	Judy Bechard (2007), Jeff Bechard (2018)
Town of Washington	--	David Donovan (2007), Mike Peterson (2018)
Town of Wheaton	--	Bob Sworski (2007), Mark Blaskowski (2018)

Water Quality Management Technical Advisory Committee

2007	**2018**
Lanny Gleason, City of Altoona Rick Rubenzer, City of Chippewa Falls Brian Amundson, City of Eau Claire Peter Lehmann, Village of Lake Hallie Michael Sedlacek, Town of Eagle Point David Staber, Town of Lafayette Doug Kranig, Town of Seymour Debbie Smith, Town of Union Mike Peterson, Town of Washington Bob Sworski, Town of Wheaton Dan Masterpole, Chippewa County David Donovan, Eau Claire County Steve Thon, Wisconsin DNR	Brian Kelley, Chippewa Co. Highway Commissioner Jon Johnson, Eau Claire Co. Highway Commissioner Kelly Zimmerman, Chippewa Co. Transport. Coordinator Jennifer Speckien, Eau Claire Co. ADRC Director Rod Eslinger, Eau Claire Co. Planning & Develop Director Darryl Tufte, Eau Claire Community Development Director Richard Rubenzer, Chippewa Falls City Engineer Dave Solberg, Eau Claire City Engineer David Walter, Altoona City Engineer Wayne Walkoviak, Village of Lake Hallie Tom Wagener, Eau Claire Transit Manager Mark Jones, Abby Vans Coordinator, Chippewa Falls Shared Ride Taxi Jeff Bechard, Town of Union Janelle Henning, Town of Washington Dan Baumann, Wisconsin DNR Mitch Batuzich, Federal Highway Administration Diane Paoni, Wisconsin DOT-Madison Evan Gross, Federal Transit Administration Dena Ryan, WisDOT-Northwest Region Donna Brown-Martin, WisDOT-Bureau Planning & ED

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APPENDICES

Appendix A: Legal Type Description of the Sewer Service Boundary for 2025

Additional information, including application summaries, a tracking form for use by WCWRPC and municipalities, a web map, and weblinks to code references, will be made available online in 2018 at the WCWRPC website. (www.wcwrpc.org)

CHAPTER 1 – INTRODUCTION

1.1 INTRODUCTION

This urban sewer service area plan updates and amends the *Chippewa Fall/Eau Claire Urban Sewer Service Area Plan for 2010* which was completed and adopted in 1990.

Sewer service area plans are a formal element of state areawide water quality management plans (basin plans) which are part of state administrative rules. Being grounded in state law, agency actions on local development proposals must be consistent with sewer service area plans. In addition, urban areas are now more aware of sewer service areas because of their common use in development planning. Now communities with a population over 10,000 must consider sewer service area plans in development decisions where state approvals and permits are needed.

Sewer service area plans, and their subsequent updates, are prepared by local or regional planning agencies, under contract with the Wisconsin Department of Natural Resources. To the extent possible, the preparation of this plan considers already existing documents and other concurrent planning efforts which will be referenced within.

Since 1990, the Chippewa Falls-Eau Claire urban area has experienced considerable growth, in addition to the incorporation of the Village of Lake Hallie, which further supports the need for this update.

2017-2018 Policy Update

Beginning in Fall 2017, with funding support from WDNR, WCWRPC formed an ad hoc work group to update the policies and procedures of this plan, including:

- Clarifying definitions and policies related to environmental sensitive areas, as well as those circumstances for which a WQM 208 review or amendment is required (or exempt) and the timing of such reviews.
- Updating the environmental constraints and environmentally sensitive area (ESA) maps.
- Updating plan references and policies to reflect State and local regulatory and organizational changes.
- Reviewing, clarifying, and updating procedures and the roles of WCWRPC, WDNR, MPO, and local governments during plan implementation, as well as improving tracking and methods of communication.

Representatives from municipalities throughout the sewer service area were invited to participate on the work group, along with representatives from WDNR and two local land engineering firms. The work group recommended policy and procedural changes to the MPO, which were approved by the MPO and WDNR following a public hearing conducted on February 7, 2018, per standard MPO procedure.

This was not a full plan update and many sections of the plan were <u>not</u> modified or updated, including: (i) the demographics, economic, and land use data, plans, and maps in Chapter 2; (ii) the analysis of wastewater treatment systems and development areas in Chapter 3.5; (iii) the forecast of urban growth in Chapter 3.6; and (iv) the sewer service area (SSA) boundary in Chapter 3.7.

1.2 PURPOSE

Sewer service area plans serve as a basis for Wisconsin Department of Natural Resources (WDNR) approval of state and federal grants for the planning and construction of wastewater treatment and sewerage facilities. They also serve as a basis for WDNR approval of locally proposed sanitary sewer extensions and Department of Safety and Professional Services (WDSPS) approval of private sewer laterals, which were previously regulated through the Wisconsin Department of Commerce. In addition, because the service area plans identify environmental constraints, they serve as a guide for environmental permit decisions by federal and state agencies.

The urban sewer service area plan is intended to be an important planning and development guide for local communities[1]. The plan serves the following purposes:

1. It projects future needs for sewer service and establishes the geographic extent of the sewer service area for a twenty-year planning period to the year 2025.
2. It provides technical data for designing cost-effective and environmentally sound sewage treatment configurations for the planning area.
3. It defines the procedures for reviewing boundary and plan amendments.
4. It identifies sensitive environmental areas which will be protected from sewered development.
5. It serves as a guideline for government interaction and will be useful in the development of community plans.
6. It provides a basis for community officials to direct community growth and protect environmental, social, and economic concerns.
7. The plan will become a companion document to *The State of the Lower Chippewa River Basin*[2], the Areawide Water Quality Management Plan for the Lower Chippewa River Basin.

State rules suggest that the approved urban sewer service area plan is required to be reviewed and potentially updated every five years to reflect changes in statutes and policies, and to review data, such as population projections and housing densities.

1.3 BACKGROUND

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.

---

[1] While this plan can be an important planning and development tool, the plan should not be used or viewed to promote nor hinder annexation petitions or urban density development.

[2] Wisconsin Department of Natural Resources. "The State of the Lower Chippewa River Basin". PUBL-WT-554 2001. http://dnr.wi.gov/water/basin/lowerchip/lchippewa.pdf

One of the principal purposes of areawide plans is to identify cost-effective solutions to wastewater collection and treatment problems on a regional basis. To accomplish this objective, areawide plans are required to include "the identification of treatment works necessary to meet the anticipated municipal and industrial waste treatment needs of the area over a twenty year period," and a program to "regulate the location, modification and construction of any facilities within such area which may result in any discharge in such area" [Public Law 92-500, Section 208(b)(2)(A)]. The planning tool used to address these requirements in the Chippewa Falls-Eau Claire area is the urban sewer service area plan.

The Section 201 Facility Planning Grant Program was developed to provide uniform guidelines for the planning, design and construction of municipal wastewater facilities and to provide financial assistance to communities with inadequate wastewater collection and treatment systems. Facility plans prepared under Section 201 must be consistent with the broader framework of the areawide plans prepared under Section 208.

The State of Wisconsin has incorporated many of the Federal areawide and facility planning requirements in the Wisconsin Administrative Code. These administrative rules set forth clear procedures and standards regarding the preparation of these plans and their implementation. Specific sections of the code directly pertaining to these activities are NR121, concerning areawide waste treatment management planning, and NR110, concerning facility planning and sanitary sewer extensions. Chapter NR121, Areawide Water Quality Management Plans, requires urban sewer service area plans to be components of Areawide Water Quality Management Plans. The Chippewa Falls-Eau Claire Urban Sewer Service Area lies entirely within the Lower Chippewa River Basin Water Quality Management Area. Hence, when it is completed, this Plan will be appended to *The State of the Lower Chippewa River Basin* water quality management plan.

NR121, supplemented by WDNR planning guidance[3], largely sets forth the requirements for sewer service area planning. Specifically, NR121 requires that the following major elements be included in the areawide plans: (1) population forecasts for 20 years in five year increments (NR121.05(2)(c)3); (2) existing and projected land use patterns including the delineation of sewer service areas (NR121.05(2)(c)4); and (3) an identification of sewage collection system needs through the delineation of sewer service areas for existing and proposed treatment systems for the 20-year planning period (NR121.05(2)(g)).

Sewer service area plans prepared under NR121 must meet the following specific standards and criteria:

- The sewer service area is determined in such a fashion as to promote cost-effective and environmentally sound waste collection and treatment.
- The sewer service areas are delineated based on a 20-year population forecast and municipally approved population density standards.

[3] Wisconsin Department of Natural Resources SSA Planning Guidance can be found at http://dnr.wi.gov/topic/surfacewater/planning/ssaplanning.html

- Areas unsuitable for the installation of waste treatment systems because of physical or environmental constraints are to be excluded from the sewer service area. Areas to be considered for exclusion from the sewer service area because of the potential for adverse impacts on water quality from both point and non-point sources of pollution include, but are not limited to: wetlands, shorelands, floodways and floodplains, steep slopes, highly erodible and other limiting soil types, groundwater recharge areas, and other such physical constraints.
- The sewer service area plan shall include criteria for the construction of future treatment systems within the areawide planning area (NR110.08(5)).

Upon approval by the state, the *State of the Lower Chippewa River Basin* water quality management plan, and more specifically the sewer service area element, establishes the framework within which facility plans are developed and sewer extensions are reviewed under NR110. NR110 establishes an extensive series of regulations covering all phases of design and construction of sewerage systems. Perhaps the most significant requirement of NR110 in terms of sewer service area planning is found in NR110.08(4) and NR110.08(5)(e) requiring that facilities plans for all projects be subject to review for conformance with the areawide plans. These requirements serve to elevate sewer service areas from a purely advisory planning guideline to a functional mechanism for directing growth and development. It is important to recognize that regulatory aspects of the sewer service area rest with the State of Wisconsin. The West Central Wisconsin Regional Planning Commission's and the Water Quality Management Technical Advisory Committee's roles remain advisory to the communities and the Wisconsin Department of Natural Resources.

1.4 PLANNING COMMITTEE

NR121 requires a local policy committee be established, or an existing one be used, to assist WDNR in the preparation of the plan and act as an advisor in matters concerning implementation.

The West Central Wisconsin Regional Planning Commission utilized the existing Chippewa-Eau Claire Metropolitan Planning Organization (MPO) Policy Council to oversee the preparation of the plan update. The 17-member MPO Policy Council oversees a continuing, cooperative, and comprehensive urban transportation planning process that results in plans and programs consistent with the comprehensively planned development of the Eau Claire Urbanized Area, and thereby satisfies the conditions necessary for the receipt of federal transportation funds. In addition, the MPO also assists the Wisconsin Department of Natural Resources in the development of the municipal point source element of the State's Areawide Water Quality Management Plan and acts in an advisory role to the Department in matters concerning the implementation of the plan. The Policy Council includes representatives from eleven towns, one village, three cities, and two counties.

In addition, the Policy Council appointed a Water Quality Management Technical Advisory Committee to assist in the development of the technical aspects of the Plan's development, and includes participation by the Wisconsin Department of Natural Resources. The Policy Council's

and Committee's membership is listed at the very beginning of this report immediately following the cover.

1.5 PLANNING AREA

The Chippewa Falls-Eau Claire urban area is located in west-central Wisconsin and encompasses parts of both Chippewa and Eau Claire counties. The City of Eau Claire is the central city of the Chippewa Falls-Eau Claire Metropolitan Statistical Area (MSA), which includes all of Chippewa and Eau Claire Counties.

The establishment of a planning area assists by focusing sewer service area study efforts on a defined geographic area and facilitates a comprehensive examination of data needed in the planning effort. The criteria used in delineating the planning area included:

1. The recognition of areawide land use trends and patterns;
2. The recognition that water quality and growth problems are areawide concerns; and,
3. The delineation of planning areas in previous planning efforts and existing local plans.

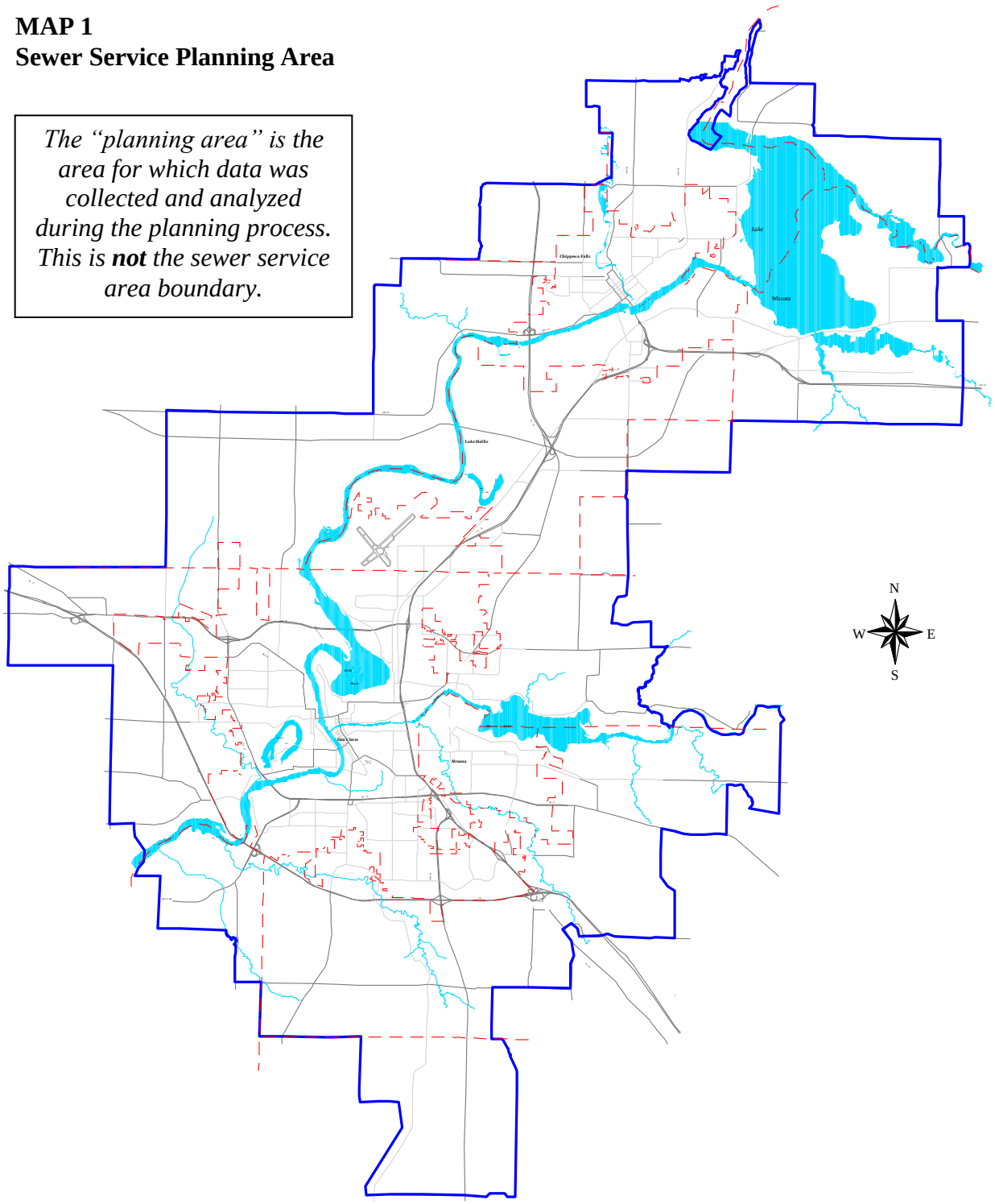
Based on these criteria, the MPO Policy Council selected as the study or planning area for the sewer service area plan update the area encompassing parts or all of the following municipalities:

Chippewa County	Eau Claire County
City of Chippewa Falls	City of Altoona
City of Eau Claire	City of Eau Claire
Village of Lake Hallie	Town of Brunswick
Town of Anson	Town of Pleasant Valley
Town of Eagle Point	Town of Seymour
Town of Hallie	Town of Union
Town of Lafayette	Town of Washington
Town of Tilden	
Town of Wheaton	

In all, the planning area encompasses approximately 118,652 acres or 185 square miles. Map 1 below outlines the planning area boundary and the municipality boundaries. For the purpose of this Plan, the planning area will also be referred to as the Chippewa Falls-Eau Claire urban area.

MAP 1
Sewer Service Planning Area

*The "planning area" is the area for which data was collected and analyzed during the planning process. This is **not** the sewer service area boundary.*



Municipal Boundaries
SSA Planning Area Boundary

West Central Wisconsin Regional Planning Commission

CHAPTER 2 – GROWTH & DEVELOPMENT TRENDS

Note: Chapter 2 was not updated as part of the 2018 SSA Plan policy update.

2.1 GENERAL CHARACTERISTICS OF THE PLANNING AREA

Located approximately 90 miles east of the Minneapolis-St. Paul urban area, the Chippewa Falls-Eau Claire urban area serves as a major employment, trade, service, and governmental center for west-central Wisconsin.

In general, the urban area has developed near and out from the banks of the Chippewa and Eau Claire Rivers, reflecting the importance of these rivers to early travel, settlement, and the timber industry in the region. The urban area is surrounded by fertile agricultural land, remnants of large pine forests, and scenic lakes and rivers.

The City of Eau Claire, located at the confluence of these two rivers, is the ninth largest city in the State of Wisconsin with an estimated 2004 population of 63,897.[4] With an estimated 2004 population of 13,155, the City of Chippewa Falls is the second largest community in the urban area. Both the City of Chippewa Falls and the City of Eau Claire are the county seat for their respective counties.

In the 1970s and 1980s, the Eau Claire Metropolitan Statistical Area (MSA) was Wisconsin's fastest growing metro area, but growth for the MSA slowed considerably relative to other urban areas in the State during the 1990s, though still experiencing 4.3% growth occurring from 1990 to 1997. Since the mid-1990s, many of the unincorporated towns within the planning area have been experiencing higher rates of population growth than their nearby incorporated counterparts. The planning area also includes the Village of Lake Hallie which was incorporated in 2003 and was part of the Town of Hallie in the prior sewer service area plan for the urban area.

2.2 POPULATION

Population trends and projections play an important role in most planning decisions. There are three major factors determining population change over time: birth, deaths, and migration. In addition, annexation of areas by a city may increase the population of the city, but decrease the population of the town it acquired the land from. Economic and social conditions will greatly affect population changes; thus, the population projections should be revised if growth patterns change from the historic norm.

[4] Wisconsin Department of Natural Resources. Wisconsin Municipalities – Population Change and Rank. <http://www.doa.state.wi.us/docs_view2.asp?docid=2689>. September 2004.

2.2.1 Population Trends

As Table 1 shows, since 1980, population in the Chippewa Falls-Eau Claire urban area has increased at a rate above the State of Wisconsin average. The growth rate varies substantially by community, with the City of Altoona, Town of Pleasant Valley, and Town of Lafayette experiencing the greatest rates of population growth. Only the Town of Union experienced a loss of population between 1980 and 2000, though this is can be misleading since the population loss (and resultant population gain for the City of Eau Claire) was largely due to annexations. Overall, Eau Claire County's population increased at a rate faster than that of Chippewa County. Table 1 also shows than many of the unincorporated towns in the study area have increased at rates at or above their adjacent incorporated communities. Since the Village of Lake Hallie did not incorporate until 2003, historical population trend data for the Village is unavailable. Its parent town, the Town of Hallie, experienced a 10% increase in population during this time period, though this increase was somewhat deflated due to annexations of portions of the Town into its incorporated neighbors which occurred during the same timeframe.

Table 1. Population Trends* - 1980-2000

	1980	1990	2000	% change
Town of Anson	1,590	1,634	1,881	+18.3%
Town of Brunswick	1,411	1,506	1,598	+13.3%
Town of Eagle Point	2,750	2,542	3,049	+10.9%
Town of Hallie	4,275	4,531	4,703	+10.0%
Town of Lafayette	4,181	4,448	5,199	+24.3%
Town of Pleasant Valley	1,908	2,076	2,681	+40.5%
Town of Seymour	2,824	2,754	2,978	+5.5%
Town of Tilden	1,088	1,079	1,185	+8.9%
Town of Union	2,689	2,456	2,402	-10.7%
Town of Washington	6,489	6,269	6,995	+7.8%
Town of Wheaton	2,328	2,257	2,366	+1.6%
Village of Lake Hallie	*incorporated 2003*			
City of Altoona	4,393	5,889	6,698	+52.5%
City of Chippewa Falls	12,270	12,749	12,925	+5.3%
City of Eau Claire	51,509	56,806	61,704	+19.8%
Total	70,165	77,437	83,320	+18.8%
Chippewa County	52,127	52,360	55,195	+5.9%
Eau Claire County	78,805	85,183	93,142	+18.2%
Wisconsin	4,705,642	4,891,769	5,363,715	+14.0%

source: U.S. Census

2.2.2 Population Characteristics

Examination of selected characteristics of the Chippewa Falls-Eau Claire area population provides insight into present and future needs of the community. Table 2 shows the median ages of residents in the communities in the planning area. The median age is that age at which there

are the same number of people in the population with ages above it and below it, providing a cursory idea of the overall age structure of the communities in the planning area. Over the past decade, the median age has been steadily increasing in all area communities, with some towns experiencing quite dramatic increases. This increase reflects longer life expectancy and decreasing birth rates, but also influences other social factors such as average household size.

Table 2. Median Age Comparisons – 1990-2000

	1990	2000
Town of Anson	32.1	38.7
Town of Brunswick	33.7	40.6
Town of Eagle Point	35.8	41.8
Town of Hallie	31.4	35.2
Town of Lafayette	27.1	38.8
Town of Pleasant Valley	35.3	37.8
Town of Seymour	35.7	39.1
Town of Tilden	30.6	35.7
Town of Union	31.6	37.6
Town of Washington	34.5	38.1
Town of Wheaton	33.8	37.7
Village of Lake Hallie	*incorporated 1993*	
City of Altoona	32.0	36.1
City of Chippewa Falls	34.2	37.3
City of Eau Claire	28.5	29.4
Chippewa County	33.4	37.6
Eau Claire County	30.3	32.4
State of Wisconsin	32.9	36.0

source: U.S. Census Bureau, 1990-2000

To provide further insight into local demographic trends, Table 3 shows the fertility and death rates for Chippewa and Eau Claire Counties for 1990 and 2000. Birth and fertility rates in the area continue to decline, while the death rates have increased slightly (Chippewa County) or have dropped (Eau Claire County). These trends become even more apparent on Figures 1 and 2 on the following page.

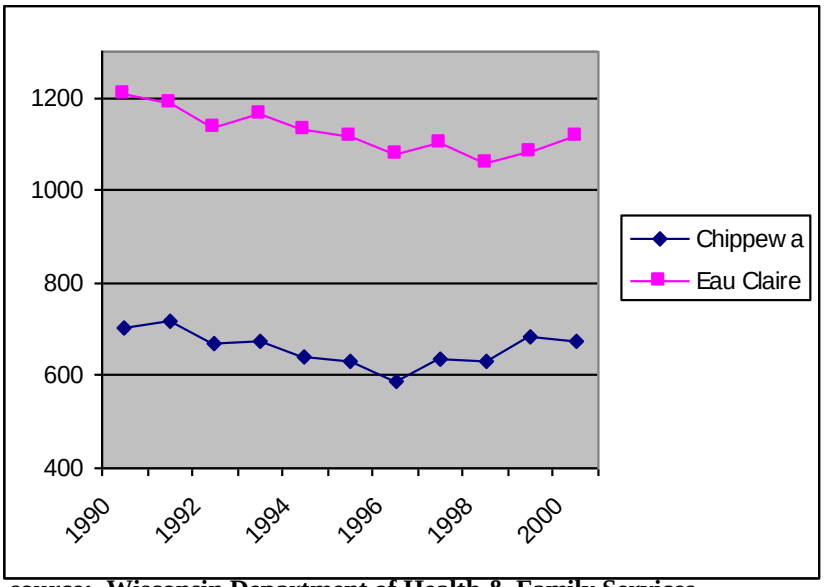
Table 3. Births and Deaths – 1990 & 2000

Chippewa County		**1990**	**2000**
	number of births	704	673
	fertility rate *(births per 1,000 women ages 15-44)*	62.68	60.39
	number of deaths	498	533
	death rate *(deaths per 100,000 population)*	951.11	965.67
Eau Claire County			
	number of births	1,208	1,116
	fertility rate *(births per 1,000 women ages 15-44)*	54.23	49.02
	number of deaths	658	639
	death rate *(per 100,000 population)*	772.4	686.05

source: Wisconsin Department of Health & Family Services

Figures 1 and 2 show a relatively steady, albeit slow, decrease in the number of births during the 1990s in Chippewa and Eau Claire Counties. The number of death fluctuated more from year-to-year, but remained fairly even over the same time period as a whole.

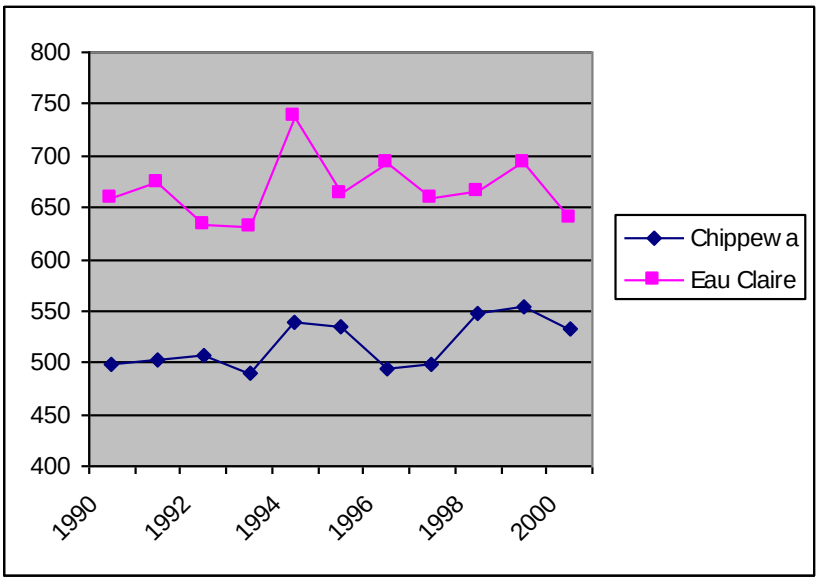
Figure 1. Chippewa & Eau Claire County Births – 1990-2000



source: Wisconsin Department of Health & Family Services

The fertility rate on a national level continues to decline due to a number of factors including concern over a growing population and its demand on natural resources, the general state of the economy, married couples in which both partners work outside of the home, those same married couples having fewer or even no children, a smaller percentage of marriages, and increased divorce rates. The Chippewa Falls-Eau Claire area appears to be also following this trend.

Figure 2. Chippewa & Eau Claire County Deaths – 1990-2000



source: Wisconsin Department of Health & Family Services

Though fertility rates in Chippewa Falls-Eau Claire area are slowly declining, the number of births still outpace the number of deaths and death rates have remained fairly stable. It is probable this trend will continue, although fertility rates may stabilize at some point. Assuming a stable death rate and a slowly decreasing fertility rate, the area is still projected to grow over the next twenty years because of in-migration.

In order to understand the extent to which migration is affecting the area, one must consider what the population would be had no migration occurred and relate that to the actual population.

The resulting figure approximates the in-migration of the area and is the derived from the following formula:

Beginning of decennial population + Births – Deaths = Expected end of decennial population

Actual end of decennial population – Expected end of decennial population = Net In-Migration

As Table 4 shows, net in-migration was 38.8% of the increase in the population from 1990 to 2000. Hence, net in-migration is a significant component of the area's population increase and will likely remain so.

Table 4. Chippewa & Eau Claire County Net Migration – 1990-2000

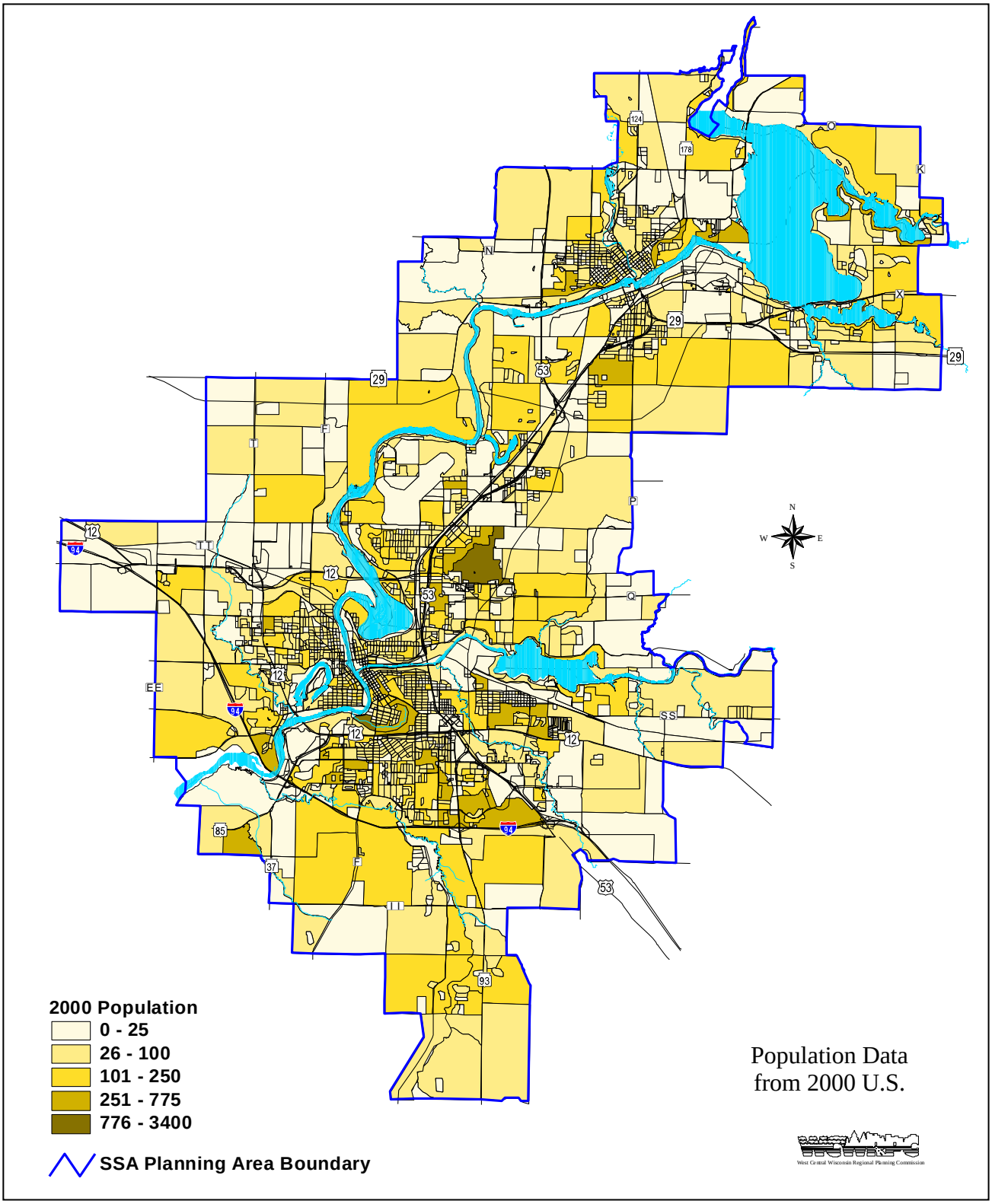
	1990 Pop.	Expected 2000 Pop	Actual 2000 Pop	Net In-Migration
Chippewa County	52,360	53,926	55,195	1,269
Eau Claire County	85,183	90,225	93,142	2,917
Total	137,543	144,151	148,337	4,186

sources: Wisconsin Department of Administration; Wisconsin Department of Health & Family Services

2.2.3 Planning Area Population Distribution

The distribution of the planning area's population by census block in 2000 is show on Map 2.

MAP 2
2000 Population Distribution



2.2.4 Population Projections by Municipality

Table 5 shows the official population projections for the municipalities in the planning area as established by the Wisconsin Department of Administration. These population projections include potential population changes through annexation, based on past trends. Together, the municipalities in the Chippewa Falls-Eau Claire urban area are projected to be home to approximately 80% of the Chippewa and Eau Claire County residents in 2025.

