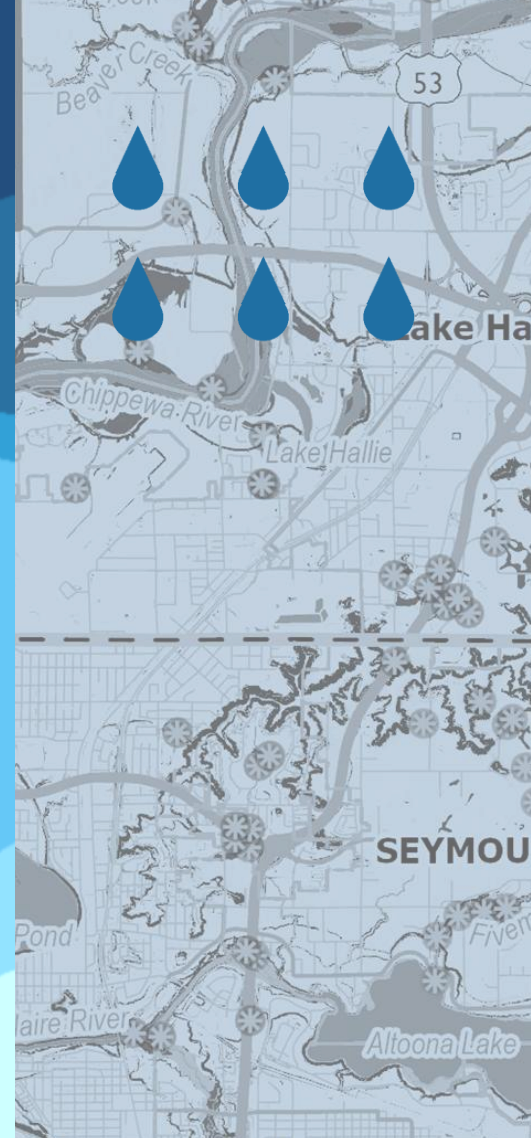


CHIPPEWA FALLS-EAU CLAIRE URBAN SEWER SERVICE AREA PLAN FOR 2045



FINAL DRAFT
10/1/26

<INSERT WDNR APPROVAL>

CHIPPEWA FALLS-EAU CLAIRE URBAN SEWER SERVICE PLAN FOR 2045

Prepared by:

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

2025 SSA Plan Approved by:

Chippewa-Eau Claire Metropolitan Planning Organization
September 30, 2026

Wisconsin Department of Natural Resources
XXXX XX, 2026

Chippewa-Eau Claire Metropolitan Planning Organization (MPO)

Policy Council

Chippewa County	--	Daniel Hardy
Town of Anson	--	Gary Lazar
Town of Eagle Point	--	Chuck Hebert
Town of Hallie	--	Rod Eslinger
Town of Lafayette	--	Dave Staber
Town of Tilden	--	Federick Bohl
Town of Wheaton	--	Eugene Gutsch
Eau Claire County	--	Connie Russell
Town of Brunswick	--	Wes Vleck
Town of Pleasant Valley	--	Doug Nelson
Town of Seymour	--	John Ailie
Town of Union	--	Jennifer Meyer
Town of Washington	--	Robert Solberg
Village of Lake Hallie	--	Gary Spilde
City of Altoona	--	Matt Biren
City of Chippewa Falls	--	Jason Hiess
City of Eau Claire	--	Jeremy Gregert

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CHAPTER 1 – INTRODUCTION

1.1 WHAT IS A SEWER SERVICE AREA (SSA) PLAN?

In short, Sewer Service Area (SSA) Plans anticipate and forecast growth for a planning (study) area for the next 20 years and identify the most cost-effective and environmentally sound regional mix of wastewater treatment solutions for the study area with an emphasis on protecting surface water quality.

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. 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 overarching planning tool used to address these requirements in the Chippewa Falls-Eau Claire area is the urban sewer service area plan.

The State of Wisconsin has incorporated many of the Federal areawide and facility planning requirements into the Wisconsin Administrative Code. As reflected below, the SSA Plan is part of a collection of locally guided areawide water quality management policies and plans (AWQMP) driven by Section 208 of the Federal Clean Water Act and Chapters NR 110 & 121 of Wisconsin Administrative Code. WDNR has overall responsibility for areawide water quality planning as described under NR 121, which includes sewer service area planning.



NR121, supplemented by WDNR planning guidance, largely sets forth the requirements for sewer service area planning. SSA Plans:

- Anticipate the study area's future needs for wastewater treatment.
- Evaluate alternative means for achieving water quality goals/standards and identifies the most cost-effective regional wastewater treatment approach.
- Encourage efficient and environmentally-sound sewer collection and treatment systems.
- Discourage the degradation of water quality and encroachment upon environmentally sensitive areas, especially when development would have an adverse impact on water quality.
- Help coordinate water quality protection plans, programs, and policies within the urban area.
- Are used by local, State, and Federal agencies when considering municipal wastewater facility plans, permitting for municipal sewer extensions (i.e., 208 reviews), certain private interceptor sewer mains, and certain related grant applications.
- Are not intended to restrict growth, obligate municipalities to provide sewer service, or affect community annexation policies.

A SSA Plan is required for designated urban areas and communities with a population over 10,000 in nondesignated areas. For most urban areas in the State, WDNR partners with regional planning commissions to serve as the region's areawide coordinating and local planning agency. For the Chippewa Falls-Eau Claire urban area, a nondesignated area under NR 121, WDNR has identified WCWRPC as the local planning agency and recognizes the MPO's Policy Council as the local policy advisory committee.

The SSA Plan has a strong relationship with Facility Plans for wastewater treatment facilities, which is described under NR 110. Approved facility plans are required before approval of plans/specs for reviewable sewage collection and treatment projects. Facility plans must demonstrate the need for proposed projects by systematically evaluating feasibility alternatives and selecting the most cost-effective means of meeting effluent limits and water quality stands. Facility plans and plans/specs for all sewage projects must be in conformance with the approved AWQP, which includes the SSA Plan. The following subsection of NR 121 best summarizes these relationships:

"The most cost-effective regional wastewater systems for all urban areas shall be identified over a 20-year planning period based upon an analysis of alternative waste treatment system configurations. Wherever possible, applicable recommendations of approved facility plans shall be used to determine the urban area[s] treatment needs. This analysis shall be consistent with s. NR 110.09, and shall include a cost-effectiveness analysis of regional versus individual treatment plants for the outlying areas including subsurface waste disposal systems. Water quality and other environmental impacts shall be considered."

Other key SSA planning concepts:

- From a State rules perspective, the SSA Plan is “blind to annexation”, but is driven by cost-effectiveness and water quality protection. Water quality issues and the provision of sanitary sewer may cross municipal boundaries and there are mechanisms for changing the SSA Plan and its boundary in the future.
- The boundary is not driven by water quality or the water bodies, but is driven by growth. Major areas unsuitable for waste treatment systems should be excluded from the acreage included within the SSA boundary, including environmentally sensitive areas. Otherwise, the boundary is largely driven by the growth forecasts, wastewater facility plans, and the cost-effective provision of wastewater treatment.
- NR 110.08(5) restricts the construction of new sewage treatment facilities in order to protect water quality (i.e., “the non-proliferation policy”).
- When evaluating the most cost-effective regional wastewater solution, it ultimately comes down to regional cost-effectiveness and the ability to protect water quality. If an area is not yet sewered, what is the most cost-effective approach considering distance, gravity flow, development density, construction costs, benefits, etc.? A municipal wastewater treatment system (sanitary sewer) provides the highest level of environmental protection, planning, management, and monitoring; such facilities are the preferred treatment system when service can be provided in a cost-effective manner.
- When evaluating cost-effectiveness, utilize NR 110 as a guide and all infrastructure and resource costs and efficiencies should be considered, not just the cost of construction or density of development. Cost-effectiveness should also consider the societal and resource costs for the area as a whole over the 20-year planning period. Duplication of treatment systems or overlapping types of services is not efficient. Part of effectiveness is also identifying where sewers and treatment systems should not be installed because associated development would adversely impact water quality.

It is important to recognize that regulatory enforcement of SSA planning rests with the State of Wisconsin. The roles of West Central Wisconsin Regional Planning Commission and the local water quality advisory committee are advisory to the communities and the Wisconsin Department of Natural Resources.

1.2 LOCAL SEWER SERVICE AREA PLANNING HISTORY

This urban sewer service area (SSA) plan updates the *Chippewa Falls-Eau Claire Urban Sewer Service Area Plan for 2025 with 2017-2018 Policy Update*. All previous SSA Plans for the urban area have been facilitated by West Central Wisconsin Regional Planning Commission (WCWRPC) with the Metropolitan Planning Organization (f/k/a Metropolitan Area Policy Committee) serving as the local advisory committee:

1975 *Chippewa Falls-Eau Claire Urban Area Plan 1975-2000* was the forerunner of sewer service area planning for the area and provided a framework for sewer facility planning.

1981 *Chippewa Falls-Eau Claire Urban Area Sewer Service Area Plan for the Year 2000*

- 1990 *Chippewa Falls/Eau Claire Urban Sewer Service Plan for 2010*
- 2007 *Chippewa Falls-Eau Claire Urban Sewer Service Area Plan for 2025* update began in 2005 was completed in May 2006 and approved by WDNR in July 2007
- 2018 *2017-2018 Policy Update* was a limited update primarily focused on clarifying definitions and policies related to environmental sensitive areas (ESAs), as well as those circumstances for which a SSA Plan conformance review or amendment is required (or exempt) and the timing of such reviews. Additional local control was allowed if SSA Plan compliance is maintained.

Since the 2007 Plan, there has only been one SSA boundary amendment (Type I in August 2023) and there have been no steep slope Type IV amendments since 2018 Policy Update was adopted.

Month & Year	Municipality	Type	Acreage
May 2011	City of Eau Claire	IV – Steep Slopes	0.89
Feb 2012	City of Eau Claire	IV – Steep Slopes	1.38
Feb 2012	City of Eau Claire	IV – Steep Slopes	0.155
May 2014	City of Altoona	IV – Steep Slopes	1.1
Sept 2014	City of Eau Claire	IV – Steep Slopes	0.12
Sept 2014	City of Eau Claire	IV – Steep Slopes	0.493
Sept 2015	City of Altoona	IV – Steep Slopes	0.721
Sept 2015	City of Altoona	IV – Steep Slopes	0.662
Feb 2018	City of Eau Claire	IV – Steep Slopes	0.10
Sept 2021	City of Eau Claire	IV – Wetlands	3.18
March 2023	City of Eau Claire	IV – Stream/Floodplain	0.16
August 2023	City of Eau Claire	I – Boundary Swap	221.0/219.64
May 2025	City of Altoona	IV – Wetlands	0.09

In 2022-2023, during consideration of the proposed Type I boundary swap plan amendment, the Metropolitan Planning Organization (MPO) Policy Council expressed concerns that the extent of the SSA boundary had not been revisited as a whole since the 2007 Plan (over 15 years) and a SSA Plan update was needed. In 2024, WCWRPC executed an aid agreement with Wisconsin Department of Natural Resources (WDNR) to utilize U.S. Environmental Protection Agency (EPA) grant funding passed through WDNR to help finance a full update of the 2007 Plan.

1.3 SSA PLANNING SCOPE

The urban SSA Plan is intended to be an important planning and development guide for local communities¹. SSA planning fosters intergovernmental coordination and is useful in the development of other community and water quality-related plans. And being grounded in State law, consideration of local development proposals within the sewer service area must be consistent with the SSA Plan.

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.

To support these roles, the SSA Plan must include the following key components described within NR 121.05:

1. Define a planning or study area.
2. Utilize State-defined population forecasts and locally approved density standards to project future needs for sewer service and establish the geographic extent of the sewer service area for a twenty-year planning period. The SSA boundary shows where urban growth is most likely to occur but is not a guarantee of such growth.
2. Incorporate technical data, such as wastewater flow projections and wastewater treatment plant capacity assessments. The sewer service area plan shall include criteria for the construction of future treatment systems within the areawide planning area (NR110.08(5)).
3. Define and identify environmentally sensitive areas that should be protected from development within the SSA. Areas unsuitable for the installation of waste treatment systems because of physical or environmental constraints are to be excluded from the sewer service area.
4. Define policies, procedures, and responsibilities to achieve plan goals, administer plan conformance (e.g., 208 reviews), and for the review of plan amendments and updates.

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. While this update of the plan was comprehensive, WDNR advised that a complete re-write was not necessary.

It is recognized the NR 110 and NR 121 are outdated due to changes in resources, complexity of growth, and other factors; some things in State code no longer exist and the State no longer prepares basin-level water quality management plans. The SSA Plan is not intended to be an Areawide Water Quality Management Plan (AWQMP). There are subsections of NR 121.05 that are addressed in other plans and do not need to be included or updated in the SSA Plan, though should be referenced when possible. The SSA Plan should support and complement these other plans. The SSA Plan is not intended to duplicate or replicate other plans, but can explain how the plans are connected.

1.4 SSA PLAN UPDATE PROCESS

NR121 requires “the preparation of the [SSA] plan be carried out if possible by a local planning agency under contract with the [Department] and “a local policy advisory committee made up of representatives of the various local units of government in the planning area shall be established, or an existing body used, to assist the department in the preparation of the plan and to act in an advisory role to the department in matters concerning the implementation of the plan.”