Table 5. Population Projections by Municipality - 2005-2025

	2005	2010	2015	2020	2025	% change
Town of Anson	1,958	2,079	2,191	2,294	2,363	+20.7%
Town of Brunswick	1,644	1,679	1,702	1,740	1,787	+8.7%
Town of Eagle Point	3,236	3,499	3,746	3,978	4,150	+28.2%
Town of Hallie	323	351	374	395	403	+24.8%
Town of Lafayette	5,538	6,006	6,444	6,858	7,167	+29.4%
Town of Pleasant Valley	2,901	3,103	3,277	3,479	3,700	+27.5%
Town of Seymour	3,096	3,196	3,272	3,376	3,499	+13.0%
Town of Tilden	1,217	1,276	1,330	1,378	1,407	+15.6%
Town of Union	2,582	2,756	2,907	3,083	3,275	+26.8%
Town of Washington	7,395	7,756	8,058	8,428	8,843	+19.6%
Town of Wheaton	2,435	2,559	2,672	2,774	2,836	+16.5%
Village of Lake Hallie	4,558	4,942	5,276	5,568	5,685	+24.7%
City of Altoona	7,056	7,369	7,621	7,941	8,303	+17.7%
City of Chippewa Falls	12,935	13,244	13,490	13,690	13,691	+5.8%
City of Eau Claire	64,638	67,180	69,189	71,783	74,723	+15.6%
Total	123,517	129,005	133,564	138,785	143,857	+16.5%
Chippewa County	57,740	60,217	62,375	64,292	65,192	+12.9%
Eau Claire County	97,679	101,580	104,663	108,674	113,270	+16.0%

source: Demographic Services Center, Wisconsin Department of Administration, Jan 2004

However, concern was expressed over the accuracy of these projections for the City of Chippewa Falls. Based on recent trends, it is apparent that the Chippewa Falls will likely grow at a rate faster than projected by the Wisconsin Department of Administration (WisDOA). For instance, the WisDOA 2004 population estimate for the City already exceeded the 2005 population projection provided above by 829 persons. For the Chippewa Falls Wastewater Treatment Facility Plan under development in 2004, the following projections for the City of Chippewa Falls were developed:

Alternative "Unofficial" Population Projection	2005	2010	2015	2020	2025	% change
City of Chippewa Falls	13,764	14,308	14,851	15,394	15,937	+15.8%

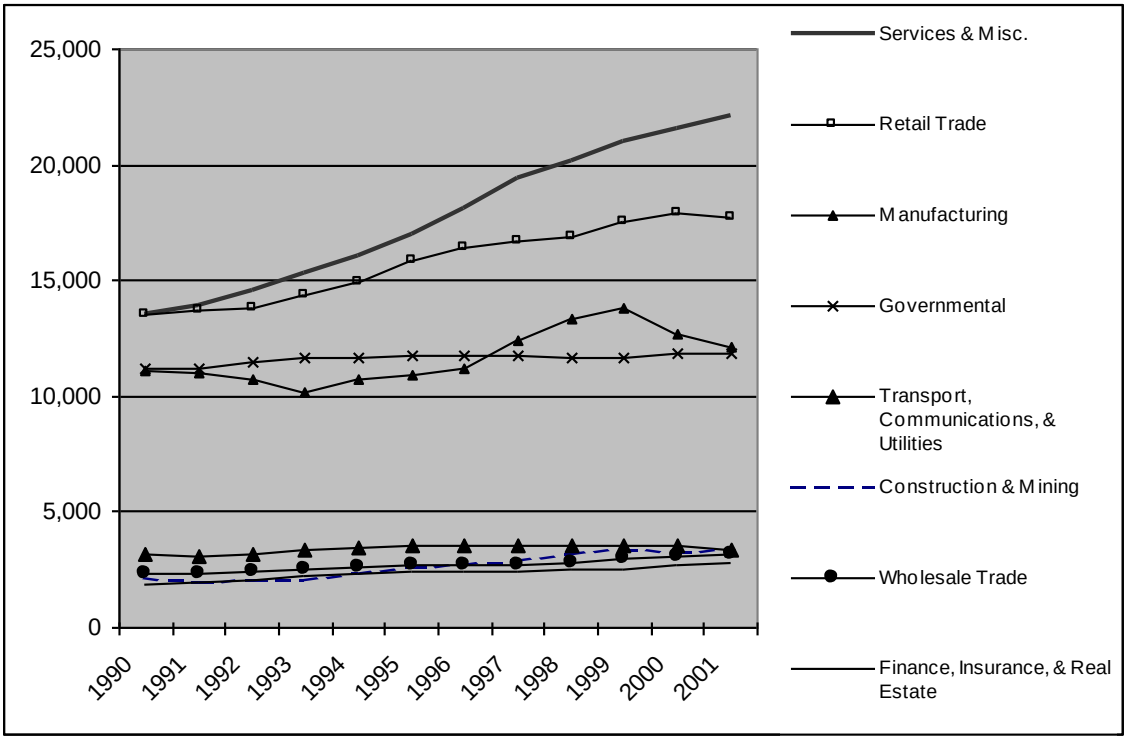
The population projections for the planning area addresses these concerns later in this plan by using traffic analysis zones and census blocks to project future population by sub-areas rather than projecting population for entire communities. This approach yielded total population

projections for the planning area which were comparable to the total official WisDOA projection, adjusted for those portions of the communities in the planning area. Population and development projections for the planning area, as well as the methodology used to develop these projections, is discussed later in the plan in *Chapter 3.6 Forecast of Urban Growth*.

2.3 EMPLOYMENT & COMMUTING TRENDS

Figure 3 reflects the importance of the Chippewa Falls-Eau Claire urban area as a service and retail trade center for west-central Wisconsin. Employment in the service and retail trade sectors grew considerably during the 1990s while other non-farming sectors remained fairly unchanged overall during the same timeframe. Overall, between 1990 and 2000, employment grew 21% in the urban area. And over the planning timeframe, the Wisconsin Department of Workforce Development projects an average employment growth of 1.5% annually.

Figure 3. Eau Claire MSA Non-Farm Employment -- 1990-2001



source: Wisconsin Department of Workforce Development

The mobility of the residents of the Chippewa Falls-Eau Claire Urban Area is automotive dominated. According to the 2000 U.S. Census, 89.8% of workers 16 years or older in the area use the automobile to commute to work. Of these, 81.3% drove alone, while only 8.5 % carpooled. The convenience of automotive travel in the urban area contributes to the regional commuting patterns. Approximately 80% of the commuter trips to the urban area originate within the urban area, with an additional 13% of the trips originating in areas of Chippewa, Eau Claire, and Dunn County outside the urban area. In all, an average of 68,031 commuter trips were made to the Chippewa Falls-Eau Claire Urban Area on a daily basis in 2000. These trips

are expected to continue to increase as population increases, with economic growth, and as the number of automobiles per household continues to increase.

2.4 LAND USE PLANS AND TRENDS

2.4.1 Incorporated Communities' Land Use Analysis

The planning area includes four incorporated communities: City of Altoona, City of Chippewa Falls, City of Eau Claire, and the Village of Lake Hallie. Table 6 shows the distribution of land uses by acreage for each of these communities in 1973, 1989, and 2005, with the exception of the Village of Lake Hallie which was incorporated in 2003. For Lake Hallie, the current corporate limits were applied against the land use inventory for 2000 to obtain the acreages in Table 6. The total acres in Table 6 also provide insight into the growth of each community through annexation.

Table 6. Land Uses for Incorporated Communities -- 1973, 1989, 2005

	Total Acres	Residential	Commercial	Industrial	Vacant
Altoona					
1973	1,826	254 (13.9%)	11 (0.6%)	0 (0.0%)	1,043 (57.1%)
1989	2,770	540 (19.5%)	95 (3.4%)	15 (0.5%)	1,370 (49.5%)
2005	3,004	1,363 (38.2%)	149 (5.0%)	100 (3.3%)	847 (28.2%)
Chippewa Falls					
1973	6,166	788 (12.8%)	109 (1.8%)	77 (1.2%)	3,335 (54.1%)
1989	6,400	930 (14.5%)	150 (2.3%)	350 (5.5%)	1,900 (29.7%)
2005	7,284	1,602 (22.0%)	246 (3.4%)	514 (7.1%)	2,120 (29.1%)
Eau Claire					
1973	14,604	2,912 (19.9%)	454 (3.1%)	320 (2.2%)	5,064 (34.7%)
1989	19,600	4,580 (23.4%)	760 (3.9%)	420 (2.1%)	6,150 (31.4%)
2005	20,712	7,246 (35.0%)	1,425 (6.9%)	1,827 (8.8%)	1,731 (8.4%)
Lake Hallie					
2005	9,236	2,102 (22.8%)	401 (4.3%)	1,713 (18.5%)	4,211 (45.6%)

source: West Central Wisconsin Regional Planning Commission Land Use Surveys, 1973, 1989, 2005

In Table 6, commercial lands include all offices, while warehouses fall within the industrial category. Vacant uses encompass all lands undeveloped (no structures), but considered developable; vacant lands do not include the environmentally sensitive areas of wetlands, steep slopes, and floodplains which were approximately 35% of the planning areas overall. Recreational, governmental, and institutional uses are also not included in Table 6.

City of Altoona Land Use Analysis

Over the last decade, the amount of residential acreage more than doubled in the City of Altoona. Substantial increases in commercial and industrial acreage also were realized, while the amount of available vacant, undeveloped land shrunk considerably.

Moderate and steady growth is expected to continue for the City of Altoona, with an increase of approximately 1,000 more households anticipated over the next twenty years. To accommodate such growth, annexations are likely, with the majority of this residential growth occurring on the east and southeast side of the City. Much of this residential development will likely occur at relatively low densities, which could be further impacted by how the Town of Washington regulates these areas in the interim.

A second key growth area in the City of Altoona is anticipated around the future U.S. Highway 53 and Birch Street interchange as part of the U.S. Highway 53 bypass improvements. Increased access and visibility will increase the commercial development potential of this area. Some multi-family housing development may accompany the retail, office, or other commercial development which occurs in this area.

The City of Altoona adopted a comprehensive plan in 2000 which was recently amended for consistency with the State Comprehensive Planning Law. Altoona's plan recommendations include:

- Require all new development within the Altoona planning area be served with the full array of municipal services (e.g., water, sewer, stormwater, police/fire).
- Preserve environmental corridor features including waterways, floodplains, wetlands, ground water recharge areas, steep slopes (>15%), wildlife habitat, scenic vistas, drainageways, and woodlands.
- Discourage urban development in areas that cannot be easily or economically served with municipal utilities.
- Guide new urban growth to areas within its sewer service area (SSA) as compact, orderly development.
- The City will generally not extend sanitary sewer lines outside its corporate boundaries and will not extend sanitary sewer lines outside the SSA.
- The City will work closely with WCWRPC to monitor and amend the SSA as necessary; the Altoona SSA should be large enough to easily accommodate projected urban growth over the next 20 years and provide excess acreage to ensure efficient operation of the urban land market.

- The City will work with adjacent communities to ensure that lands within the Altoona SSA will be developed in a logical, orderly and cost-effective manner, with a full range of municipal utilities and services at the time of construction.
- Discourage development of unincorporated lands adjacent to or near the City; development of these lands is generally consistent with annexation.
- Encourage cooperative planning with neighboring communities so that urban development can be guided into the City's SSA.

City of Chippewa Falls Land Use Analysis

Like the City of Altoona, the amount of residential acreage in the City of Chippewa Falls also more than doubled over the last decade. Substantial increases in commercial and industrial acreage also was realized. While the amount of undeveloped land shrunk considerably, substantial amounts of undeveloped acreage still exists within the corporate limits.

The City of Chippewa Falls Comprehensive Plan adopted in December 1999 identifies two primary single-family residential expansion areas: the former Chippewa County Farm property on the northeast side of the City (250 acres) and an area on the northwest side of the City (300 acres north of Elm St. and west of Wheaton St.). Multi-family residential expansion will be integrated into developments as well, such as the northwest neighborhoods near US 53 and the former Chippewa County Farm Property. To the southeast, the 300+ acres of the former Northern Wisconsin Center property is being developed with a mix of commercial, single-family residential, and multi-family residential uses. The Chippewa County Farm Property and adjoining parcels west of STH 178 were identified as the primary industrial development areas for the next planning period.

The Comprehensive Plan also included the following general policy statements:

- Provide utility expansions in a planned, staged, and orderly manner.
- The City shall maintain the policy of not extending municipal sanitary sewer or water services to areas outside the City limits. Owners may petition for annexation as provided by State statute.
- Annexation proposals will be evaluated based on cost-effectiveness and impact on service needs elsewhere in the City.
- Eventually, all area included within the City's SSA will be a part of the City of Chippewa Falls.

City of Eau Claire Land Use Analysis

Residential, commercial, and industrial acreage in the City of Eau Claire also increased dramatically during the past decade. With the improved access provided by State Highway 312, commonly referred to as the north crossing, considerable office, commercial, and industrial growth has been occurring on the northwest side of the community, with residential neighborhoods forming along the highway farther to the east as one approaches the Chippewa River.

During the 1990s, the Cameron Street and Sherman School areas on the west side of the community experienced considerable residential subdivision growth; and continued residential growth in this area is anticipated. However, substantial amounts of adjacent land in the Town of Union to the west of Interstate 94 have been developed as unsewered, large residential lots reducing opportunities for more efficient, urbanized growth.

Access to transportation connections and sanitary sewer service, existing topographical challenges, and the existence of large, semi-rural lots all contribute to slow growth for some areas of the City's south side. Primary areas for potential growth south of the City are along Highway 93 to the east of Lowes Creek and along Highway 85 to the southwest, above the floodplain. The north side of Interstate 94 on the south side of the community will continue to develop as experienced in recent years with commercial, office, single-family residential, and multi-family residential uses.

Land uses on the northeastern quadrant of the community along U.S. Highway 53 are a diverse mixture of sewered and unsewered residential, commercial, and industrial uses. The new Highway 53 bypass and wooded hillsides to the east further delineate this area and pose development challenges. Substantial growth in this area within municipal limits is not anticipated. Much like the central portion of the City, most development will consist of infill and redevelopment on this northeast side. However, considerable opportunities for redevelopment occur farther to the east in the Town of Seymour, which has been generally agreeable to landowner annexation petitions to date.

The City of Eau Claire adopted its comprehensive plan on September 27, 2005. Much of the previous descriptions of local land use trends was adapted from the City's comprehensive plan. The *City of Eau Claire Comprehensive Plan* also includes the following policies and comments pertinent to the SSA planning effort:

- Forecasts that 4,200 acres will be needed for urban development between 2004-2025 (more than double the estimated undeveloped acreage currently within the corporate limits).
- The plan includes a proposed future sewer service area (SSA) for the Eau Claire WWTP with forecasted urban growth areas.
- Utilities staging plan w/ trunk lines, force mains, and pump stations identified.
- Village of Lake Hallie has stated it will develop w/ private, on-site sewage systems. As such, the City's comprehensive plan suggests that the SSA map not include parts of Village of Lake Hallie and this acreage should be allocated elsewhere.
- Annexation or agreements to annex should be executed prior to extension of sewer service to areas outside the City.
- The City will not approve sewer extensions beyond the 2010 SSA boundary unless the regional Urban SSA Plan is amended.
- Priorities for annexation and extension of services are: (1) existing sewered areas, (2) expansion of existing facilities per the C.I.P., (3) trunk line facilities expansion for 5-10 years, and (4) long-term trunk line expansion not to be served in near future.
- Environmentally sensitive areas include wetlands, floodplains, shorelands, and steep slopes (20+%).

- Within the extraterritorial plat review zone and SSA, there should be a maximum number of homes per 40 acres without public sewer. Maintaining a rural density in these areas will improve opportunities to provide efficient community services at a later date.

The City of Eau Claire has adopted extra-territorial plat review for three miles surrounding the City's incorporation limits. Within this area, a 10-acre maximum density standard applies in accordance with the City's recently adopted comprehensive plan. Within the sewer service area boundary within this extra-territorial plat review area, these lots can be further subdivided when public services are made available.

Village of Lake Hallie Land Use Analysis

The Village of Lake Hallie incorporated from part of the Town of Hallie in April 2003, halting annexations by adjacent incorporated areas, thus protecting its territorial integrity. Historical land use and demographic information for the newly formed village is not readily available. The community currently does not have public sanitary sewer service within its corporate limits, but part of the community is served by a public water system that was installed due to groundwater contamination from the Presto Superfund site.

The Village is quickly developing, with tremendous commercial growth along U.S. Highway 53 and near the upcoming U.S. Highway 53 and State Highway 29 interchange. Limited industrial uses are also present along the Highway 53 corridor. The remainder of the Town is dominated by large-lot detached single-family housing and agricultural lands.

Based on the 1997 Town of Hallie Land Use Plan, an estimated 183 acres would be needed by 2015 to accommodate residential growth, at an average of two-thirds of an acre per household. Given recent trends, however, this estimate is likely too low since residential development has often been occurring on larger lots (possibly in part due to the lack of sanitary sewer service) and the substantial commercial growth occurring as a result of the U.S. Highway 53 bypass project.

2.4.2 Unincorporated Communities Land Use Analysis

In general, the unincorporated portions of the planning area are expected to experience higher rates of population growth, and at lower densities, than their nearby incorporated neighbors. As acknowledged in the *Town of Washington Land Use Plan*, development occurring in many unincorporated areas within the planning area is "not economically efficient to serve with municipal sewer and water because of their larger lot size, yet do not lend themselves to re-subdivision to accommodate a higher density development."

All towns in the planning area fall under their respective county's subdivision ordinance, floodplain ordinance, and shoreland-wetland ordinance, when applicable. With the exception of the Town of Tilden, all towns also participate in county zoning. Some area towns are placing increasing emphasis on land use strategies which preserve prime farmlands and valued open spaces.

Town	Comp. or Land Use Plan	Other Comments
Town of Anson	may partner w/ County on Comp. Planning	A relatively small portion of the Town of Anson is located with the SSA planning area, of which a large portion is Lake Wissota State Park. Additional residential growth can be expected near Lake Wissota surrounding the park, but on larger lot sizes and not at densities to efficiently serve with community sewer or water.
Town of Brunswick	Land Use Plan 2000; agreed to participate in County Comp. Planning	Housing is primarily large-lot single-family homes scattered throughout the town. There is very little commercial development and gravel mining constitutes the primary industry. Population growth has been slow, but steady, not experiencing the growth rates of its neighbors. from Plan: Mixed farming and housing along Highway 37. Large-lot residential development closest to Eau Claire, essentially creating a barrier for sewer service expansion. The owners of the large gravel mine west of Highway 37 are contemplating the residential development of this property after the mining operation is closed.
Town of Eagle Point	Land Use Plan 2000	Located immediately north of the City of Chippewa Falls, the Town of Eagle Point has been experiencing residential development pressure in the southern part of the town, especially adjacent to the Chippewa River and the Highway 124 and 178 corridors. The Town enforces a minimum 30,000 square feet (0.46 acre) lot size. from Plan: environmentally sensitive lands include steep slopes (12+%), surface waters, wetlands, floodplains, and shorelands Much of the Town's acreage in the planning area has been designated an urban transition area within the Town's Land Use Plan. The plan encourages min. lot requirements and ghost platting in this area for when future public services are imminent.
Town of Hallie	Land Use Plan 1997	Residential growth is anticipated for most of the Town of Hallie which falls within the SSA planning area. Currently, higher density subdivision growth has been occurring in the areas closest to the City of Chippewa

		Falls, while larger residential lot sizes and agricultural uses predominate in areas farther from incorporated communities. The Town enforces a minimum 20,000 square feet (0.46 acre) lot size in most areas. from Plan: environ. corridors include steep slopes (12-20% managed; 20+% prohibited); .67 acre avg. lot size; promote infill & compact development; protect prime agri. lands; explore options for providing sanitary sewer; public water to portions since 1992 due to groundwater contamination concerns; complete a stormwater management plan to address Town Water Quality Management Planning Project.
Town of Lafayette	Land Use Plan 1995	The Town of Lafayette has experienced tremendous residential and commercial growth nearest the City of Chippewa Falls and Lake Wissota, especially along Highway 29 and Highway X. Additional residential growth pressures are anticipated for areas south of Highway 29 along Highway J and towards the west closer to the Town of Hallie and City of Chippewa Falls. Based on recent trends, the Town of Lafayette is projected to increase in population at a faster rate than any other community in the planning area. The Town enforces a minimum 30,000 square feet (0.69 acre) lot size. from Plan: primary sensitive areas include steep slopes (12+%), wetlands, prime farmlands, and surface water resources/floodplains; promote larger lot development and contiguous residential growth; limit m.f. housing to areas where it can be adequately served by public utilities.
Town of Pleasant Valley	Land Use Plan 1998; agreed to participate in County Comp. Planning	Pleasant Valley has been experiencing substantial, unsewered, residential development on very large lots along the Highway 93 and Lowes Creek Road corridors. from Plan: primary sensitive areas include steep slopes (20+%), wetlands, and prime farmlands; 1.5 acre min. lot size/unit w/in subdivision; promote infill, compact, & contiguous residential growth; identifies high & med. density resid. growth areas.

Town of Seymour	Land Use Plan 1989; agreed to participate in County Comp. Planning	The portion of the Town east of Eau Claire and north of Lake Altoona continues to experience considerable residential growth at semi-rural or larger lot sizes making the provision of community services inefficient in many instances.
Town of Tilden		To date, the Town of Tilden has experienced only a limited number of large residential subdivisions. This subdivision growth has been limited to areas immediately adjacent to the City of Chippewa Falls and near the unincorporated community of Tilden along County Highway B. The majority of residential growth that has been occurring in the Town has primarily been on large lots of 2 acres or more, with many lots of 10+ acres. The Town has adopted minimum lot size requirements.
Town of Union	Land Use Plan adopted; developing Comp Plan	The Town has its own subdivision control ordinance and recently adopted a minimum 5 acre lot size. During the last decade, the population actually shrunk due to annexations. Half-acre to one-acre residential development has been occurring nearest Eau Claire along county highways and east of I-94. Many of these semi-rural residential lots are inefficient for the provision of public water and sewer. Substantial commercial and industrial development has been occurring east of I-94 along Highway 124. A potential future I-94 interchange at Cameron Street has been under discussion and could further increase development pressure in this area.
Town of Washington	Land Use Plan 2000; agreed to participate in County Comp. Planning	Town population has grown rapidly as farmland is fragmented into very large residential lots. Much of this residential development has been occurring in the Lowes Creek Road and Highway 93 corridor just south of Eau Claire. A portion of the Town is included within the urban sewer service area. Some future commercial and/or industrial development may occur along Highway 93 within the urban sewer service area.

		From their Plan: +33 housing units per year through 2020 projected; 1.5 acre min. lot size outside SSA; primary sensitive areas include steep slopes (20+%), wetlands, and prime farmlands; development in SSA should be coordinated w/ availability of municipal sewer & water service at urban standards.
Town of Wheaton	developing Land Use Plan; has 5-acre min. lot size in subdiv ord	The future U.S. Highway 29 project is anticipated to increase growth in the Town of Wheaton. Commercial and some industrial development is anticipated near the Highway 29 and County Highway T interchange down to the City of Eau Claire. Unsewered residential subdivisions at semi-rural densities are anticipated near County Highway F and near the Chippewa River. Significant residential subdivision development, primarily on 5 to 8 acre lots, has occurred in the western potion of the Town of Wheaton near the unincorporated community of Pine Grove. While notable, this is outside the SSA planning area.

2.4.3 Overall Land Use Patterns

Map 3 at the end of this section shows the general land uses for the SSA planning area as of January 1, 2005. The land use mapping incorporated available land use data from the MPO's Long-Range Transportation Plan, current municipal plans, input from Water Quality Technical Advisory Committee, and field inventories in some rural areas where current information was not readily available. However, the land use patterns of the planning area are continuously changing, and notable changes since the land use inventory were incorporated into the map when possible, but some variation from existing land use should be expected.

The mapping process was automated through the application of the computerized Geographic Information System (GIS) which allows the integration and comparison of databases to provide various overlay coverages for information analysis. The GIS also allows land use acreage to be calculated for the various land use categories. Table 7 on the following page provides the approximate land use acreage for the planning area as of 2005. Land use patterns shown on the map are generally urbanized areas of contiguous similar development, and some isolated parcels with differing use categories may not be shown. The character of the development varies, with larger residential lot sizes more common in areas located farther from existing incorporated boundaries and the older residential neighborhoods within the cities.

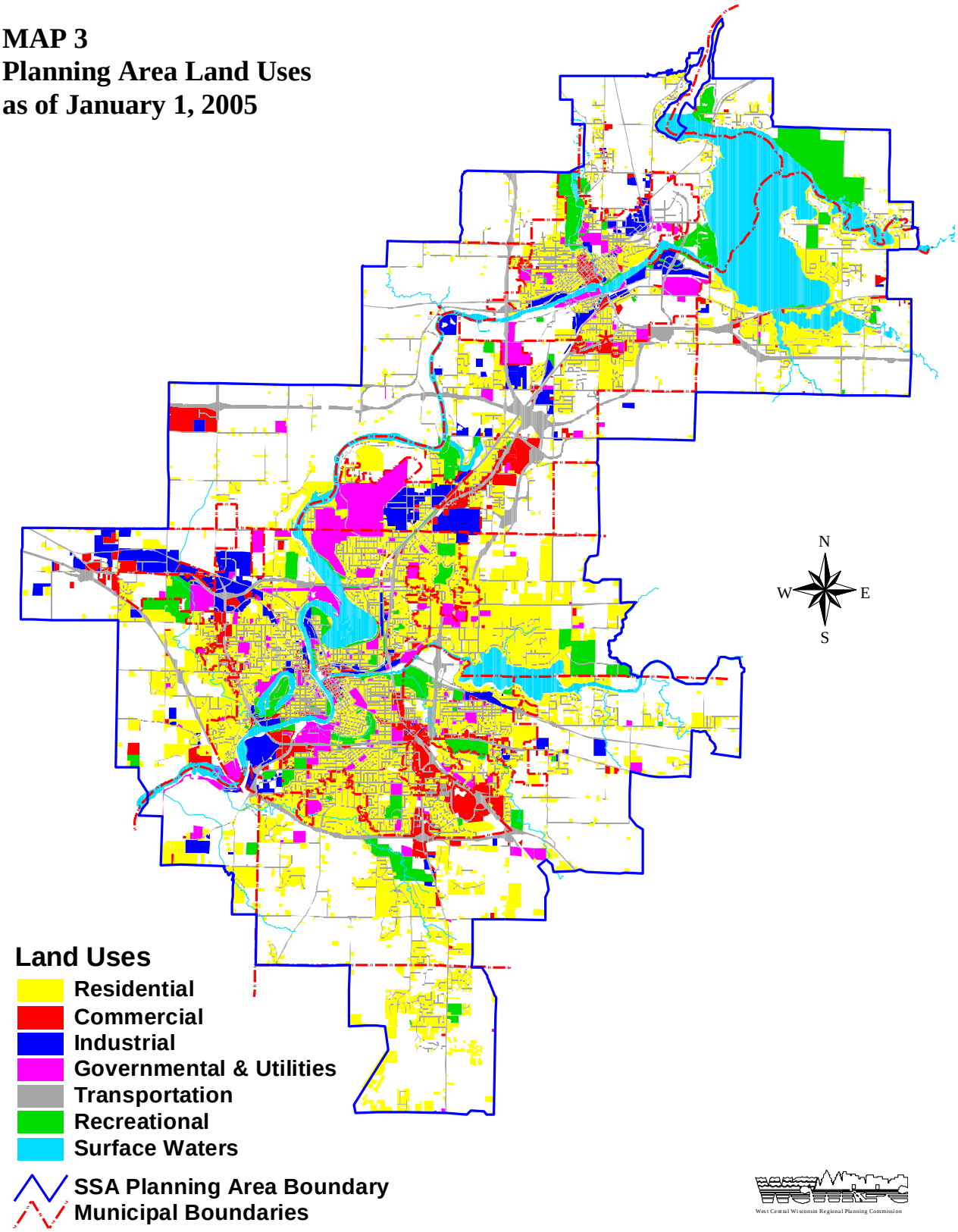
Table 7. Land Use Acreage by General Classification for the Sewer Service Planning Area – January 1, 2005

Land Use Categories	Acreage	Percent of Developed Area	Percent of Total Planning Area
Residential	27,528	49%	23%
Commercial	3,307	6%	3%
Industrial	5,264	9%	5%
Government/Institutional	3,683	6%	3%
Recreational	5,064	9%	4%
Transportation & Utilities	11,912	21%	10%
TOTAL DEVELOPED ACRES	56,758	100%	48%
TOTAL UNDEVELOPED ACRES	53,013		45%
PRIMARY SURFACE WATERS	8,851		7%
TOTAL PLANNING AREA ACRES	118,652		100%

source: West Central Wisconsin Regional Planning Commission, 2005

Please note that the above acreages were primarily gathered on a parcel-by-parcel basis. As such, environmentally sensitive areas are included within the above land use categories, since portions of a developed or undeveloped parcel may include a feature of environmental significance. These environmentally sensitive areas are defined and delineated in latter chapters of this plan, most notably Chapters 3.2, 3.3, and 3.4.

MAP 3
Planning Area Land Uses
as of January 1, 2005



CHAPTER 3 –
SEWER SERVICE AREA DELINEATION

Note: Only some portions of Chapter 3 (as noted later) were updated as part of the 2018 SSA Plan policy update.

3.1 PLANNING PROCESS

To delineate the sewer service area boundary, four primary factors need to be considered:

1) environmental constraints and environmentally sensitive areas,
2) local water quality resources and issues,
3) existing sewer systems, service areas, and engineering constraints, and
4) projected population, land use patterns, and growth data.

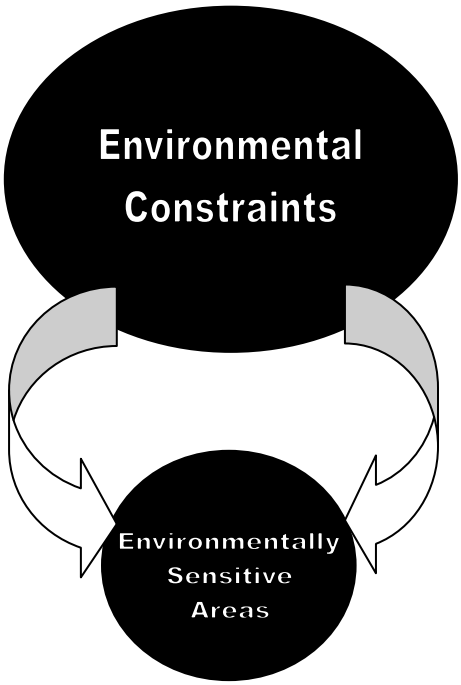
This comprehensive look at the Chippewa Falls-Eau Claire planning area will form the basis for the determination of the sewer service boundary. By excluding environmentally sensitive areas from development, our natural resources will be protected for future generations to enjoy. An inventory of the existing sanitary sewer systems and related engineering constraints (e.g., topography) will determine the effect future development will have on the sewage capacities and the feasibility of extending sewer services to new areas. Identification of urban development areas will aid in determining what infill and expansion alternatives should be used in delineating the sewer service area. In addition, projected population and growth data will estimate the acreage needed for future development within the sewer service area.

3.2 DELINEATION OF ENVIRONMENTAL CONSTRAINTS OR LIMITING LOCAL CONDITIONS

The purpose of using environmental features to help determine a sewer service area is to preserve and protect valuable areas from urban development or degradation. To do this, environmentally sensitive areas are delineated and urban growth is prohibited from occurring in these areas. Prior to determining the types of environmentally sensitive areas that should be excluded from the sewer service area, a broader range of environmental constraints and local limiting conditions is first considered.

Environmental constraints are potentially limiting conditions to development or environmental features that could benefit from protective measures. Environmental constraints may include, but are not limited to: wetlands, shorelands, floodplains, steep slopes, highly erodible soils, bedrock outcrops, other limiting soil types, groundwater recharge areas, wellhead protection areas, prime farmlands, unique or threatened natural resources, parks, and sites of special historical or cultural significance. While all environmental constraints should be considered during the planning process, not every constraint may constitute an **environmentally sensitive area** (ESA) that should be excluded from the sewer service area. And in some instances,

sanitary sewer service may be preferred as a protective measure for an environmental feature or constraint.



Environmental constraints and sensitive areas can be connected or linked to form **environmental corridors** that can provide added ecological value than when such features are unconnected or fragmented. An environmental corridor is a linear, continuous feature on the landscape that is maintained with one or more of the following purposes: (1) provide high quality wildlife habitat and/or the movement of wildlife; (2) offer linked recreational opportunities, (3) provide greenspace and open space; and (4) protect water quality, sensitive lands, and other areas that require protection from disturbances and development. Environmental corridors are not identified and mapped as a specific type of feature in this plan. For example, Putnam Park Natural Area is an environmental corridor along Little Niagara Creek, which is identified and discussed as a natural community, not as a corridor. ESAs and the environmental corridors are further discussed in Chapter 3.4.

It is important to note that NR 121 does not provide the authority to require protection of areas based on criteria other than water quality maintenance. Though not directly related to water quality, areas such as parklands, prime farmlands, and historic sites may still be deemed of sufficient importance to local communities to be afforded special consideration and protection as local environmentally sensitive areas. But communities may also need to pursue appropriate regulatory authority, in addition to the sewer service area plan, in order to preserve these other resources.

During the planning process, the following environmental constraints were identified as particularly important to the urban area in the context of this planning effort:

- wetlands *(updated 2018)*
- shorelands
- floodplains *(updated 2018)*
- steep slopes *(updated 2018)*
- endangered or threatened species & natural communities *(updated 2018)*
- parks and recreation areas
- trout streams
- prime farmlands
- wellhead protection zones
- surface waters *(added 2018)*

3.2.1 Wetlands (updated 2018)

A wetland is any area in which water is at, near, or above the surface long enough to support hydrophytic vegetation or water-loving plants and which has soils indicative of wet conditions (NR 103, Wisconsin Administrative Code). Wetlands may be seasonal or permanent and are sometimes referred to as swamps, marshes, or bogs.

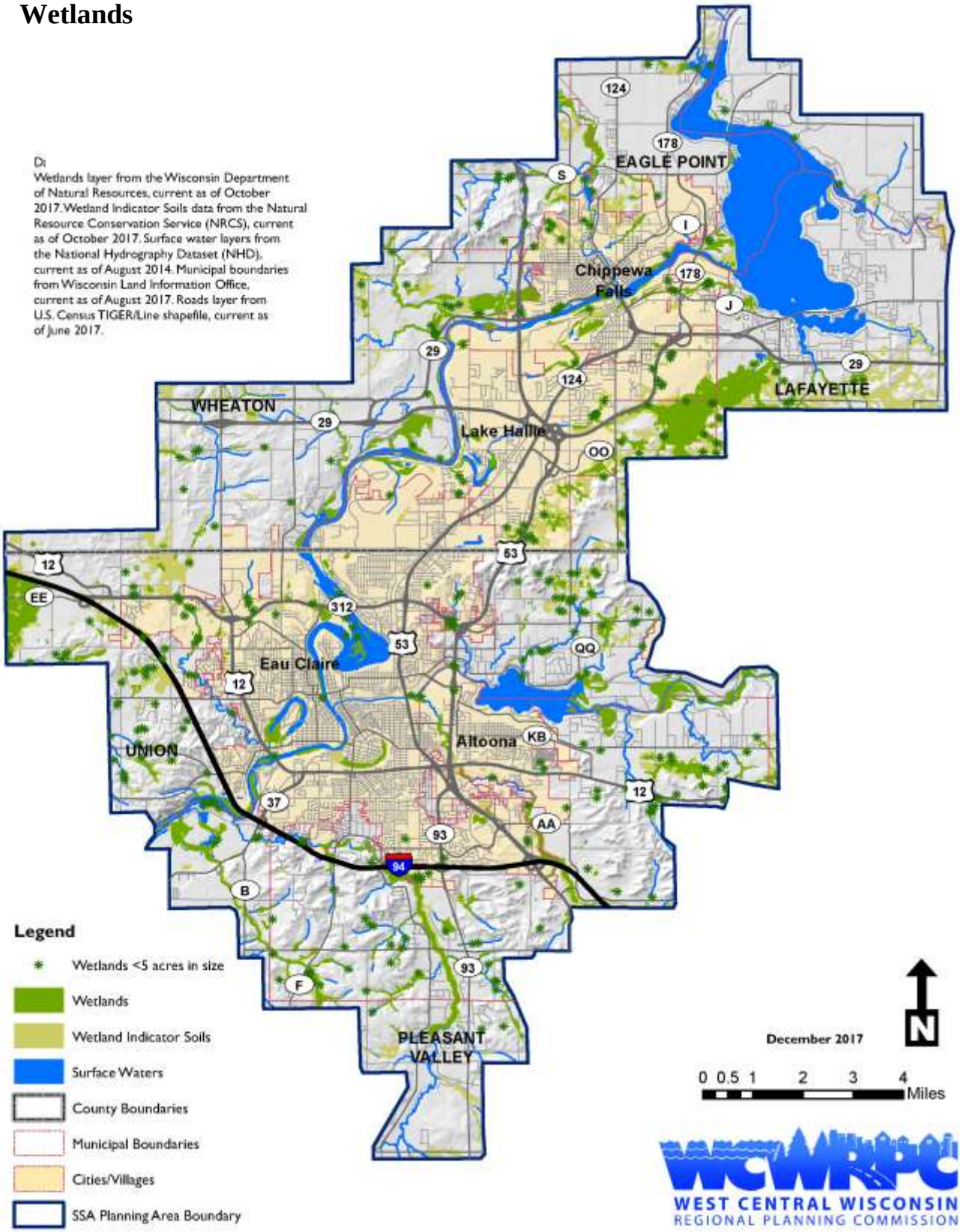
Wetland areas serve as groundwater recharge zones, as water storage areas during flooding events, and also as a habitat for a variety of plants and animals. Wetlands act like a sieve, filtering out silts before they can enter streams and lakes. Particular attention must be given wetlands within shorelands to assure protection from development. Activities such as flooding, draining, ditching, excavating and building are all regulated in wetlands.