For the 2026 SSA Plan update, WCWRPC continues to serve as the local planning agency responsible for preparing the SSA Plan. As suggested in the current 2018 SSA Plan, the Chippewa-Eau Claire Metropolitan Planning Organization (MPO) Policy Council as the local water quality

policy advisory committee, which is a role the MPO has performed since at least the 1981 SSA Plan.

The multi-jurisdictional 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 Chippewa Falls-Eau Claire Urbanized Area, and thereby satisfies the conditions necessary for the receipt of federal transportation funds.

In 2024, the Policy Council established a Water Quality Management Technical Advisory Committee (WQM-TAC) to advise WCWRPC and the Policy Council during the SSA Plan update. Representatives from all municipalities and counties within the Study Area were invited to be part of the WQM-TAC. This steering committee was a working group without a formal structure or meeting minutes. All meeting agendas of the WQM-TAC were publicly posted and open to the public. Chapter 9 of the SSA Plan outlines the SSA Plan administration approach once the plan is approved by WDNR, including future plan updates.

The following table provides the general timeline and major steps during the plan update:

Project Initiation – agreements, flyer, press release, begin data collection, committee activation, and develop draft Study Area	May-July 2024
WQM-TAC (Steering Committee) Meeting #1 – Project overview, facility plans/capacities, set Study Area	July 22, 2024
MPO Policy Council Meeting – Approve SSA Study Area	August 28, 2024
WQM-TAC Meeting #2 - Conversation with WDNR Staff on SSA Planning	Oct 17, 2024
WDOA Population Projections released	Late Dec. 2024
WQM-TAC Meeting #3 – Discussed ESA definitions and policies, and SSA boundary methodology	March 3, 2025
Data Gathering – WCWRPC distributed community “ESA survey” and gather data on wastewater facility capacity, etc. Work with WDOT to begin integration of population projections with TAZ data. Work on some plan sections continuing.	March – April 2025
WQM-TAC Meeting #4 – ESA sections, Goals 1 & 3, and wastewater facilities.	May 5, 2025
Revised WDOT Traffic Analysis Zone (TAZ) data received , reflecting local land use plans and updated WDOA population projections.	August 2025
Continue Plan Development – Continue with development of other plan chapters. Once TAZ data set is finalized, WCWRPC will complete the Growth & Development Trends (Chapter 4), then begin work on the projected growth areas and initial draft SSA boundary.	August 2025– Apr 2026
WCWRPC to Distribute Draft Plan Sections for WQM-TAC Comment – Draft Chapters 1, 2, 3, 5, and 7.	March 2026
WQM-TAC Meeting #5 – Discussed draft chapters to date, growth projections, and initial draft SSA boundary alternatives	April 8, 2026
Continue Plan Development - WCWRPC receives additional comments on draft plan sections, revised draft plan, and creates an initial draft SSA boundary. Also distributes revised Working Draft SSA Plan, including Chapters 8 & 9, for WQM-TAC for review and comment.	April-May 2026
WQM-TAC Meeting #6 – Discussed comments on working draft SSA Plan with a particular focus on the goals, objectives, and policies in Chapter 7.	May 20, 2026
Continue Plan Development - Cities provided additional input on draft SSA boundary in late June. WCWRPC distributes Full Working Draft SSA Plan to WQM-TAC and WDNR Water Quality Staff for Review	June-July 2026
WQM-TAC Meeting #7 – Discuss comments on draft SSA Plan, including revised boundary and any recommendations regarding plan changes.	July 22, 2026
WQM-TAC Meeting #8 – Continued discussion on draft SSA Plan, including revised boundary and any recommendations regarding plan changes. Made an advisory recommendation to the Policy Council unanimously approving the plan text but a vote on the draft SSA Plan boundary failed.	August 26, 2026

Public Hearing Notice on Draft Plan - Newspaper notice was issued at least 14 days prior to the hearing. Written public comments were also invited. Six emails/letters were received on the draft plan: 2 from City of Eau Claire department supporting the SSA Plan text and boundary; 3 opposing the proposed boundary with a focus on a 341-acre area within the Town of Union; and 1 letter from a Town of Tilden resident asking that their property be exempted or removed.	September 14, 2026
MPO Policy Council Meeting & Public Hearing on Draft Plan – After a WCWRPC staff presentation and recognition of written comments, seven speakers provided oral testimony during the public hearing: 1 in favor; 4 against with a focus on a 341-acre area; 1 expressing support for WCWRPC's efforts; and 1 with concerns over their property's inclusion and the general process. As the Local Water Quality Advisory Committee, the MPO Policy Council made an advisory recommendation to WDNR approving the draft SSA Plan (see Appendix B) with a modification to the draft SSA Plan to remove the 341-acre area from the SSA boundary.	September 30, 2026
Advisory Final Draft SSA Plan provided to WDNR for Review and Approval	October 1, 2026

The project experienced significant delays to incorporate Wisconsin Department of Administration's updated population projections (released in December 2024) into the Wisconsin Department of Transportation's traffic analysis zones (TAZ) data for the urban area. These TAZs, and their projections, were developed by the MPO and WDOT after consultation with urban area municipalities about local land use plans and anticipate growth. Utilizing this TAZ data ensures a high level of consistency between the SSA Plan and the urban area's Long-Range Transportation Plan, which was being updated concurrently.

Chippewa Falls-Eau Claire WQM-TAC Representatives, 2024-2026

Unit of Government	WQM-TAC Member	Alternate
Chippewa County	Lynda Schweikert	Trenton Shutter
City of Altoona	Christien Huppert	
City of Chippewa Falls	Brandon Cesafsky	
City of Eau Claire	Leah Ness	Ned Noel
Eau Claire County	Matt Michels	
Town of Anson	Stacy Steinke	
Town of Brunswick	Wes Vlcek (Tim Davis)	
Town of Eagle Point	<i>declined participation</i>	
Town of Hallie	Rod Eslinger	
Town of Lafayette	<i>declined participation</i>	
Town of Pleasant Valley	Dan Hanson	
Town of Seymour	John Ailie	Jessica Janssen
Town of Tilden	<i>declined participation</i>	
Town of Union	Nate Peleschak	Jennifer Meyer
Town of Washington	Janelle Henning	
Town of Wheaton	Carolyn Kaiser	Alice Droske
Village of Lake Hallie	Gary Spilde	
Wisconsin DNR	<i>available if needed</i>	

CHAPTER 2 – STUDY AREA

2.1 DEFINING THE STUDY (PLANNING) AREA

NR 121.05 requires a map of the area which the plan is being prepared. While code calls this the “planning area boundary”, this SSA Plan refers to this as the “Study Area” to avoid confusion with the SSA Plan boundary.

The establishment of a study area assists by focusing the plan update efforts on a defined geographic area and facilitates a comprehensive examination of data needed in the planning effort. **The Study Area is the area for which data is being gathered.** WDNR water quality staff emphasized that the Study Area is “for data collection purposes” and “has no regulatory significance.”

The criteria used in delineating the Study Area included:

1. The recognition of areawide land use trends and patterns, including growth areas defined in local land use and comprehensive plans.
2. The recognition that water quality and growth problems are areawide concerns
3. The delineation of Study Areas in previous SSA planning efforts.
4. The Study Area must be large enough to encompass whatever is eventually identified as the Sewer Service Area (SSA). The Study Area should be large enough or far enough out that it will include any areas that could be reasonably and efficiently served by sanitary sewer in the next 20 years. However, it is expected that many areas within the Study Area will not be sewered and may not even be developed within the next 20 years.
5. To assist with data analysis and support plan consistency, the Study Area largely follows and does not subdivide Transportation Analysis Zone (TAZ) boundaries that were created by WDOT.
6. Clusters or concentrations of existing residential, commercial, and manufacturing development should be included within the Study Area.

For the purpose of this SSA Plan, the Study Area will also be referred to as the Chippewa Falls-Eau Claire urban area, though this Study Area does differ some from the MPO’s official urban planning area for transportation purposes.

2.2 THE STUDY AREA

Using the previous criteria, WCWRPC created a draft Study Area. Based on WQM-TAC input, three primary changes were made to the draft Study Area:

- The Study Area was expanded to encompass the area west of the County Highway “S” and U.S. Highway 53 interchange northwest of Chippewa Falls.
- Some Study Area boundary in the Town of Union was changed so that it more closely aligned with the current SSA boundary line.
- The draft SSA boundary was significantly changed in the Town of Union, with its western extent retracted so that it more closely followed the 2007 Plan’s Study Area.

After considerable deliberation, the MPO Policy Council selected Figure 2.1 as the Study Area for the sewer service area plan update, which encompasses parts or all of the following municipalities:

Chippewa County

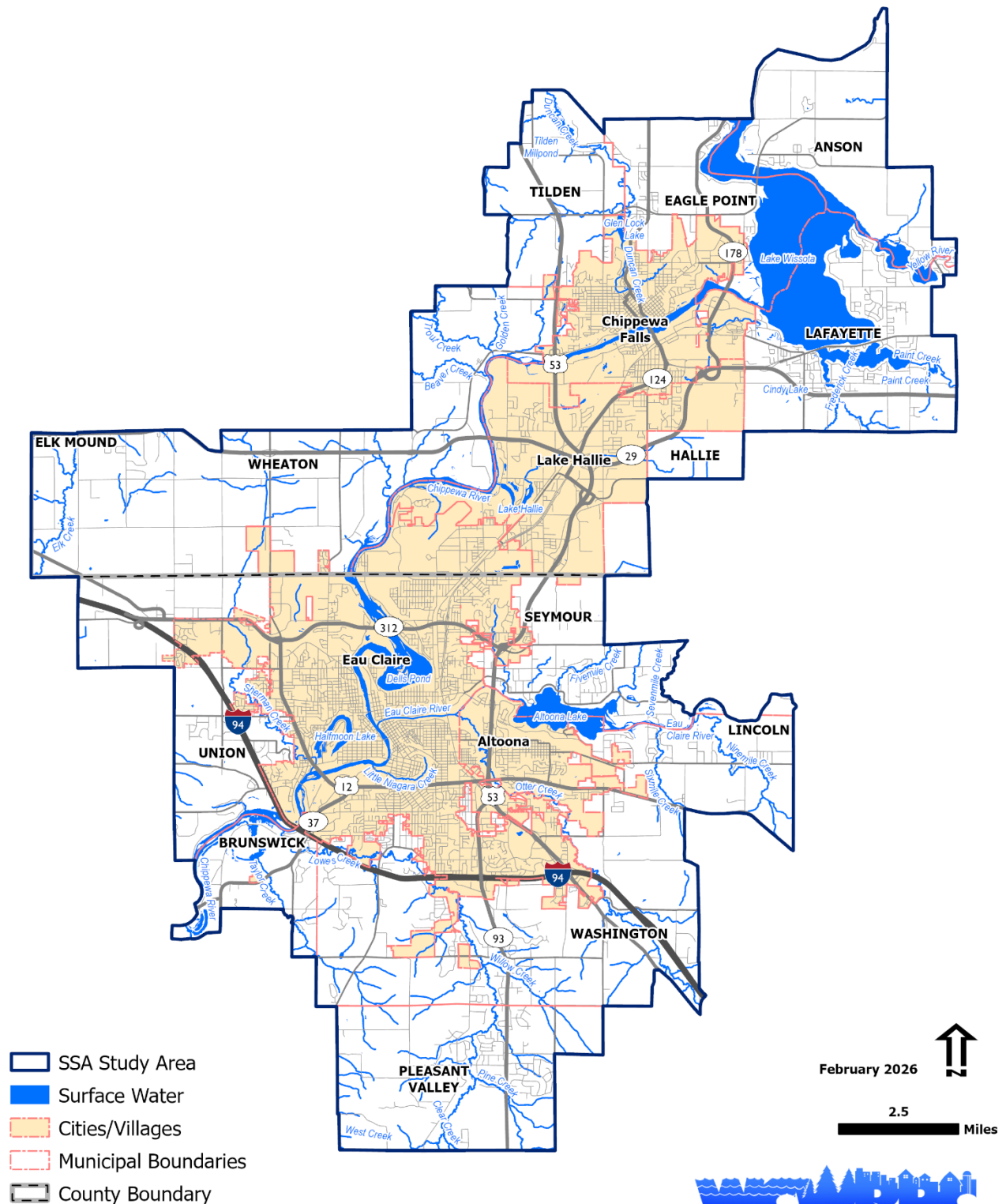
City of Chippewa Falls
City of Eau Claire
Village of Lake Hallie
Town of Anson
Town of Eagle Point
Town of Hallie
Town of Lafayette
Town of Tilden
Town of Wheaton

Eau Claire County

City of Altoona
City of Eau Claire
Town of Brunswick
Town of Pleasant Valley
Town of Seymour
Town of Union
Town of Washington

In all, the final Study Area encompasses approximately 141,740 acres or 221.5 square miles, including surface waters. From 2000-2020, the number of MPO households grew 20.2% (+8,568) from 2000-2020 and the plan update must anticipate what growth will occur during the next 20 years (2045). As such, it makes sense that the updated Study Area would be larger than the Study Area in the 2007 SSA Plan. Even so, it is notable that the updated Study Area boundary is very similar to 2007 boundary in many areas, while the Study Area boundary is larger in some other areas so that we do not split or subdivide a TAZ.

Map 2.1 SSA Plan Study Area



Data Sources: Wisconsin DNR, Wisconsin DOA, Wisconsin DOT, WCVRPC.