The Wisconsin Department of Natural Resources' (WDNR) guidelines for sewer service area planning state that all wetlands, regardless of size, are environmentally sensitive areas and should be excluded from local sanitary sewer areas. This includes existing wetlands that have not been delineated or mapped. According to WDNR SSA planning guidance, proposed development projects near a wetland should be evaluated according to the following:

- The presence or absence of physical alterations in the wetland resulting from human activity. Wetlands which have not been altered should be given high priority for preservation.
- The availability of reasonable alternatives to development of the wetland. Where alternatives are available, wetlands should be protected from development.
- The potential impacts of the proposed actions on other scarce natural resources in or outside of the wetland. Consideration should be for protection of the wetland when the area is or has been known to be a habitat for state or federally designated rare, threatened or endangered species; or where it is determined that the wetland type is scarce or rare either statewide or regionally.
- Presence of or proximity to scientific study areas, sanctuaries and refuges. Direct or indirect adverse impacts in these areas should be evaluated when reviewing an amendment to the plan.
- Effect on water quality of adjacent stream. SSA Plan amendments should not result in an adverse effect on an adjacent stream. Such effects include interference with the maintenance of dry season stream flow; increasing sediment, nutrient or other pollutant loading to the stream and decreasing the instream plant and animal habitat conditions.

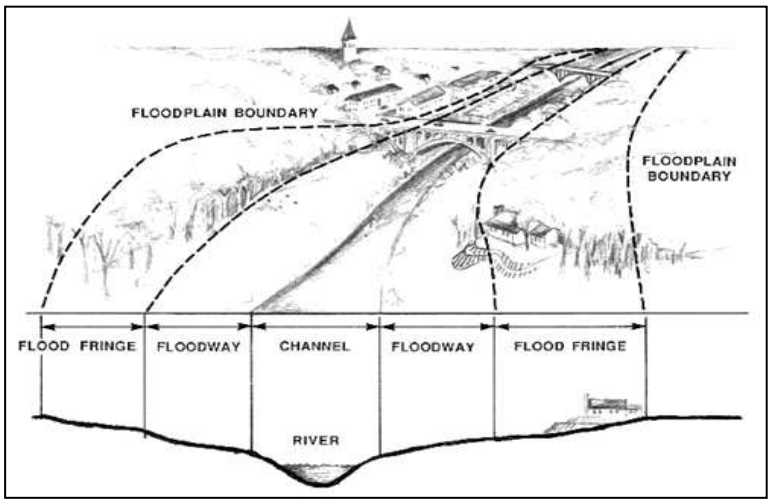
WDNR Wisconsin Wetland Inventory maps were used to identify all, known regulated wetlands within the planning area as shown in Map 4. Although WDNR is now mapping wetlands of 2 acres or more, the Inventory was originally designed to identify wetlands of 5 acres or more. Many of the smaller wetlands are not mapped, though wetlands are regulated even if they do not appear on the Wisconsin Wetlands Inventory. The map also includes **wetland indicator soils** (e.g., hydric or poorly drained soils) based on NRCS soil survey data. These soils are an indicator that a potential wetland <u>may</u> exist, but an on-site investigation may be required to confirm or delineate whether the possible presence and extent of a wetland. The WDNR Surface Water Data Viewer and GIS Staff will be used to ensure access to the latest wetland mapping.

MAP 4
Wetlands



3.2.2 Floodplains (updated 2018)

A floodplain is typically an area of relatively flat land on either side of a water body covered by water during a regional (100-year) flood event. It contains layers of sediments deposited by the river or lake during floods and encompasses both the floodway and flood fringe. The floodway is the main channel of the river and the adjoining land which are required to carry the main flow of a 100-year flood event. The flood fringe is that part of the floodplain outside the floodway which plays a water storage role during a flood event, but water depth and velocity is generally much lower than compared with the floodway. Floodplains play an important role in filtering stormwater before it reaches surface water and by removing pollutants and debris from inland river waters during a flood event. Floodplains also offer important water storage areas during flood events to help reduce the impacts of flooding downstream.

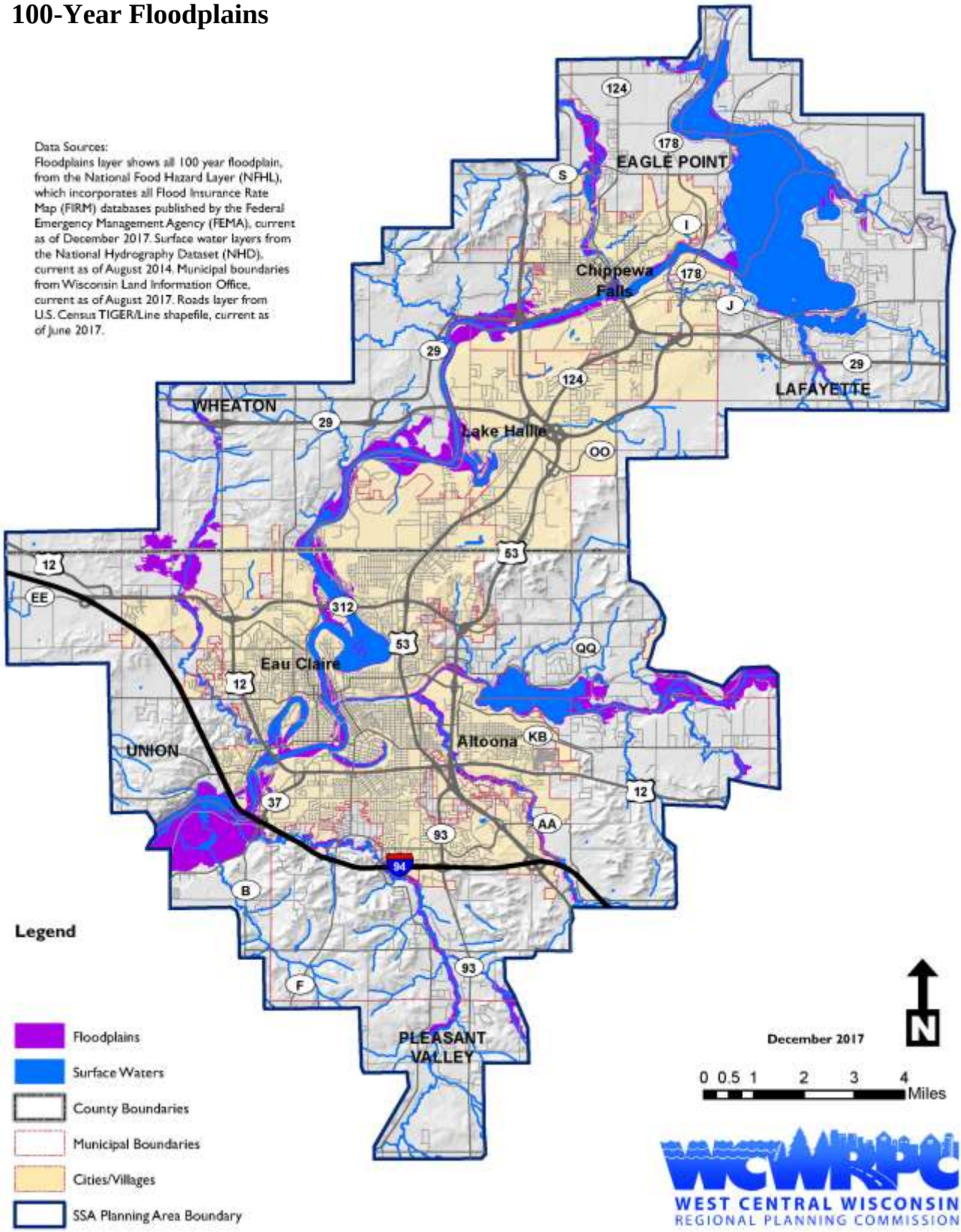


Elements of a Floodplain.
Source: Minnesota Department of Natural Resources.

Federal Emergency Management Agency Flood Insurance Rate Maps (FIRMs) identify the 100-year floodplain and were used to delineate flood hazard areas within the planning area. In the planning area, there is considerable existing development within 100-year floodplains. The largest concentrations of existing floodplain development lie along the Chippewa River in downtown Eau Claire, in downtown Chippewa Falls, and in the Village of Lake Hallie. A considerable amount of potential floodplain development has also occurred along Lowes Creek in the Towns of Washington and Pleasant Valley. However, local topography may effectively minimize the risk of flooding to structures in many of these areas. The 100-year floodplains are shown on Map 5 on the following page. However, there is significant local concern with the accuracy of the existing FIRMs (and Map 5) since the FIRMs were created without use of more accurate LIDAR technology for determining elevations; letters of map change to correct the FIRMs are not uncommon within the planning area.

Floodplain zoning is required to be implemented by counties, cities and villages by Wisconsin Statute 87.30(1), which has sharply limited future floodplain development in the planning area. Flooding is also mitigated locally by natural hazards or flood mitigation plans that encourage restrictions on future floodplain development. Due to the inherent risks to development in floodplain areas, WDNR guidelines for SSA planning recommend that floodplains should be excluded from local sewer service areas and that proposals to reduce floodwater conveyance capacity should be denied unless remedial actions (in conformance with NR 116) are identified and approved. Amendments or plans that result in a reduction of stormwater or flood water storage should also be avoided or remedial actions identified. WDNR will not approve a SSA Plan or plan amendment that is inconsistent with local or State floodplain regulations.

MAP 5
100-Year Floodplains



3.2.3 Shoreland Zoning

Shorelands are lands within the following distances above the ordinary high-water mark of navigable waters: (a) 1,000 feet from a lake, pond, or flowage and (b) 300 feet from a river or stream to the landward side of the floodplain. Shorelands are usually considered prime residential building areas because of their scenic beauty. However, shorelands provide valuable habitat for both aquatic and terrestrial animals and vegetation. Shorelands also act as buffers and thus serve to protect water quality.

Wisconsin requires counties to protect and prevent the loss and erosion of these valuable resources by adopting and enforcing a shoreland ordinance. The authority to enact and enforce this provision comes from section 59.97 of the Wisconsin Statutes, and Wisconsin Administrative Code NR115 dictates the shoreland management program. County ordinances can be more, but not less, stringent than NR115. Shoreland regulations govern lot size, setbacks of structures from waters, landscaping, siting of wastewater systems, and filling.

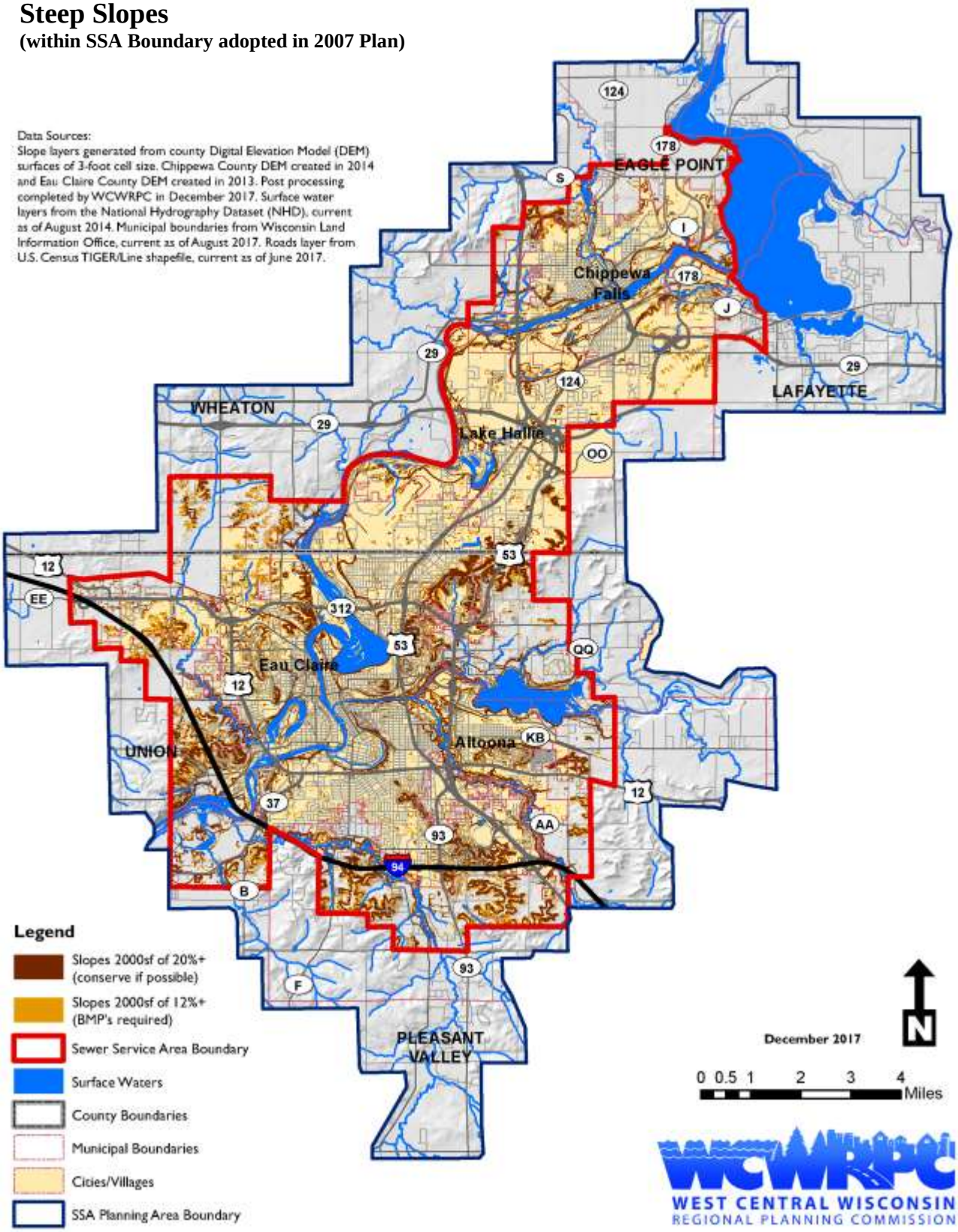
WDNR will not approve a local sewer service area plan which is inconsistent with local shoreland ordinances. In addition, when evaluating a plan or amendment, WDNR will consider potential adverse effects of shoreline development on water quality (e.g., erosion, filtering, recharge), fish and wildlife habitat, storm/flood water storage capacity, and nearby scientific study areas, refuges, or scarce wetlands.

3.2.4 Steep Slopes (updated 2018)

Slope is defined as RISE divided by RUN. Slope is measured by the amount of elevation increase over a certain distance; slope is not equal to the degree of the angle. For instance, a 100% slope would be a 45 degree angle over the length of the run, since the rise and run would be equal (a 200 foot lot with a 200 foot elevation increase over its distance forms a 45 degree angle of the slope). For this plan, slopes shall be measured over a horizontal distance of 50 feet. Slopes shall be measured as the change in elevation over the horizontal distance between consecutive contour lines and expressed as a percent. Further, a contiguous area of steep slope less than 2,000 square feet total (about 0.05 acres) shall not be considered a steep slope due to its small size.

Steep slopes are considered, in this plan and by WDNR, to be any area of 12% or greater slope and consisting of any soil type. Bare ground on slopes 12% or greater are considered vulnerable to soil erosion, depending on the characteristics of the soil type and site. Soil erosion on slopes 12% to 20% is often manageable with good practices. The steep slopes in Map 6 were identified using digital elevation models created by Chippewa and Eau Claire counties using recent LIDAR-based topographic information, which is much more accurate that the steep slope data used in for the previous sewer service area plans. It is important to note that the LIDAR-produced digital elevation model does not distinguish between natural and artificial slopes, thus Map 6 includes artificial, man-made slopes, many of which have been carefully engineered to mitigate potential erosion.

MAP 6
Steep Slopes
(within SSA Boundary adopted in 2007 Plan)



Development on slopes greater than 20% should be discouraged since they are more prone to erosion without more intensive or engineered best management practices and erosion control planning (e.g., retaining walls, stormwater management systems, terracing). Any development on these slopes could result in high construction costs and severe erosion with resultant negative impacts to surface waters. Therefore, development on steep slopes should be discouraged. WDNR guidance goes on to specify that sewer service area plans should exclude steep slopes greater than 12%, which are near a stream, from sewered development areas and that steep slopes in combination with other environmental features should be considered for designation as environmentally sensitive areas.

Further, WDNR guidance states that any SSA Plan amendments for sewered development on steep slopes that would result in direct runoff into a stream should be prohibited or mitigation measures required for the protection of water quality. Further, amendments to allow sewered development on slopes should be the most cost-effective alternative and should be consistent with the existing development pattern and locally approved construction erosion control ordinances. Chapter 3.3.4 later in this section summarizes local erosion control, stormwater management, and steep slope regulations.

Within the previous SSA Plan for the Chippewa Falls-Eau Claire area, steep slopes were defined as any area of 20% or greater slope and consisting of any soil type regardless of location, size, or type. The plan further delineated these areas of 20% or greater slope as environmentally sensitive areas that should be excluded from sewered land disturbance under a Type IV SSA Amendment with erosion control plan was approved. The result was administratively unmanageable and untenable as plan amendment requests were being triggered for extremely small areas, for artificially engineered slopes, and regardless of a slope's proximity to other ESAs. As will be discussed in Chapter 3.4.1, the 2018 SSA policy update included significant changes and clarifications regarding the definition of a steep slope ESA.

3.2.5 Endangered or Threatened Species and Natural Communities (updated 2018)

The WDNR Bureau of Endangered Resources conducts data searches for natural areas and endangered plants and animals and maintains the Wisconsin Natural Heritage Inventory (NHI). The NHI program focuses on locating and documenting occurrences of rare species and natural communities, including state and federal endangered and threatened species. The Bureau urges that special attention be taken to protect any and all endangered resources from development. Information on the NHI Program, including the working list of species and natural communities can be found on the WDNR website at: http://dnr.wi.gov/topic/nhi/.

Both aquatic and terrestrial occurrences of rare, threatened, or endangered plant and animal species and habitats have been found throughout much of the planning area. Such occurrences have been identified for large portions of the urban area, including the majority of the City of Eau Claire and City of Altoona as well as much of the Village of Lake Hallie. Potential aquatic occurrences of rare species occur throughout the lengths of the Chippewa and Eau Claire Rivers within the planning area. Since locations can change and to protect certain resources, site-specific information is not publically available; projects are considered on a case-by-case or site-

specific basis. As of July 2017, the following are some totals for Chippewa and Eau Claire counties (includes areas outside the SSA planning area):

	Chippewa County	**Eau Claire County**
Endangered Species	5	9
Threatened Species	8	10
Other Species of Concern	29	17
Natural Communities	22	12

Only one State-designated natural area—Putnam Park Natural Area—exists in the planning area. The 105-acre Putnam Park Natural Area is located within the City of Eau Claire and is home to one State-designated threatened plant species. Located east from the University of Wisconsin-Eau Claire campus and following Putnam and Little Niagara Creeks, the Putnam Park Natural Area is owned by the UW-Eau Claire and was designated a State natural area in 1976. Mostly forested, the flora is dominated by impressive white and red pines, with birch, maple, hackberry, tamarack, and white cedar in the wetter portions. With varied topography, bedrock exposures, seepage springs, and a variety of soil types all in close proximity, Putnam Park possesses many plant and animal habitats. More than 400 species of plants, 100 species of birds in summer, 23 mammal species, and 6 reptile species can be found.

According to the 2001 "The State of the Lower Chippewa River Basin" report, there is a general lack of information on the biological community of the Chippewa and Eau Claire Rivers which contributes to sub-optimal management of these complex resources. Additional information and monitoring is needed in a wide range of areas, including non-point source influences, water quality impacts of reservoirs, impacts of agricultural run-off, fish migration, and effects of local land use changes. In addition to these larger rivers, many of the streams in the areas (e.g., Lowes & Sherman Creeks) also provide important wildlife habitat and opportunities to establish and preserve greenways or wildlife corridors.

3.2.6 Parks and Recreation Areas

Parks and recreation areas are important environmental assets to local communities but can vary greatly in use, size, recreational amenities, and natural features. The largest park in the planning area is the 1,062-acre Lake Wissota State Park, east of Lake Wissota in the Town of Anson. Though only Putnam Park has been officially designated as a State Natural Area, there are other recreation areas and open spaces scattered throughout the planning area which are important environmental features which may compel or necessitate local protection. Such conservancy and passive recreation locations include:

Kalk-Fatu Woodland Park (Chippewa Falls)
Goldsmith Wildlife Refuge(Chippewa Falls)
Hurd Park (Chippewa Falls)
Riverside Industrial Park Conservancy Area (Chippewa Falls)
Chippewa River Corridor (Chippewa Falls)
Chippewa Falls-Eau Claire Railroad Prairie Remnants (Lake Hallie)
Sherman Creek (Town of Union)
Town of Washington Conservancy Area (Town of Washington)

This list is not complete, and new parks and recreation areas with significant environmental features may be designated in the future to meet community needs and/or protect natural resources. For instance, the draft *City of Eau Claire Comprehensive Plan* contemplates the acquisition of considerable floodplain property in the Town of Brunswick as a future park.

During the planning process, it was determined that parks and recreation areas are environmental constraints which should be carefully considered during local planning efforts and afforded adequate protections to preserve these important community assets. However, due to site characteristics, there may be instances where municipal sanitary sewer is preferred in some of these areas in order to best protect localized environmental features while supporting related recreational amenities (e.g., restrooms, concessions, visitors/interpretative centers). As such, parks and recreation areas do not necessarily constitute environmentally sensitive areas for which no sanitary sewer service should be provided; and sewer extensions into these areas should be evaluated on a case-by-case basis.

3.2.7 Trout Streams

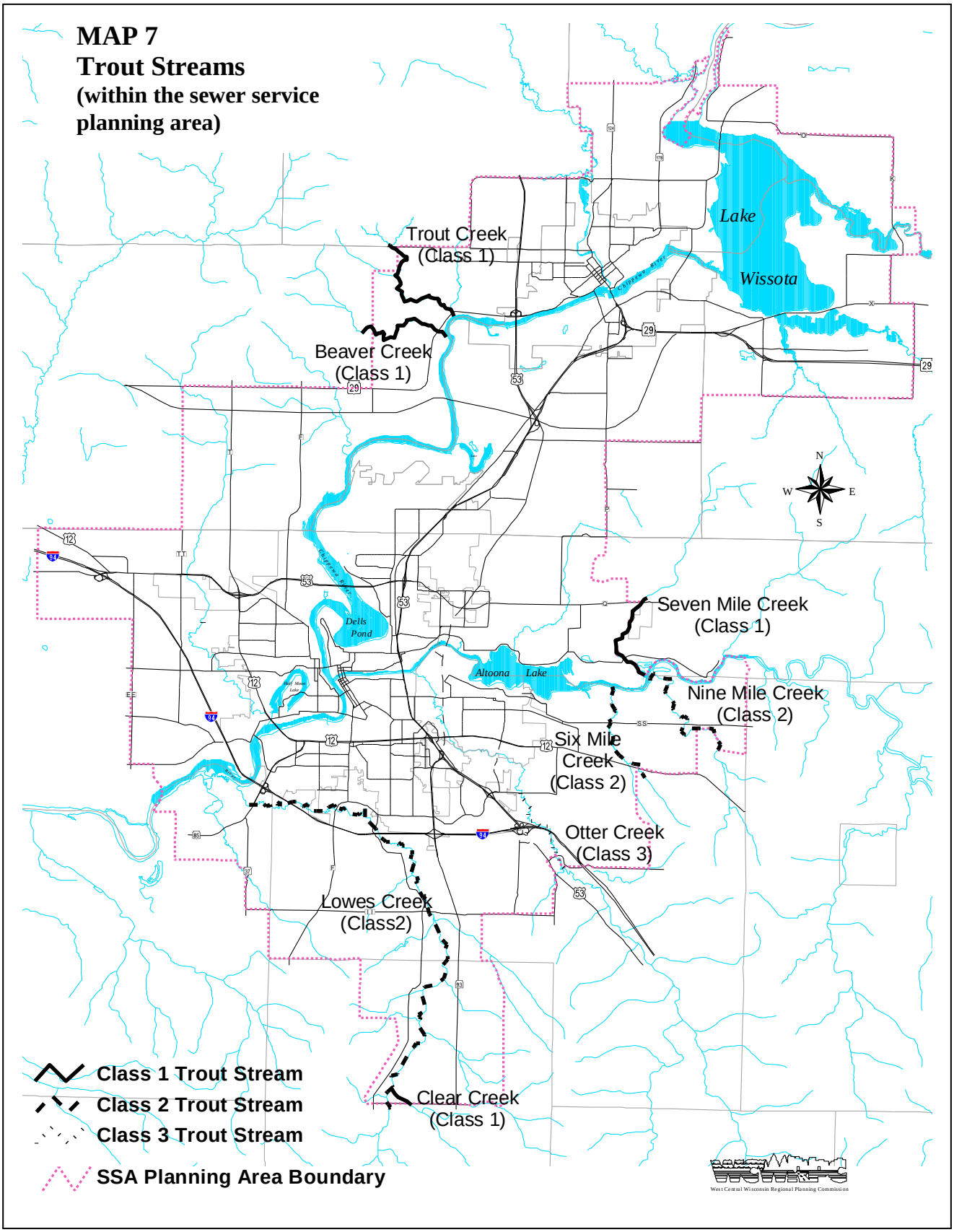
Map 7 on the following page shows the currently designated trout streams in the planning area. Portions of two Class 1 trout streams (Trout Creek and Beaver Creek) are located in Chippewa County in the Town of Wheaton. Portions of six trout streams are located in Eau Claire County, varying from Class 1 to Class 3. The different trout stream classes are defined below:

Class 1 High-quality trout waters that have sufficient natural reproduction to sustain populations of wild trout, at or near carry capacity. Consequently, streams in this category require no stocking of hatchery trout. These streams or stream segments are often small and may contain small or slow-growing trout, especially in the headwaters.

Class 2 Streams in this classification may have some natural reproduction, but not enough to utilize available food and space. Therefore, stocking is required to maintain a desirable sport fishery. These streams have good survival and carryover of adult trout, often producing some fish larger than average size.

Class 3 These waters are marginal trout habitat with no natural reproduction occurring. They require annual stocking of trout to provide trout fishing. Generally, there is no carryover of trout from one year to the next.

Trout fishing is an intimate recreational activity with avid participation among many anglers. Over the past ten years, about 135,000 inland trout stamps have been sold in Wisconsin annually. Because brook and rainbow trout require cold, clear waters with silt-free bottoms, their presence is also considered an indicator of good water quality and adequate water quantity. Trout habitat can degrade due to numerous factors such as bank and upland soil erosion, loss of riparian vegetation, water diversion, logging and mining activities, and point and non–point source pollution from municipal development and agriculture. In addition, construction of dams, road crossings, and other structures impede the ability of rainbow trout to migrate upstream and down-stream, which is critical to successful completion of their life cycles.


MAP 7
Trout Streams
(within the sewer service planning area)
Trout Creek (Class 1)
Beaver Creek (Class 1)
Lake Wissota
Seven Mile Creek (Class 1)
Nine Mile Creek (Class 2)
Six Mile Creek (Class 2)
Otter Creek (Class 3)
Lowes Creek (Class2)
Clear Creek (Class 1)
Dells Pond
Altoona Lake
N
W
E
S
Class 1 Trout Stream
Class 2 Trout Stream
Class 3 Trout Stream
SSA Planning Area Boundary
West Central Wisconsin Regional Planning Commission

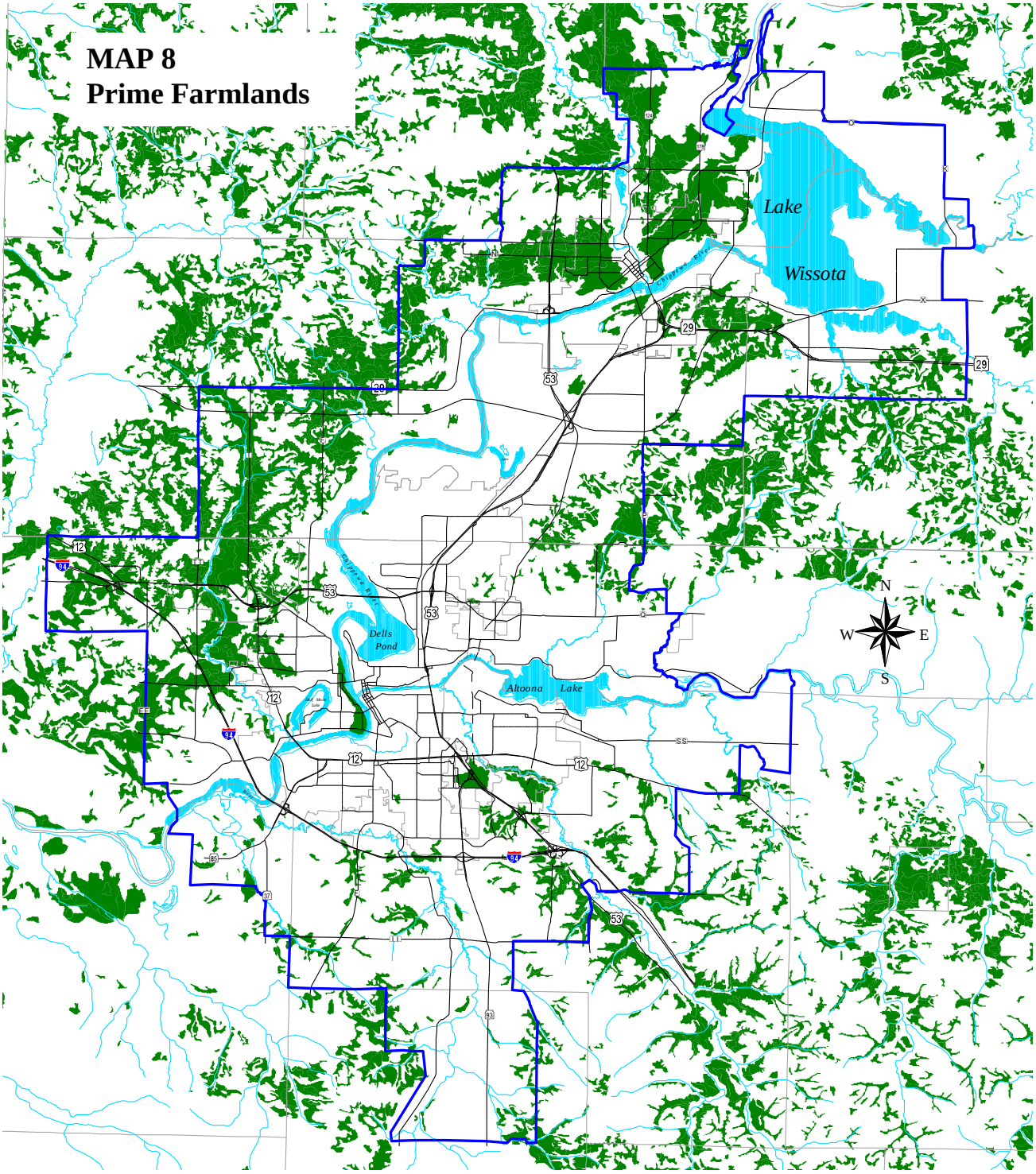
3.2.8 Prime Farmlands

Following the timber boom of the last half of the 1800's, agriculture has been the predominant land use in the region. Most local land use and comprehensive plans emphasize the importance of preserving and protecting valuable, productive farmland. Agriculture still maintains a very important role in the local and regional economy. As farmland is lost, other agricultural-related services also decrease (e.g., implement dealerships, transportation), making it more difficult for other area farmers to maintain operations and encouraging the further sale of farmlands. Further, farmlands are an important component of the rural character of the area, which is valued by many local communities as expressed through their respective plan vision statements.

A substantial challenge which local communities face is that prime farmlands are often also very suitable for residential construction and other development. Consideration of new development within prime farmland areas must be given in accordance with County Farmland Preservation Plans, local zoning, and other applicable local policies. These documents have implemented procedures to direct non-farm development away from prime farmland. Most prime farmlands within the unincorporated areas of the planning area have been afforded some level of protection, though the level of enforcement of these regulatory policies varies by community. As such, development pressure within the planning area continues to fragment area farmlands and convert these farmlands to other uses. And given the large, cleared acreage of many farmlands, there is often a tendency to develop these with large residential lots which are inefficient for the provision of public water, sewer, and other services.

Any developments requesting sewer hookups or extensions should consult the appropriate farmland preservation instruments to determine if the proposals are in accordance with current regulations and consistent with the visions of the local communities as expressed through their respective comprehensive plans.

Soils that fall into classes I, II, and III of the Natural Resources Conservation Services capability unit classification system are usually considered prime agricultural lands. These prime farmlands in the planning area are considerable, especially north and west of Chippewa River as shown on Map 8 on the following page. Due to the hilly topography and soil types found throughout much of the area, large portions of the existing farmland is used for dairy and pasture rather than row crops.



Prime Farmland

SSA Planning Area Boundary

Prime Farmlands are identified by the USDA Natural Resources Conservation Service based on soils, slopes, hydrology, and other natural features.

Additional prime farmlands may exist if an area is drained, protected from flooding, or not frequently flooded during the growing season.

West Central Wisconsin Regional Planning Commission

3.2.9 Wellhead Protection and Groundwater Recharge Areas

Municipal water suppliers are required by state administrative code to establish wellhead protection plans for new public water supply wells constructed after May 1, 1992. It is also appropriate to establish protection measures for existing public water supply wells to protect the public health, safety and welfare, and to reduce public costs should a pollution event occur. Because it is difficult to adequately react to a pollution event which occurs in proximity to a well, strict prohibitions of certain high-risk land uses should be established for that area (within the 30-day time of travel of contributing groundwater to a well). Certain high-risk land uses should be limited, and best management practices and monitoring established in the area between the 30-day and 5-year time of travel of contributing groundwater to a public water supply well.

Currently, only Chippewa County, the City of Chippewa Falls, and the Village of Lake Hallie have adopted wellhead protection plans and ordinances within the planning area. The City of Eau Claire has studied and mapped the groundwater recharge areas for its eighteen municipal wells, but has not adopted a formal wellhead protection plan or ordinance. However, a wellhead protection plan is expected to be completed for Eau Claire within the next three years as part of proposed new well construction. The City of Altoona is planning to construct a new water tower and well within the next 1-3 years which will require the development and adoption of a wellhead protection plan. In some cases in the area, wellheads and zones of contribution extend across municipal boundaries, necessitating intergovernmental cooperation to help protect water supplies.

Though some development may be allowable within wellhead protection and recharge areas, protection of the groundwater in these areas is of utmost concern to the local communities. In these areas, municipal wastewater connections might be preferred over private, on-site treatment systems for some uses. As such, these groundwater recharge areas are a very important environmental constraint but are not necessarily environmentally sensitive areas for which sanitary sewer connections should be discouraged.

3.2.10 Historical Resources

During the planning process, historical resources were not included as an environmental constraint in the context of this plan since these resources typically have no unique, direct impact on water quality management. However, historic sites are of great importance to area residents, as they are reminders of the past and also of the progress which has taken place since their construction. Therefore, they are briefly mentioned here since proposed sewer extensions and development have the potential to jeopardize these unique resources.

The Wisconsin Historical Society maintains the Wisconsin Architecture and History Inventory (AHI). This is a database of approximately 120,000 buildings, structures and objects that illustrate Wisconsin's unique history. The AHI documents a wide range of historic properties, mostly privately owned, such as the round barns, log houses, metal truss bridges, small town commercial buildings, and Queen Anne houses that create Wisconsin's distinct cultural landscape. The inventory is not comprehensive; and, in some cases, the inventory may be outdated if structures are altered or no longer exist.

A record search of the AHI database revealed a significant presence of architectural, historical, and archeological properties in communities represented in the planning area totaling 1,356 structures and sites. The far majority of these historical resources (78.8%) were found within the City of Eau Claire.

Distribution of AHI Properties

City of Eau Claire	1,069
City of Chippewa Falls	109
City of Altoona	9
Other	169
Total	1,356

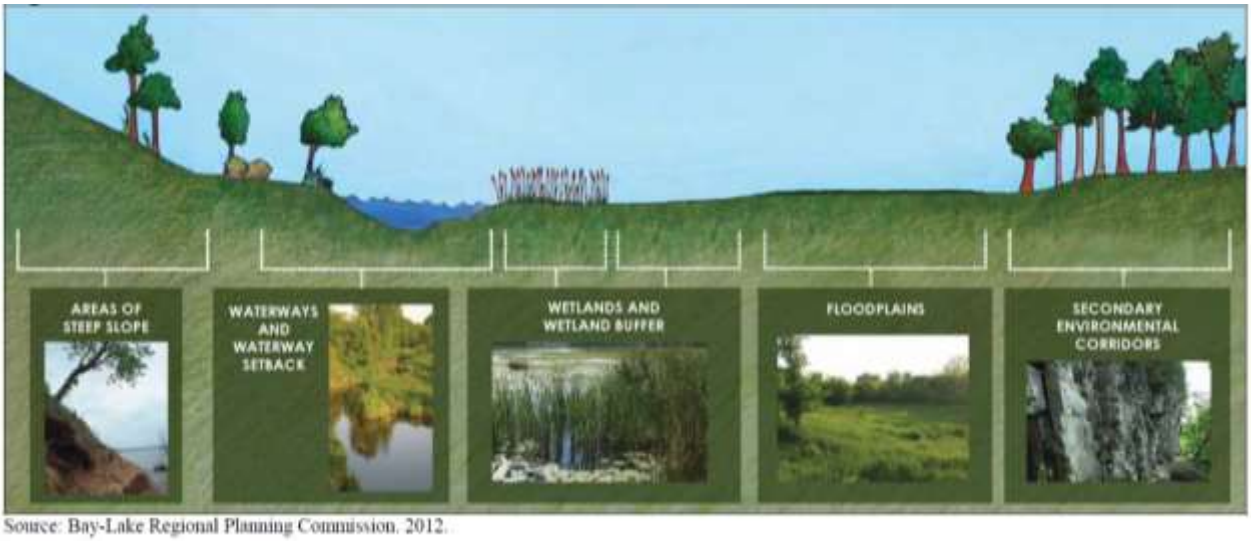
There may also be undiscovered prehistoric and early historic sites present. In accordance with Federal law, a listing of these archeological sites and their location is not provided so as to protect them from disturbance. However, any development requiring extensions to the sanitary sewer must be reviewed by WDNR, pursuant to Wisconsin Statute 44.40 (1989), against the historical resource list to determine whether historic properties within the project area will be affected. If it is determined that a historical property will be affected, the Wisconsin State Historical Society must be notified by WDNR to determine whether the proposed extension will have possible adverse effects on the historical property.

The Wisconsin State Historical Society strongly recommends that all development proposals be surveyed by a qualified archeologist to identify any sites. Also, if the removal or alteration of any building or structure over 50 years old is proposed, the State Historical Society should be contacted so they may assist in evaluating any historical significance. Cooperation of all developers, public and private, will assure preservation of these valuable resources of our community. While these historical assets are important environmental constraints to be considered when evaluating proposed development projects, in most case they are not environmentally sensitive areas for which sanitary sewer connections and extension should not be allowed.

3.2.11 Surface Waters (added 2018)

Left unsaid in local sewer service area plans prior to 2018 is that surface waters are also an environmental constraint. Protection of the water quality of area surface waters is the primary overarching purpose of this plan. The Chippewa Fall-Eau Claire area is blessed with an abundance of surface waters of relative good quality that perform important environmental, wildlife habitat, recreational, economic, and quality of life functions for the region.

A surface water is a natural or artificial named or unnamed lake or naturally flowing stream as defined by NR 103.02, Wisconsin Administrative Code. Surface waters include all springs, stream headwaters, streams, lakes, and waterfalls, and can overlap with many of the previously environmental constraints, such as trout streams and critical habitat. Surface waters are also adjacent to or part of shoreland, wetland, and floodplain areas, which may help explain its absence in previous SSA Plans. Similarly, surface waters are often the key feature that binds together an environmental corridor.

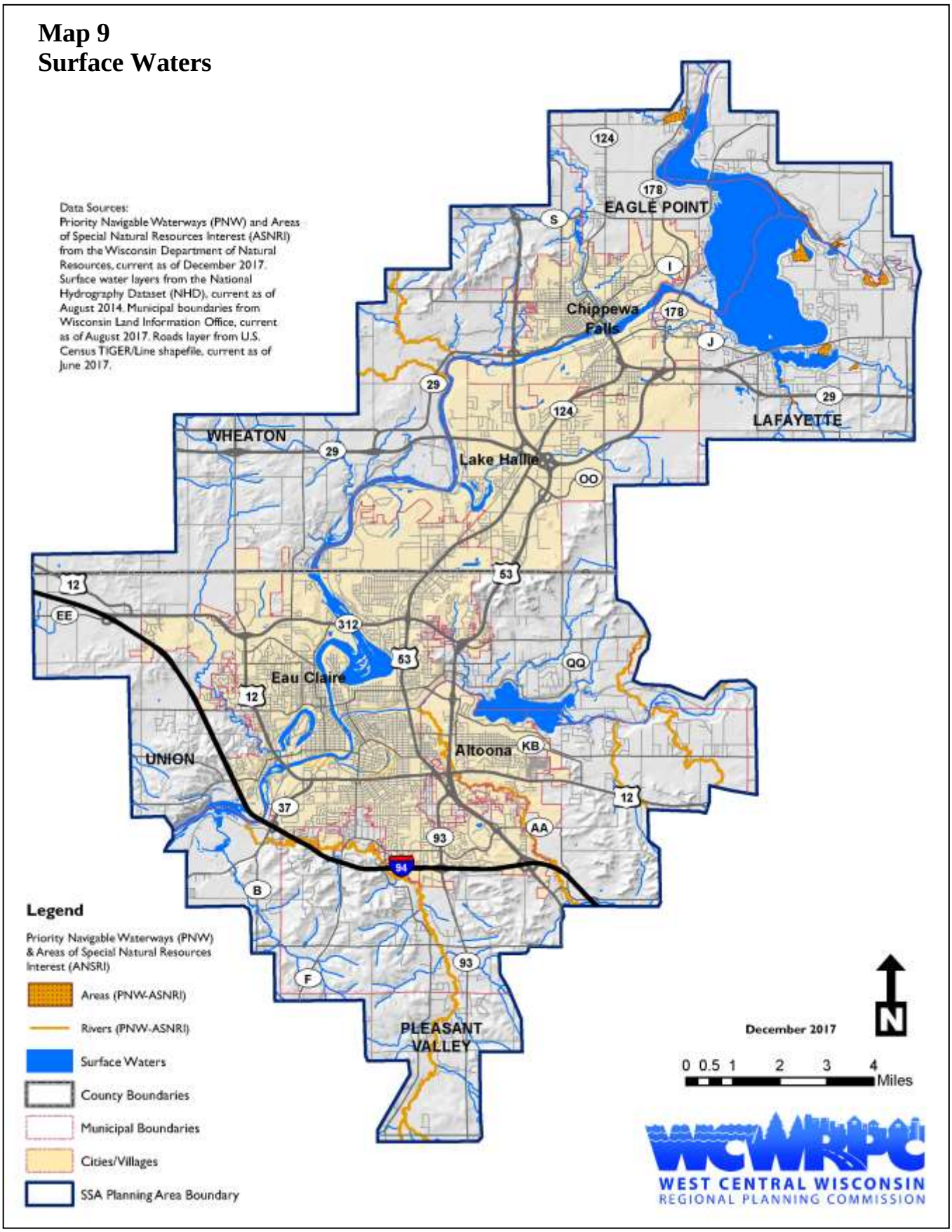


Source: Bay-Lake Regional Planning Commission, 2012.

Example Elements of an Environmental Corridor

Map 9 on the following page shows the surface waters within the SSA planning area and highlights those **priority navigable waters that are areas of special natural resources interest** (PNW-ASNRI waters). PNW-ASNRI waters include the trout streams and some natural communities (e.g., portions of Little Niagara Creek within Putnam Park Natural Area) mentioned previously. Not shown on the map is that Lake Wissota, Chippewa River, Eau Claire River, and Lake Altoona (the largest waters bodies in the SSA) have also been designated priority navigable waters due to their musky and sturgeon fisheries.

Map 9
Surface Waters



3.3 WATER QUALITY ASSESSMENT *(updated 2018)*

According to the Wisconsin Department of Natural Resources (WDNR) planning guidance, sewer service area plans must:

> "*Inventory and discuss the areas contributing to local adverse water quality impacts including industrial, agricultural and other pollutant sources. Review applicable local priority watershed reports, basin plans, wellhead protection plans, wastewater facility plans and local knowledge for pollutant factors*.[5]"

The guidance also states that discussion "should" be included in the sewer service area plan on local stormwater management and erosion control issues, plans, ordinances, and any related recommendations. One of the intents of the 2018 SSA policy update was to better integrate the SSA Plan with local regulations and identify opportunity to reduce redundancy in review and permitting processes.

The development of sewer service area plans for urban areas is mandated to maintain compliance with the Federal Water Pollution Contact Act Amendment (P.L. 92-500) in 1972 which established Areawide Water Quality Management Planning requirements under Section 208. As these titles suggest, the protection of water quality is an inherent goal of this planning process; and a review of local water quality issues and programs is necessary. The assessment provided here is an overview, and the reader should refer to "*The State of Lower Chippewa River Basin*" report prepared in 2001 by the Wisconsin Department of Natural Resources for a more detailed discussion of area water quality issues.

3.3.1 Point Source Water Quality Impacts

A point source is a stationary location or fixed facility from which pollutants are discharged or emitted (e.g., smokestack, pipe). Potential point sources for water quality pollution in the planning area are numerous.

As of 2017, the WDNR Bureau for Remediation and Redevelopment Tracking System (BRRTS) identifies 1,489 contaminated site records in the Cities of Eau Claire, Chippewa Falls, and Altoona. The far majority of these sites have been remediated and closed. Historically, spills and leaking underground storage tanks have been the most common causes of contamination in the three cities.

As of 2017, there were five sites within the planning area which are listed in the Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) database as Superfund sites by the Federal Environmental Protection Agency due to contamination which poses a risk to human health and/or the environment. Three of these sites have been remediated and may be removed from the list in the future. Groundwater contamination from volatile organic compounds (VOCs) has been identified at the other two sites, National Presto Industries, Inc. and the Eau Claire Municipal Well Fields; and both have been designated as Superfund sites

[5] Wisconsin DNR. *Draft Sewer Service Area Planning Guidance*. 7/97.

and are being monitored. According to the CERCLIS database, there is a "direct relationship between the contaminants at the [Presto Industries] site and those found at the Eau Claire Municipal Well Field."[6] VOC's are a group of commonly used chemicals found in fuels, degreasers, solvents, cosmetics, drugs, and dry cleaning solution. At both sites, under current conditions, potential or actual human exposures are under control. The City of Eau Claire municipal water supply is monitored closely, and there have been no violations of Clean Water Act water quality standards for tested contaminants for over the past five years.

As of 2007, the planning area was also home to over 125 Tier Two facilities and over 40 Extremely Hazardous Substances (EHS) facilities. By Federal law, Tier Two facilities must annually file a Material Safety Data Sheet which identifies any hazardous chemicals present at or above 10,000 pounds at the site. EHS facilities store and/or use at least one of over 300 chemicals with extremely toxic properties and require the development of an emergency response plan. A number of exemptions are allowed from these reporting requirements, however, including gas stations, routine agricultural products, and hospitals. Within the cities of Altoona, Chippewa Falls, and Eau Claire alone there are over 1,400 storage tanks, mostly for gas, diesel, or fuel oil, registered with the Wisconsin Department of Commerce.

Growth which occurs outside the sewer service area will most likely utilize on-site wastewater treatment systems which can pose significant groundwater quality contamination hazards if not properly designed or maintained.

3.3.2 Non-Point Water Quality Impacts

Phosphorus loading (from agricultural and residential nutrient sources), sedimentation (from overland and bank erosion), and contaminated runoff from urban sources (e.g., oil, pesticides, salt) are the primary pollutant threats to surface waters in the planning area. Recent increases in the frequency of heavy rain events and flash flooding is exacerbating such threats.

As reflected in the Eau Claire River Watershed's nine-key element plan, croplands and pasture is a predominant land use within the watershed draining into the planning area. There have dramatic increases in cropland acreages over the past decade as corn and bean prices rose. In addition, portions of the planning area are still in agricultural production. The application of fertilizers, herbicides, and pesticides in crop production can all have negative impacts on surface and groundwater quality if not managed properly. Likewise, animal waste and manure storage and handling can have additional negative impacts if not carefully planned and maintained. Excessive bank erosion in wooded or heavily pastured areas continues today on some local streams and rivers, and 150 years of soil erosion has led to heavy deposition of fine sediment in many streambeds. Local farmers utilize a variety of conservation management practices to reduce such impacts and to maintain compliance with applicable State and Federal regulations. Additional measures, such as bank restoration, have been undertaken in more critical occurrences.

[6] Environmental Protection Agency, "Website: NPL Fact Sheets for Wisconsin: National Presto Industries, Inc.", www.epa.gov/R5Super/npl/wisconsin/WID006196174.htm, March 4, 2004.

As of 2007, the planning area included approximately 53,000 acres of undeveloped land. Continued urbanization in the Eau Claire and Chippewa Falls area increases the number of potential non-point sources of water pollution affecting both surface and groundwater resources. As impervious surfaces increase (i.e., roads, parking lots, buildings/roofs) and natural groundwater recharge areas are encroached upon (i.e., wetlands, shorelands), the amount of surface stormwater runoff can increase, resulting in flooding damage, increasing erosion, and/or increasing organic and inorganic pollutant loadings. This run-off can carry oil and fluids from roads and parking lots, pesticides and herbicides from lawns, and other contaminants which impact water quality.

Over the long term, if natural surface water systems are destroyed or fragmented, recharge areas can dry up and baseflows in streams can decrease, resulting in a loss of wildlife habitat and increasing flood potential. Also, as the amount of surface waters decrease, the nutrients, suspended solids, or pollutants become more concentrated, which can further contribute to water quality problems like eutrophication. The loss of wetlands, floodplains, and other natural drainageways and flood storage areas reduce the natural filtering of contaminants while increasing flash flooding and peak flows.

Other contributing sources of non-point water quality concerns include the development of steep slopes and construction sites which have the potential to both increase stormwater erosion and decrease water quality. Stormwater management systems, appropriate site planning, preservation of environmentally sensitive areas, and proper agricultural practices can all help mitigate non-point source impacts on water quality.

3.3.3 Groundwater Impacts

As land is developed and converted from open space, forests, or farmlands, it can have a cumulative effect on the quality and quantity of groundwater. Groundwater recharge is expected to continue to decrease as impervious surfaces increase as the ground is paved over. Concurrently, with the increase in residential, commercial, and industrial development, there will be an increasing demand for groundwater. And, as discussed, development on private wastewater systems outside the sewer service areas can pose significant risks, especially since the majority of these structures also utilize private wells. Run-off from heavily-used roads, parking lots, lawn pesticides, and other activities can also pose a risk to these private wells.

According to "*The State of the Lower Chippewa River Basin*" report, all five of the watersheds in the planning area are ranked high for potential groundwater contamination based on land use, presence of confined animal feeding operations, and sample data for nitrates and pesticides from private wells. In the Lower Chippewa River Basin, 15% of the 1,114 public and private potable wells tested exceeded the 10 part per million (ppm) drinking water and groundwater enforcement standard for nitrate levels. The groundwater prevented action limit of 2 ppm was exceeded in 58% of the samples. For pesticide contamination, 1% of samples exceeded the preventive action limit and 0.12% of samples exceeded the enforcement limit. Six percent of wells had detectable levels of pesticides but were below the limit.

3.3.4 Water Quality and Steep Slope Protection

The need to extend sewer lines indicates impending development of land. Naturally, the exposure of soils during the excavation and building process soon follows. The potential for these exposed soils to either reach a surface water or storm sewers leading to surface waters increases without adequate stormwater management and construction site erosion controls. Soil loss rates increase exponentially as slope increases; therefore, greater damage may result from development on lands with 12% or higher slopes without properly installed and maintained construction site controls.

Numerous activities are undertaken at the Federal, State, regional, and local levels to protect surface and groundwater quality. The laws, regulations, and programs are too numerous to mention all within this plan, though some key programs which relate to this planning effort are described here or in the previous plan sections (e.g., wetlands, shoreland zoning, steep slopes, wellhead protection). Through the implementation of applicable Federal, State, and local permitting processes (e.g., siting of structures, storage tanks, erosion controls, stormwater management, environmental constraints), significant water quality impacts should be avoidable as the planning area develops.

MS4 and WPDES Permitting in the Sewer Service Area

Chippewa and Eau Claire counties and all but one municipality in the sewer service area areMS4 communities, which are required to have Municipal Separate Sewer System (MS4) permits under NR216. As a federally-designated urbanized area, these municipalities have been required to obtain a MS4 permit to reduce polluted storm water runoff by implementing storm water management programs with best management practices. While MS4 permits usually do not include effluent limits like other WPDES permits, MS4 communities are required to conduct a variety of educational, enforcement, and best practices activities. The regional Rain to Rivers of Western Wisconsin group was created, in part, to meet MS4 public outreach requirements. These state and federal MS4 storm sewer discharge permits, collectively, are frequently referred to as the Phase I and Phase II rules, with Phase I mainly affecting the largest communities such as Madison and Milwaukee, and Phase II later impacting smaller municipalities. Now, more than 200 Wisconsin municipalities must meet these Phase I and II rules, including Chippewa County, Eau Claire County, the City of Altoona, the City of Chippewa Falls, and the City of Eau Claire.

Since county and municipal codes change over time, specific code references with web links for local stormwater, erosion control, and steep slope regulations in the sewer service area will be available in 2018 at a WCWRPC sewer service area plan webpage.

For urban areas and land development, Section 402 of the Clean Water Act requires that all construction sites on one acre or greater of land, as well as municipal, industrial, and commercial facilities that discharge wastewater or stormwater directly from a point source (a pipe, ditch or channel) into a surface water of the United States (a lake, river, and/or ocean) must first obtain permission under the National Pollutant Discharge Elimination System (NPDES). In Wisconsin, this federal requirement is addressed through the Wisconsin Pollutant Discharge Elimination

System (WPDES) program under NR 216 of the Wisconsin Administrative Code. In 2009, Wisconsin adopted a Zero- Phosphorus Fertilizer Law that restricts the use, sale, and display of lawn fertilizers that contain phosphorus or phosphates by homeowners, renters, municipalities, retailers, and lawn care professionals, except under certain specific exemptions.

Erosion Controls in the Sewer Service Area

The Wisconsin Department of Safety and Professional Services (WisDSPS) requires all communities to conduct inspections in order to determine compliance with the Wisconsin Uniform Dwelling Code (IHLR 20-25). The Uniform Dwelling Code (UDC) applies to all one- and two-household homes, manufactured buildings for dwellings, and newly constructed community-based residential facilities providing care, treatment and services for three to eight unrelated adults constructed after June 1, 1980. The UDC contains many provisions, one being containment of soils on the developing site with erosion control measures. By State of Wisconsin law (NR 216, NR 151), construction sites that disturb one or more acres of soil are required to:

- obtain a construction site erosion control permit,
- develop a stormwater management plan,
- be inspected, and
- execute a maintenance agreement for any permanent stormwater management structures.

Regulating Steep Slopes in the Sewer Service Area

Chippewa County

In the County's land division regulations (Chapter 38), steep slopes are identified as an environmentally critical area. These regulations go on to state that "land suitable for the actual placement and construction of a principal structure, accessory buildings, a well and on-site wastewater treatment facilities except that such facilities shall not be located in…slopes of 20 percent or more, or slopes of 12 percent or more on highly erodible soils where evidence of erosion already exists."

Further, Section 38.73 of the land division regulations states that "[s]tormwater control is of critical concern in the county, both as pertaining to ensuring, in the land division process, as well as in the use of land, generally, that adequate measures are taken by subdividers and land users alike to install and maintain stormwater control measures. To this extent, the committee is charged with the responsibility of developing a stormwater management ordinance containing stormwater controls as a separate ordinance under Wis. Stats. § 59.693."

Within the County's shoreland zoning regulations (Chapter 55), filling, grading or excavating on slopes greater than 100% is prohibited. A conditional use permit contract is required for any filling or grading of any area that is within the shoreland area of a navigable water and has surface drainage toward the water and on which there is either: (a) any filling or grading on slopes of more than 35 percent; (b) filling or grading of more than 2,000 square feet on slopes of 12 percent to 35 percent; or (c) filling or grading of more than 4,000 square feet on slopes less than 12 percent. Chippewa County does not have a separate erosion control or stormwater

management ordinance, but may consider such factors during land division and zoning application reviews.

Eau Claire County

Stormwater management and erosion controls are addressed when proposing a land division as part of the County subdivision regulations. Since the 2007 SSA Plan, the County has completed a county stormwater management plan and has adopted a stormwater management ordinance and erosion control ordinance in accordance with State models at some time in the future once the plan is complete.

Eau Claire County has a policy prohibiting development on slopes of 20% or greater as part of its land use ordinances. Approval of subdivision plats and Certified Survey Maps are contingent upon delineating areas that have slopes of 20% or more and specifying that these areas are unavailable for development. On existing lots, development is discouraged on slopes of 20% or greater, although the County cannot prohibit development in such areas.

As part of the County's zoning ordinance, Section 18.76.003 identifies slopes of 20% or greater as environmentally sensitive areas. Multiple sections of the zoning ordinance references the need to protect environmentally sensitive areas. And Section 18.82.060 states that "No development or land disturbance activity shall be allowed within any environmentally sensitive area except after issuance of a permit from the county, such permit only to be issued if the owner demonstrates the proposed development or land disturbance activity is expressly allowed under any of the following: 1. Chapter 17.05, Storm Water Management and Erosion Control. 2. Title 18, Zoning."

City of Eau Claire

The City of Eau Claire uses its *Comprehensive Stormwater Management Plan* (currently being updated), stormwater and erosion control regulations (Chapters 19.10, 19.20, 19.30), and stormwater system conveyance modeling when making decisions regarding stormwater volume, rate, storage, quality, and erosion control. In Summer 2017, the City adopted a new Construction Site Erosion Ordinance (Chapter 19.20) that ensure consistency with State standards. No land disturbing construction activity on slopes of 20+% are allowed unless approved as otherwise meeting the standards of Chapter 19 and implementing such additional safeguards, given the slope and site conditions, required by the Director of Engineering and approved by the City. Such steep slopes require appropriate, engineered erosion control practices and a stabilization plan. In the past, the City has required that any wastewater connections to development on slopes of 20+% must first obtain a Type IV sewer service area plan amendment. The *City of Eau Claire Comprehensive Plan* also includes recommendations to review and amend the Stormwater Management Plan for certain sub-areas and watersheds based on changing land uses. The comprehensive plan goes on to recommend that a regional stormwater management plan for all watersheds in the metropolitan area should be prepared.

City of Chippewa Falls

The City of Chippewa Falls has adopted a stormwater management ordinance (Chapter 31) and a construction site erosion control ordinance (Chapter 30). The City's erosion control ordinance applies to any land disturbance on slope of 12% or greater regardless of parcel size (Chapter

30.04(1)). Since the 2007 SSA Plan, the City completed a stormwater management plan with base model of stormwater flows for the City to help identify possible trouble spots; best management practices were then to address these trouble spots and help reduce suspended solids. Slopes along rivers would be most vulnerable to erosion. Current local ordinances do not further define or regulate steep slopes, though steep slopes are referenced as a potential barrier to development and their relationship to potential erosion.

City of Altoona

Per its comprehensive plan, the City requires new development projects to include City-approved stormwater management facilities. Slopes 20+% are identified and considered as part of the City's environmental assessment for review of land divisions. Altoona's comprehensive plan includes the objective of preserving steep slopes (15+%). Per its comprehensive plan, all site plans, preliminary plats, and CSMs are required to accurately depict all environmental corridor natural resource elements, including steep slopes. In general, areas prone to erosion concerns tend to be located in shorelands with sandy soils. As of late 2017, the City is revisiting its steep slope policies to consider additional setbacks or protections.

Village of Lake Hallie

The Village of Lake Hallie currently has no public sanitary sewer service. Like all Wisconsin municipalities, the Village must enforce shoreland and construction site erosion controls as required by state law. The Village's Zoning Ordnance (Chapter 70) considers stormwater management review as part of site plan review and conditional use permitting. The Village has not adopted a separate stormwater management ordinance or steep slope regulations.

Priority Watershed Planning

The planning area intersects five different watersheds—Lower Eau Claire River, Otter Creek, Lowes Creek, Muddy & Elk Creeks, and Duncan Creek. Three of these watersheds (Lower Eau Claire River, Lowes Creek, & Duncan Creek) have been identified by the Wisconsin Department of Natural Resources as priority watershed projects in order to reduce the likelihood of non-point pollutants entering surface waters.

These three priority watersheds, and 83 others in the State of Wisconsin, were selected as priority watersheds based on the following factors:

- potential to respond positively and/or be protected by non-point source controls
- unique environment for endangered or threatened species
- water quality and habitat degradation impacts on fish populations and biodiversity
- water chemistry criteria
- macro invertebrate biotic index rating
- negative changes in stream morphology and vegetation
- classification as a threatened stream
- classification as an outstanding or exceptional resource water
- sensitivity of a lake to phosphorus loading
- classification of a lake as a high resource or high recreation use lake
- susceptibility of groundwater to contamination based on depth to bedrock, bedrock type, depth to water table, soil characteristics, and surface deposits

For each designated priority watershed, WDNR develops a non-point source control plan with management actions, implementation policies, and procedures, which include erosion control and stormwater management strategies.

Watershed plans were implemented locally, with WDNR providing up to 70% cost sharing for the installation of best management practices, generally over a ten- to twelve-year period. Currently, the program is being phased out; and no new grants are being awarded. The Lower Eau Claire River and Lowes Creek projects have been completed and only the Duncan Creek project remains open. Since many of the ongoing recommendations in these plans will no longer be directly linked to a funding source for implementation, the continued applicability of these priority watershed plans is uncertain.

Local Impaired Waters (2004 303D List)

Every two years, Section 303(d) of the Federal Clean Water Act requires each state to submit to EPA for approval a list of impaired waters. Impaired (or 303d) waters are those that are not meeting the state's or federal water quality standards.

To address impaired waters, the U.S. Environmental Protection Agency has established the Total Maximum Daily Load (TMDL) Program. TMDLs specify the maximum amount of a pollutant a water body can assimilate and still meet a state's water quality standards. The TMDL process links the development and implementation of control actions to the attainment and maintenance of water quality standards and designated uses. In addition, Wisconsin has adopted additional water quality standards for pollutants such as phosphorus.

Provided by the Wisconsin Department of Natural Resources, Map 10 on the following page shows the extent of the local impaired waters in the planning area. On the Chippewa River, the primary pollutants are metals, mercury and PCBs that have resulted in aquatic toxicity and fish consumption advisory. For most other impaired surface waters on Map 10, phosphorus and/or sedimentation are the primary pollutants, resulting in algal blooms, eutrophication, and degraded aquatic habitat.

Other Local Land Use Controls and Plans

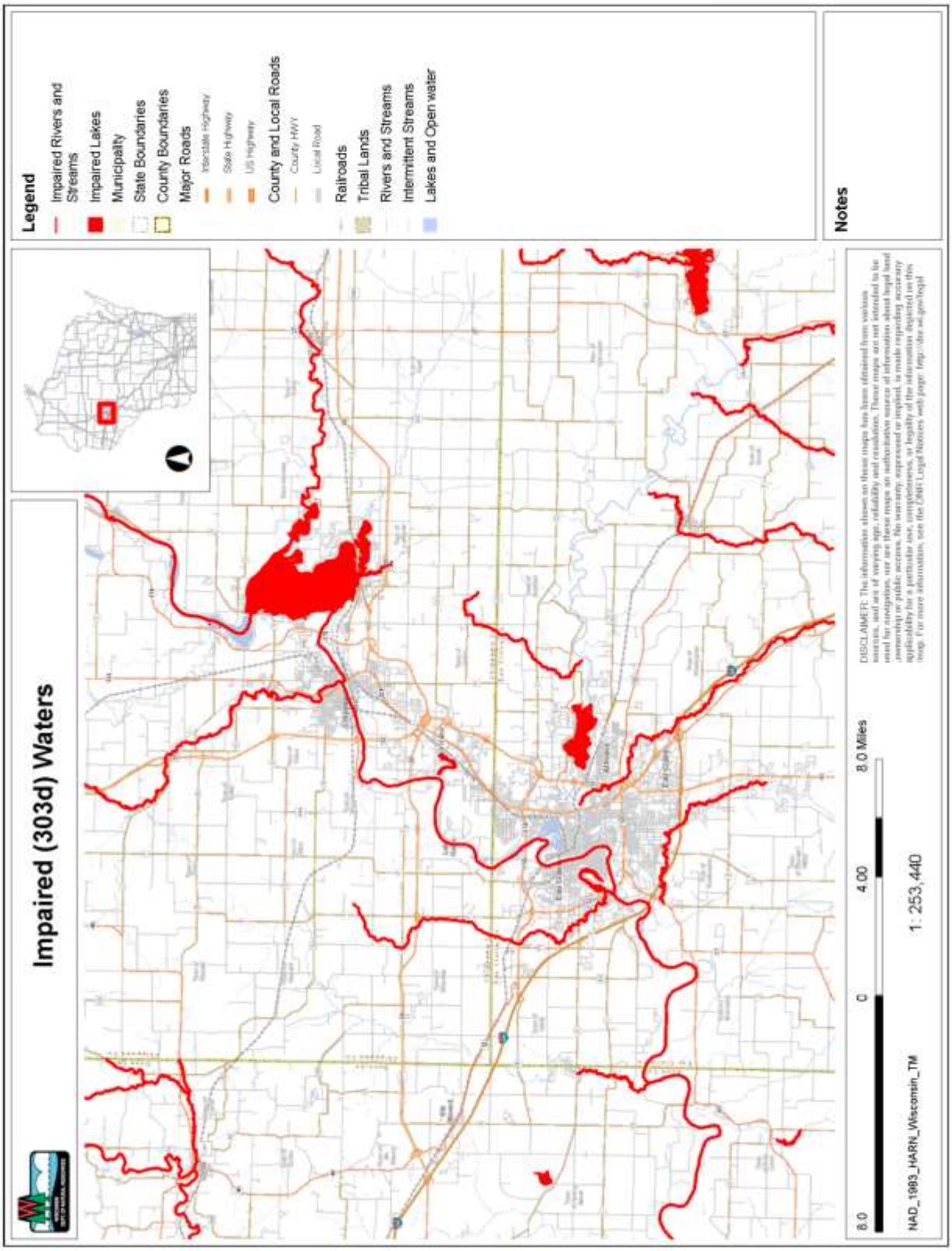
Local governments utilize a variety of land use controls to further protect water quality, such as shoreland/wetland zoning, floodplain zoning, and wellhead protection planning discussed previously. Proposed projects located in wetlands and navigable waters must also be reviewed by the U.S. Army Corps of Engineers under the Federal Clean Water Act.