CHAPTER 3 – PHYSICAL SETTING

This chapter summarizes the key physical characteristics of the Study Area. As part of a water quality management plan created under NR121, Chapter 3 gives emphasis to and is largely limited to aspects of the Study Area’s physical setting related to water quality or the cost-efficient provision of sewer service.

3.1 OVERVIEW

Geology & Topography

The bedrock type for most of the Study Area is Cambrian-age sandstone. Some areas, specifically along the Chippewa and Eau Claire Rivers, are underlain by igneous, metamorphic, and volcanic rock. As shown in **Map 3.1**, in most areas the bedrock is more than 100 feet below the surface; however, in some areas, it is within 5 feet of the surface. Where depth to bedrock is shallow, contaminants generally have less time with the earth’s natural pollutant removal process found in unconsolidated surficial deposits. Depth to bedrock is also used to evaluate the importance of bedrock type in determining an area’s susceptibility to groundwater contamination. The greater the bedrock depth, the more likely it is that the water table is located above the bedrock. When the bedrock is shallow, the bedrock type can affect the ease with which infiltrating waters flow to the groundwater. Factors such as bedrock type and depth may influence the most cost-efficient and environmentally sound solution for wastewater treatment.

Map 3.2 shows the general topography of the Study Area, which ranges from 770 to 1,020 feet above sea level. Some of the steepest slopes occur along stream banks. The highest point of elevation within the Study Area is Mount Tom, located in the City of Eau Claire. As the slope increases, the potential for erosion, runoff to surface waters, and flash flooding also increases. Groundwater recharge also tends to be lower on steeper slopes when compared to flatter areas. For such reasons, steep slopes are considered environmentally sensitive areas (ESAs) under this plan and are further described in Chapter 3.5.5.

Groundwater

Groundwater is a limited resource, and the protection of its quality and quantity is consistently a top priority during planning efforts across west-central Wisconsin. Precipitation percolates through the soil and bedrock, eventually reaching a saturated zone known as an aquifer. An aquifer is an underground layer of permeable or fractured material that can store, transmit, and supply water. Groundwater availability is closely tied to local geology. For the Study Area, groundwater is found in sandstones of the Cambrian age and in unconsolidated deposits of sand and gravel within glacial drift. The sand and gravel aquifer is not a continuous rock unit, as is the sandstone bedrock aquifer, but occurs as outwash deposits and valley alluvium. The sand and gravel aquifer is usually much shallower than the sandstone aquifer, and is sometimes referred to as the upper aquifer. The sandstone (or ‘lower’) aquifer generally underlies much of the area, except in areas of Precambrian undifferentiated igneous and metamorphic bedrock; the sand and gravel aquifer is generally found overlaying this bedrock.

Legend

Bedrock Depth

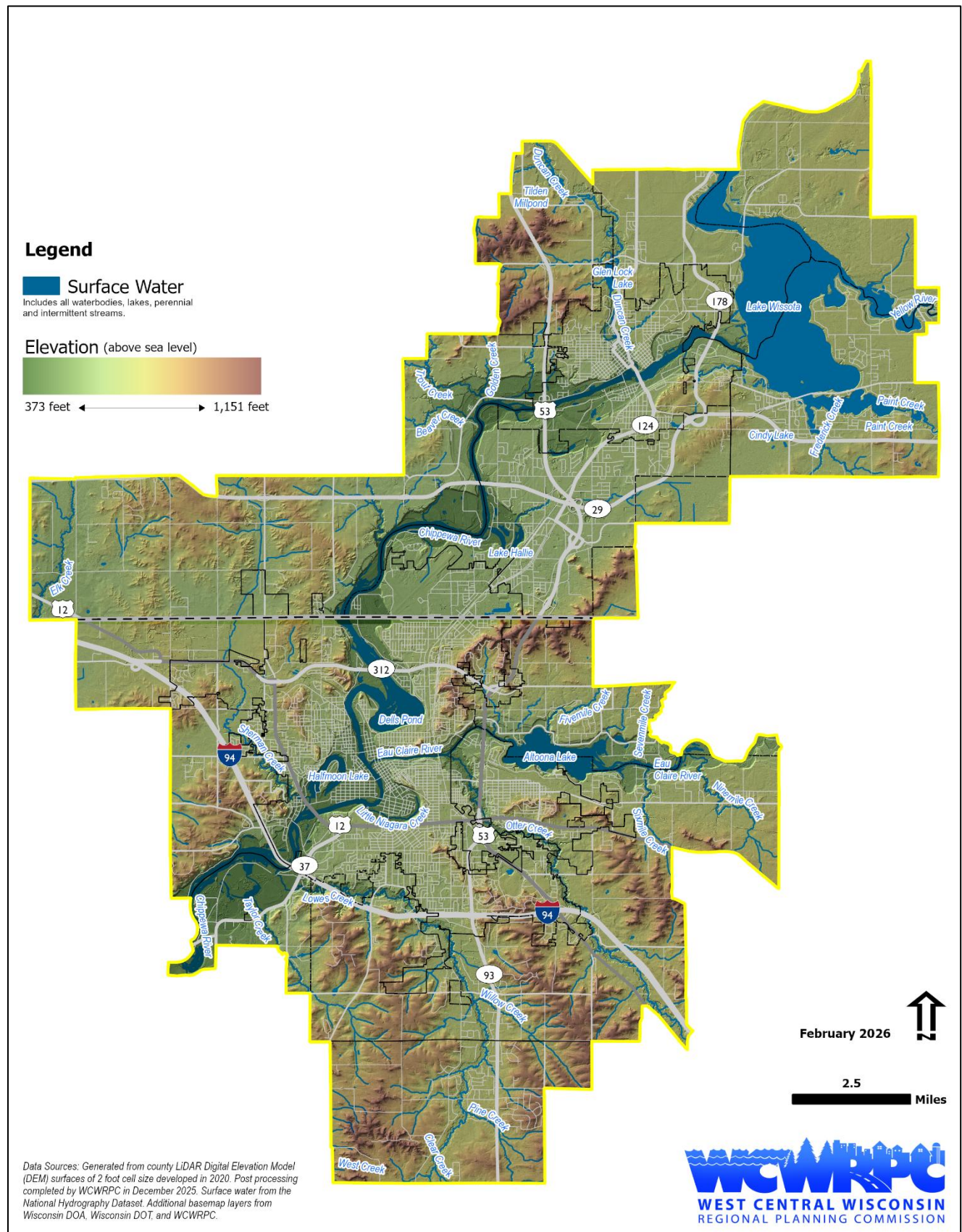
- 35%-70% of area within 5 feet of surface
- >70% of area within 5 feet of surface
- 5-50 feet from surface
- 50-100 feet from surface
- 100+ feet from surface
- Surface Water
- County Boundary
- Municipal Boundaries
- SSA Study Area

February 2026

2.5 Miles

WCWRPC
WEST CENTRAL WISCONSIN
REGIONAL PLANNING COMMISSION

Map 3.2 Topography & Surface Waters



As shown in **Map 3.3**, some areas within the Study Area have very high groundwater levels (i.e., a high water table), which have an increased susceptibility to pollutants. Wetlands, an ESA-type further described in Chapter 3.5.4, are typically a place where high groundwater levels intersect with the land surface.

The movement of groundwater is primarily influenced by gravity and topography, flowing from areas of higher recharge and higher elevation to lower areas where groundwater discharge to lakes and rivers might occur. However, well pumping also influences flow and can change regional groundwater flow toward the wells instead of its natural flow direction. Groundwater levels also change over time, especially as surface recharge changes. Overall, the regional flow of groundwater within the Study Area is towards the Chippewa and Eau Claire Rivers. The natural rate of groundwater movement through sandstone is relatively slow, only a few inches to feet per day. Due to such variability, mapping aquifers and the groundwater quantity and movement is complicated and changes over time with fluctuations in recharge and use/demand. No single groundwater study has been completed that encompasses the entire Study Area.

Surface Waters

Maps 3.2 & 3.4 delineate the Study Area's surface waters, which are divided among 17 HUC-12 sub-watersheds. The surface waters in the Study Area have a total surface area of approximately 17,000 acres or 27.18 square miles. Lake Wissota, located in Chippewa County, is the largest body of water at 6,148 acres. Other water bodies of considerable size include Lake Altoona (720 acres), Dells Pond (622 acres), and Half Moon Lake (135 acres). These reservoirs, lakes, and the rivers themselves are recreational resources for Eau Claire County.

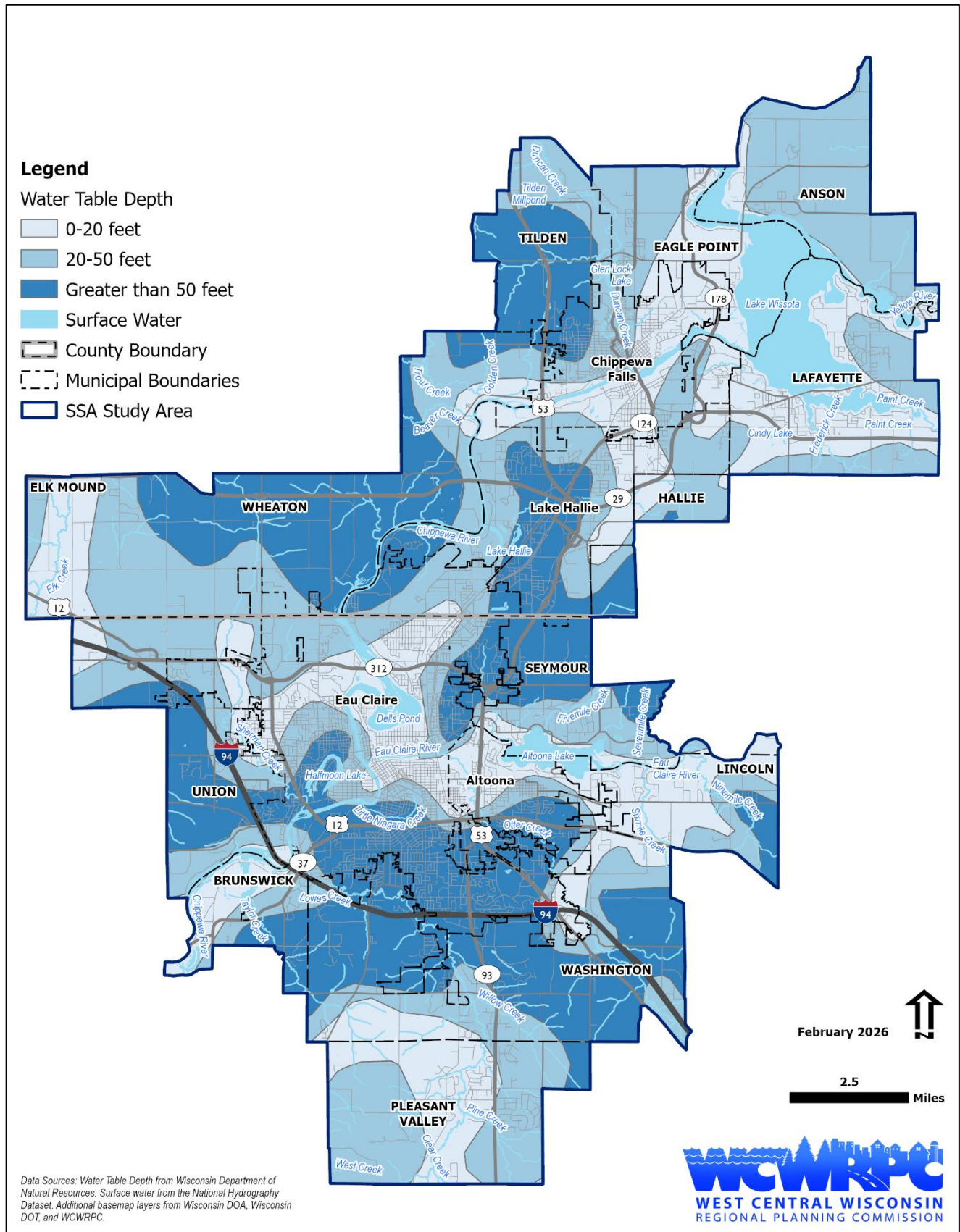
Land Cover

Historically, the Study Area's landscape was primarily forests, which spurred the development of lumberyards in the area. The resulting deforestation allowed for the development of settlements and farmland. **Map 3.5** shows that the dominant land cover within the Study Area today taken from 2024 USGS satellite imagery, which is summarized in **Table 2**. In 2024, cultivated cropland and forest were the predominate cover types, encompassing about 44% of the Study Area. Developed areas comprise almost 34% of the area. About 12% of the area is open surface waters and wetlands.