A variety of other plans also exist that strive to plan for and protect water quality ranging from municipal and county comprehensive plans to the plans for individual lakes, a few of which are reference below.

Wisconsin's Nonpoint Source Program Management Plan FFY 2016-2020

Approved by the EPA in September 2015, this document outlines Wisconsin's approach to addressing water quality impacts from nonpoint sources (NPS) of pollution. The Plan includes an excellent summary of related rules, programs, planning tools, trends, best management practices, partners, and resources.

MAP 10
Impaired Waters



Wisconsin's Nutrient Reduction Strategy
This strategy is a broad overview of nutrient management activities for both point and nonpoint sources in Wisconsin.

Areawide Water Quality Management (WQM) Planning
Water planning in Wisconsin occurs on many levels in many agencies. At the state level, each WQM plan begins with monitoring to evaluate the health of Wisconsin's waters. Biologists and trained volunteers collect monitoring data on representative segments on rivers, streams and lakes across the state. Water quality data are then evaluated against water quality standards to assess condition. WDNR staff conducts studies to better define pollutants loads, sources and impairments and to develop plans that identify management activities and strategies to enhance and protect our waters. The result is a WQM Plan that outlines the water quality standards attainment for fish and aquatic life use, public health and welfare and recreation. The plans contain management recommendations for WDNR and partners, and provide the condition "bar" for antidegradation rules and water quality restoration goals. As such, the state's WQM plans are a critical starting point for TMDLs, Nine Key Element Plans, and related activities. Sewer Service Area Plans, such as this one, is a critical component of maintaining or attaining water quality standards in locations of high population density and municipal sewer services.

Lower Chippewa River Basin Water Quality Management Plan
Completed in 2001 as required by Section 208 of the Federal Clean Water Act, this document was prepared by the Wisconsin Department of Natural Resources and guides water resource activities in the Lower Chippewa River Basin. This water quality management basin plan includes an analysis and recommendations on surface water quality, non-point sources, and groundwater, expanding on the assessment provided in the previous sub-sections. Since 2001, the Lower Chippewa River Basin Plan has been updated in a piecemeal fashion by subshed and is available through WDNR's web-based Surface Water Data Viewer (http://dnr.wi.gov/topic/surfacewater/swdv/). The *Chippewa Falls-Eau Claire Urban Sewer Service Plan for 2025* is a companion document and addendum to the basin plan.

Eau Claire River Watershed 9-Key Element Plan
In Summer 2017, the EPA approved a nine-key element plan for the *Eau Claire River Watershed—Healthy Soils & Healthy Waters: A Community Strategy for the Eau Claire River Watershed.* Appendix A of this plan available at the WCWRPC website, summarizes many of the water quality plans and standards that also apply to the SSA planning area, including plans for lakes within this watershed.

Local Wastewater Treatment and Facility Plans
The Chippewa Falls and City of Eau Claire wastewater treatment plants must maintain permit compliance. Descriptions of these plants are provided later in this report. Individual septic systems also must abide by applicable State laws covering system design and obtain sanitary permits.

County Land & Water Conservation Plans
In order to meet ATCP Chapter 50, Wis. Adm. Code, both Chippewa and Eau Claire counties have a county land and water conservation department. Though exact responsibilities and

department names do vary by county, these departments are generally responsible for a variety of educational, coordination, and enforcement activities to protect the farmlands, waters, and natural resources of their respective counties.

County and Municipal Comprehensive Plans

All jurisdictions in the sewer service area have adopted comprehensive plans. Comprehensive Plans are important tools for establishing community goals and guiding municipal decision-making. Under Wis. Stats. §66.1001, if a town, city, village, or county enacts or amends any of the following ordinances, those ordinances shall be consistent with (i.e., furthers and not contradicts) the objectives, goals, and policies of that local governmental unit's comprehensive plan: official mapping, zoning, subdivision regulations, or shoreland/shoreland-wetland zoning. Comprehensive plans must encompass nine elements; water quality issues, goals, and strategies are often addressed as part of a community's agricultural, natural, and cultural resources element. Surface and groundwater quality consistently ranked highest among the natural resources most important to residents during planning surveys.

3.4 ENVIRONMENTALLY SENSITIVE AREAS *(updated 2018)*

Environmentally sensitive areas (f/k/a environmental corridors) are...

> "[m]ajor areas unsuitable for the installation of waste treatment systems because of physical or environmental constraints...to be excluded from the service area. Areas to be considered for exclusion from the sewer service area because of the potential for adverse impacts on the quality of the waters of the state from both point and non-point sources of pollution include but are not limited to wetlands, shorelands, floodways and floodplains, steep slopes, highly erodible soils and other limiting soil types, groundwater recharge areas, and other such physical constraints." NR 121.05(1)(g)(2)(c).

Environmentally sensitive areas are significant areas of environmental resources characterized by often continuous systems of open space, physical features, environmentally sensitive lands, and natural or cultural resources which can be adversely impacted by development. These areas are often evident to people in the area and they identify with them as significant natural areas in their surroundings. Environmentally sensitive areas, as implemented in this plan, also include isolated, non-continuous natural and cultural features which meet specified resource criteria. The environmental constraints, environmental conditions, and other significant local features identified in the previous two sub-sections may also be environmentally sensitive areas.

Environmentally Sensitive Areas versus Environmental Corridors

In past plans, environmentally sensitive areas were referred to as "environmental corridors" and the terms were often used interchangeably.

WDNR recently amended their guidelines to state their preference for use of the term "environmentally sensitive areas" since the sensitive resources in need of protection may not be a part of a linear, contiguous corridor.

The adverse impacts caused by development in these areas can create undue costs to society in the attempt to alleviate those problems. Managing development in these areas either eliminates

or reduces the adverse impacts from development. The impacts of developing in some of these areas cannot be overcome by management; in those areas, it is prudent to prohibit development. In managing the development in those areas which can accommodate it, the costs associated with the adverse impacts of development can be shifted from society as a whole to those who choose to develop in them. This is accomplished by ensuring development occurs using engineering, site design, construction and management practices which address or mitigate potential adverse impacts.

3.4.1 Delineation of Environmentally Sensitive Areas

WDNR recommends lands delineated as environmentally sensitive areas not be developed for intensive urban use. NR121.05(g)(2)(c) of the Wisconsin Administrative Code identifies those environmental constraints that should be excluded from the sanitary sewer service area due to the potential for adverse impacts on water quality from point and non-point pollution.

The identification of environmentally sensitive areas is intended to: reduce runoff and erosion damage around lakes and streams, preserve the quality of surface and ground water, guide development to protect environmental constraints, prevent excessive non-point source pollution, provide long-term protection of wildlife habitats and recreation areas, and reduce public utility costs. Prohibiting development of environmentally sensitive areas is an effort to become more critical of the degrading effects development can have on our environment. Directing sewered development into areas with minimal environmental impact to protect water quality is the overreaching purpose of this plan.

This Sewer Service Plan defines the environmentally sensitive areas (ESAs) as being:

- **Surface Waters** – *A natural or artificial named or unnamed lake or naturally flowing stream as defined by NR 103.02, Wisconsin Administrative Code. Surface waters include all springs, stream headwaters, streams, lakes, and waterfalls.*

  The following man-made water-related features are generally not identified as ESAs: cooling lakes, farm ponds, ponds created as the result of an approved quarry or infrastructure project, facilities constructed for the treatment of wastewaters, roadside ditches, and most stormwater detention ponds or similar artificial stormwater management improvements. However, should appropriate regulatory agencies determine that such man-made features are waters of the United States or waters of the state, and if developed or disturbed would pose a significant risk to water quality, the ESA criteria and restrictions set forth in this plan shall apply. As discussed later in this sub-section, additional shoreland and shoreland-wetland regulations are enforced by the counties and cities within the sewer service area, though shorelands and surface water setbacks are not included or regulated as an additional ESA in the context of this plan.

- **Floodplains** – *Land which has been or may be covered by flood water during a regional flood event having a 1-percent chance of being equaled or exceeded in any given year as defined by NR 116.03, Wisconsin Administrative Code.* The 100-year floodplains are shown as the "A" or "AE" zones on the FEMA Flood Insurance Rate Maps (FIRMs), including any FEMA-approved map changes, revisions, amendments,

including Conditional Letters of Map Revision or Amendment (e.g., CLOMR, CLOMA) until such time that an effective FIRM is revised or amended.

- **Wetlands** – *Any area in which water is at, near, or above the surface long enough to support hydrophytic vegetation or water-loving plants and which has soils indicative of wet conditions as defined by NR 103, Wisconsin Administrative Code.* Wetlands may be seasonal or permanent and are sometimes referred to as swamps, marshes, or bogs. Wetlands may or may not be mapped as part of the Wisconsin Wetlands Inventory. If potential wetlands or wetland-indicator soils exist, a site-specific survey and/or certified wetland delineation may be required. Additional wetland setbacks may be required by the State, county, or local government, but the setback area is not considered part of the ESA.

- **Steep Slopes (and Class A & B Steep Slopes)** – *For delineating ESAs in this plan, a steep slope is a contiguous area of slope that is 20% or greater and at least 2,000 square feet total in size. Steep slope ESAs for this plan are further divided into two classes:*

Class A Steep Slope ESA *– A Class A steep slope is a contiguous area of steep slope ESA, including lands within 20 feet from the top and bottom of the steep slope, that are partially or wholly located within any of the aforementioned ESAs (e.g., surface waters, floodplains, wetlands); in such a case, the entire, contiguous area of steep slope ESA and its 20-foot buffer become part of the Class A steep slope ESA.*

Class B Steep Slope ESA *- Any steep slope ESA not a Class A steep slope is a Class B steep slope. The 20-foot buffer area from the top and bottom of slope will be used in determining the class of the steep slopes, but a 20-foot buffer area does not become part of a Class B steep slope ESA.*

  - Slopes shall be measured over a horizontal distance of 50 feet. Slopes shall be measured as the change in elevation over the horizontal distance between consecutive contour lines and expressed as a percent. A contiguous area of steep slope less than 2,000 square feet total (about 0.05 acres) shall not be considered an ESA due to its small size. The 20-foot buffer area shall not be included when determining the size of the steep slope area.

  - The 20-foot ESA buffer for Class A steep slopes should be defined using a reasonable number of points that are a minimum of 20-feet from the top and bottom of the actual steep slope ESA and not the setback line of another ESA. The points should be connected with a straight line that is surveyed and scaled, similar to a meander line. In no instance shall the resultant straightened lines be closer than 15-feet from the actual ESA.

  - Slopes equal to or greater than 12% up to 20% as measured above are considered steep slopes for which best management practices are required and enforced by the local regulating jurisdiction, but are not an ESA for purposes of this plan. See Policy 2.1.7 in Chapter 4.

  - Walk-out basements and engineered, artificial steep slopes, including the re-engineering and re-grading of stabilized artificial slopes and previously approved grading plans, are not considered an ESA if an engineering report and

documented best management practices have been submitted to the regulating county or municipality to mitigate erosion AND the impacted area of steep slope is not located in another ESA.

- As discussed in Chapters 3.2.4 and 3.3.4., the counties and municipalities in the SSA have adopted and enforce regulations regarding other steep slopes, including steep slopes not located within or extending beyond any of the aforementioned ESAs. Counties and municipalities may have additional more stringent definitions and standards regarding steep slopes.

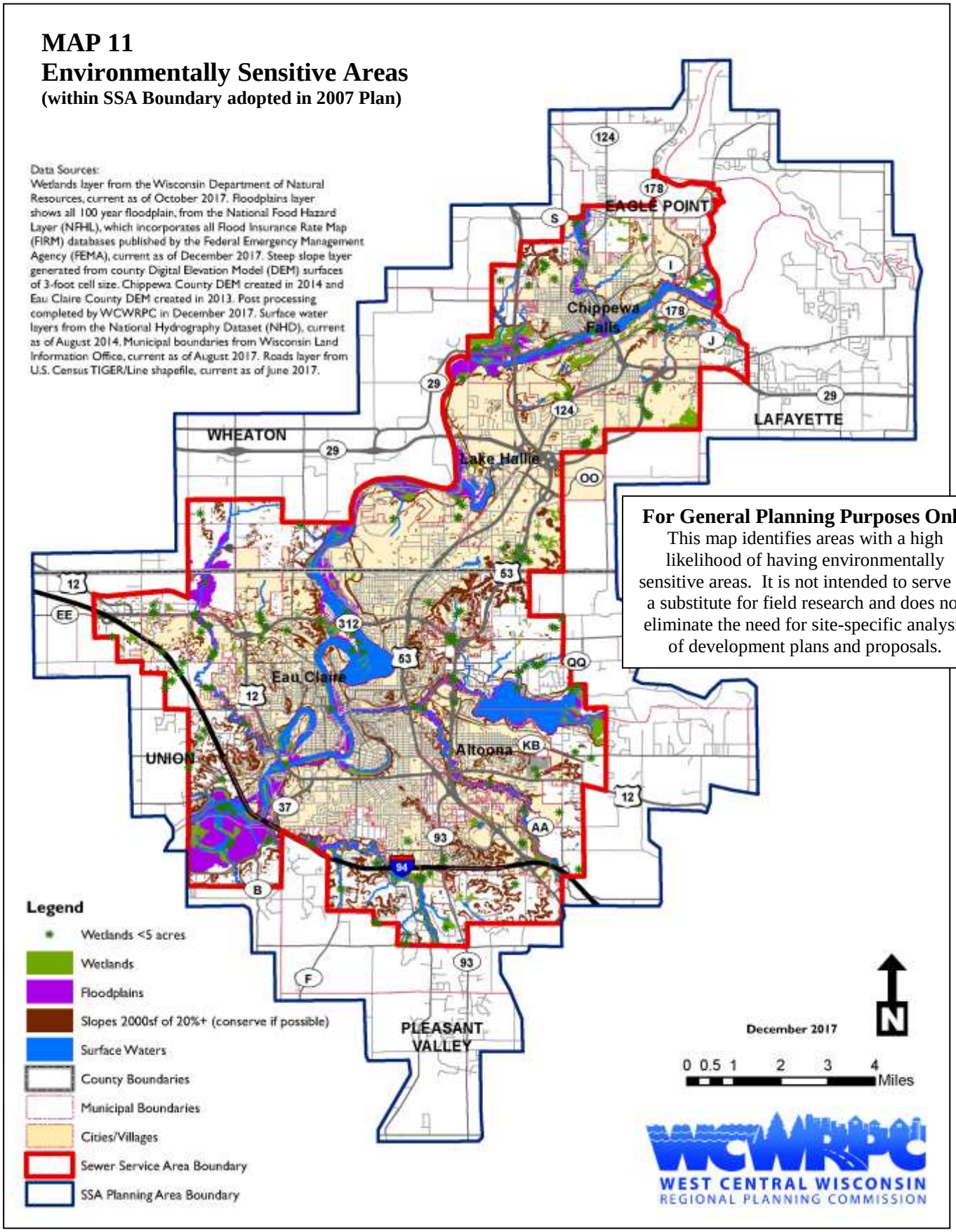
- **Endangered or Threatened Species and Natural Communities** – *Plants, animals, and natural communities that appear on the Wisconsin endangered and threatened species lists or in the Wisconsin Natural Heritage Inventory.* Evaluated on a project-by-project basis since specific locational data for endangered species and habitats for specific properties may not be readily available and such locations are subject to change.

The environmentally sensitive areas as of December 2017 for the 2007 sewer service area are depicted on Map 11 on the following page and are reflected in the table below.

Feature	Acreage or Amount
Surface Waters ESA	3,301 acres, plus 94 miles of streams
100-year Floodplain ESA	8,012 acres
Wetlands ESA (larger)	2,423 acres
Wetlands ESA (smaller)	163 points/locations *(acreage not available)*
Steep Slopes 12% to < 20% *2,000+ s.f.* *(for reference; not an ESA or mapped)*	4,734 acres
Steep Slopes ESA 20+% *2,000+ s.f.*	5,694 acres
Class A Steep Slopes ESA	2,240 acres
Class B Steep Slopes ESA	3,454 acres
Total Acreage within the 2007 SSA Boundary	65,221 acres

When considering Map 11 and the above table, it is important to remember that some ESA features overlap (e.g., a wetland located in a floodplain), so the sum of all of the ESA acreages above is not equivalent to the percentage of SSA acres that are sensitive areas. Further, the mapped and acreage estimates for steep slopes include significant areas of artificial, engineered slopes (e.g., slopes creates as part of highway projects) that should not be considered ESAs according to the previous definitions, if properly engineered and maintained. Considering whether a slope is artificial and properly engineered will be considered on a case-by-case basis during implementation of this plan.

MAP 11
Environmentally Sensitive Areas
(within SSA Boundary adopted in 2007 Plan)



The mapped ESAs shown in Map 11 may also change over time as more accurate information becomes available. The most recent, available maps and GIS data will be used to delineate the environmentally sensitive areas for review of proposed sewer extensions and hookups, as well as more accurate survey information provided by the applicant. Due to the accuracy limitations of some mapping information, field research may be needed and actual site-specific data will also be used to determine plan conformance, such as in the case of endangered species and habitats.

Shorelands are lands which are: (a) within 1,000 feet of the ordinary high water mark of navigable lakes, ponds or flowages; or (b) within 300 feet of the ordinary high water mark of navigable rivers or streams, or to the landward side of the floodplain, whichever distance is greater, excluding certain lands adjacent to farm drainage ditches as defined by NR 115.03, Wisconsin Administrative Code. As required by Wis. Stats. Chapter 30 and NR 115, shoreland regulations are regulated and enforced locally within the sewer service area:

- Wetlands within shoreland areas are regulated in the cities and villages.
- All shorelands are regulated by county zoning regulations in the unincorporated towns.

Shorelands are excluded as an environmentally sensitive area in the context of this plan. Shorelands were excluded as ESAs in the context of this plan since: (i) there may be previously existing development in shoreland areas on private septic systems for which a sanitary sewer connection is preferred, (ii) shorelands are already closely regulated, but are treated differently within incorporated versus unincorporated areas under State law, and (iii) there are certain types of land disturbances specifically allowed under State law within shoreland areas that are best enforced by county and municipal staff rather than through this plan. The exclusion of shorelands as an ESA here does not diminish their importance as sensitive areas and the need to closely regulate shorelands for water quality protection.

Similarly, prime farmlands, wellhead protection/recharge areas, and parks are also important environmental assets which should be protected and conserved, but are not included as ESAs in the context of this plan. However, there may be instances where the provision of sanitary sewer to these areas is preferred or desirable.

3.4.2 Non-Encroachment of Environmentally Sensitive Areas

Generally, there are two criteria that may permit sanitary sewer extensions or hookups to lands upon which there are environmentally sensitive areas:

1) non-encroachment by an intensive land disturbance upon the environmentally sensitive portion of a site, including any necessary setbacks or best practices to protect surface water quality; and,
2) enforcement of the Uniform Dwelling Code, local erosion controls, and stormwater regulations allowing sewer extensions into 12% to 20% steep sloped areas (see Chapter 3.4.3 below).

The plan allows, without a plan amendment, sewer extensions or hookups to buildings on lots that are partially within an environmentally sensitive area if the building construction or any

other intensive land disturbance does not occur on that portion of the lot affected by any one of the ESAs described in Chapter 3.4.1. Counties and municipalities must further ensure that sufficient setbacks and erosion control measures are taken, as determined by local zoning or land development controls.

Policy 2.1.3 in Chapter 4 discusses land disturbances and activities that may be permitted to encroach upon an ESA without the need to amend this sewer service area plan. Any unapproved alteration of surface waters, floodplain, wetlands, slopes 20% or greater, or endangered species/habitat to remove these areas from an environmentally sensitive area, and hence make them available for sewered development, is prohibited.

Intensive Land Disturbances

For this plan, intensive land disturbances include but are not limited to construction, expansion, or replacement of the following uses:

- structures and accessory structures, including buildings, homes, outbuildings, sheds, garages, storage buildings, decks, fences, and any objects with a foundation;
- impervious surfaces such as parking lots, concrete or asphalt surfaced storage areas, paved patios, private walkways, and swimming pools;
- private golf courses, campgrounds, man-made ponds, etc., if associated with any of the above; and,
- site disturbing activities such as clearing, grubbing, grading and filling related to the above.

Land disturbances in regulated shoreland areas are allowed to the extent permitted by State and local ordinances and approved by the regulating entity.

3.4.3 Engineering Studies and Enforcement of Local Codes

As discussed previously in Chapter 3.3, each municipality is responsible for proper implementation and enforcement of their respective erosion control ordinances, uniform dwelling codes, and stormwater management regulations, including for areas of steep slopes. Failure to do so may impact sewer extension approvals within those municipalities where improvements in enforcement are needed.

Development of steep slopes of 20% or greater should be avoided if possible, regardless of location or whether a sewer extension or hook-up are required. Any proposed intensive land disturbances within steep slopes of 20% or greater requires that an engineering study, stabilization plan, or its equivalent is prepared by a Wisconsin-licensed engineer and is filed with and approved by the local regulating entity. The engineering study must demonstrate that the lands are suitable for intensive land disturbance. Intensive land disturbances within Class A steep slopes may only be allowed if an engineering study is completed AND a Type IV SSA Amendment is approved.

Allowable changes resulting from an acceptable engineering study that is submitted to and approved by the local regulating entity <u>before</u> a subdivision plat or certified survey map is recorded shall allow the land divider to represent appropriate changes on the a subdivision plat or certified survey map.

Engineering Studies and Stabilization Plans

For this plan, an engineering study or stabilization plan can include site planning documents, grading plans, stabilization plans, geotechnical reports or other such technical reports prepared by a Wisconsin-licensed engineer that sufficiently demonstrates that the land, with potential best practices, is suitable for the proposed intensive land disturbance.

Such engineering studies should include, at a minimum, the following (or comparable) information as required by the regulating entity:

(i) Summary of subject site and proposed changes.

(ii) Soil types.

(iii) Existing conditions and slopes, including existing erosion and slope stability.

(iv) Proposed land development.

(v) Proposed erosion control best management practices, including any retaining walls.

(vi) Identification of a single responsible party, before, during and after changes to slope.

(vii) Verification and statement that changes to slope does not reduce the existing water quality, the existing erosion, or the stability of the slope.

(viii) An engineer's stamp and signature on the report verifying the accuracy of the document.

Depending on project and site circumstances, a local regulating entity may require additional information or studies, including reports provided by a licensed, geotechnical engineer.

Allowable changes resulting from an acceptable engineering study that is submitted to and approved by the local regulating entity after a subdivision plat or certified survey map is recorded shall require the land divider to represent appropriate changes on a separately recorded document, such as an Affidavit, that includes a legal description and graphic of the subject area. Until this is accomplished, a deed restriction or similar note on the plat or CSM shall designate areas of steep slope of 20% or greater as unbuildable.

As determined by the Wisconsin Department of Safety and Professional Services (WDSPS) or Wisconsin Department of Natural Resources (WDNR), if local construction site erosion controls and/or stormwater regulations are not adequately implemented as described in this plan, all sewer extensions into areas of 20% or greater slope will not be approved in the respective municipality until such time that the department determines that adequate enforcement is achieved. Similarly, WDSPS or WDNR may require changes in the review, approval, amendment, and tracking processes under this plan should it be determined that the policies and procedures in Chapters 4, 5, or 6 are not being adequately implemented or adhered to.

3.4.4 Other Environmentally Sensitive Area Considerations

While this sewer service plan emphasizes protection of environmentally sensitive areas, it also recognizes the possibility of a conflict between environmental preservation and legitimate local and regional development. An example may be the need to cross an environmentally sensitive area to service an outdoor recreation facility with sanitary sewer lines. When such a conflict occurs, the problem should be resolved with utmost care taken to minimize damage to the environment. During implementation of this plan, the environmental constraints and local

limiting conditions in Chapter 3.2 may also be considered to the extent provided by the goals and policies in Chapter 4.

3.5 ANALYSIS OF WASTEWATER TREATMENT SYSTEMS AND DEVELOPMENT AREAS

Note: Chapter 3.5 was not updated as part of the 2018 SSA Plan policy update.

3.5.1 Current Sanitary Sewerage Systems

The Chippewa Falls-Eau Claire Urban Area is served by two wastewater treatment facilities – the Chippewa Falls and Eau Claire Wastewater Treatment Plants. The City of Altoona also owns and manages a sewage collection system which is connected to the City of Eau Claire treatment facility. Thus, the Cities of Altoona, Chippewa Falls, and Eau Claire are the designated management agencies for the area.

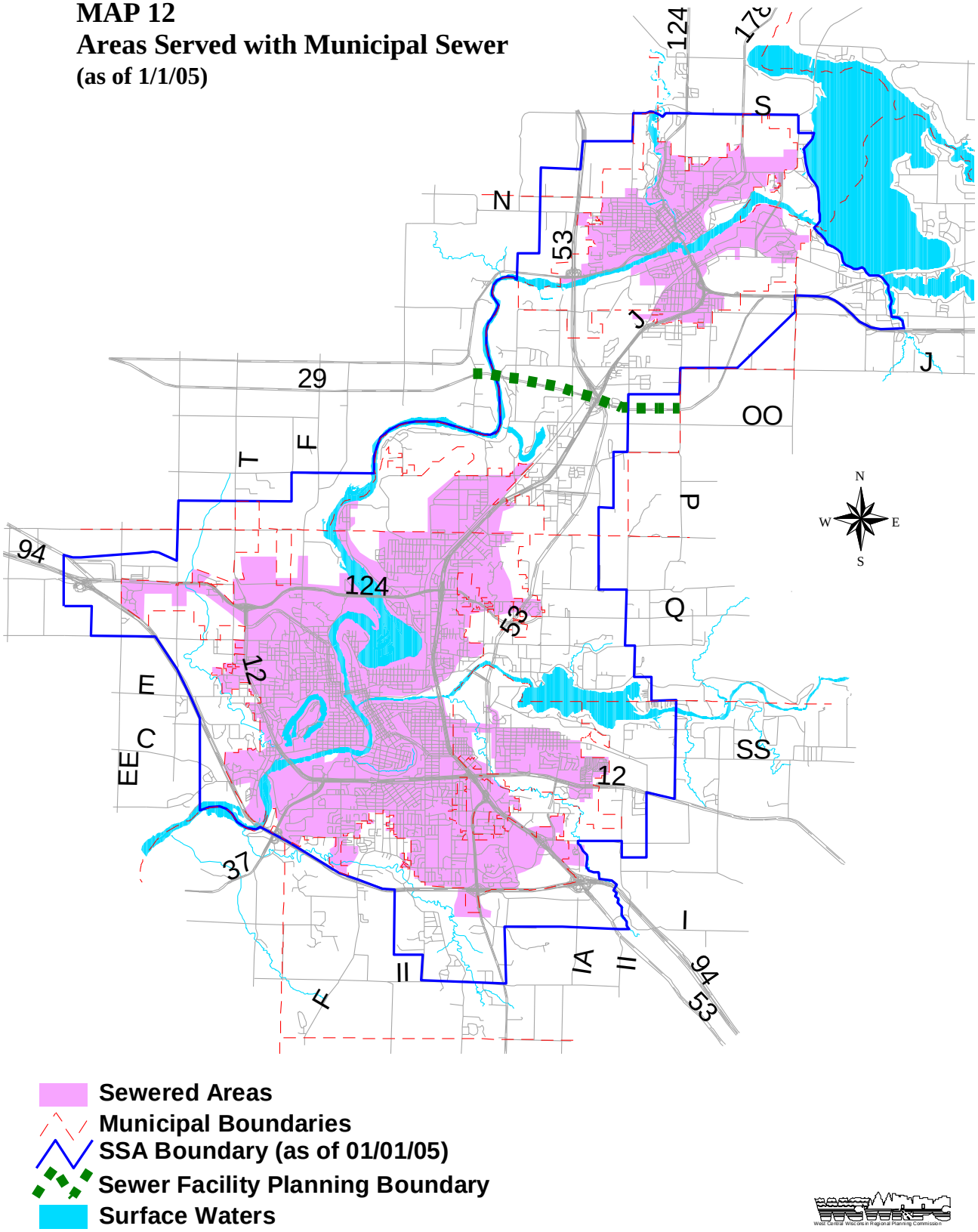
The Chippewa Falls plant serves the City of Chippewa Falls and the Eau Claire plant serves the Cities of Eau Claire and Altoona, in addition to portions of the Washington Heights area. Map 12 on the following page shows the sanitary sewer trunk systems and areas currently served with municipal sewer for both sanitary sewer systems as of January 1, 2005, along with the current (prior to this plan) sewer service area for reference.

Both the City of Chippewa Falls and City of Eau Claire have long-standing policies that sanitary sewer service would only be provided to properties located within their respective municipal limits. Landowners of unincorporated properties would need to petition for annexation, and meet all applicable standards for annexation, prior to receiving sanitary sewer service. As could be expected, at times this has resulted in some strained relationships between the cities and their respective neighboring towns. This policy was upheld in the 1970s after the City of Eau Claire participated in a lengthy legal battle which went to the U.S. Supreme Court.

In April 2003, the Village of Lake Hallie was incorporated under Wisconsin Statutes Section 66.0207. This is especially relevant to this plan due to the Village's location between the two cities and since those landowners within the Village would no longer be able to petition either the City of Chippewa Falls or City of Eau Claire for annexation and, thus, water and sewer services. Currently, the Village of Lake Hallie is experiencing considerable growth, though no community sanitary sewer service is provided within the community.

Map 12 also shows an important boundary used during facility planning. State Highway 29 is used as a break or boundary during wastewater treatment planning facility planning in the urban area due primarily to topography, with the City of Eau Claire Facility Plan encompassing those areas to the south and the City of Chippewa Falls Facility Plan encompassing those areas to the north. The STH 29 corridor is roughly where a natural drainage break exists, with drainage flowing towards each respective facility. Sewer service could be extended further from either city with appropriate engineering (and likely increased construction costs), but natural drainage patterns combined with the physical barrier which the highway and its associated stormwater improvements impose makes State Highway 29 an appropriate planning boundary.

MAP 12
Areas Served with Municipal Sewer
(as of 1/1/05)



3.5.2 Description of Wastewater Treatment Plants

Chippewa Falls Wastewater Treatment Plant

Located at 1125 West River Street, this facility on the north side of the Chippewa River is somewhat centrally located to the community. Initial portions of the Chippewa Falls Wastewater Treatment Plant were constructed in 1952. The project included the control building and raw sewage pumping stations, the primary clarifiers, and two digesters which currently serve as secondary digesters.

The secondary treatment facilities were added in 1968 to allow the City to meet increasing wastewater flow and organic load demands. The major units included the four aeration basins, two final clarifiers, return sludge pumping facilities, engine-driven blowers, and the primary digester.

Improvements in 1984 increased the hydraulic capacity of the preliminary treatment units, increased raw sewage pumping capacity, added a third clarifier, and provided for the construction of a new chlorine contact tank. In addition, flood protection and effluent pumping facilities were provided to ensure that treatment plant operation can be maintained during high river stage.

A $5,000,000 expansion was completed in 1997. The expansion upgraded the removal system to include biological phosphorous removal, additional bio-solid handling, and automated facilities.

In 1999, a digester cover was replaced and additional sludge heating and mixing equipment was installed at a cost of $1,000,000. An effluent diffuser was also constructed to help reduce the concentration of copper in the effluent, thus allowing for an increase in the permitted amount of copper able to be discharged at the plant.

Between 2003 and 2005, both secondary digester covers were replaced and external heat exchange and mixing systems were installed. The three 1960's vintage engine-driven blowers were replaced with 150hp electric motors and new blowers and controls. Two 30 kw Capstone Micro-turbines were installed to utilize methane gas produced in the anaerobic digesters. A heat exchanger for micro-turbine exhaust was added to increase efficiency, and the digester heating boiler was replaced. The control building size was doubled to include a new laboratory, office space, and personnel facilities. The grit removal system was also replaced. New motors were installed on the existing raw sewage pumps and one new pump and motor were added.

The treatment plant has a design capacity of 5.61 MGD and can treat a momentary peak flow of nearly 15 MGD. The plant is currently operating at 75% of BOD capacity with a current average sewer flow of 2.2 million gallons a day.

The Chippewa Falls plant provides physical and biological treatment to obtain a secondary level of treatment. The physical treatment is provided by a bar screen, grit removal, and primary and secondary clarifiers. The biological treatment is provided through the activated sludge process in which organisms and bacteria are allowed to feed on the organic matter in the wastewater in the presence of oxygen. Chlorine is then added to kill the remaining micro-organisms and the treated wastewater is discharged into the Chippewa River. The settled solids, or sludge, from the

primary clarifiers and scum from the primary and secondary clarifiers are pumped to anaerobic digesters. The anaerobic digestion system consists of one primary and two secondary digesters. Once the sludge has been stabilized and thickened, the sludge is applied to agricultural land or stored for later application.

Chippewa Falls Wastewater Treatment Plant Design Wastewater Flows and Characteristics	
Parameter	Design Characteristic
Design Flow	5.61 MGD
Average Monthly Flow	3.099 MGD (high) 2.200 MGD(low)
Peak Flow	5.0 MGD (10/10/2000)
Design BOD-5 day loading	5,330 lbs/day
Monthly Avg BOD-5 day loading	5,100 lbs/day (high) 3,200 lbs/day (low)
Monthly Avg BOD-5 effluent concentration	7 mg/l (high) 5 mg/l (low)
Monthly Avg Suspended Solids concentration	17 mg/l (high) 9 mg/l (low)

The 2004 Compliance Maintenance Annual Report (CMAR) rated the plant at 3.5 points. Several plant processes are at performance limit capacity, including: RAS pumping, final clarification, and solids handling. Very high summer weekday organic loads (>5,000 lbs/day BOD) and low weekend organize loads make control of the biological phosphorus removal process very difficult and sometimes unreliable. It has also led to settlability problems in the final clarifiers due to filamentous microorganism growth. Some form of flow/load equalization may be necessary.

Eau Claire Wastewater Treatment Plant

The initial wastewater treatment plant in Eau Claire was built in 1940 at the present plant location on Ferry Street on the Chippewa River on the southwest corner of the community. This plant consisted of settling tanks, digesters, and sludge drying beds. The treatment facility was expanded in 1960 with construction of additional settling tanks and chlorination facilities.

The present secondary treatment plant was built in 1980 and consists of grit tanks, primary clarifiers, rotating biological contractors (RBC's), final clarifiers, and a chlorine contact system. The biosolids produced from the treatment process are treated in four anaerobic digesters and then applied to agricultural fields. The biosolid storage capacity is inadequate to meet the six-month storage requirements and expansion in being considered.

The Eau Claire treatment plant has a design flow capacity of 11.5 million gallons per day (MGD) and currently treats an average of about 6.5 MGD. The current Facilities Plan, dated December 1992, indicates that the plant will require updating by 2015. Trace copper from local manufacturing can be found in the sewage, but this has not been a problem due to pretreatment and current lower levels of manufacturing activity, but could become an issue in the future.

The Eau Claire wastewater treatment plan is presently meeting applicable wastewater quality standards. The Wastewater Pollution Discharge Elimination Permit (WPDES) for the plant was reissued in 2005 and contains an ammonia limit to the discharge, which will involve plant modifications.

Eau Claire Wastewater Treatment Plant ***Design Wastewater Flows and Characteristics***	
Parameter	Design Characteristic
Design Flow	11.5 MGD
Average Monthly Flow	7.835 MGD (high) 6.095 MGD(low)
Peak Flow	11.99 MGD (5/14/2003)
Design BOD-5 day loading	33,700 lbs/day
Monthly Avg BOD-5 day loading	17,901 lbs/day (high) 13,002 lbs/day (low)
Monthly Avg BOD-5 effluent concentration	15 mg/l (high) 6 mg/l (low)
Monthly Avg Suspended Solids concentration	17 mg/l (high) 10 mg/l (low)

The December 1992 Facilities Plan amendment includes an implementation plan for facility improvements. Additional attention to the phosphorus removal system may be required within the next 6-8 years. The 2003 Compliance Maintenance Annual Report (CMAR) rated the plant at 32 points, noting the overall age of the facility and the fact that only four to five months of sludge storage capacity was available.

3.5.3 Regional Treatment Alternatives

The existing *Chippewa Falls-Eau Claire Urban Sewer Service Area Plan for 2010* analyzed a variety of wastewater treatment alternatives, including having a single regional facility, three regional facilities, and on-site systems. Based on the analysis, it was determined that utilizing the existing two sites and facilities was the most cost-effective method of providing treatment for the service area.

The Wisconsin Department of Natural Resources maintains a non-proliferation policy for wastewater treatment. The first sentence of NR 110.08(5), Wis. Admin. Code reads, “It is the policy of the department to restrict the construction of new sewage treatment facilities in order to preserve and protect the quality of waters of the state.” Any proposals for new or upgraded facilities must be “necessary” and “cost-effective” (NR 110.08(5), 110.08(6), and 110.08(4)). Regionalization alternatives typically provide certain efficiencies in management and operation from one plant versus multiple smaller plants, though these alternatives should be individually assessed on a project-specific basis for environmental pros and cons.

Recently, the Village of Fall Creek to the southeast of Eau Claire investigated alternatives for the future of wastewater services for their community, including potentially connecting to the City of Eau Claire system. Given the distance, approximately twelve miles, it was determined that this alternative would not be cost-effective at this time.

3.5.4 Engineering Constraints

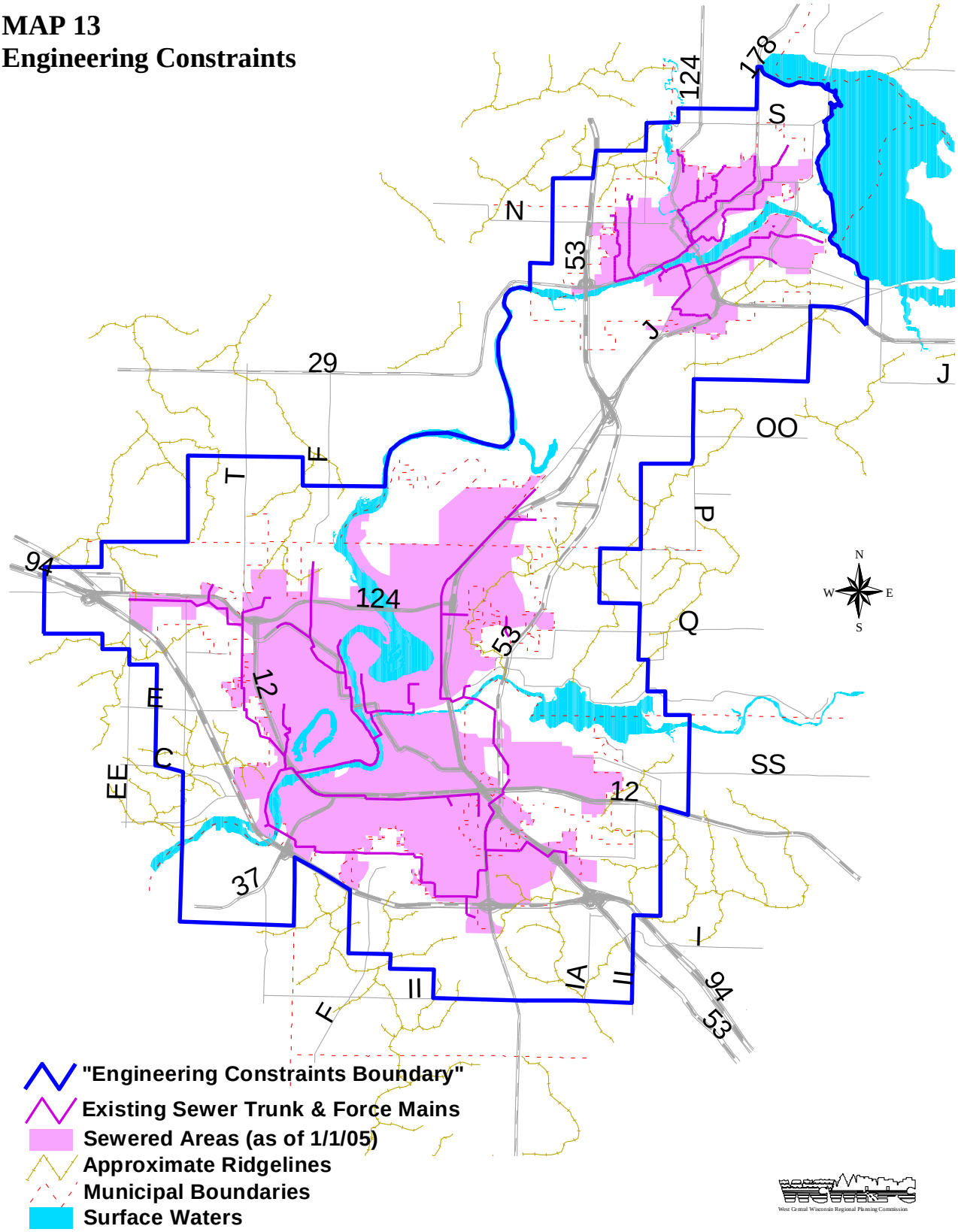
In the context of this plan, "engineering constraints" are directly related to the technical feasibility of providing cost-effective municipal sewer services. Three primary factors constitute these engineering constraints—the existing sanitary sewer infrastructure, topography, and other significant barriers (e.g., interstate highways, large water bodies, existing development). These constraints can then be compared to expected growth areas to help establish the sewer service boundary. Fragmented or semi-large lot residential development on private sewer systems can be an engineering constraint since it would not be cost-efficient to provide sanitary sewer services to non-contiguous, individual parcels.

Map 13 on the following page generally delineates those unsewered areas which can be most cost-effectively served by municipal sanitary sewer based on engineering constraints, also keeping in mind local growth trends of where development is occurring. This map was created by working closely with the engineering personnel from the Cities of Eau Claire and Chippewa Falls to identify physical (and related financial) barriers to expanding existing sewer service to potential growth areas. Topography was a principal driving factor during this analysis. As shown on Map 13, the area delineated as being most cost-effective for future sewer service closely follows ridgelines; in many of these cases, to extend sewer service beyond these ridgelines would require costly infrastructure improvements (e.g., liftstations).

For other areas, such as near the south end of Lake Wissota, existing development on individual septic systems was determined not to be cost-effective for the provision of municipal sanitary sewer for the foreseeable future. The existing land use map (Map 3) was compared to the existing sewer services map (Map 13) to help identify such areas where existing, unsewered development may pose engineering constraints.

The engineering constraints boundary is different than the sewer service area boundary which gives additional consideration to population projections, local land use plans, and intergovernmental relationships. However, the engineering constraints boundary should still be considered in local planning efforts and intergovernmental discussions due to the ability to possibly provide cost-effective municipal sewer services to these areas at some time in the future, but not necessarily within the 20-year planning horizon of this plan.

MAP 13
Engineering Constraints



3.6 FORECAST OF URBAN GROWTH

Note: Chapter 3.6 was not updated as part of the 2018 SSA Plan policy update.

With anticipated improvements to the existing treatment facilities as defined in the respective facility plans, adequate plant capacity should exist to provide sewage treatment for expected future development in the planning area during the 20-year planning horizon. The next step is to look at where development can and should occur within the urban area.

3.6.1 Methodology for Population, Housing, and Employment Projections

For demographic trends and population projections for the planning area, smaller geographic units were utilized instead of municipal boundaries.

1) Defining the Sub-Areas -- The planning area was subdivided into traffic analysis zones (TAZs) as defined by the 2000 Census Transportation Planning Package distributed by the U.S. Census Bureau. For each TAZ, a wealth of 2000 Census information is available and land uses were identified. Seven additional sub-areas, following census blocks when possible, were amended to the Chippewa-Eau Claire Metropolitan Planning Organization (MPO) transportation planning area based on local plans and discussion of the Water Quality Technical Advisory Committee. For each of these additional seven sub-areas, census block data was used in conjunction with on-site visits and review of remote imagery.

2) Comparison of 2000 Population – The 2000 population for the sub-areas combined was compared to 2000 Census population estimates by municipality, interpolated from census block data for those portions of each community in the planning area. In total, there was less than a 1% different between the two methods, which was deemed to be acceptable.

3) Projecting 2025 Planning Area Population -- Since 1980, the Chippewa-Eau Claire Urbanized Area has experienced an average annual population growth rate of approximately 1.1%. However, this 20-year historical population growth trend has slowed during the past decade to just under 1.0% annually. Therefore, the MPO has selected a 1.0% average annual growth rate as the basis for preparing the population forecast for the next 25-year planning timeframe. The 1.0% average annual growth rate produces a year 2025 population forecast of 130,027 for the entire planning area.

4) Comparison of 2025 Planning Area Population -- The 2025 population for the planning area using the method in Step #3 above was compared to total 2025 population estimates by municipality, derived from an interpolation of Wisconsin Department of Administration projections for those portions of each municipality within the planning area and using estimates provided by the City of Chippewa Falls. In total, there was less than a 0.5% difference between the two methods, which was deemed to be acceptable.

5) Projecting 2025 Sub-Area Population & Housing Units – For each TAZ, population projections were developed based on existing and planned land use, reflecting available land, existing land use plans, and excluding environmentally sensitive areas and transportation rights-

of-way. For incorporated, planned residential portions of each TAZ, an average of three homes per acre was applied, while an average of one home per acre was applied to unincorporated residential portions. Based on the 2000 Census, an average household size of 2.5 persons per household was applied to the planned residential areas, then added to the 2000 population for the remaining portions to project a 2025 population for each TAZ. The total of all TAZ projections were compared to the total population for the entire planning area, then evenly adjusted downward so the total population for the entire planning area is maintained.

With local input and based on existing plans, individual TAZs were then further adjusted based on known or proposed development projects, constraints on the provision of services, or expected areas of low growth. The total population for the entire planning area remained unchanged from the projection established in Step #3.

6) Projecting 2025 Employment – The employment projections are based on recent trends and the assumption that the Chippewa-Eau Claire Urban Area will continue to be an important regional employment center. The regional employment projections developed by the Wisconsin Department of Workforce Development (WisDWD) accounts for changing demographics which make up the workforce The WisDWD projects an average employment growth of 1.5% annually over the planning timeframe which was applied to the total planning area to project future employment.

To forecast employment growth by sub-unit, employment by TAZ from the 2000 U.S. Census was analyzed for different types of employment land uses (e.g., retail commercial, manufacturing, government). For each type of employment land use, an average employees per acre was identified. The WisDWD projected growth rate were then applied to each TAZ by anticipated future land uses for the planning area while adjusting appropriately to maintain consistency with the overall employment projection for the planning area.

3.6.2 Population Projections for the Planning Area

The first component in forecasting urban growth for the planning area is to consider the projected population for 2025. The population of the planning area is expected to grow by 19.5% between 2005 and 2025 to 130,854 persons (see Table 8).

Table 8. Population Projections for Planning Area

	2005	2010	2015	2020	2025	% change
Incorporated Municipalities	89,187	92,735	95,576	98,982	102,402	+14.8%
Unincorporated Municipalities	20,307	22,102	24,604	26,541	28,462	+40.2%
Planning Area Population	109,494	114,837	120,180	125,523	130,864	+19.5%

sources: Wisconsin Department of Administration, 2000 Census Transportation Planning Package, and West Central Wisconsin Regional Planning Commission

Map 14 identifies the projected high growth areas by TAZ taken from the recently completed MPO's *Long-Range Transportation Plan*. As Map 14 shows, the highest growth areas tend to be located outside incorporated areas, with the possible exception of the Village of Lake Hallie. Many of these areas are also located near water bodies, such as Lake Wissota, Altoona Lake, Chippewa River, Sherman Creek, and Lowes Creek. However, the map does not reflect density and current total population, so some of the areas shown to have the highest population increases are also some of the larger TAZs within the planning area. The MPO's *Long-Range Transportation Plan* does provide additional confidence in these forecasts by including a comparison with previous such analyses which demonstrates the similarities between projected high population growth areas.

3.6.3 Employment Projections for the Planning Area

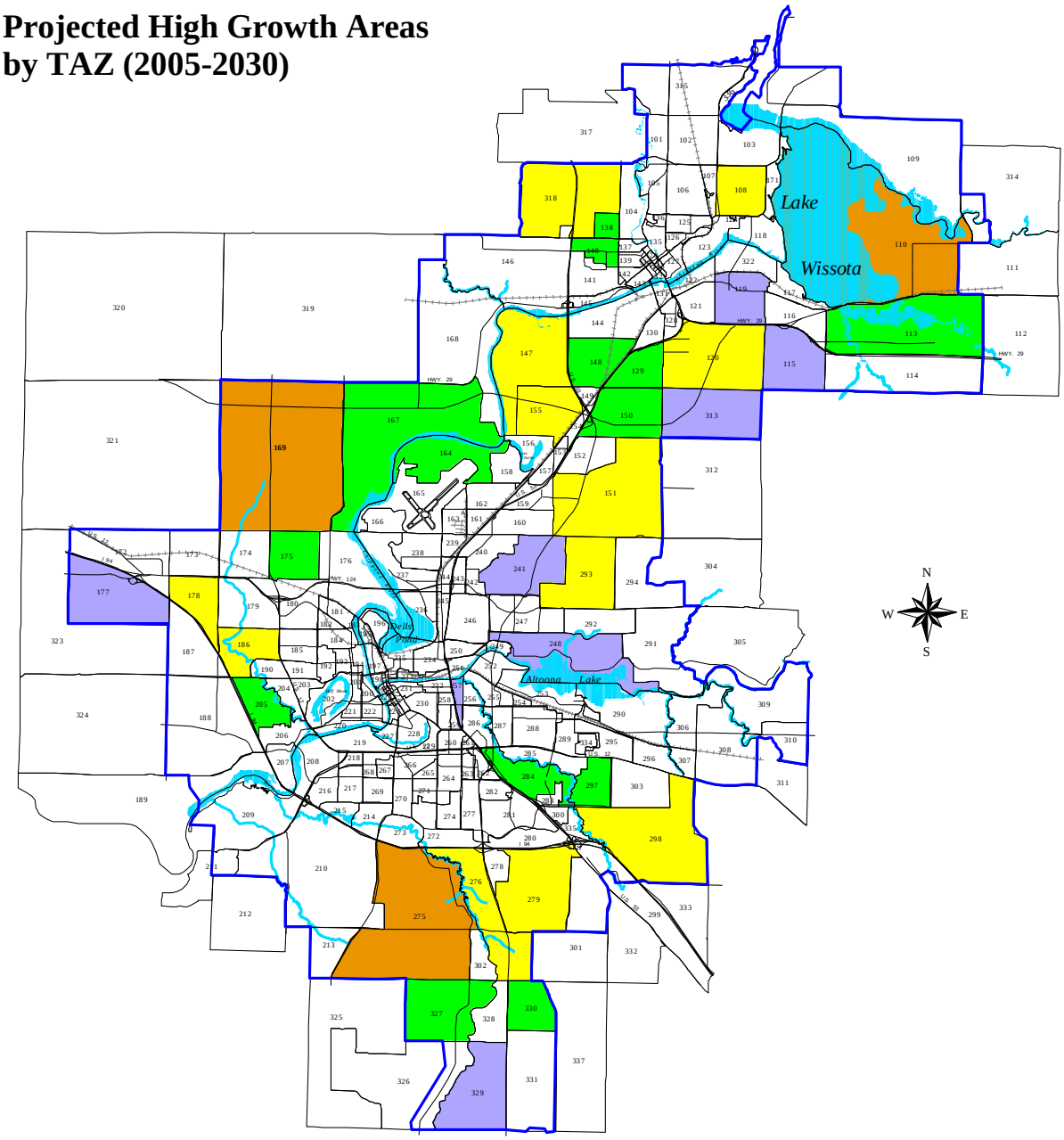
Employment growth in the Chippewa Falls-Eau Claire area has been particularly strong over the past decade, increasing by 21% between 1990 and 2000 in the planning area. The Wisconsin Department of Workforce Development projects an average employment growth of 1.5% annually over the planning timeframe, and the planning area will continue to grow as the primary employment center for west-central Wisconsin. Table 9 incorporates the Department of Workforce Development's forecasts in the preparation of employment projections for the planning area. In accordance with local plans, it is anticipated that the majority of employment growth within the planning area will occur in incorporated areas.

Table 9. Employment Projections for Planning Area

	2005	2010	2015	2020	2025	% change
Planning Area Employment	71,287	76,242	81,197	86,152	90,715	+27.3%

sources: Wisconsin Department of Workforce Development, 2000 Census Transportation Planning Package, and West Central Wisconsin Regional Planning Commission

MAP 14
Projected High Growth Areas by TAZ (2005-2030)



SSA Planning Area Boundary

Projected Population Growth

- **1501 to 2000**
- **1001 to 1500**
- **751 to 1000**
- **501 to 750**
- **250 to 500**

source: Chippewa-Eau Claire MPO. *Long-Range Transportation Plan*. 2005.

West Central Wisconsin Regional Planning Commission

3.6.4 Acreage Allocations for Future Development

Population is a key determinant in establishing the sewer service area boundary. According to NR 121.05(1)(g)(2) of the State of Wisconsin Administrative Code...

"b. The sewer service areas are delineated based on a 20-year population forecast approved by the department, and municipality approved population density standards."

This sub-section of the plan identifies projected needed acreage for the 2025 sewer service area based the 20-year population forecasts and related employment projections discussed in the previous sections. This approach assumes that most, if not all, development in unincorporated areas will continue to occur on private septic systems, which is consistent with local policies.

Residential Development

To estimate the acreage needed to accommodate future residential growth, two key statistics are needed: (1) a projection of dwelling units that will be built and (2) a projection of the density at which those homes will be built. The previous population projections are used in combination with the anticipated number of persons per household to determine how many housing units are likely to be developed by the year 2025 in the planning area.

Based on the 2000 Census, there were 42,533 housing units in the sewer service planning area. The Chippewa-Eau Claire Urban Area has followed national trends with a decline in household size from 2.6 persons per household in 1990 to 2.5 persons per household in 2000. The smaller household size, combined with a growing overall population, tends to stimulate housing demand.

Housing unit projections for the planning area for the year 2025, as depicted in Table 10, were developed using the population projections shown previously and the most current average household size of 2.5 persons per household.

Table 10. Projected Dwelling Units for the Planning Area

	2005	2010	2015	2020	2025	change
Incorporated Municipalities	35,675	37,094	38,230	39,593	40,961	+5,286
Unincorporated Municipalities	8,123	8,841	9,842	10,616	11,385	+3,262
Planning Area Dwelling Units	43,798	45,935	48,072	50,209	52,346	+8,548

The resulting year 2025 projections identify a need for an additional 8,548 housing units in the planning area, or 393 housing units per year, to accommodate projected population growth between 2005 and 2025. However, if the average household size continues to decrease, this demand could be larger.

Regulatory standards for residential density vary throughout the planning area due to the number of municipalities, and can vary within an individual municipality by zoning district or due to extraterritorial subdivision regulations. The residential density in incorporated areas is

significantly higher than residential areas in unincorporated towns. Based on the 2000 estimates of dwelling units and residential land use, the residential density of the planning area is approximately 2.1 dwelling units per acre in residential areas, which is relatively low density for urban development. Given market trends for increasing lot sizes which has been reducing the number of dwelling units per acre on average, the density of 2.1 dwelling units per acre is used in the plan to project future residential acreage needs.

With a projected demand for 8,548 additional housing units between 2005 and 2025, at an average of 2.1 housing units per acre, a total of 4,071 acres for new residential development is needed within the sewer service planning area. It can be further projected that 62% (or 2,517 acres) of these residential acres will be needed within the incorporated municipalities, and, thus, within the sewer service area boundary.

Commercial, Industrial, & Other Development

By comparing the current employment estimate to current commercial, industrial, and governmental/institutional acreage for the planning area, an average of 8.3 employees per acre of commercial, industrial, or governmental/institutional use can be derived.

As shown previously, an increase of 19,428 employees is projected between 2005 and 2025. Applying the 8.3 employees per acre average, this increase in employment would have a corresponding demand for 2,341 acres additional acres of commercial, industrial, and governmental/institutional lands. And as previously discussed, the majority of this commercial and industrial development is expected to occur within incorporated areas.

Other Development Factors

To estimate future needed acreage, three additional factors were considered:

- **Market Factor** - A market factor of 30% was added to offer additional flexibility to the real estate market and to account for landowner choice. The market factor recognizes that petitions to connect to municipal sewer are primarily landowner- or developer-initiated. Likewise, a landowner in an area with high development pressure may select to keep their property undeveloped or to restrict development rights through tools such as conservation easements. By using a market factor, the uncertainty of where municipal sewer service may be provided for in the future is accounted for while helping to mitigate undue influence on land and housing prices in specific areas. The 30% market factor was selected after review of local plans, consideration of local circumstances, and a review of other such market factors used in similar planning efforts in the State.
- **Environmentally Sensitive Areas** - Those areas identified as having environmentally sensitive areas in the must be excluded from the available acreage for development. Comparing currently developed parcels with the map of environmentally sensitive areas, approximately 35% of the acreage of these developed parcels is considered environmentally sensitive due to shorelands/floodplain, wetlands, or steep slopes.
- **Public Rights-of-Way** - Public rights-of-way for roads, sidewalks, utilities, recreational trails, etc., should also be excluded from the available acreage for development. After consultation with Wisconsin Department of Transportation, and based on similar experiences

for residential subdivision growth, a factor of 12% was used to account for public rights-of-way.

Estimated Additional Acreage Needed for Development – 2005 to 2025

Based on population and local development projections in the previous sub-sections, Table 11 summarizes the acreage demand forecasts for the planning area.

Table 11. Allocation for Future Development by Land Use (in acres)
Estimated Additional Acres for Development -- 2005 to 2025

	Incorporated Areas	Unincorporated Areas	Planning Area
Residential	2,517	1,554	4,071
Commercial, Industrial, & Governmental/ Institutional	2,341 *primarily in incorporated areas*		2,341
Other Factors *(+77%)*	3,741	1,197	4,938
Total[7]	8,599 acres	2,751 acres	11,350 acres

The distribution of the allocated needed acreage is not evenly distributed throughout the planning area. A majority of this growth is projected to occur within the City of Eau Claire and City of Altoona which together constitutes 53% of the projected residential needed acreage for the planning area and nearly 56% of the of all employment in the planning area.

3.6.5 Projected Growth Areas

Previous plan sections identified existing land uses, the extent of municipal sewer services, environmental constraints, engineering constraints, and the projected acreage needed for development. This section focuses on where this development will most likely occur within the planning area.

Map 15 at the end of this sub-section shows those areas which were undeveloped as of January 1, 2005, but likely to be developed over the next 20 years. This map was created based on available local planning documents, the MPO's *Long-Range Transportation Plan for the Chippewa-Eau Claire Metropolitan Planning Area*, and input from those participating on the MPO's Water Quality Technical Advisory Committee. Not reflected on Map 15 is the character and density of the future development. For instance, as discussed previously, residential densities in the incorporated areas are significantly higher than those of the unincorporated areas. In some cases, residential development in unincorporated areas may be occurring at low densities or at substantial distances from municipal sewer trunk lines that it may not be cost-effective to provide municipal wastewater services.

[7] The incorporated areas total includes all commercial, industrial, & governmental/institutional acreage, though a smaller portion of these development types may occur in some unincorporated areas.

In addition, Map 15 delineates the current extent of municipal sewer services. Sewered but undeveloped areas are of importance because they will likely be developed within the planning horizon and additional loadings from them will add to the wastewater treatment flow. In most cases, it is more cost-effective to provide sewer service to these infill areas rather than expanding services to new areas. Local plans for some sewered but undeveloped areas may discourage development due to environmental features, engineering constraints, or the community's desire to maintain the land for open space and/or recreational purposes. As Map 16 shows, there are a very limited number of large sewered-undeveloped parcels which are available to be developed over the next 25 years. There are also a very limited number of undeveloped parcels within the incorporated municipalities available for development, with the exception of the recently incorporated Village of Lake Hallie.

Map 15 was used in the context of this planning for general planning purposes only. It provides one picture into a possible future for the development of the urban area based on existing planning documents and known land use trends. However, landowner decisions, market forces, and local regulatory activities over the next 20 years will all influence and determine how and where actual development will occur.

During the planning process, the following general growth trends were discussed and considered as the updated sewer service area boundary was identified:

CHIPPEWA FALLS AREA

Minimal development to the west of the City of Chippewa Falls is expected due to topography and Highway 53 which both form considerable barriers to urban expansion. The Village of Lake Hallie lies along the City's southern boundary. Some development is expected to the south-east of the City, but existing, non-sewered development on private sewer systems in the Town of Lafayette prohibits cost-efficient expansion of municipal wastewater services any significant distance to the east at this time.

Immediately to the east of the City is Lake Wissota which forms an additional barrier to the expansion of wastewater services. Residential infill development is expected to continue in unincorporated areas to the east and north of Lake Wissota. The north side of Chippewa Falls and adjacent portions of the Town of Eagle Point are expected to incur significant development over the next twenty years, in part due to recent and planned road improvements in this area. The relatively flat topography which gently slopes southwards to the City also makes the area cost-feasible for the potential future provision of municipal wastewater services.

LAKE HALLIE AREA

The Village of Lake Hallie has been experiencing tremendous commercial and residential growth over the past five years, spurred by the recently completed U.S. Highway 53 bypass through the Village. Commercial growth within the Village is anticipated to continue along U.S. Highway 53, with increasing residential development to the east, potentially including unincorporated areas. The bypass, topography, and other natural constraints (e.g., wetlands) will guide and limit the extent of this easterly development.

EAU CLAIRE/ALTOONA AREA

Residential infill development is expected to continue along the City of Eau Claire's northeast side and adjacent areas of the Town of Seymour. Topography and large areas of existing residential development on private sewer systems combine to decrease the likelihood of expanding municipal wastewater services into this area in the near future. Development is expected east of the Cities of Altoona and Eau Claire, such as along U.S. Highway 12 and adjacent areas within the Town of Washington.

Commercial development is underway in the area near the Interstate 94 and U.S. Highway 53 interchange on the southeast side of the City of Eau Claire. Residential development pressure is expected to be significant south of the City of Eau Claire with some commercial development along larger roadways closer to the City. However, development densities farther from the City, such as in the Town of Pleasant Valley, may not be high enough for the cost-effective provision of municipal sewer services. Most unincorporated communities participating in the planning process expressed a desire to preserve prime farmlands by encouraging higher density residential development closer to incorporated areas.

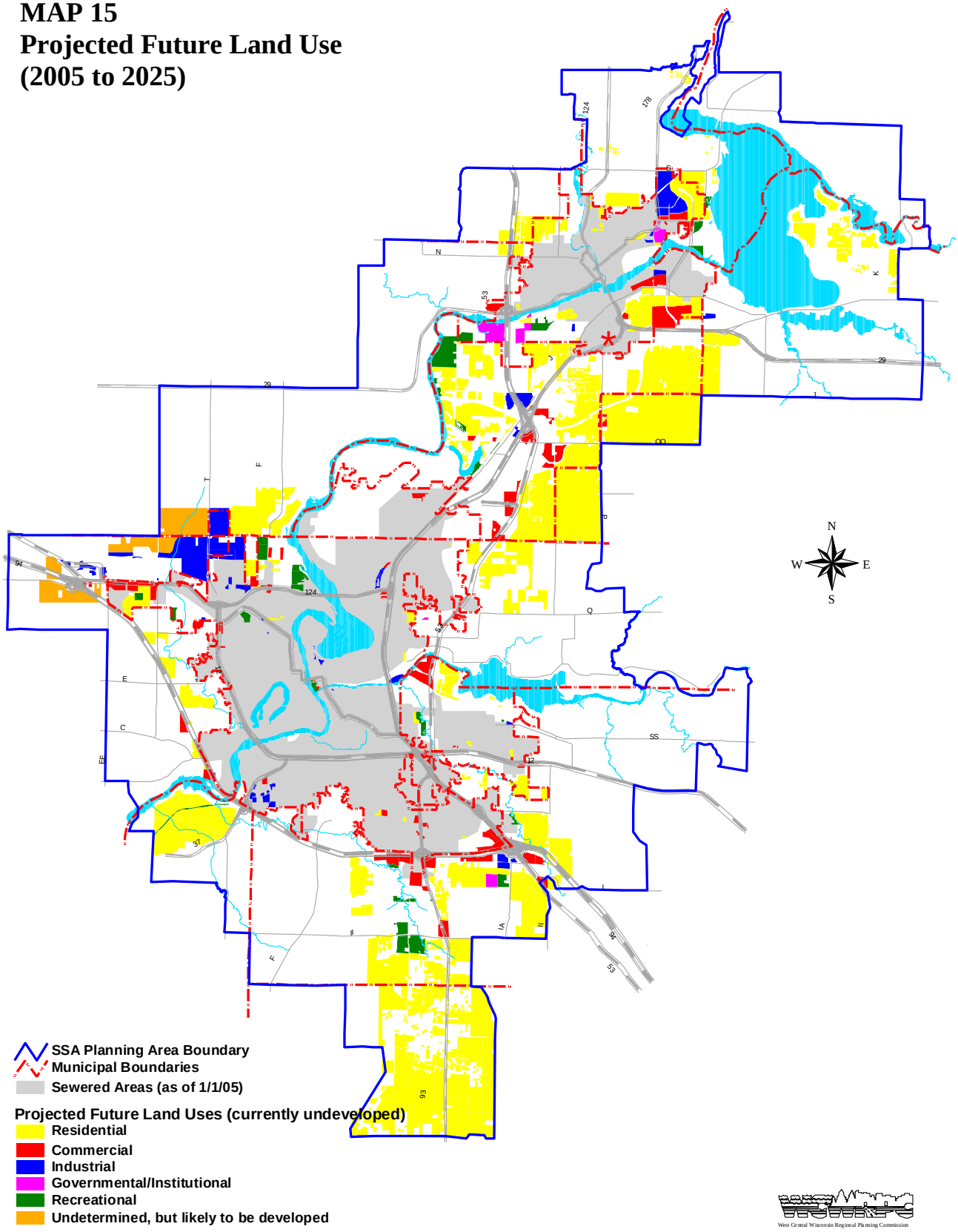
Topography hinders significant development in a large area east of State Highway 37 to County Highway "F". A preliminary proposal has been made for a significant residential development in the Town of Brunswick north of Highway 37 and south of the Chippewa River, though the development would be clustered, preserving large areas of open space and floodplain.

West of the City of Eau Claire and adjacent areas of the Town of Union have been experiencing substantial development pressure. Residential development east of Interstate 94 has been considerable during the past decade, with some newer development occurring recently or is underway to the west of I-94. The Town has expressed a goal of limiting future development of prime farmlands in this area, and some local landowners have considered other mechanisms, such as land trusts, to conserve farmlands or open space for the future. A mix of commercial, industrial, residential development has occurred near the I-94 and State Highway 124 interchange, with increasing commercial pressure expected in the future. Topography constrains the possible expansion of municipal sewer services to the southwest, in areas north of the Chippewa River. However, more directly to the west in Cameron Street/CTH "E" area, such topographical constraints are more limited.

Industrial development has predominated the area north of State Highway 124 on Eau Claire's northwest side. Expansion of these industrial uses, along with areas of commercial and residential development, are expected in the future in this area and the adjacent unincorporated areas of the Town of Wheaton. Generally, the topography of this area is slowly rolling, but is generally favorable to the possible expansion of sewer services in the future.

The recently completed four-lane U.S. Highway 29 project in the northern part of the study area is expected to increase development pressure northwest of the City of Eau Claire. Already, new commercial development is occurring adjacent to the new interchange of Highway 29 and CTH "T" in the Town of Wheaton.

MAP 15
Projected Future Land Use
(2005 to 2025)



3.7 DELINEATION OF THE 2025 SEWER SERVICE AREA BOUNDARY

Note: Chapter 3.7 and the SSA boundary was not updated or changed as part of the 2018 SSA Plan policy update.