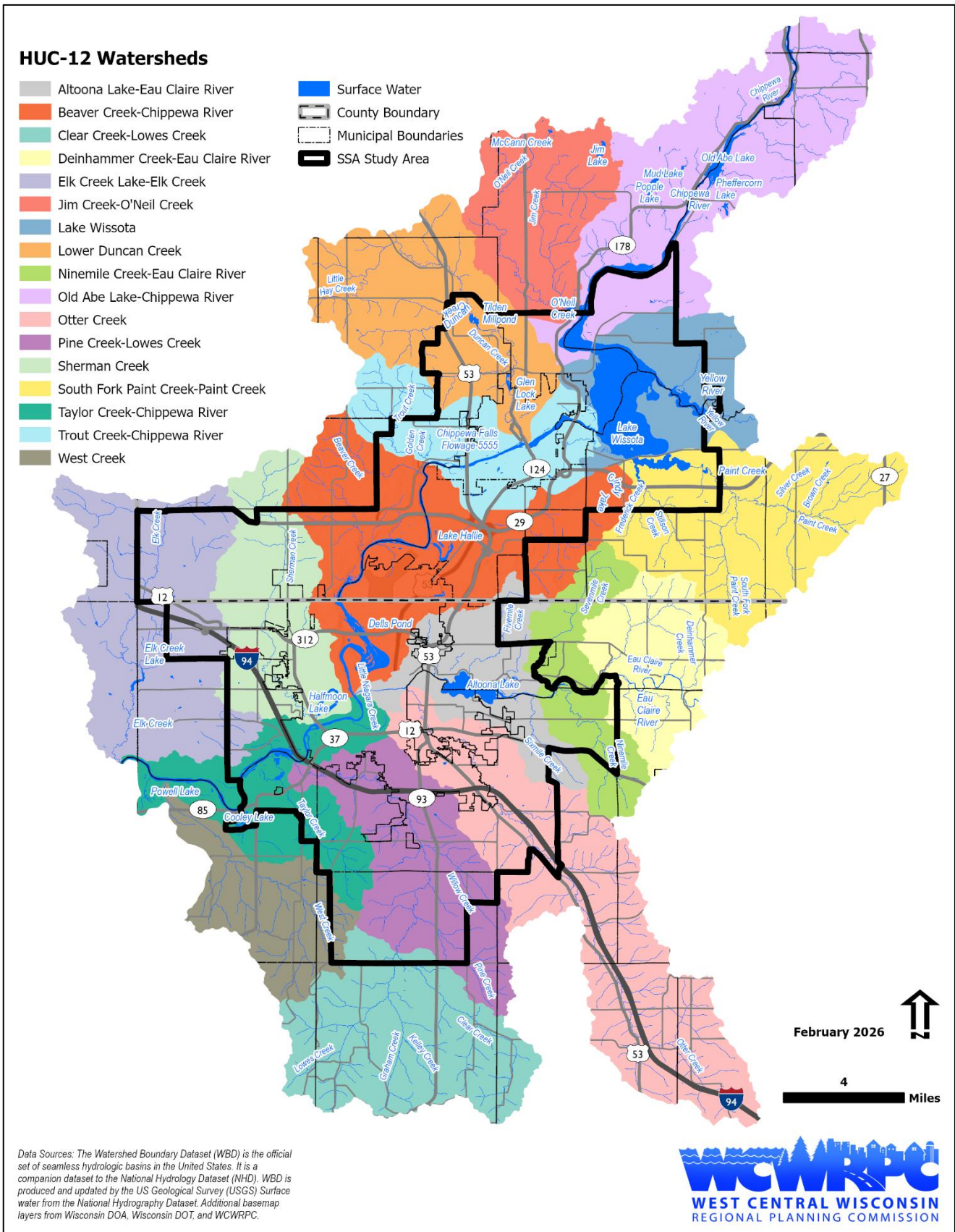
Table 2. Study Area Land Cover, 2024

Land Cover Type	Acres	Percent
Open Water	9,087	6.41%
Developed, Open Space	17,106	12.07%
Developed, Low Intensity	17,974	12.69%
Developed, Medium Intensity	10,045	7.09%
Developed, High Intensity	3,020	2.13%
Barren Land	234	0.17%
Deciduous Forest	18,632	13.15%
Evergreen Forest	3,217	2.27%
Mixed Forest	5,055	3.57%
Shrub/Scrub	381	0.27%
Herbaceous	2,184	1.54%
Hay/Pasture	10,135	7.15%
Cultivated Crops	36,526	25.78%
Woody Wetlands	6,350	4.48%
Emergent Herbaceous Wetlands	1,738	1.23%

Map 3.3 Depth to Groundwater



Map 3.4 Surface Waters & HUC-12 Watersheds



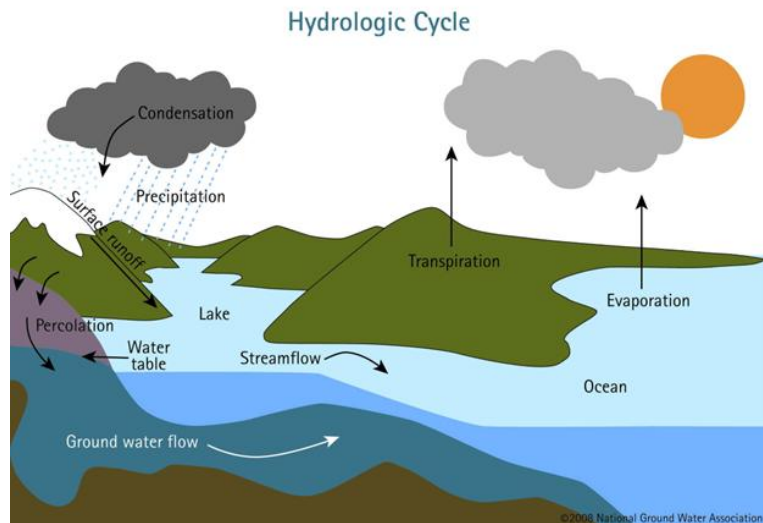
3.2 GROUNDWATER QUALITY ASSESSMENT

Groundwater is a limited resource, and both its quality and quantity are important factors. These factors are primarily influenced by local geology and local land use. Precipitation percolates through the soil and bedrock where it eventually reaches a saturated zone known as an aquifer. It is from these aquifers that wells are used to draw water.

Groundwater in the Study Area is generally abundant and of good quality. All public and most private potable water used within the Study

Area comes from groundwater sources. Municipal water supplies and private wells from groundwater sources also support the area's economy, services, and other domestic uses. The hydrologic conditions of aquifers can influence their use as water supplies. The sandstone aquifer can provide an available supply of water for municipal water supplies, whereas the sand and gravel aquifer is suited to individual domestic water supplies. The rock formations of Cambrian sandstone can yield more than 1,000 gallons per minute, while the sand and gravel deposits typically yield significantly less.

While surface water protection receives more emphasis in SSA plan policies, groundwater plans and studies may influence local regulations and future land use plans, which should be recognized and supported through the SSA planning.



Some Potential Sources of Groundwater Contamination

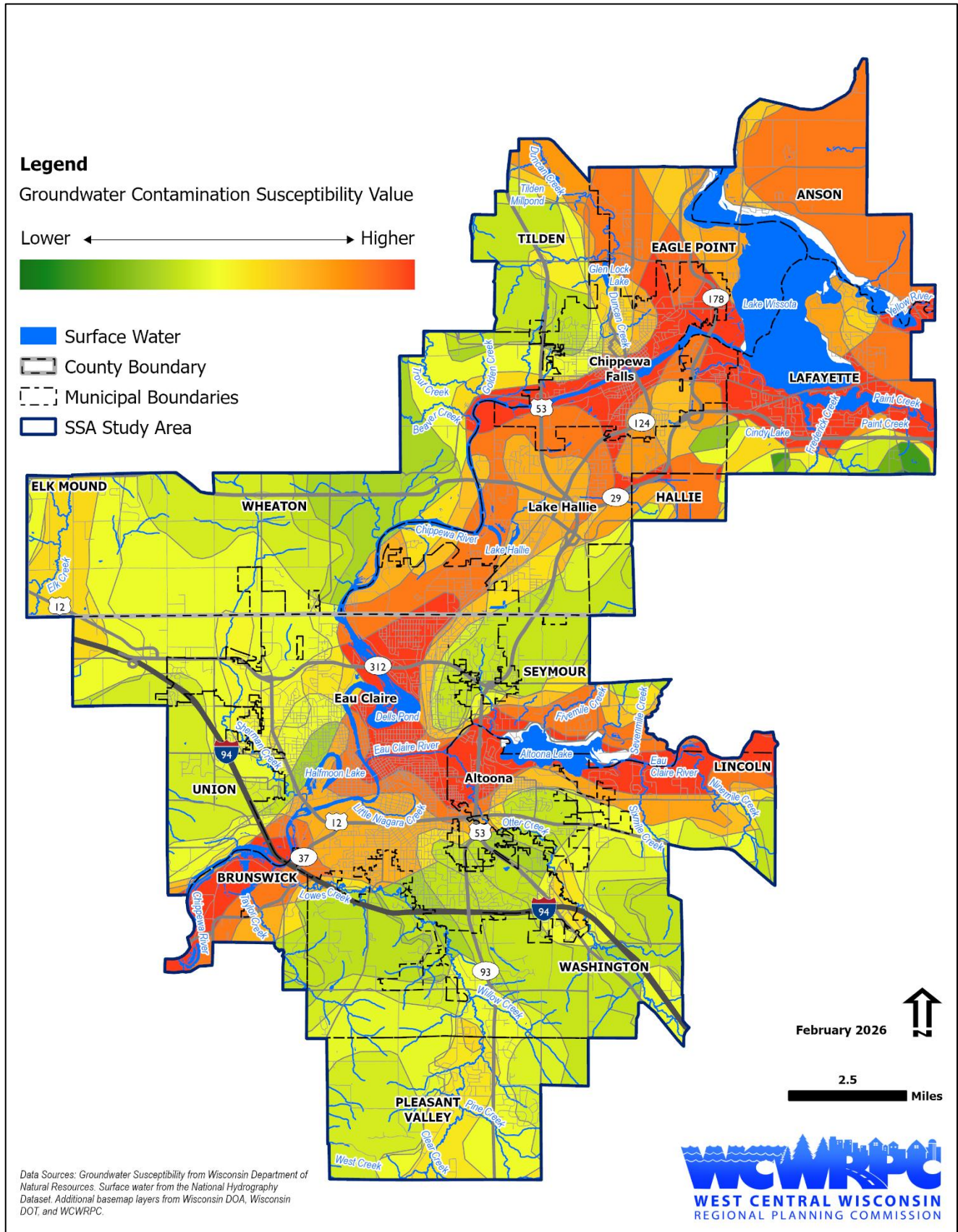
- Chemical storage
- Landspreading of animal, sewage, and industrial waste
- Road salt usage and storage
- Animal feedlots
- Use and spillage of fertilizers and pesticides
- Accidental spills
- Septic tanks and drainfields
- Underground storage tanks
- Underground pipelines and sewers
- Landfills
- Mines, pits, and quarries

3.2.1 Groundwater Quality Conditions

Groundwater quality has been a greater concern than quantity in the Study Area. Contamination is most likely to occur where fractured bedrock is near the ground surface, in very sandy soils, or where only a thin layer of soil separates the ground surface from the water table.

Map 3.6 shows generalized locations within the Study Area with a potential for elevated Groundwater Contamination Susceptibility. The susceptibility varies due to the presence of permeable glacial deposits, sandy soils, and shallow depth to groundwater in some areas. Areas with these conditions, particularly in outwash plains and along river and stream corridors, are more susceptible to contamination from surface activities such as agricultural practices, on-site wastewater treatment systems, and land development.

Map 3.6 Groundwater Contamination Susceptibility



Areas with elevated contamination risk may benefit from increased groundwater/well monitoring, lower densities of development, and/or municipal wastewater treatment rather than private, on-site systems, if cost-efficient. Alternative on-site systems, such as holding tanks, might be considered in existing developed areas when alternatives are not cost-efficient.

Significant private well testing has been conducted in Chippewa and Eau Claire counties, and additional studies are underway. A 2024 *Wisconsin Groundwater Coordinating Council Report to the Legislature*² identifies nitrate contamination as a serious problem in Wisconsin's groundwater due to sources like fertilizers, manure, and septic systems. The report estimates that 13.5% of private wells in Chippewa County and 5.3% of private wells in Eau Claire County exceed the safe drinking standard for nitrate contamination, though some studies suggest that the actual percentages may be significantly higher. The current safe drinking water standard for nitrates is 10 milligrams per liter; infants and pregnant women in particular are advised to avoid drinking water that exceeds this limit. Many households with private wells have installed reverse osmosis systems to mitigate the health risks. Well testing data also identifies nitrates as the most common groundwater pollutant concern for the Study Area. **Map 3.7** shows average nitrate test results from 1980-2024 for the general area by section. Some sections may have one test results while others may represent multiple tests.