The previous sections of Chapter 3 reviewed the following characteristics and trends for the planning area:

1) environmental constraints and environmentally sensitive areas,
2) local water quality resources and issues,
3) existing sewer systems and related urban development areas,
4) engineering constraints, and
5) projected growth data and growth areas.

Based on these characteristics and projected growth trends, and in consideration of local political circumstances and challenges, the Technical Advisory Committee proposed Map 16 at the end of this section as the new sewer service area boundary for 2025. Appendix A at the end of this report contains a legal-type description of the boundary. The boundary follows easily identifiable landmarks and section lines (or fractions thereof) for ease of use.

The Technical Advisory Committee looked at many alternatives during the planning process. In general, the new sewer service area boundary reflects the following primary changes from the sewer service boundary in place prior to this plan's completion:

- The boundary was expanded in portions of the Town of Eagle Point based on projected development trends, existing lakeshore development, planned road improvements, and cost-effectiveness to serve the area.
- The boundary was contracted to the east of the City of Chippewa Falls based on the low likelihood of expanding sewer services into the Town of Lafayette in the future due to significant amount of existing residential development on private sanitary sewer systems.
- The boundary was expanded in three areas of the Town of Washington based on development plans, available services, and topographical constraints.
- The boundary was expanded to include a portion of the Town of Brunswick along Highway 37 based on currently proposed development plans.
- The boundary was expanded to include areas of the Town of Union adjacent to the existing boundary based on development trends, existing services, and topographic constraints.
- The boundary was expanded in the Town of Wheaton based on development trends in this area, projected future development based on the new U.S. Highway 29, and the ability to provide sewer service to the area.

The new Chippewa Falls-Eau Claire Urban Sewer Service Area encompasses 65,264 acres of land, an increase of 7,058 acres when compared to the 58,206 acres delineated in the sewer service area boundary as of January 1, 2005, prior to completion of this plan.

In total, the new sewer service area boundary encompasses 26,786 acres of undeveloped land as of January 1, 2005. This undeveloped acreage is considerably larger than the projected demand determined in Chapter 3.6.4. However, after considerable discussion by the Technical Advisory Committee, a decision was made to continue to include most of the Village of Lake Hallie within the sewer service area boundary for water quality management and local planning purposes. Over 3,600 acres in the Village within the proposed sewer service area were undeveloped as of the beginning of 2005. At this time, the Village has no plans to pursue municipal wastewater services, so these acres may be cautiously excluded from the total available undeveloped lands at this time.

The amount of undeveloped land within the sewer services area accounts for a variety of other factors discussed during the planning process:

- The existing sewer service area boundary was maintained in many locations, which was strongly influenced by topographical barriers and other environmental constraints.
- The boundary accounts for existing infrastructure. In some cases, areas were included within the sewer service area due to their proximity to sewer trunk lines or pump stations, and the possible future need to expand such infrastructure through these areas to serve other developing properties.
- Recently completed or planned road projects influenced the boundary in some locations. The recently completed U.S. Highway 29 project influenced the boundary's determination in the Town of Wheaton. Similarly, in the Town of Eagle Point, the boundary considers the Seymour-Cray Boulevard improvement project scheduled to be completed within the next two years and a possible jurisdictional transfer with State Highway 178.
- Contemplated or planned development projects also influenced the boundary, adding to the amount of undeveloped acreage. For instance, a proposed residential project in the Town of Brunswick resulted in a considerable boundary change along State Highway 37. However, the current plans for the development call for the clustering of residential development, while retaining large areas of open space and floodplain within the sewer service area which would likely not be considered as available for future development.

PLEASE NOTE

The Sewer Service Area delineates those areas with a *potential* for future sewered development by 2025, excluding environmentally sensitive areas.

Inclusion of lands within the Sewer Service Area boundary does NOT determine or guarantee that these lands will be developed, sewered, or annexed by 2025.

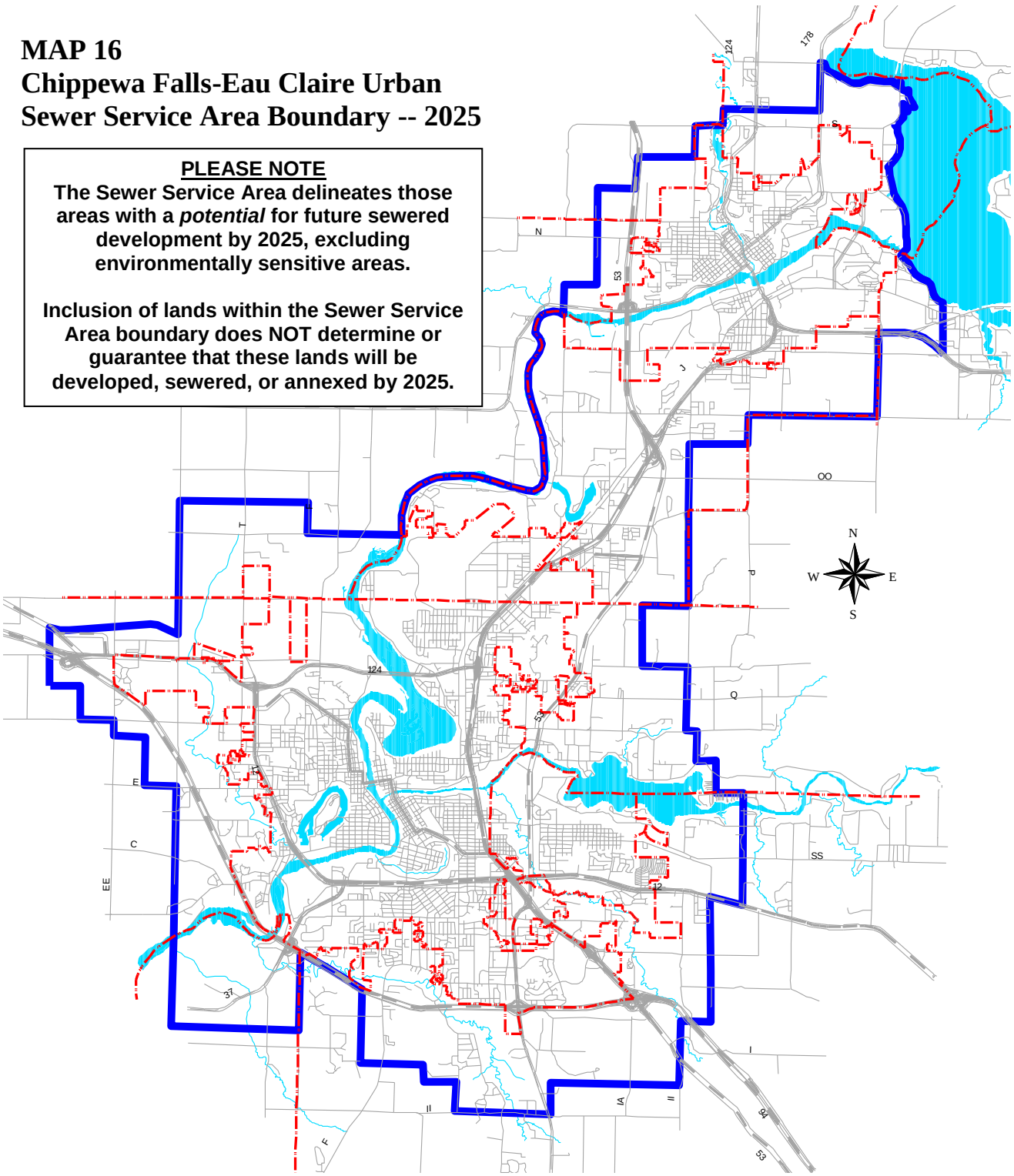
In short, there are many additional factors, beyond market factors, which influenced the determination of the updated sewer service area boundary. The sewer service boundary as presented attempts to accommodate these factors and reflects the uncertainty of where and when development will occur in the future in the urban area.

MAP 16
Chippewa Falls-Eau Claire Urban Sewer Service Area Boundary -- 2025

PLEASE NOTE

The Sewer Service Area delineates those areas with a *potential* for future sewered development by 2025, excluding environmentally sensitive areas.

Inclusion of lands within the Sewer Service Area boundary does NOT determine or guarantee that these lands will be developed, sewered, or annexed by 2025.



Sewer Service Area Boundary - 2025
Municipal Boundaries

West Central Wisconsin Regional Planning Commission

CHAPTER 4 - GOALS AND POLICIES

Note: Chapter 4 was significantly modified as part of the 2018 SSA Plan policy update.

Goal is a long-term end toward which programs or activities are ultimately directed, but might never be attained. It represents a general statement which outlines the most preferable situation which could possibly be achieved if all the objectives and policies were developed to their fullest degree.

Objective is a specific, measurable, intermediate end that is achievable and marks progress toward a goal.

Policies are the way in which programs and activities are conducted to achieve an identified objective and goal. They are courses of action selected to guide and determine present and future decisions.

The policies stated in this plan represent an effort to improve the quality of life in and around the Chippewa-Eau Claire Urban Area through the protection of surface water quality, while recognizing the diversity in character and resources of the area's communities. Those policies that direct action using the words "will" or "shall" are mandatory and regulatory aspects of the *Chippewa-Eau Claire Urban Sewer Service Plan*. In contrast, those policies that direct action using the word "should" are advisory and serve as guides, reflecting a common vision of the communities within the planning area. These communities are strongly encouraged to pursue these policies toward their preceding stated objectives and goals. Communities can affect these policies by implementing the regulatory tools they are authorized to use, such as, planning, zoning, subdivision controls, impact fees, and site plan review.

Goal 1:
Create an orderly and efficient pattern of community growth and development that will provide a safe, high quality living environment.

Objective 1.1 **Guide future growth within the urban sewer service area to occur in an efficient and orderly manner to promote contiguous, compact, and cost-efficient development.**

Policy 1.1.1 Community comprehensive plans should be updated every ten years to reflect changing economic and physical conditions.

Policy 1.1.2 Urban development should be encouraged to "infill" vacant developable lands within city boundaries, then be staged outward according to local plans.

Policy 1.1.3 Sewer extensions that reflect the contiguous and compact pattern of development should receive priority over extensions that will contribute to urban sprawl.

Policy 1.1.4 The supply of land dedicated to urban development should approximate current and future needs as determined from population, employment, and land use projections, and be based on a locally determined density standard.

Policy 1.1.5 Future commercial and industrial development should expand upon existing areas and be readily accessible to major transportation systems.

Policy 1.1.6 Future residential development should occur adjacent to existing development to contain costs of public service provisions, and reflect compact and orderly development.

Policy 1.1.7 Generally, the Cities of Altoona, Chippewa Falls, and Eau Claire will not extend sanitary sewer service beyond their corporate limits unless there is a negotiated agreement between the involved governmental entities.

Furthermore, the Sewer Service Area Plan (SSA Plan) and boundary should not be used to promote nor hinder annexation petitions or urban density development. The SSA Plan is in addition to and not superseded by any other municipal or intergovernmental plans, boundary agreements, development agreements, or similar plans and agreements.

Policy 1.1.8 Sewer extensions will not be made beyond the 20-year urban sewer service area, unless the plan is amended.

Policy 1.1.9 Proposed plan amendments shall be located within or have a common boundary with the current sewer service area and shall not create a void within the service area. Satellite sewer service areas extended to serve an existing development that has failing onsite sewage systems may be an exception to this criteria.

Objective 1.2 Guide future rural development to occur in an efficient, orderly, and compatible manner to maintain a rural character.

Policy 1.2.1 Rural development should take place adjacent to existing development to prevent further scattered development.

Policy 1.2.2 Future residential development should be directed to existing platted subdivisions.

Policy 1.2.3 Commercial and industrial development should be clustered around existing development to prevent scattered or strip development.

Policy 1.2.4 Development into areas identified as prime agricultural land will be discouraged consistent with to county farmland preservation plans.

Goal 2:
Protect water quality, natural resources, and sensitive natural areas from the encroachment of development.

Objective 2.1 **Areas environmentally unsuitable for development shall be delineated, tracked, and protected from intensive land disturbance.**

Policy 2.1.1 Local land use plans and ordinances should be used to guide development away from environmentally sensitive areas. Sufficient setbacks and erosion control measures should be taken, as determined by local zoning or land development control, and may be more stringent than the policies in this Sewer Service Area plan at the discretion of the local regulating jurisdiction.

Counties and local municipalities shall continue to consider, implement, and enforce the local shoreland, floodplain, erosion control, uniform dwelling code, stormwater, and steep slope regulations described in Chapter 3 and the policies of Chapter 4, as well as consider and abide by other applicable local, state, and federal rules pertaining to water quality and wetland protection. Failure to implement such regulations and policies may impact sewer extension approvals within those municipalities where improvements in enforcement are needed.

Policy 2.1.2 The environmentally sensitive areas (ESAs) delineated and defined in Chapter 3.4.1 shall be protected and not encroached upon by any intensive land disturbance, subject to the policies of this Chapter and the exceptions in Policy 2.1.3. Intensive land disturbances are defined in Chapter 3.4.2.

A 208 Review Conformance Letter or other approval may be issued without a Type IV SSA Amendment for an intensive land disturbance within Class B steep slopes if an engineering report or its equivalent has been approved by the local regulating jurisdiction and such encroachments are reported to WCWRPC for tracking purposes.

Except for Class B steep slopes, an encroachment of any other ESA defined in Chapter 3.4.1., including Class A steep slopes and its buffer areas, by an intensive land disturbance shall require a Type IV (ESA) Sewer Service Area Amendment prior to the permitting of the disturbance, subject to the other policies of this chapter.

208 Review Letter & Sewer Extensions

In this plan, a ***208 Review Letter*** refers to the water quality management review letter issued by WCWRPC or a local municipality regarding the consistency of a proposed **sanitary sewer extension or hook-up/PIMS** with this Sewer Service Area Plan. This conformance review is also referred to as a ***208 Review***.

A **sewer extension** is the installation or expansion of the public sewage system, including private interceptor sewers, but excluding plumbing in connection with buildings served, service laterals from buildings to a street main, and the maintenance or replacement of inadequate systems in areas previously served. Applicable **sewer hook-ups/PIMS** are discussed in Policy 3.1.6.

IF 208 REVIEW REQUIRED. If encroachment of an ESA by an intensive land disturbance is expected and a 208 Review Letter is required from WCWRPC (or the municipality for sewer hook-ups/PIMS) prior to the provision of sewer service, a Type IV (ESA) Sewer Service Area Plan Amendment will first be required prior to the completion of the 208 Review, with the previously noted exception for Class B steep slopes.

A 208 Review Letter may be issued with conditions or restrictions if there is insufficient information available to verify a possible ESA encroachment OR if an ESA or other environmental constraint exists within or near the project area. In such cases, including for phased development projects, the conditions shall include that any existing ESAs shall be unbuildable unless a Type IV SSA Amendment is approved. Local regulating jurisdictions are strongly encouraged to include a similar condition as part of their plat, survey map, and site plan review for projects when a sewer extension is required.

IF NO 208 REVIEW REQUIRED. The local regulating county or municipality is responsible for reviewing, discouraging, minimizing, and mitigating any steep slope or other ESA encroachment and related impacts, regardless of the slope's or ESA's proximity to any other ESAs or if an intensive land disturbance is part of sewered or unsewered development. The county or municipality may request a Type IV SSA Amendment if needed and reasonable, and must report any ESA encroachments within the sewer service area to WCWRPC for tracking purposes. Based on the characteristics of the ESA or nature of the proposed disturbance, the local regulating jurisdiction or WDNR have the discretion to require a Type IV SSA Amendment at any time prior to permitting the disturbance.

Policy 2.1.3 **EXCEPTIONS TO TYPE IV (ESA) SSA AMENDMENTS.** Only utility and public street crossings shall be permitted to encroach upon surface waters, floodplains, and wetlands without a Type IV SSA Amendment, except passive public recreational facilities may be allowed in floodplains if flood storage is not reduced. For steep slope ESAs, an encroachment by the following uses and activities do not require a Type IV SSA Amendment:

- utilities that are routed or located to minimize or avoid impacts on an ESA or extend across an ESA to serve sewered development not located within the ESA or ESA setback;
- passive public recreational facilities such as trails and picnic areas, excluding buildings, parking areas, and other significant hardscape;
- stormwater management improvements, when demonstrated that such facilities cannot fit or function elsewhere are part of the development;
- streets, driveways, and private access roads, when demonstrated that such facilities cannot fit or function elsewhere are part of the development;
- walk-out basements and engineered, artificial steep slopes, including the re-engineering and re-grading of stabilized artificial slopes and previously approved grading plans, if an engineering report is submitted and approved by the local regulating entity as discussed in Chapters 3.4.1 and 3.4.3.
- open decks and/or stairways on post and pier foundations, as well as paved patios extending up to 15 feet from the foundation of the principal structure, may

encroach upon slopes 20% or greater or their buffer areas with approval of the local regulating authority and subject to any additional local regulations, though buffers or setbacks for such disturbances should be encouraged if possible;

- limited clearing, grubbing, grading, filling, planting and landscaping required for erosion control, stormwater management, or other health, safety, or natural resource protection purposes; and,
- existing development on private septic systems, if deemed environmentally beneficial or will remedy an existing environmental problem (e.g., failing on-site systems).

A Type IV (ESA) Sewer Service Area Amendment shall not be required for the above specified uses, activities, and crossings if all other required permits and approvals are received and mitigation plans have been approved by regulating entities for any potential adverse water quality-related impacts. However, any such disturbance of an ESA shall be noted in the 208 Review Letter and in the subject sewer/site plans and specifications so that an environmental review of the proposed action can be conducted, if necessary, during WDNR review of the proposed project.

Policy 2.1.4 A request for a Type IV (ESA) Sewer Service Area Amendment for which less than one (1) acre of ESA is affected shall be considered a minor amendment. In such cases, the amendment may be approved by WCWRPC following consultation with and concurrence by local WDNR staff. WCWRPC and local WDNR staff have the discretion to require the full amendment review and approval process as described in Chapter 6.4.

Policy 2.1.5 A Type IV (ESA) Sewer Service Area Amendment should only be approved in unusual circumstances where no reasonable alternative exists and/or when the encroachment is necessary to mitigate or remedy an existing environmental problem as determined by the municipality's Plan Commission.

Policy 2.1.6 Local regulating entities shall continue to protect shorelands as sensitive areas important to water quality to the extent allowable by State law, but shorelands are not included as an ESA nor are separately regulated under this Sewer Service Area Plan. However, some ESAs (e.g., steep slopes, floodplains, endangered natural communities) may overlap with shoreland areas and such areas are covered under this Plan.

Policy 2.1.7 Regardless of location, proximity to other ESAs, or whether a sewer extension or hook-up is required, the local regulating entity (county and/or municipality) shall require the following for proposed intensive land disturbances within areas of steep slope:

i. Best management practices shall be required for erosion and stormwater control for all steep slopes of 12% or greater.

Summary of Steep Slope ESA Definitions

- 20+% slope and min. of 2,000 square ft. is a steep slope ESA.
- Class A – The steep slope and/or its 20 ft. top & bottom buffer overlaps a surface water, 100-year floodplain, or wetland ESA
- Class B – Steep Slope ESA's that are not Class A slopes.

See Chapter 3.4.1. for full definitions.

ii. Intensive land disturbances shall avoid encroachment upon any steep slopes of 20% or greater to the extent reasonably possible.

iii. If no reasonable alternative exists and an encroachment upon a steep slope of 20% or greater is needed, an engineering report, stabilization plan, or comparable study prepared by a Wisconsin-licensed engineer shall be required and approved by the local regulating entity to demonstrate suitability for the proposed intensive land disturbance as described in Chapter 3.4.3.

iv. Slope shall be measured and delineated as described in Chapter 3.4.1, including the minimize size, the exclusion of walk-out basements and engineered artificial slopes, and determining if a steep slope is Class A or Class B when evaluating encroachment. The local regulating jurisdiction may be more restrictive in its definition and protection of steep slopes.

Policy 2.1.8 Sewer extensions into physical or cultural resource areas not included as an environmentally sensitive area in this plan shall conform to applicable local, state, and federal rules and regulations.

Policy 2.1.9 Rural development should be discouraged where soils are unsuitable for conventional on-site disposal systems.

Policy 2.1.10 Development in municipal wellhead protection areas should be connected to a municipal wastewater system or connected to a private system which is constructed, operated, and maintained by a named, responsible party.

Policy 2.1.11 Prior to a 208 Review or consideration of a plan amendment, an applicant may be required to perform studies and surveys to accurately delineate an ESA at their expense. This may include the performance of site-specific surveys and certified wetland delineation.

Policy 2.1.12 When a subdivision plat or certified survey map is created, replatted, further subdivided, or otherwise changed, the ESA definitions and SSA Plan policies that are in effect at the time of the action or change shall apply. A change in the ESA definitions within this plan does not change any area designated as unbuildable on a previously approved plat or CSM. No ESA may be modified, removed, graded, filled, or otherwise altered to avoid these requirements and policies. If an ESA encroachment by an intensive land disturbance occurs that did not receive required approval(s) in accordance with the policies and procedures of this plan the following shall apply:

i. The encroachment area shall be remain an ESA and be unbuildable until properly approved and/or a Type IV amendment is granted.

ii. On a case-by-case basis, the landowner may be subject to remediation or restoration costs or other penalties at the discretion of WDNR.

Policy 2.1.13 Counties and communities shall inform WCWRPC of any changes regarding ESA location, encroachment, and size/acreage changes for tracking purposes, including updated ESA mapping data.

Policy 2.1.14 The ESAs mapped in this plan are an approximate representation of known conditions at the time of map preparation. Not all ESAs are mapped, such as endangered species and smaller wetlands. Such physical features may change over time from natural or human causes and new ESAs may be formed or created. Therefore, it is extremely important that, prior to any land-disturbing activity, the presence and location of ESAs be verified to the extent reasonably possible. Such verified information shall supersede and replace any previously mapped information set forth in this plan.

At the request of WDNR, WCWRPC, a county, or municipality, the ESA boundaries and acreages as mapped in this plan may be corrected by WCWRPC to reflect more accurate information. WCWRPC may request technical support or approval of WDNR, municipalities, and others when considering such requests. Such corrections will be tracked by WCWRPC, but shall not require a Type IV Sewer Service Area Plan Amendment unless determined that an amendment is needed by WCWRPC, the MPO, or WDNR. Such a correction does not constitute a change of any deed restriction or any conditions of a CSM, subdivision plat, or land use permit without the consent and approval of the local regulating jurisdiction.

Policy 2.1.15 Local regulating entities and WCWRPC have a responsibility to report to WDNR any intensive land disturbances within an ESA that occur in a manner inconsistent with the policies and procedures of this Sewer Service Area Plan.

Goal 3:
Provide and maintain a full range of community facilities and services which are efficient, economical, and environmentally sound.

Objective 3.1 Provide municipal sanitary sewer systems that will effectively and economically serve urban development.

Policy 3.1.1 Sanitary sewer extensions should be concurrent with the timing or provision of other public facilities and services.

Policy 3.1.2 Sewer extensions should occur contiguous to existing systems, according to local staging plans, where facilities can accommodate them.

Policy 3.1.3 Sanitary sewer systems should be provided for existing development whenever they are the most cost-effective alternative for addressing failing on-site disposal systems.

Policy 3.1.4 Sanitary sewer system construction and sizing should be staged to encourage lower capital investment and flexibility.

Policy 3.1.5 Existing capacity in sanitary sewer systems should be used before making substantial expansions or extensions.

Policy 3.1.6 The municipality providing sewer services will serve as the designated water quality management agency for the review of proposed private sewer hookups, laterals, sanitary private interceptor main sewers (PIMS), or building sewer for new

construction including determining applicability under SPS 382.20(4), reviewing the proposal for conformance with this Sewer Service Area Plan, and issuing a 208 Review Letter if required as discussed in Chapter 6.2. This review authority does not extend to the review and approval of plan amendments.

Policy 3.1.7 The number of waste treatment plants should generally be minimized to avoid duplication of facilities, institute economies of scale, and lessen environmental degradation.

Policy 3.1.8 When a subdivision plat, condominium plat, certified survey map, or sewered development is proposed, the local regulating authority shall review the proposal for consistency with this Sewer Service Area Plan, if it can be reasonably expected that the proposed development would be sewered in the future. In such a case, regardless of the timing of the sewer extension, the policies in this chapter regarding plan amendments shall apply and, if required, a plan amendment shall be obtained prior to any intensive land disturbance. The granting of a 208 Review Letter or plan amendment is not guaranteed, even if an environmentally sensitive area had previously been disturbed or encroached upon.

Policy 3.1.9 A request for a 208 Review Letter can be initiated by a landowner, authorized developer, land surveyor, etc., or the municipality in which the sewer extension would be located. A request for a plan amendment can only be initiated by WDNR, the Chippewa Falls-Eau Claire MPO Advisory Council, or a municipality within the sewer service area.

Policy 3.1.10 The issuance of a 208 Review Letter or approval of a plan amendment does not constitute approval or compliance with any other local, state, or federal permits or regulations that may be required for sewer construction or associated land development activities. 208 Review Letters and plan amendments may include conditions that are consistent with the goals, objectives, and policies of this chapter.

CHAPTER 5 - HOLDING TANK SERVICE AREAS

Note: Chapter 5 was updated as part of the 2018 SSA Plan policy update.

In some cases, municipalities are faced with high-cost alternatives to improving their wastewater treatment and disposal situations. With the number of affordable alternatives diminishing, holding tanks may be the only alternative. As of October 1, 1987, a revised Chapter NR113 of the Wisconsin Administrative Code took effect to consistently handle this alternative. At the same time NR113 was being changed, NR205 was being revised to clarify Publicly Owned Treatment Works (POTW) obligations to accept septage[8]. The provisions of this chapter can only relate to programs and policy as they are currently enforced. Three terms should be defined here to aid in understanding the requirements of NR113:

1. "**Publicly owned treatment works (POTW) planning area**" means the area delineated in a map form in which the planning for a specific POTW is being or has been prepared to cover. In other words, the area that a POTW is responsible to consider in planning a cost-effective regional wastewater treatment alternative. The planning area described in Chapter 1.5 should be used to determine the POTW planning area, unless the POTW has adopted its own POTW planning area map.

2. "**Publicly owned treatment works (POTW) sewer service area**" means the area presently served and anticipated to be served by a sewerage collection system as approved under ch. NR121 or as a facility planning effort done under ch. NR110, if no NR121 designation has been made.

3. "**Publicly owned treatment works (POTW) holding tank service area**" means the area outside the POTW's sewer service area, but inside or equal to the POTW's planning area where a contract has been developed for holding tank wastewater to be treated at the POTW.

The six (6) general requirements applicable to the Chippewa Falls-Eau Claire Sewer Service Area are:

1. Holding tanks are a solution or repair of last resort and, when required, are most frequently installed in isolated rural areas without sewer service in order to replace failed private onsite sewage disposal systems that cannot be repaired in any other fashion.

2. If a holding tank or septic tank is located within the sewer service area boundary, the disposal of septage from that system must be at its corresponding POTW, as required by NR113 and NR205.

3. Within a POTW planning area, any new holding tanks for new development, outside of the sewer service area and inside the planning area that receive more than 3,000 gallons of wastewater per day require that the owner of the holding tank system and the POTW reach an

[8] The current NR113 was created effective January 1, 1997 with subsequent corrections. The current NR205 of the Wisconsin Administrative Code was created effective October 1, 1984.

agreement and seek a water quality management plan amendment by WCWRPC with approval by WDNR. The amendment is needed to put the area tributary to the holding tank within a holding tank service area of the POTW. The new holding tank cannot be approved until the amendment has been completed or until WDNR has received adequate assurance that it will be completed. This type of amendment does not require an acreage swap. WCWRPC will evaluate the amendment request and may recommend the holding tank owner consider other POTWs because of cost effectiveness or environmental concerns.

4. Holding tanks to replace existing failed onsite systems, which will receive more than 3,000 gallons of wastewater per day, should also be included in the designated POTW holding tank service area. However, if the owner of the holding tank can satisfactorily demonstrate that he is unable to become part of such a service area, the holding tank may be approved provided the owner has a multi-year contract with a POTW, of sufficient capacity, to provide treatment for all wastewater tributary to the holding tank. Further, the owner must provide satisfactory assurance all such wastewater will only be disposed of at a POTW.

5. Small holding tank (generating under 3,000 gallons per day) and septic tank wastewater must be taken to a POTW if:
   a. The septic tank is located in the POTW's sewer service area.
   b. The holding tank is located in the POTW's sewer service or holding tank service areas[9].
   c. The holding tank is located inside the POTW's planning area, but outside the POTW's sewer service and holding tank service area(s), if the POTW will accept the wastewater and the cost to the disposer/hauler is less than or equal to the amounts calculated pursuant to NR113.07(1)(f).

   The above requirements (in 4., including 4a., 4b., and 4c.) do not apply if the wastewater from small holding tanks and septic tank systems will be land spread in accordance with a WDNR or WPDES permit.

6. POTW's are required to accept, treat, and dispose of septage under certain circumstances as directed by 281.49 State Statutes and ch. NR205.

A holding tank service area must be delineated for any holding tank outside the sewer service area, but within the planning area, generating 3,000 gallons or more of septage a day. The service area for a POTW may include both an urban sewer service area and a holding tank area. The POTW should have the capacity to accept wastewater from both areas. The difference between the sewer and holding tank service areas is the holding tank service area including areas not intended to be sewered during the design life of the POTW. Also, holding tanks may be located in either service area.

[9] The POTW acceptance requirement, for holding tank wastewater within the sewer service and holding tank service area and septic tank wastewater within the sewer service area is in NR205.07(2)(i).

No holding tank service area has been delineated in this plan, because there were no identified contracts to dispose of large holding tank wastewater into either the Chippewa Falls or Eau Claire treatment plants. **In addition, to the knowledge of the City treatment plant and public works staff, there were no holding tanks in the planning area, and outside the sewer service area, required to contract with the POTW.**

A holding tank service area amendment is required when a holding tank service area is added within the Chippewa Falls-Eau Claire Sewer Service Area. An amendment request for a holding tank service area for new development cannot be approved if an intensive land disturbance encroaches on an environmentally sensitive area as defined in Chapter 3; those applicable policies and exemptions noted in Chapter 4 shall also apply. The amendment may be allowed if it is determined that the actual construction of all buildings and the holding tank are not on those portions of the holding tank service area within an environmentally sensitive area, and there are sufficient setbacks and erosion control measures taken, as defined by local zoning and land development. The procedures for amendments are outlined in Chapter 6.4 of this plan.

CHAPTER 6 – PLAN IMPLEMENTATION & AMENDMENT

Note: Chapter 6 was significantly modified as part of the 2018 SSA Plan policy update.

The *Chippewa Falls-Eau Claire Urban Sewer Service Area Plan* is the primary tool to be used in the review of proposals for sewer extensions and hookups (208 Reviews) and plan amendments. Such reviews and amendments are often triggered by a development proposal.

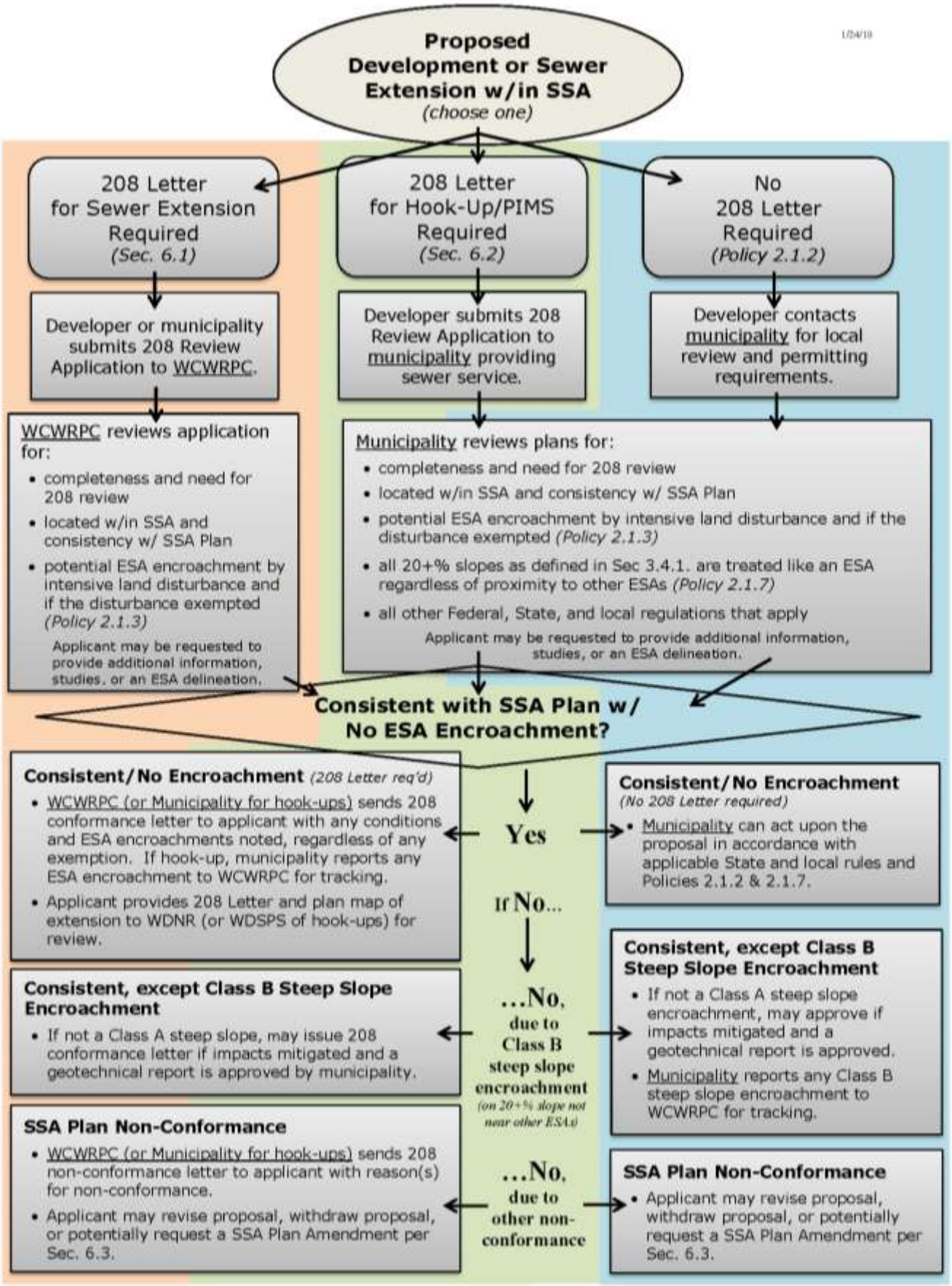
Developers and local officials must be aware of the policies and environmentally sensitive area criteria detailed within this plan when proposing or considering new development. Any approvals or conformance letters issued under this SSA Plan do not constitute approval of any other local, state, or federal permit that may be required for sewered construction or associated land development activities.

The Chippewa-Eau Claire Metropolitan Planning Organization (MPO), West Central Wisconsin Regional Planning Commission (WCWRPC), Wisconsin Department of Natural Resources (WDNR), and all municipalities represented in this planning effort recognize the importance of residential, commercial, and industrial development in the urban area. Likewise, the importance of preserving water quality and the environment is also recognized. The implementation of this plan will be accomplished through site specific review to ensure sensible decisions are made to protect our natural resources, but, also, to not unduly prevent development from occurring. In early 2018, WCWRPC and local municipalities will begin tracking SSA implementation actions using a tracking form at the WCWRPC website. Submittals to WDNR for plan amendments, updates, and similar SSA Plan actions will be made via the WDNR SWIMS system.

6.1 PROCEDURES FOR 208 REVIEW FOR SEWER EXTENSIONS

WCWRPC is a "Designated 208 Water Quality Planning Agency" by WDNR and is required to review proposed sanitary sewer extensions for conformance with the Chippewa Falls-Eau Claire Sewer Service Area Plan (SSA Plan) when a Section 208 Review Letter is required. The local review procedures for sewer extensions are outlined below and are also illustrated by the first column in the process chart on the following page. NR 110 should be reviewed by the applicant for detailed WDNR plan approval requirements.

1. Application to WCWRPC. 208 Review applications for sewer extensions are typically submitted to WCWRPC by the landowner or landowner's representative (e.g., land engineering firm), but may be submitted by a municipality. Applications must include:
    - A cover letter requesting the Section 208 conformance review with contact information, project name, and acreage to be served by the sewer extension or hook-up. The letter should also describe any potential or proposed disturbance of an environmentally sensitive area (ESA) if known.
    - A project location map and a map showing the geographic extent of the project area served by the sewer extension.


1/24/18
Proposed Development or Sewer Extension w/in SSA
(choose one)
208 Letter for Sewer Extension Required (Sec. 6.1)
208 Letter for Hook-Up/PIMS Required (Sec. 6.2)
No 208 Letter Required (Policy 2.1.2)
Developer or municipality submits 208 Review Application to WCWRPC.
Developer submits 208 Review Application to municipality providing sewer service.
Developer contacts municipality for local review and permitting requirements.
WCWRPC reviews application for:
• completeness and need for 208 review
• located w/in SSA and consistency w/ SSA Plan
• potential ESA encroachment by intensive land disturbance and if the disturbance exempted (Policy 2.1.3)
Applicant may be requested to provide additional information, studies, or an ESA delineation.
Municipality reviews plans for:
• completeness and need for 208 review
• located w/in SSA and consistency w/ SSA Plan
• potential ESA encroachment by intensive land disturbance and if the disturbance exempted (Policy 2.1.3)
• all 20+% slopes as defined in Sec 3.4.1. are treated like an ESA regardless of proximity to other ESAs (Policy 2.1.7)
• all other Federal, State, and local regulations that apply
Applicant may be requested to provide additional information, studies, or an ESA delineation.
Consistent with SSA Plan w/ No ESA Encroachment?
Consistent/No Encroachment (208 Letter req'd)
• WCWRPC (or Municipality for hook-ups) sends 208 conformance letter to applicant with any conditions and ESA encroachments noted, regardless of any exemption. If hook-up, municipality reports any ESA encroachment to WCWRPC for tracking.
• Applicant provides 208 Letter and plan map of extension to WDNR (or WDSPS of hook-ups) for review.
Yes
Consistent/No Encroachment
(No 208 Letter required)
• Municipality can act upon the proposal in accordance with applicable State and local rules and Policies 2.1.2 & 2.1.7.
If No...
Consistent, except Class B Steep Slope Encroachment
• If not a Class A steep slope, may issue 208 conformance letter if impacts mitigated and a geotechnical report is approved by municipality.
...No, due to Class B steep slope encroachment
(on 20+% slope not near other ESAs)
Consistent, except Class B Steep Slope Encroachment
• If not a Class A steep slope encroachment, may approve if impacts mitigated and a geotechnical report is approved.
• Municipality reports any Class B steep slope encroachment to WCWRPC for tracking.
SSA Plan Non-Conformance
• WCWRPC (or Municipality for hook-ups) sends 208 non-conformance letter to applicant with reason(s) for non-conformance.
• Applicant may revise proposal, withdraw proposal, or potentially request a SSA Plan Amendment per Sec. 6.3.
...No, due to other non-conformance
SSA Plan Non-Conformance
• Applicant may revise proposal, withdraw proposal, or potentially request a SSA Plan Amendment per Sec. 6.3.

- 1 set of construction/engineering plans showing utility connections and locations, including the planned footprint of any buildings or other intensive land disturbance. Best management practices are required for any encroachment upon a steep slope of 12+% and should be noted in the cover letter or included in the engineering plans.
- If available, additional maps and/or plans delineating and estimating acreages for any known environmentally sensitive areas (i.e., surface waters, 100-year floodplain boundaries, wetlands, and steep slopes of 20+%) within the project area as defined in the SSA Plan. Certain land disturbances, such as engineered walk-out basements, may be exempt from certain SSA Plan policies and review requirements.
- WCWRPC may require an application fee for 208 reviews at their discretion.

Submittal of a 208 Review application to WCWRPC will typically occur after the local municipality has approved the certified survey map, subdivision plat, and/or development agreement. When steep slopes exist within the project area, any required grading plans, engineering reports, or other such studies should also first be approved by the local municipality and submitted with or referenced in the 208 Review applications.

For proposed project areas containing environmentally sensitive areas that may potentially be encroached upon, it is advisable that the applicant contact WCWRPC relatively early in the development process, prior to detailed plans, for an initial consultation on any concerns related to SSA Plan conformance. Applications may be delivered to WCWRPC by email, but WCWRPC is not responsible for delays should e-mail correspondence not be delivered, accidently screened as spam, etc.; applicants are encouraged to verify receipt of application by WCWRPC.

2. WCWRPC Review. WCWRPC staff will review all applications for:

- completeness and need for the 208 Review by WCWRPC;
- confirmation that the project is located within the sewer service area boundary;
- potential encroachment of an environmentally sensitive area by an intensive land disturbance; and,
- consistency and conformance with the goals, objectives, and policies of this Sewer Service Area Plan.

WCWRPC may request or require additional information as part of the conformance review, especially when a potential encroachment of an environmentally sensitive area (ESA) exists. If there is any doubt as to whether an intensive land disturbance associated with the sewer extension project may encroach upon an environmentally sensitive area as described in the policies in Chapter 4, WCWRPC will consult with and request site specific information from the local municipality, WDNR, and/or developer. For example, WCWRPC will contact WDNR regarding a possible encroachment upon

wetland-indicator soil to determine whether a wetland delineation should be required by the applicant prior to issuing a 208 conformance letter.
This information, along with the policies from this plan, will be used to make a recommendation on the application. Under circumstances were WCWRPC is unable to make a determination of SSA Plan conformance, WCWRPC may request a special review and/or determination by the MPO or WDNR.

3. WCWRPC Issues 208 Letter. The 208 Review Letter is an advisory recommendation to WDNR regarding a proposed sewer extension's conformance with the SSA Plan. WCWRPC will issue a sewer service area conformance or non-conformance letter (208 Review Letter) to the applicant within 15 working days of receipt of the plan map and all required information and ESA delineations necessary to perform the review, unless WCWRPC is otherwise unable to make a conformance determination.

   - WCWRPC may issue a 208 conformance letter with conditions as discussed in Chapter 4. WCWRPC may issue a 208 conformance letter for an encroachment upon a Class B steep slope if no reasonable alternative exists and an engineering report and sufficient documentation mitigating any erosion or surface water quality impacts has been approved by the municipality. **A 208 conformance letter must also note any encroachment upon an environmentally sensitive area regardless of the project's location or type of encroachment.**
   - A 208 non-conformance letter may be issued by WCWRPC if insufficient information was provided for the review, a plan amendment is required, or the application otherwise does not conform with the SSA Plan. Typically, WCWRPC will reach out to the applicant or applicant's representative prior to issuing a non-conformance letter to ensure to discuss a potential non-conformance.
   - WCWRPC may deliver the 208 Review Letter by email, but the applicant may request the letter by mail if preferred.
   - It is the responsibility of the applicant to provide the sewer service area conformance letter and other materials required by NR110 to WDNR for final review and approval of the sewer extension.

4. If a 208 Non-Conformance Letter is Received by the Applicant. If a proposal is inconsistent with the SSA Plan, a 208 non-conformance letter for the proposed sewer extension is issued by WCWRPC to the applicant. The applicant has the following primary options:

   - The applicant may contact WCWRPC to determine if there an incorrect interpretation or misunderstanding had taken plan.
   - The applicant may revise or withdraw their application. If an application is amended or request altered, the applicant must notify the WCWRPC that it wishes to have the proposed extension re-evaluated.
   - The applicant may request a SSA Plan amendment per Chapter 6.4.

- Since the 208 letter is advisory, the applicant may correspond with WDNR as part of the WDNR's review to make their case why they believe the project should be approved without changes.
- The applicant may appeal a WDNR decision under this SSA Plan as described in Chapter 6.4.

It must be also noted that inadequate enforcement of the Uniform Dwelling Code or local erosion controls may also result in Wisconsin Department of Natural Resources denial of sewer extension requests into areas of 12% to 20% slopes within the municipality. This monitoring process and related enforcement policies are discussed previously in Chapter 3.4.3 of this plan.

6.2 PROCEDURES FOR SEWER HOOKUP REVIEW

In contrast to the review of sewer extensions and plan amendments, the municipality providing sewer services will serve as the water quality management agency for the review of proposed private sewer hookups (laterals) to confirm conformance with the SSA Plan. Another difference is that the Wisconsin Department of Safety and Professional Services (WisDSPS) is the state regulating entity for sewer hook-ups and not WDNR.

Most sewer connections, laterals, and hook-ups, do not require a Section 208 hook-up review. SPS 82.20(4) requires a Water Quality Management (WQM) letter if the project requires plumbing plan review AND conveys sewage to a municipal sewer in the sewer service area[10] AND if any of the following are true:

1) The project creates a new private interceptor main sewer (PIMS) or extends an existing PIMS.

OR

2) The project discharges more than 54 drainage fixture units to the proposed building sewer AND the new building sewer will be installed to connect to a PIMS or the proposed building sewer will connect to a point outside the lot line or private easement to a municipal sewer.

The municipality providing sewer services will review submissions for conformance with the SSA Plan, specifically ensuring the proposed hookup does not infringe on an environmentally sensitive area and is within the sewer service area. Specific requirements are outlined in SPS82 and NR110, which should be reviewed by the applicant for detailed approval requirements.

The process for 208 Review applications for sewer hook-up is the middle column in the previous process chart and similar or identical to the procedures for sewer extensions reviews in Chapter 6.1, unless otherwise noted below.

1. Application to Municipality. The application requirements and timing of a sewer hook-up review are determined by the municipality, but are generally the same as the

[10] Tables SPS 82.20-1 and SPS 82.20-2 list the projects which require general plumbing plan review.

requirements in 6.1. The municipality may require an application fee at their discretion. The 208 application and review for hook-ups may be part of a CSM, subdivision plat, or other land use permitting application and approval process.

2. Municipality Review. The municipality reviews the application for conformance with the SSA Plan, including potential ESA encroachment by intensive land disturbances. The municipality may request assistance from WCWRPC or WDNR in determining conformance if needed. All other Federal, State, and local regulations also apply and the municipality may have additional standards and requirements that are more strict than those within the SSA Plan to the extent allowed for by law.

3. Municipality Issues 208 Letter. The 208 Review Letter is an advisory recommendation to WisDSPS regarding a proposed sewer hook-up's (or PIMS's) conformance with the SSA Plan. If the requested sewer hookup is in conformance with the SSA Plan, a Section 280 conformance letter will be sent to the applicant. The sewer service area conformance letter and other materials required by WisDSPS must then be submitted by the applicant to WisDSPS for approval.

   All 20+% slopes as defined in Chapter 3.4.1 of the SSA Plan are treated like an ESA regardless of proximity to other ESAs. A municipality may issue a 208 conformance letter for an encroachment upon a Class B steep slope if no reasonable alternative exists and an engineering report and sufficient documentation mitigating any erosion or surface water quality impacts has been approved by the municipality. **An encroachment by an intensive land disturbance upon a Class A steep slope within the sewer service area cannot occur unless a Type IV SSA Plan amendment is first approved.**

   Submittal to and approval by WisDSPS of a 208 Letter is not required for hookups within the City of Eau Claire, since the City is an agent municipality that reviews and approves those plumbing installations within its municipal limits. However, the City of Eau Claire must still meet the requirements of SPS 82.20(4) and have an appropriately filed 208 Letter.

   A 208 conformance letter issued by a municipality must also note any encroachment upon an environmentally sensitive area regardless of the project's location or type of encroachment. The municipality must report the issuance of a 208 Letter, including any ESA encroachment, to WCWRPC for tracking purposes.

4. If a 208 Non-Conformance Letter is Received by the Applicant. If a proposal is inconsistent with the SSA Plan, a 208 non-conformance letter for the proposed sewer hook-up is issued by the municipality to the applicant. The applicant has options similar to those identified in Chapter 6.1 (e.g., amending their application, requesting a plan amendment), in addition to appealing the decision under any local municipal rules and contacting WisDSPS instead of WDNR.

6.3 SSA PLAN CONFORMANCE IF NO 208 REVIEW

The municipalities, as local regulating jurisdictions, have the responsibility to review for SSA Plan conformance when no 208 Review for a sewer extension or hook-up is required. This process is reflected in the right column of the previous process chart.

When a municipality receives a proposal for any proposed intensive land disturbance or sanitary sewer connections within the sewer service area, the municipality will review the proposal for:

- confirmation that the project is located within the sewer service area boundary if sewer services are to be provided;
- potential encroachment of an environmentally sensitive area by an intensive land disturbance; and,
- consistency and conformance with the goals, objectives, and policies of this Sewer Service Area Plan, including the need for a 208 Review letter or SSA Plan amendment.

Within the sewer service area, all 20+% slopes as defined in Chapter 3.4.1 of the SSA Plan shall be treated like an ESA regardless of proximity to other ESAs. A municipality may permit an encroachment by an intensive land disturbance within a Class B steep slope if no reasonable alternative exists and an engineering report and sufficient documentation mitigating any erosion or surface water quality impacts has been approved by the municipality. **An encroachment by an intensive land disturbance upon a Class A steep slope within the sewer service area cannot occur unless a Type IV SSA Plan amendment is first approved.**

A development proposal that does not conform with the SSA Plan should be denied due to non-conformance. In such a case, the applicant has options similar to those identified in Chapter 6.1 (e.g., amending their application, requesting a plan amendment), in addition to appealing the decision under any local municipal rules or appealing to WDNR as referenced in Chapter 6.5.

Any and all encroachments upon an ESA or loss of ESA acreage, regardless of size, type, exception, or proximity to other ESAs, must be reported by the municipality to WCWRPC for tracking purposes.

6.4 SEWER SERVICE AREA AMENDMENTS

With the possibility of changes in development patterns, a mechanism for reviewing and revising the sewer service area boundary is essential. The amendment process will allow the communities to alter the service area by using additional technical data, new community needs and trends, and possible facility changes. All amendment records and updated boundary maps will be maintained by the West Central Wisconsin Regional Planning Commission.

Types of Amendments.
Four types of amendments may be made to the Sewer Service Area Boundary:

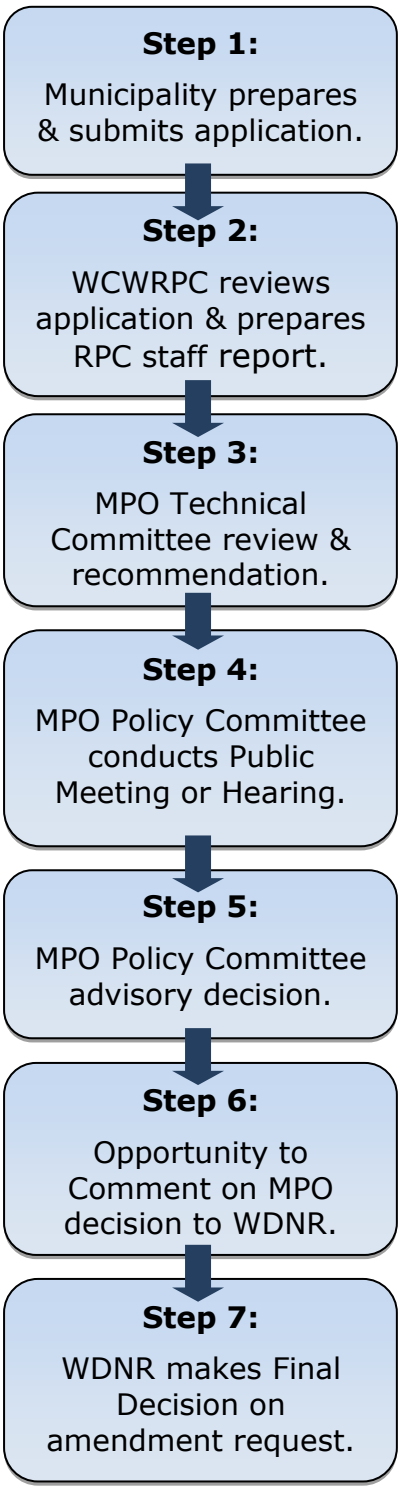
Type I amendments requests for boundary changes without the total acreage of the service area changing. (Land Swap Amendments)

Type II amendments requests to alter the boundary and the acreage of the service area. (Land Addition/Subtraction Amendments)

Type III amendments requests to add holding tank service areas to the plan. (Holding Tank Amendments)

Type IV amendments requests for development of an environmentally sensitive area (ESA Amendments).

General Amendment Process
As reflected in the flowchart to the right, all amendment requests follow the same general process, except Type IV minor amendments of less than one acres, which may skip Steps 3-7. Applicants must be aware that the MPO committees typically meet on a quarterly basis, so the process of reviewing and approving an amendment can be lengthy.



Step 1: In most cases, an amendment application will be prepared and submitted by the municipality in which the project is located or the municipality who owns the sanitary sewer lines being connected to. A developer requiring an amendment should work with their local municipality and the municipality will request the amendment. Though rare, amendments can also be initiated by WDNR, MPO Policy Committee, or WCWRPC. An application should only be submitted after authorization and action by the appropriate municipal decision-making body (e.g., Board/Council, Plan Commission). Applications should be received by WCWRPC at least 15 days prior to the MPO Technical Advisory Committee meeting during which action under Step #3 is desired.

Step 2: WCWRPC will review the application and prepare a staff report with any recommendations or suggested conditions. WCWRPC will contact the applicant for clarification or more information, at the applicant's expense, as needed. WCWRPC will also contact the local WDNR office to discuss the proposed amendment. WCWPRC may require a conference call or in-person meeting with the applicant, local WDNR staff, or other stakeholders prior to completing its staff report.

As reflected in Policy 2.1.4, for Type IV minor amendments, WCWRPC may include an advisory approval cover letter with the

staff report and send the approval letter and staff report to WDNR for a final decision (Step 8), thus skipping Steps 3-7. For particularly unique amendment requests involving circumstances that are not clearly or reasonably addressed in the policies in Chapter 4, WCWRPC may request an administrative review from WDNR, thus skipping Steps 3-6.

Step 3: The MPO Technical Advisory Committee will review the application and draft WCWRPC staff report, then make an advisory recommendation to the MPO Policy Committee. The applicant is encouraged to be present at this meeting in order to answer questions. WCWRPC staff may need to collect additional information or revise its staff report as a result of this review.

Step 4: The MPO Policy Committee will conduct a public meeting during which WCWRPC staff will present its report, the applicant will have an opportunity to present their request and answer questions, and an opportunity for public comment will be provided.

The public meeting will be properly noticed in accordance with MPO policies, including an invitation for written public comments on the amendment. Written comments shall be sent by U.S. Mail and received by WCWRPC prior to the public meeting during which public comment is invited. The public meeting notice will be posted and distributed at least 7 days prior to the meeting date to the following:

- Notice posted at the WCWRPC/MPO webpage
- Notice posted in three, public physical locations
- E-mailed to the County, City, Village, and Town Clerks in the sewer service area
- E-mailed to any individuals who have requested to be included on MPO or WCWRPC email lists
- E-mailed to the WCWRPC local media list

For Type I, II, and III amendments, the applicant municipality must provide to WCWRPC with their application the names and mailing addresses of all landowners within the areas to be added to deleted. At least 14 days prior to the public meeting, WCWRPC will distribute the public meeting notice by U.S. Mail to these landowners.

Depending on the characteristics of the application, WCWRPC, the MPO Technical Committee, or MPO Policy Committee may choose to conduct a more formal public hearing that is noticed with a Class I notice published in the Leader Telegram at least 14 days prior to the hearing.

Step 5: After consideration of the reports and any public comments in Step 4, the MPO Policy Committee shall act upon amendment request by resolution during a public meeting. The MPO may approve, approve with conditions, or deny the application; the MPO's action is advisory to WDNR. The applicant may request that the MPO table the action if additional information is needed. Step 5 may occur during the same meeting of, but following, Step 4. Within 30 days following the MPO decision, WCWRPC will provide all materials, public comments, and the MPO's meeting minutes and resolution to WDNR for a final decision on the amendment request.

Step 6: Any person, organization, or governmental body in favor of, objecting to, or providing information on the decision of the MPO may submit written comments to WDNR within 30 days after the MPO's advisory decision in Step 5. This includes appeals as described in Chapter 6.6.

Step 7: WDNR will make the final and official determination on all plan amendments based on consideration of public comments, written comments, official action taken by the MPO, standards, policies and procedures of the Sewer Service Area Plan, and NR 121 of the Wisconsin Administrative Code. WDNR will inform the applicant and WCWRPC of its decision on amendment requests within 60 days of the MPO's decision.

It is important to remember that sewer service area plan approvals are formal amendments to the state's Areawide Water Quality Management Plan. Any plan amendments, once approved by the MPO are forwarded to the WDNR for administrative decision to update the state's AWQM Plan. These decisions are based on the elements and considerations outlined in NR121. Annually, WDNR transmits updates to USEPA for certification as an amendment to the state's WQM Plan.

Post-WDNR Approval: Following WDNR approval of an amendment, WCWRPC will modify the sewer service area map and track any changes. At this time, WCWRPC (or the municipality) can also issue a 208 Review Letter for any sewer extensions (or hook-ups) related to the project, if needed, in accordance with Chapters 6.1 or 6.2.

<u>Amendment Applications</u>
An application for an amendment to the Sewer Service Plan <u>must</u> include:

- A cover letter requesting and describing the amendment with contact information, project name, project locations, etc. The cover letter or an included staff report should briefly identify, include, or be accompanied by:
    - type(s) of amendment(s) being requested;
    - location description or map, including section, township, range, community, and county;
    - existing and proposed land use, development density and intensive land disturbances within the area, including map(s) if available;
    - a justification of why the amendment is needed and reasonable;
    - existing and proposed services for the area (e.g., water, sewer, roads), including the cost-effectiveness wastewater treatment solution and an assurance that adequate wastewater treatment capacity is available for the proposed development;
    - a map showing the geographic extent of the project area that will be served by a sanitary sewer extension or hook-up, if any;
    - maps and acreages of any known ESAs within the project area, if available, as well as any potential or proposed disturbance of an ESA or any water quality impacts if known;

- how any potential impacts to existing ESAs are mitigated, including stormwater management plans and any best management practices being required for any encroachment upon a steep slope of 12+%;
- the consistency of the project with the municipality's comprehensive plan;
- any known physical, regulatory, or intergovernmental barriers or issues related to the proposed amendment; and,
- what approvals for the project have been granted by the municipality.

- For Type I, II, and III amendments, acreages, maps, and legal descriptions for the areas to be added or deleted, along with names and mailing addresses of all landowners within the areas to be added or deleted.
- For Type I and II requests, include documentation that all property owners in any areas proposed to be deleted (swapped) from the sewer service area were notified of the application request, including contact information for each landowner.
- All maps should be of sufficient detail to accurately identify boundaries.
- For amendments involving a sewer extension, 1 set of construction/engineering plans showing utility connections and locations, including the planned footprint of any buildings or other intensive land disturbance.
- WCWRPC may require an application fee for plan amendments at their discretion.

It is recognized that the level of detail required for an application may vary based on the size, type, and character of the amendment. An amendment for a sewer extension involving a large subdivision with multiple ESAs will likely require more information than a Type IV minor amendment. A single application may be submitted for more than one type of amendment. An amendment may also include a 208 Review request.

WCWRPC, the Metropolitan Planning Organization (MPO), or WDNR may request that the applicant provide additional studies or data needed to fully consider the potential impacts of the proposed amendment.

6.4.1 Type I Amendment. The Sewer Service Area Boundary is Altered Without the Total Acreage Changing

With this amendment, acreage can only be added to the service area if a corresponding number of acres is subtracted. This "swap" requirement will keep the locally approved population density figures unchanged. A Type I Amendment application should be very clear in defining which areas are being swapped. Requests of this type should be submitted to the WCWRPC by the municipality in which the project is located or the municipality who will own the sanitary sewer lines that will serve the area being added to the SSA boundary.

WCWRPC staff will then review the proposed amendment based on these criteria:

1. Such sewerage service can be provided in a cost-effective manner.

2. There will be no significant adverse water quality and/or environmental impact associated with providing sewer service to the area.
3. The proposed amendment is consistent with the policies and goals of this plan.
4. Existing or planned sewerage systems have sufficient capacity to treat projected flows.
5. The areas to be swapped are of the same acreage.

6.4.2 Type II Amendment. The Sewer Service Area Boundary is Modified and the Total Acreage is Altered

With this amendment, acreage cannot be added to the sewer service area unless the following circumstances exists: (1) area is needed to accommodate unanticipated population growth; (2) a change in local population densities has been approved by the local municipality; and (3) failing on-site wastewater systems. A Type II Amendment application must include population numbers, land use acreages, and other information to demonstrate that these three factors have been met. Requests of this type should be submitted to the WCWRPC by the municipality in which the project is located or the municipality who will own the sanitary sewer lines that will serve the area being added to the SSA boundary.

WCWRPC staff will then review the proposed amendment based on these criteria:

1. Identifying if a significant difference in the projected population and the actual population of the municipality exists and if the above three factors have been met.
2. Such sewerage service can be provided in a cost-effective manner.
3. There will be no significant adverse water quality and/or environmental impact associated with providing sewer service to the area.
4. The proposed amendment is consistent with the policies and goals of this plan.
5. Existing or planned sewerage systems have sufficient capacity to treat projected flows.

6.4.3 Type III Amendment. The Addition of a Holding Tank Service Area to the Plan

A holding tank service area is required if there is a holding tank within the planning area and outside the sewer service area which generates 3,000 gallons or more of septage per day. Further explanation of holding tank service areas is contained in Chapter 5 of this plan. A request for this type of amendment must be made by the municipality owning the wastewater treatment facility that will service the tank.

Requests for a Type III amendment should be submitted to the WCWRPC and include:

1. A map of the proposed holding tank service area.
2. The exact acreage of the proposed area.
3. Proof there is a contract with the POTW to handle the septage from the tank.

4. The proposed amendment is consistent with the policies and goals of this plan.

WCWRPC staff will review the proposed amendment based on the information above. The proposed amendment must be in compliance with the policies and goals of this plan.

In addition, a request for a Type III amendment for new development utilizing a new holding tank that encroaches on an environmentally sensitive area will be denied. The amendment will be allowed if it is determined that the actual construction of all buildings and the holding tank are not on those portions of the holding tank service area within an environmentally sensitive area, and there are sufficient setbacks and erosion control measures taken, as defined by local zoning and land development regulations.

Upon WCWRPC review, the amendment must be reviewed by the MPO which will recommend approval or disapproval of the amendment request. Following the MPO's action, the amendment request shall be submitted to WDNR for final approval.

6.4.4 Type IV Amendment. The Development of an Area Designated as an Environmentally Sensitive Area

All requests for Type IV amendments will be reviewed on a case-by-case, site-specific manner. A Type IV Amendment is requested by the municipality wishing to extend sewer service to an area delineated as an environmental sensitive area. Essentially, a Type IV amendment removes the ESA acreage from the SSA Plan. The plan recognizes the possible conflict between development and preservation of environmentally sensitive area and this amendment is an attempt to allow both to co-exist.

Requests of this type should be submitted to the WCWRPC by the governmental entity that will be servicing the proposed area. Information (e.g., maps, studies, surveys, technical data) needed to fully analyze and make an informed recommendation on the proposed amendment should accompany the request; failure to provide such needed information may result in delays during the approval process.

WCWRPC and regional WDNR staff will cooperatively review and analyze the proposed amendment based on the following criteria:

1. There will be no significant adverse water quality and/or environmental impact associated with providing sewer service to the area.
2. The proposed amendment is consistent with the policies and goals of this plan.
3. The applicant has provided adequate justification that no reasonable alternative exists to avoid the amendment.
4. The project is located within the sewer service area and such sewerage service can be provided in a cost-effective manner.

5. Documentation that all appropriate local, state, and federal environmental permits (such as erosion control, wetland preservation, floodplain, etc.) have been or will be granted for the proposed development.
6. For the encroachment of areas of steep slope ESA within the project area, the applicant municipality must have also reviewed and approved an engineering study or similar requirements as referenced in Policy 2.1.7.

It is the responsibility of the municipality to review and ensure proper implementation of any best management practices, stormwater controls, and erosion control plan as required by State and local regulations. Such approvals by the municipality are needed for the issuance of a Type IV Amendment by WDNR. Once approval of the amendment is made by WDNR, the environmentally sensitive areas map of the Sewer Service Plan will be updated to remove the environmentally sensitive area, thus indicating that the area is now considered developable within the SSA Plan.

An approved Type IV amendment is one which allows development of an environmentally sensitive area with minimal environmental impacts. To that end, WCWRPC or the MPO may recommend and WDNR may approve the amendment with specific conditions that must be met to ensure protection of the potentially affected resources.

6.5 SEWER SERVICE AREA PLAN UPDATES

NR 121 calls for sewer service area plan status review and a possible plan update every five years. Frequent sewer service area plan amendments or a community land use plan update are other signals that a plan update is probably in order. Plan updates, including significant plan policy or procedural changes, should only commence with WDNR approval and involvement.

Very similar to the steps for plan amendments described in Chapter 6.4 and noted below, a plan update requires the advisory review by the MPO Technical Advisory Committee (Step 3), a public hearing conducted by the MPO Policy Committee (Step 4), action by the MPO Policy Committee (Step 5), and WDNR approval (Step 7).

For Step 4, plan updates require a more formal public hearing conducted by the MPO Policy Committee with a Class I public hearing notice published at least 14 days prior to the hearing, in addition to other applicable MPO and WDNR reviews, notices, and approvals required for plan amendments, including providing an opportunity for written comment in (Step 4) and the opportunity to provide comments to WDNR (Step 6). Plan updates involving boundary changes do not require the individual notification or mailings to landowners.

6.6 APPEALS OF SEWER SERVICE AREA PLAN DECISIONS

Administrative Appeals. An action or administrative decision made by WCWRPC or a municipality in the administration of this plan may be appealed to the MPO Policy Committee. The MPO Policy Committee shall consider all available facts provided by the administrative

entity and appealing party, then make a recommendation to WDNR. WDNR shall grant, conditionally grant, deny, or take other appropriate action on the appeal.

Appeals of 208 Reviews. Since 208 Review Letters are advisory, appeals of a recommended condition or a non-conformance identified in a 208 Review Letter should be made to the WDNR office (for sewer extensions) or WisDSPS office (for sewer hook-ups) responsible for reviewing and permitting the sewer extension or hook-up. WDNR or WisDSPS shall grant, conditionally grant, deny, or take other appropriate action on the appeal. For sewer hook-up reviews and when no 208 Review Letter is required, the local regulating jurisdiction may have an additional appeal process available under local codes.

Appeals of Amendments and Other Plan Actions. Since the actions of WCWRPC and the MPO regarding a plan amendment are advisory, any such appeal of a plan amendment decision by WCWRPC or the MPO should be directed to WDNR within 30 days of the decision. Appeals of any other actions under this plan should also be directed to WDNR. WDNR does not accept revisions or personal appeals submitted by developers, individuals or other organizations. The appeal should include sufficient information on the facts involved and any requested remedy.

Appeals of a WDNR Decision

Wisconsin statutes and administrative rules establish time periods within which requests to review WDNR decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., a party has 30 days after the decision is mailed, or otherwise served by the WDNR to file a petition with the appropriate circuit court and serve the petition on the WDNR. Such a petition for judicial review must name the Wisconsin Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. Stats., a party has 30 days after the decision is mailed, or otherwise served by the WDNR, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30 day period for filing a petition for judicial review.

6.7 SUMMARY

The *Chippewa Falls-Eau Claire Urban Area Sewer Service Plan* is intended to be a guide for local municipalities in water quality management. The sewer service area boundary map is based on the preceding data and maps, especially the population projections, growth areas, and environmental sensitive areas. Together, this information has been analyzed and translated into the sewer service area for 2025. There is substantial acreage of developable land within the sewer service area that should be used before a Type II amendment is approved that changes the boundary and adds acreage. Inclusion of lands within the sewer service area does not imply they will be developed and sewered by 2025. And though the sewer service boundary is sometimes discussed in the context of proposed annexations, the Urban Sewer Service Area Plan and boundary should not be used to promote nor hinder annexation petitions or urban density development.

The sewer service plan is designed to accommodate changes that may occur in the years between updates. Development trends, population density changes, community needs, and failed septic systems are all possible reasons the sewer service plan may need to be altered during the interim years. Any changes to this plan require an amendment, which must be approved by the MPO with final approval being made by WDNR, unless otherwise specified in this plan.