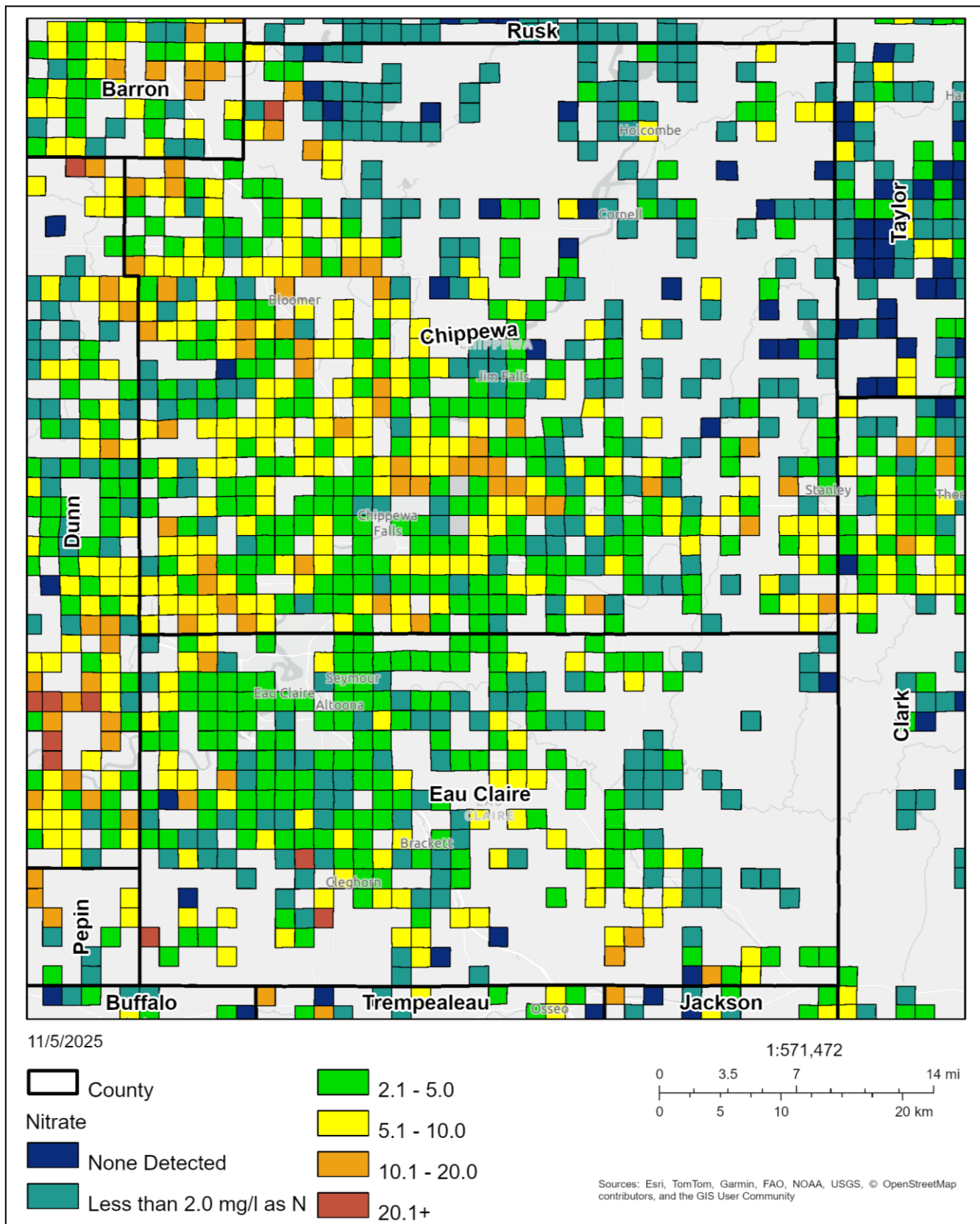
There are no atrazine prohibition areas within the Study Area. **Map 3.8** shows two areas within the Study Area have special deep well casing requirements due to the existence of VOC contamination. A number of scattered sites throughout the Study Area have experienced contamination. The 320-acre National Presto Industries site, largely in the City of Eau Claire is the only Superfund National Priority List site within the Study Area; long-term treatment and monitoring is continuing. Map 3.8 also shows the location of known landfills within the Study Area for which setback requirements apply for public and private wells.

Additional groundwater contamination concerns do exist within the Study Area, including chloride (salt) and manganese. Bacteria (e.g., coliform, E Coli) can get into well water when work is performed on a well, if a well is not properly built, or if there are nearby sources of animal or human waste. Testing for these other contaminants is not as robust compared to nitrates.

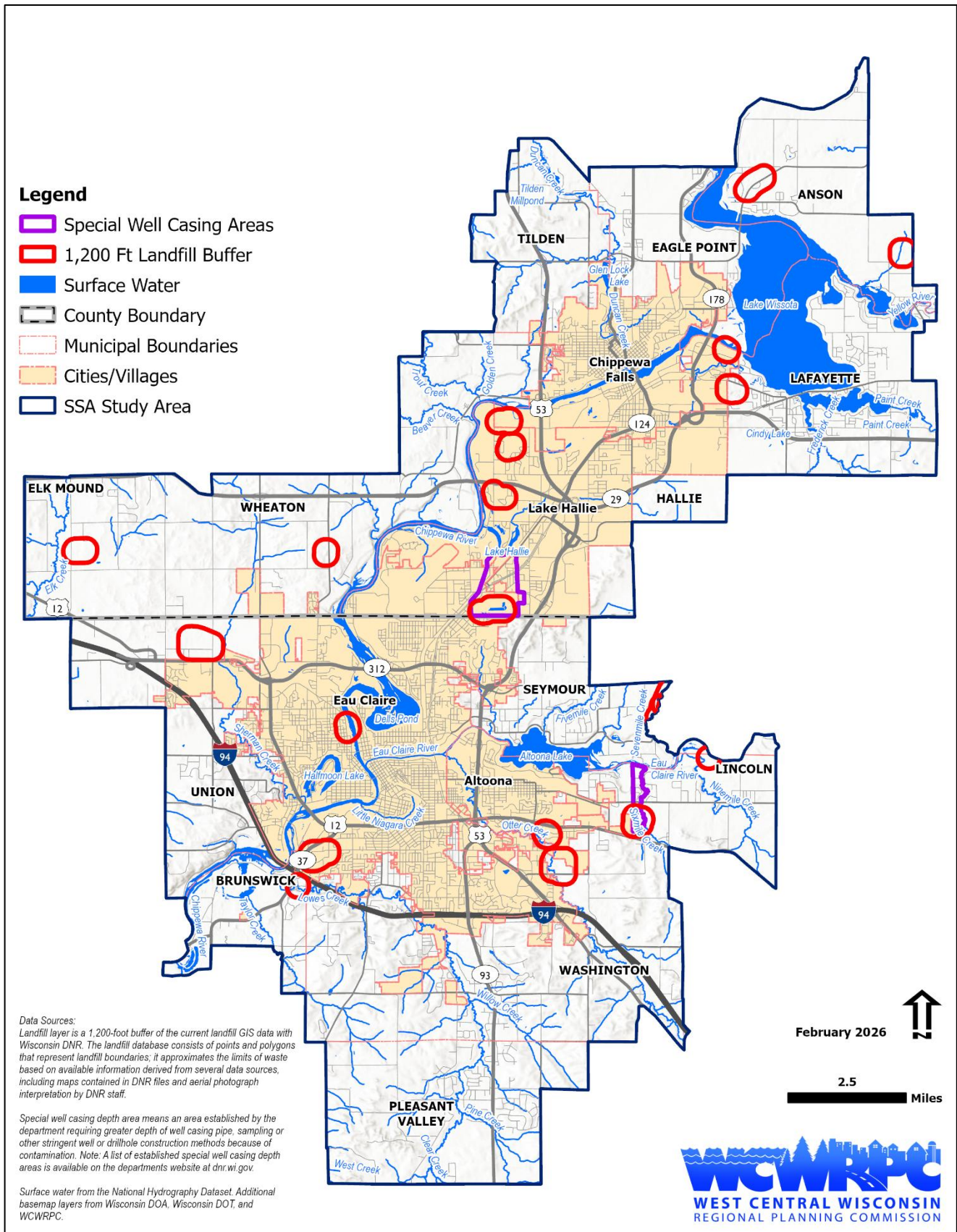
During community planning efforts, there has been increasing concern expressed over contamination threats due to pharmaceuticals and Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS). As of Fall 2024, PFAs have not been detected above the WI DHS hazard index in the municipal water systems of Altoona, Chippewa Falls, Eau Claire, and Lake Hallie. In 2024-2025, the City of Eau Claire designed and constructed a PFAs water treatment facility as a result of PFAS preventative measures to maintain levels below newly recommended standards and to provide the public safe water. The PFAS facility is expected to be fully operational in fall of 2026. The WRR Environmental Services site in the Town of Washington is under investigation due to PFAs levels. An investigation of PFAs contamination at the Chippewa Valley Regional Airport is also ongoing.

² Wisconsin Groundwater Coordinating Council Report to the Legislature. Fiscal Year 2024.
https://widnr.widen.net/view/pdf/c5e61bs1x6/DG_GCC_Report_2024.pdf

Map 3.7 Well Testing Averages for Nitrates, 1980-2024



Map 3.8 Landfills & Special Well Casing Areas



What are PFAS?

PFAS are a group of human-made chemicals used for decades in numerous products.



Products that may contain PFAS.

What is Wisconsin Doing About It?



Additional efforts include a **PFAS Action Committee (WisPAC)** and a **PFAS Technical Advisory Group**.

Why Should I Care?

PFAS persist in the environment and the human body for long periods of time. Recent findings indicate that exposure to certain PFAS may have harmful health effects in people.



What You Can Do...



Test Your Water
dnr.wi.gov/u/?q=177



Check State Fish Advisories
dnr.wi.gov/u/?q=176



Learn More About PFAS Health Risks
dnr.wi.gov/u/?q=175



Visit dnr.wi.gov, search **PFAS**.



RR-114b-E

3.2.2 Drinking Water Sources & High-Capacity Wells

Groundwater is the only source of potable, drinking water within the Study Area, unless bottled water is imported from outside the area. Most of the Study Area's urban population is served by municipal wells in Eau Claire, Altoona, Chippewa Falls, and Lake Hallie. Most of the Study Area's remaining population are served by individual private wells for each home.

The table below identifies the number of WDNR-permitted municipal or other community wells within the Study Area. Many additional transient, non-community wells exist for public locations where people do not reside for long periods of time such as campgrounds, gas stations, churches, or taverns.

Municipality	Municipal or Community Wells
City of Altoona	15
City of Chippewa Falls	9
City of Eau Claire	24
Village of Lake Hallie/Town of Hallie	5
Town of Eagle Point	1 (City of Chippewa Falls)

Chapter 3.5.3(b) discusses groundwater recharge & wellhead protection areas for these public wells that should be considered as part of water quality management planning.

In all, there are 36 public/municipal wells that are among the 182 high-capacity wells permitted by the State of Wisconsin within the Study Area. There are 28 agricultural or orchard irrigation wells and 17 wells associated with water bottling.

What is a High-Capacity Well?

The Wisconsin DNR defines a high-capacity well as any well, or combination of wells on the same property, with the capacity to withdraw more than 100,000 gallons of water per day. It excludes residential and fire protection wells. WDNR approval is required for the construction and operation of these wells due to potential impacts on groundwater resources.

3.2.3 Groundwater Quality Management Plans and Policies

This Sewer Service Area (SSA) Plan is part of the larger collection of water-related plans constituting the areawide water quality management plan described under NR 121. As noted in Chapter 1, it is the intent of this SSA Plan to identify and reference, but not duplicate, these other related plans. Key plans and policies pertaining to groundwater quality include:

State of Wisconsin

Wisconsin Statutes §160 establishes the framework for developing numeric groundwater quality standards, both enforcement standards and preventive action limits, with the scope of minimizing the concentration of contaminants concentration in groundwater and to protect public health and the environment. Chapter 160 also established the Groundwater Coordinating Council (GCC) to strengthen coordination among state agencies involved in groundwater protection and research.

While Ch. 160 defines the statutory framework for establishing Wisconsin's groundwater standards, Wisconsin Administrative Code NR 140 contains such standards and provides guidelines and procedures for regulatory authorities to manage regulated activities and facilities that may impact groundwater resources. NR 809 establishes drinking water standards for public water systems. Rulemaking for NR140 and NR809 is underway to establish new state groundwater and drinking water standards for certain PFAS substances.

These groundwater policies are primarily administered by the Wisconsin Department of Natural Resources (WDNR) through its Drinking Water & Groundwater Program. The groundwater and drinking water standards are recommended by Wisconsin Department of Health Services (DHS) and/or based on federal benchmarks. Various State departments have groundwater-related roles, and they may collaborate with WDNR and DHS in identifying substances of concern and establish appropriate standards. For example, the Department of Agriculture, Trade and Consumer Protection (DATCP) takes a lead role in groundwater education and monitoring for pesticides. WDNR also partners with many Federal, State, and local partners in the protection of groundwater resources, such as the GCC and the Groundwater-level Monitoring Network. The GCC makes an annual report to the Legislature describing the state of groundwater in Wisconsin, summarizing council activities, and making recommendations. The primary 2025 Annual Report recommendations focus on:

- Addressing PFAS contamination in groundwater.
- Addressing nitrate contamination in groundwater.
- Addressing pesticide contamination in groundwater.
- Finding solutions for water-stressed areas affecting communities, economic activity and water resources.

Other key State groundwater policies include:

- Wisconsin Statutes §280 – Well Drilling, Heat Exchange Drilling, & Pump Installing
- NR 123 – Well Compensation Program
- NR 141 – Groundwater Monitoring Well Requirements
- NR 811 – Requirements for the Operation & Design of Community Water Systems
- NR 812 – Well Construction & Pump Installation
- NR 820 – Groundwater Quantity Protection
- NR 845 – County Administration of NR 812 for Private Wells

County Land & Water Resource Management Plans

Wisconsin law requires each county to have a land and water resource management plan (LWRM Plan) that has been approved by the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). The LWRM Plan guides the activities of county land and water management departments in their efforts to protect and improve land and water resources over a 10-year period. The State requires each county to update its LWRM Plan every five years to remain eligible for conservation staff funding and cost-share grants.

Groundwater protection is a significant component of the LWRM Plans both the Chippewa and Eau Claire counties.

- Chippewa County LWRM Plan 2024-2029 (updated in 2024)
- Eau Claire County LWRM Plan (updated in 2022)

These plans represent the primary, current groundwater protection plans for their respective counties, including an analysis of available data and related goals and strategies.

Wellhead Protection Plans

Chapter 3.6.3 discusses wellhead and source water protection planning and policies.

Chippewa County Initiatives

- Continues to coordinate and promote well testing through the County Land Conservation & Forest Management Department, and provides summary data to communities for planning purposes.
- The Chippewa County Groundwater Inventory project continues to compile, evaluate, and share well testing data, including a web-based data dashboard and well permitting/groundwater inventory GIS database. The County now has its own laboratory, which will allow for most cost-efficient testing of bacteria.
- Collaborated with USGS to produce a ModFlow Groundwater Model to evaluate the impacts of high-capacity wells in western Chippewa County.
- Administers a Wellhead Protection Ordinance to protect recharge areas of municipal water supplies.
- Implemented a Nitrate Remediation Project to promote agricultural best practices, disseminate educational information, provide 4 water refill stations in areas with elevated nitrates, and track remediation progress.
- Incorporating groundwater protection as a significant component of the Natural Resources element of the County's Comprehensive Plan, which was updated in 2026.

Eau Claire County Initiatives

- Established a Groundwater Advisory Committee in 1989. The Committee has coordinated efforts with a variety of Federal, State, and local partners, including UW-Eau Claire.
- Collaborated with WCWRPC to prepare a Groundwater Management Plan in 1994, followed by *The State of Groundwater in Eau Claire County Report* in 2018.
- Continues to coordinate and promote well testing through the County Health Department's laboratory, and provides summary data to communities for planning purposes. Various maps and data related to water use and vulnerability can be found at the County's website.
- Currently working with Army Corps of Engineers to conduct groundwater modelling.
- Administers a Wellhead Protection Ordinance (Title 18.55) to protect municipal water supplies through a groundwater protection overlay district.
- Incorporated groundwater protection into the Natural Resources element of the County's Comprehensive Plan, which was updated in 2020.

3.3 SURFACE WATER QUALITY ASSESSMENT

Generally, Sewer Service Area (SSA) planning has a primary emphasis on protecting surface water quality from the impacts of growth.

3.3.1 Surface Water Quality Conditions

Impairments (303d-listed)

Table 3 lists the surface waters shown on **Map 3.9** that are impaired (303d-listed) as not meeting water quality standards.

Table 3. Impaired/303d-Listed Waters

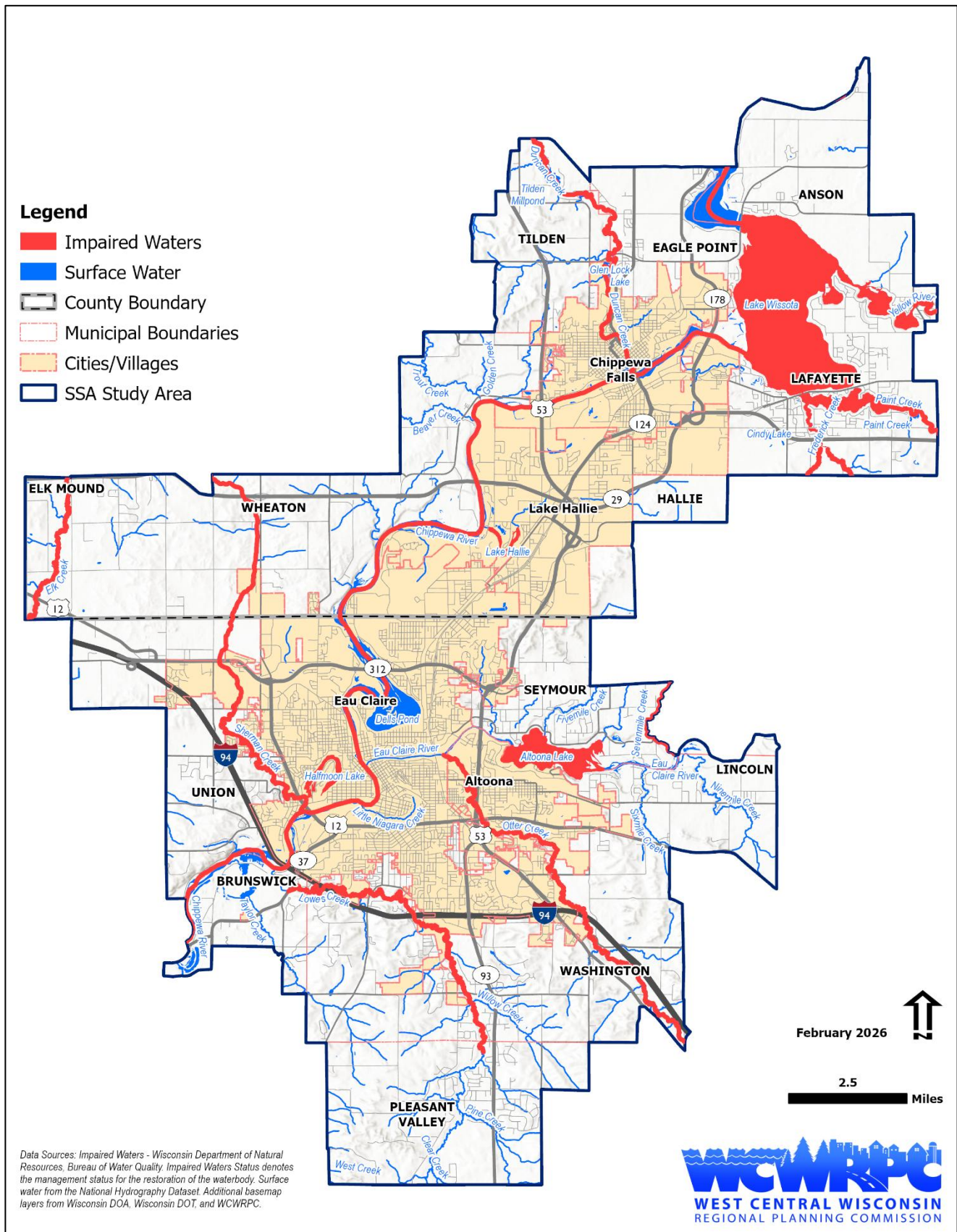
Water Body	Pollutant(s)	Related Impairments
Altoona Lake	Total Phosphorus	Excess Algal Growth
Chippewa River	PCBs	PCBs Contaminated Fish Tissue; Metals Contaminated Sediment
Duncan Creek	Total Phosphorus	High Phosphorus Levels
Elk Creek	Total Phosphorus	High Phosphorus Levels
Lake Hallie	Total Suspended Solids (TSS)	Degraded Habitat
Lake Wissota	PCBs; Total Phosphorus	PCBs Contaminated Fish Tissue; Excess Algal Growth
Lowes Creek	Total Phosphorus	High Phosphorus Levels
Otter Creek	Total Phosphorus	High Phosphorus Levels
Sevenmile	Total Phosphorus	High Phosphorus Levels
Sherman Creek	Unknown	Degraded Biological Community

Phosphorus is the primary pollutant, largely from the runoff of nutrient and sediment from farm fields, stormwater, and shoreland areas. While models suggest that agricultural lands are the principal source of this excessive phosphorus, communities, landowners, and farmers all have a role in land planning, managing stormwater, and promoting best management practices to reduce such runoff and nutrient-loading into our surface waters.

In 2002, the Chippewa River was 303d listed as impaired for fish consumption due to Mercury and Polychlorinated biphenyls (PCBs), toxic chemicals once used in many industrial applications. The mercury advisory was removed in 2006, and WDNR has proposed to delist the PCBs based on continued testing.

Some of the Study Area's water bodies have had struggles with unhealthy levels of bacteria or other disease-causing micro-organisms. Potential sources of bacteria can include sewage overflows, failing septic systems, animal waste (e.g., waterfowl, manure), and other polluted runoff. Beach closures related to high bacteria are not uncommon on some of the water bodies, such as at Lake Altoona, especially during the summer months for a number of days following heavy rains and runoff events.

Map 3.9 Impaired (303d-listed) Waters



Water Conservation Features

Though impairments exist, most of the streams and rivers in the Study Area have been identified by the WDNR Healthy Watersheds, High-Quality Waters initiative as high-quality waters due to it being a unique or rare resource (e.g., trout streams), biotic integrity, or its overall quality. However, none of the watersheds in the Area have been identified as being among the State's healthiest.

Outstanding Resource Waters (ORWs) or Exceptional Resource Waters (ERWs) are WDNR-designated surface waters that provide outstanding recreational opportunities, support valuable fisheries, and wildlife habitat, and have good water quality. ORWs do not have any point source pollutants directly to the water, though they may receive non-point runoff. If a waterbody has existing point sources at the time of designation, they may be designated as an ERW. The following are the ORWs/ERWs within the Study Area:

- Elk Creek (Outstanding)
- Clear Creek (Exceptional)
- Lowes Creek (Exceptional)
- Sevenmile Creek (Exceptional)
- Trout Creek (Exceptional)

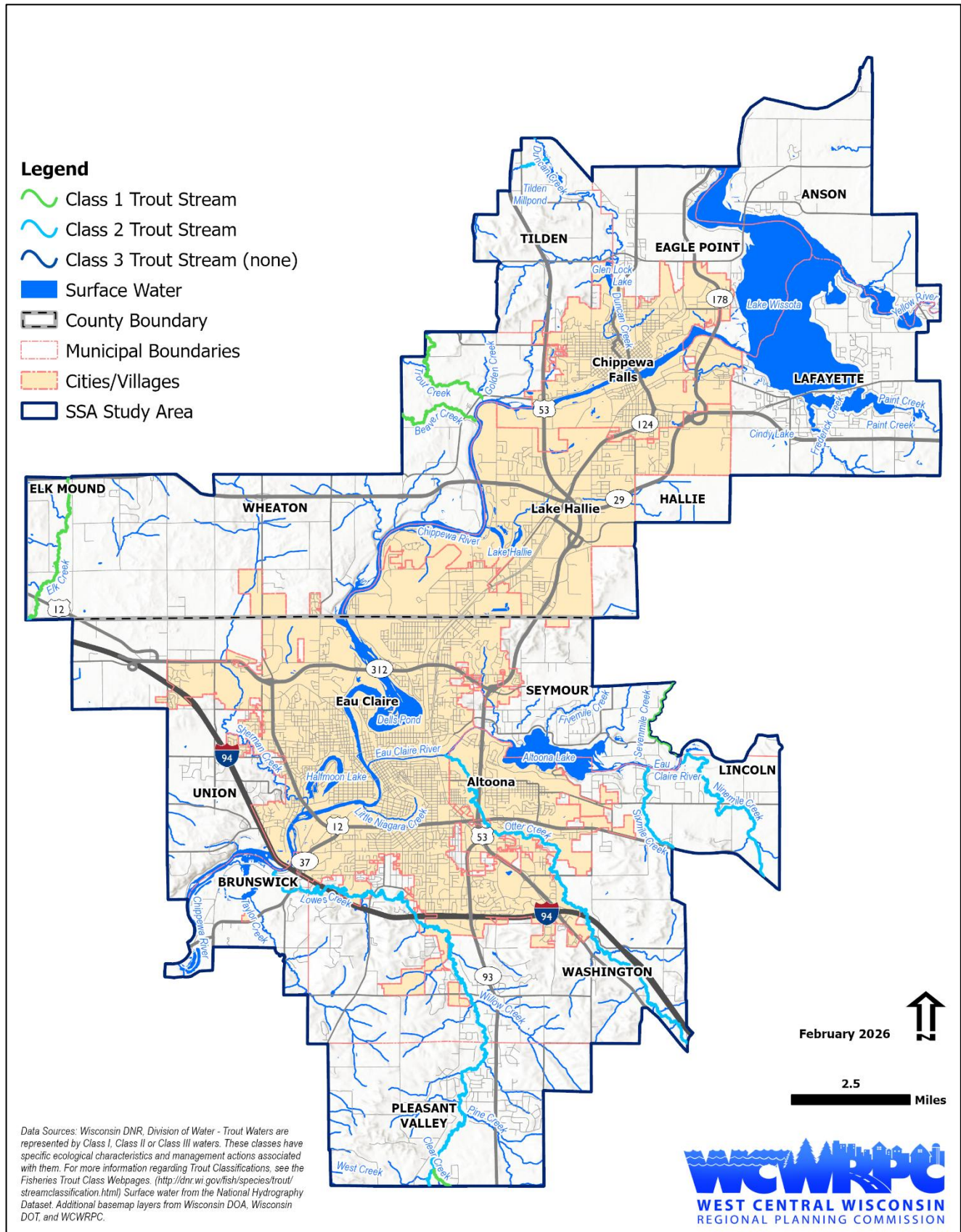
All of the above ORWs/ERWs are classified as trout streams. A mix of factors contribute to trout stream health, including streambed geology, temperature, pH, aquatic plants, cover/shade, and clean water. DNR uses three categories to classify trout streams. The class definitions are as follows:

- 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 an annual stocking of trout to provide trout fishing. Generally, there is no carryover of trout from one year to the next.

Map 3.10 shows the trout streams within the Study Area:

- Beaver Creek
- Clear Creek
- Duncan Creek
- Elk Creek
- Lowes Creek
- Ninemile Creek – South
- Otter Creek
- Sevenmile Creek
- Sixmile Creek
- Trout Creek

Map 3.10 Trout Streams



3.3.2 Point Sources of Potential Pollutants and Permitted Discharges

Surface water pollution comes from point sources and nonpoint sources. Point source pollution originates from a specific entry point, such as a wastewater treatment plant, industrial discharge, stormwater pipe, or hazardous materials spill. Since these sources can be traced to a specific location, they are easier to monitor and regulate. Many regulated point sources spend millions of dollars to comply with phosphorous or other water quality standards, even though they often represent a relatively low percentage of the pollutant-loading problem.

DNR is authorized to issue Wisconsin Pollutant Discharge Elimination Systems (WPDES) individual and general permits authorizing discharges to surface water and/or groundwater. Individual (i.e., site-specific) WPDES permits are issued to municipal and industrial facilities discharging to surface water and/or groundwater. General permits are issued for a wide range of categories of industrial, municipal, and other wastewater discharges.

There are three wastewater treatment facilities (WWTFs) in Study Area with individual permits that discharge to the Chippewa River, which are further discussed in Chapter 5.1. The following summarizes the permit limits for these three WWTFs:

Permit Limit	Permittee		
	Cascade Tissue Group	City of Chippewa Falls	City of Eau Claire
BOD₅	5,292 lbs/day	25 mg/L*	30 mg/L*
Suspended Solids	7,032 lbs/day	30 mg/L*	30 mg/L*
pH	9.0 su	9.0 su	9.0 su
Ammonia Nitrogen	11 mg/L	NA	29 mg/L*
Chlorine	38 ug/L	38 ug/L	38 ug/L
Mercury	12 ng/L	4.9 ng/L	NA
Phosphorus	1.0 mg/L*	1.4 mg/L	1.0 mg/L*

*Monthly average

Stormwater discharges to surface waters may fall under an individual or general permit. Stormwater management and permitting is discussed in Chapter 3.3.5. No single database is available that identifies all WPDES individual and general permits, so this report was unable to identify all permitted point sources/discharges within the Study Area.

3.3.3 Non-Point Sources of Potential Pollutants

Nonpoint-source (NPS) pollution, largely polluted runoff, is the biggest cause of surface water pollution in Wisconsin, degrading or threatening an estimated 90% of inland lakes. Runoff occurs when water cannot infiltrate the soil; rain or snow melt washes sediment, nutrients, and other pollutants off the landscape, threatening downstream surface water resources.

Polluted runoff comes from both rural and urban sources. In an urban or developed setting, this is largely due to runoff from the hardscape (e.g., roof tops, parking areas, compacted soils). Many city and village residents do not realize that stormwater drains bypass wastewater treatment

facilities and empty directly into our rivers, lakes, and streams. In a rural setting, runoff is the result of compacted soils, soil erosion, and other attributes of poor soil health from agricultural, forestry, and recreational uses. Runoff also increases flooding, peak flow events, and shoreland/bank erosion, thereby exacerbating pollutant loading into our rivers, lakes, and streams.

As noted previously, phosphorus is the primary surface water quality impairment in the Study Area. Phosphorus is essential to plant life, and some level of phosphorus is naturally occurring. Farmers add fertilizers and animal manure that are rich in nitrogen and phosphorus to fields to increase yields. Landowners who use lawn fertilizer have similar goals. Phosphorus is also added to our surface waters from organic sources and effluent, such as from livestock and municipal wastewater treatment plants. When runoff and soil erosion containing nutrients such as phosphorus washes into our water bodies, the result is excess nutrient loading. Sediment is often travelling with the phosphorus as erosion occurs.

Agriculture is the primary source of phosphorus loads in Wisconsin waters. The 2017 Eau Claire River Watershed 9KE Plan estimated that about 76% of the phosphorus loading was runoff from row crops. The Yellow River Moon Bay 9KE Plan identified feedlots as a key source of phosphorus loading.

Like groundwater, surface water is susceptible to other contamination, such as chloride from road salt, oil or grease from equipment and parking lots, and sediment from erosion during construction. Stormwater management is a crucial tool in mitigating pollutant runoff as will be further discussed in Chapter 3.3.5.

3.3.4 Surface Water Quality Management Plans

As noted previously, this Sewer Service Area (SSA) Plan is part of the larger collection of water-related plans constituting the areawide water quality management plan described under NR 121. It is the intent of this SSA Plan to identify and reference, but not duplicate, these other related plans. Key plans pertaining to surface water quality include:



An emphasis of watershed and county conservation plans is partnering with farmers, farmland owners, forestry/logging businesses, agri-business, lake groups, and other support partners to promote soil health best management practices and other land conservation initiatives that benefit farmers, water quality, healthy forests, and the environment.

Lower Chippewa River Basin Water Quality Management Plan

The Lower Chippewa River Basin (HUC-8) Plan was created by WDNR in 1996 and revised in 2001. This plan best captured the areawide water quality management planning approach envisioned under NR 121, but funding has not been available to continue updating such basin plans. Though outdated, this plan included many HUC-6 basin-wide recommendations and HUC-10 sub-watershed recommendations that are still relevant today.

Total Maximum Daily Load (TMDL)

A TMDL is the calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant. Two TMDLs exist within the Study Area:

- Little Lake Wissota embayment of Lake Wissota (2010) – Phosphorus
- Half Moon Lake (2004) - Phosphorus

Nine Key Element (9KE) Plans

Nine Key Element Plans are watershed plans based on EPA's planning framework that bring community partners together to address non-point source pollution or runoff. For the Study Area, phosphorus and soil erosion (sedimentation) are the primary focus of these plans, with a strong emphasis on promoting soil health best management practices among farmers and farmland owners. Having and maintaining a 9KE Plan provides greater opportunity to secure Federal Section 319 dollars for projects recommended in the plan. Three 9KE Plans overlap portions of the Study Area:

- Little Lake Wissota (2020) – This 9KE Plan is an action plan to meet the water quality goals identified in the Little Lake Wissota TMDL.
- Lower Yellow River Watershed and Moon Bay of Lake Wissota (2021) - This plan was a logical extension of the Little Lake Wissota Stewardship Project initiative, as the embayment sits directly south of Moon Bay, where the Lower Yellow River flows in.
- Eau Claire River Watershed (2017, being updated) - Since this plan's creation, an Eau Claire River Watershed Coalition has continued to meet regularly and, in collaboration with various partners, has championed a variety of efforts envisioned in the plan. An Eau Claire River Watershed Association was recently incorporated to provide fiscal support to these efforts.

Lake, Stream, & Watershed Management Plans

These plans are created to improve or protect a surface water and its ecosystem as a whole, but may also include recommendations related to the use of that water. Most commonly, a lake management plan is created by a lake group or municipality that meets the guidelines under NR 191.45, which serves as a prerequisite for funding under NR 193. The scope and content of such plans will vary by water body, and may incorporate additional studies and sub-plans (e.g., aquatic invasive species, aquatic plant management plan, shoreland/woody habitat assessment, water quality & macro-invertebrate studies).

In addition to the previous TMDL and 9KE Plans, recent management plans in the Study Area include:

- Lake Altoona Management Plan (2014, pursuing funding for update)
- Lake Hallie (2002)
- Half Moon Lake Water Quality Management Plan (2020) & Watershed Management Plan (2018)

City of Eau Claire Waterways Plan (2012)

The City of Eau Claire updated its Waterways Plan from 1988. The plan comprehensively examines the waterway resources and abutting lands, including the Chippewa and Eau Claire Rivers, Half Moon Lake, and creeks such as Lowes Creek, Sherman Creek, and Otter Creek.

County Land & Water Conservation Plans

Surface water quality protection and restoration as major components of the Land & Water Conservation Plans for Chippewa and Eau Claire counties. Conservation staff from Chippewa and Eau Claire Counties actively participate in the creation of water-quality plans within their counties and provide support to landowners, lake groups, and other partners in the implementation of these plans.

3.3.5 Stormwater Management

Our rivers, lakes, and streams are part of and are impacted by our stormwater management and flood control systems. Stormwater management, shoreland regulations, and best practices are primarily intended to protect our surface waters from sediment and other pollutant loading. On the other hand, floodplain regulations and flood controls are mainly for public safety and to avoid or mitigate flood damage.

Stormwater management is often associated with urban areas and development, where practices such as detention basins, rain gardens, porous pavement, etc., are installed to accommodate runoff or mimic natural drainage systems lost due to development. Stormwater management also includes strategies farmers and timber managers use to prevent run-off, such as filter strips, grass swales, settling basins, and soil stabilization on slopes.

Urban Stormwater (MS4) Permits

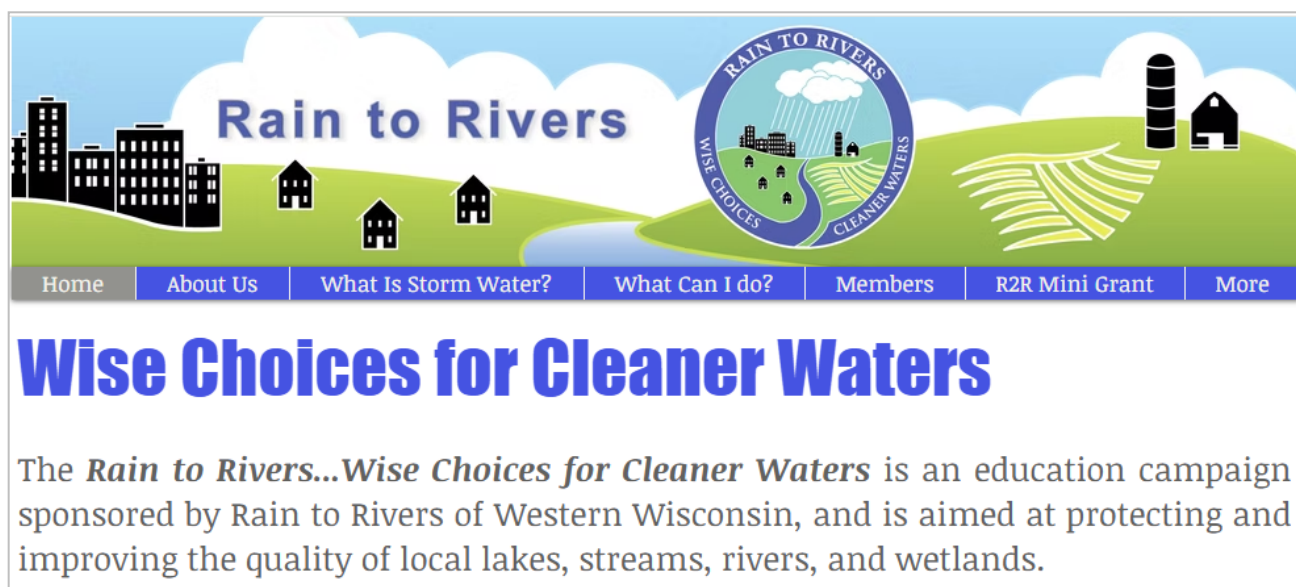
As a federally designated urbanized area, Chippewa and Eau Claire counties, as well as many of their local governments, have been required to obtain Municipal Separate Storm Sewer System (MS4) permits to reduce stormwater runoff by implementing stormwater management programs with best management practices.

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. More than 200 Wisconsin municipalities must meet these Phase I and II rules.

Below are the permit statuses of all the communities within the SSA Study Area:

Unit of Government	Permit Status
Town of Anson	Not Required
Town of Brunswick	Not Required
Town of Eagle Point	Not Required
Town of Hallie	
Town of Lafayette	Granted
Town of Pleasant Valley	
Town of Seymour	Granted
Town of Tilden	Not Required
Town of Union	Not Required
Town of Washington	Granted
Town of Wheaton	Not Required
Village of Lake Hallie	Granted
City of Altoona	Granted
City of Chippewa Falls	Granted
City of Eau Claire	Granted
Chippewa County	Granted
Eau Claire County	Granted

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 and education requirements.



Rain to Rivers

Home | About Us | What Is Storm Water? | What Can I do? | Members | R2R Mini Grant | More

Wise Choices for Cleaner Waters

The *Rain to Rivers...Wise Choices for Cleaner Waters* is an education campaign sponsored by Rain to Rivers of Western Wisconsin, and is aimed at protecting and improving the quality of local lakes, streams, rivers, and wetlands.

Industrial Stormwater Permits

Pollutants carried in storm water runoff from industrial facilities threaten or degrade water quality in many areas of the state. Because of this problem, state and federal laws require that certain dischargers of industrial storm water have a storm water discharge permit. The purpose of the permit is to identify conditions under which industrial storm water can be discharged so that the quality of surface waters, wetlands and groundwater is protected. NR 216 contains a list of industries that must obtain stormwater discharge permit coverage and related rules.

For those municipalities within the Study Area, 65 industries in Chippewa County and 43 in Eau Claire County have been issued stormwater permit coverage by WDNR.

WDNR Stormwater Construction Permits

NR 151, NR 216, and SPS 320-325 identify the runoff management performance standards, prohibitions, and measures for farms as well as the urban standards to control construction site erosion, manage runoff from roads and manage fertilizer use on large turf areas. Landowners of most construction projects where one or more acres of land will be disturbed must submit an application called a Notice of Intent (NOI) to request coverage under the Construction Site Storm Water Runoff General Permit No. WI-S067831-6. The NOI shall include:

- a written erosion control and, as applicable, a post-construction stormwater management plan.
- an erosion control map (construction plans) including topography, wetlands, waters, proposed limits of land disturbances, grading, permanent vegetation, post-construction stormwater features, etc.
- soil loss/sediment discharge calculations
- wetland assessment method
- consideration of endangered species or threatened resources (will be reviewed by WDNR)
- long-term maintenance agreements and/or permission letter for stormwater practices
- additional evaluation and modeling, and agreement requirements depending on the site, infiltration practices, etc.
- site photos

These permits are issued by WDNR. Permit applications to WDNR include the creation of an erosion control and stormwater management plan describing the best management practices that will be used on-site for erosion control consistent with the requirements of the construction site storm water permit. Certain agricultural activities are exempt from permit requirements under NR 216. And depending on the project scope, a site may or may not be required to include post-construction stormwater management practices.

Municipal Stormwater Management Plans & Local Ordinances

Local plans and regulations to protect surface water quality from erosion and runoff are a crucial to achieving the ultimate purpose of areawide water quality management planning and the goals of this SSA Plan.

Most communities do not have a municipal-level stormwater management plan and such plans are not required as part of MS4 permit, but can guide permit-related activities. Municipal stormwater management plans analyze stormwater and guide public stormwater infrastructure capacity, improvements, and maintenance. Such plans may be created for all or a part of a community. Stormwater management can also be incorporated into a variety of other local planning tools, including conservation plans, comprehensive plans, capital improvement plans, zoning and land division ordinances, and site plan review procedures. The following units of government in the Study Area reported that they have a stormwater management plan:

- Chippewa County
- City of Altoona
- City of Eau Claire

In addition to the WDNR Stormwater Construction permit discussed previously, local erosion control and stormwater permitting requirements also apply and may regulate smaller areas of disturbance. These local ordinances are often based on NR 151 and NR 216 requirements and typically include both erosion control during construction as well as post-construction stormwater management. Some local ordinances also require such a permit for new land divisions and/or subdivisions, if significant impervious surface will be created, or if environmentally sensitive areas will be disturbed. In short, a proposed construction project in the urban area will often need to obtain both a WDNR and local stormwater and erosion control permit.

The following table identifies the stormwater and erosion control ordinances for the local units of government in the Study Area as identified by the communities:

Unit of Government	Stormwater Management & Erosion Control Policies
Town of Anson	Chapter 12 of the County's Code administered by County
Town of Brunswick	Regulated by Eau Claire County Chpts 17.05 & 17.06
Town of Eagle Point	Chapter 12 of the County's Code administered by County
Town of Hallie	No local ordinance identified.
Town of Lafayette	Chapter 12 of the County's ordinance administered by County
Town of Pleasant Valley	Regulated by Eau Claire County Chpts 17.05 & 17.06
Town of Seymour	Regulated by Eau Claire County Chpts 17.05 & 17.06
Town of Tilden	No local ordinance identified.
Town of Union	Regulated by Eau Claire County Chpts 17.05 & 17.06
Town of Washington	Regulated by Eau Claire County Chpts 17.05 & 17.06
Town of Wheaton	May have adopted Chapter 12 of the County's ordinance
Village of Lake Hallie	Chapter 33 – Stormwater Management Ordinance; based on Chapter 12 of the County's Code & administered by County

City of Altoona	Title 14 - Stormwater
City of Chippewa Falls	Chapter 30 – Construction Site Erosion Control Ordinance Chapter 31 – Stormwater Management Ordinance
City of Eau Claire	Title 19, Chapters 19.10, 19.20, & 19.30 – Storm Water Ordinance
Chippewa County	Chapter 12 - Stormwater Management & Construction Site Erosion Control Ordinance The County’s ordinance applies to land disturbing construction activities on lands owned by Chippewa County and County Highway rights-of-way located in the MS4 area. However, a number of towns have effectively adopted Chapter 12 as a town ordinance, modifying its jurisdiction to include the entire town, then entered into an agreement for County enforcement of the ordinance. The County has additional, limited, stormwater and erosion control references within its zoning and land division ordinances.
Eau Claire County	Chapter 17.05 – Erosion Control Ordinance Chapter 17.06 Storm Water Management Ordinance The County’s ordinance applies to all unincorporated lands in the County, except for the Town of Ludington, which has adopted its own ordinance.

A number of communities noted that stormwater-related policies can also be found within their zoning and/or land division regulations. Some public facilities have their own stormwater management or stormwater pollution prevention plans.



Clean Water Starts in Your Own Yard...

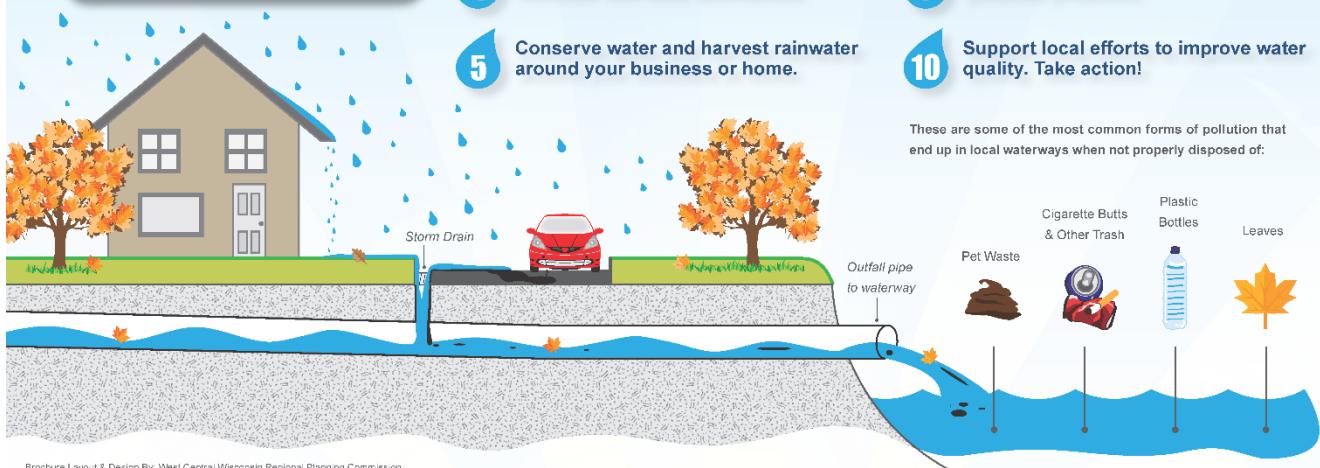
Water pollution has many sources. Up to half of all pollutants come not from factories or wastewater treatment plants, but from many diffuse sources resulting from our own everyday activities. For example, dog waste left on the ground or chemicals sprayed on lawns may get washed into the nearest waterways during the next rain event. Pet waste and pesticides in your yard may not seem like they could have a large effect on local streams and lakes, but our waterways receive stormwater from thousands of homes and properties each time it rains. What we do in our own backyards and our communities can make all the difference to the quality of our lakes and streams.

What can I do?

Top 10 things you can do to keep area waters clean...

- 1 Be a pooper scooper and pick up after your pets.
- 2 Keep soil in your yard and out of our waterways.
- 3 Keep leaves and grass clippings out of ditches and waterways.
- 4 Kick your chemical dependency and consider non-toxic alternatives.
- 5 Conserve water and harvest rainwater around your business or home.
- 6 Don't overfeed your lawn with unnecessary fertilizers or chemicals.
- 7 Practice careful car care by properly disposing of harmful fluids.
- 8 Use a proper container for trash and recyclables.
- 9 Be a watershed watchdog and report potential problems.
- 10 Support local efforts to improve water quality. Take action!

These are some of the most common forms of pollution that end up in local waterways when not properly disposed of:



Brochure Layout & Design By: West Central Wisconsin Regional Planning Commission

3.4 LONG-TERM WEATHER PATTERNS AND IMPLICATIONS

The National Oceanic and Atmospheric Administration (NOAA) classifies the Study Area as having a warm summer humid continental climate. Warm to cool summers and cold winters are the main characteristics. The average monthly temperature ranges from 13 degrees Fahrenheit in January to 71 degrees Fahrenheit in July. Annual precipitation averages 36 inches, with the majority falling in May-August. Seasonal snowfall ranges from 30 to 98 inches (2013-2022).

Regardless of the debate over the causes, there is substantial evidence that Wisconsin's long-term weather patterns are changing. The 2003 report *Confronting Climate Change in the Great Lakes Region*, published by the Union of Concerned Scientists and the Ecological Society of America, projected that by 2030, summers in Wisconsin may resemble those in Illinois overall in terms of temperature and rainfall, and by 2100, the summer will resemble that of current-day Arkansas, and the winter will feel much like current-day Iowa. And a University of Maryland model suggests that by 2080, the climate of Eau Claire will be similar to that of northern Oklahoma.³ Increasing temperatures and shifting precipitation patterns are the two primary factors that will impact our water resources.

To further document these changes in weather patterns and explore their impacts on our State, the Wisconsin Initiative on Climate Change Impacts (WICCI) was formed as a collaborative effort of the University of Wisconsin and the Wisconsin Department of Natural Resources. **Map 3.11** includes maps from the 2021 Assessment Report showing longer-term weather trends for Wisconsin. Temperatures and annual precipitation have increased in the Study Area at a rate higher than the State average. As a result, the area must anticipate increased extreme precipitation events annually, as well as greater severity within individual events.

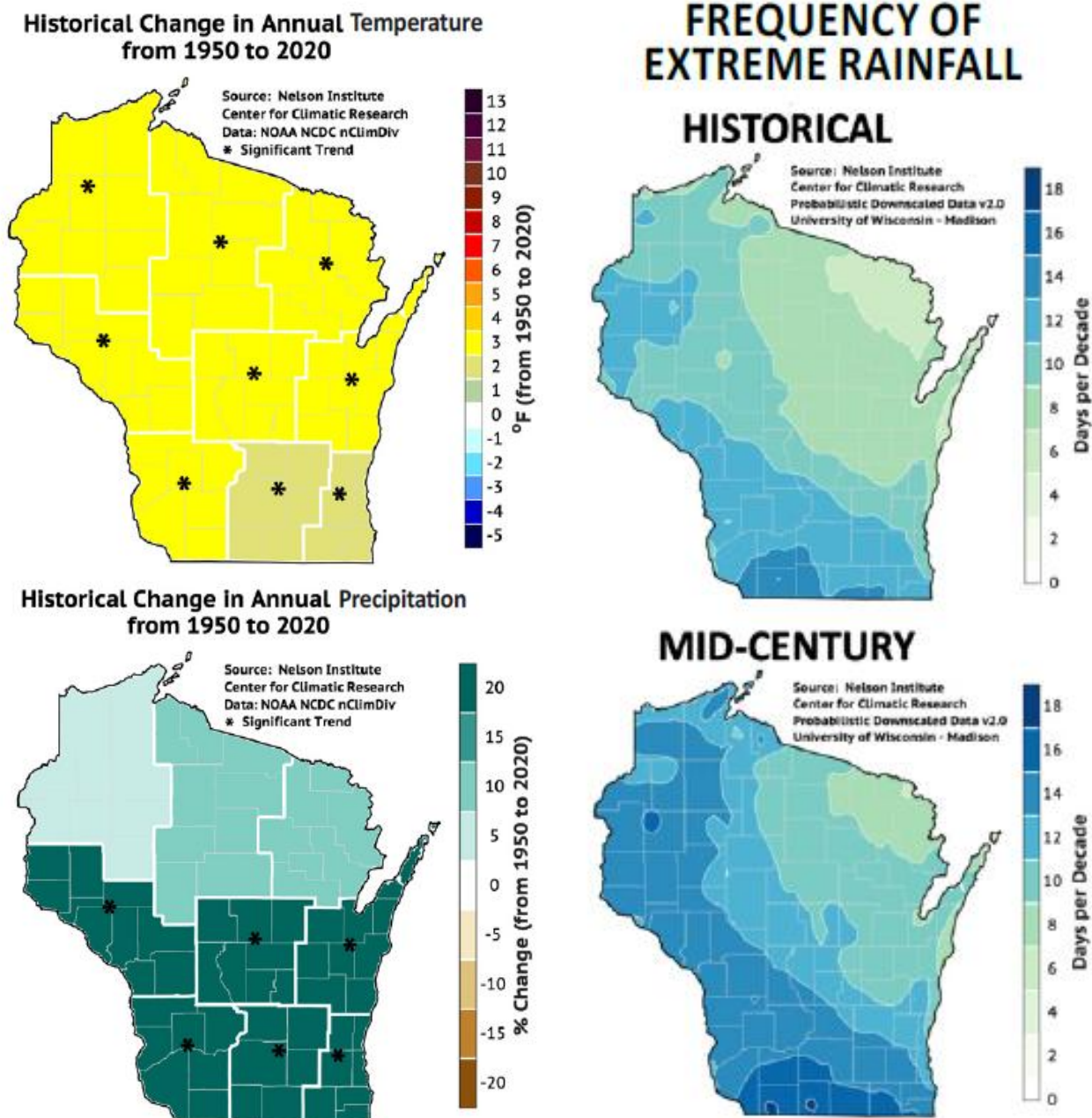
Wisconsin's average daily temperature has become three degrees Fahrenheit warmer since the 1950's and the last two decades have been the warmest on record. By 2050, the WICCI report projects that the number of extreme heat days in Eau Claire County will grow from about 10 to 25 per year. Higher temperatures will result in increased evapotranspiration and longer growing seasons. Over time, these trends have the potential to impact surface and groundwater. Trout streams, in particular, are especially vulnerable to increases in water temperature. Temperature can also change water biology and chemistry, such as increasing algal blooms.

Wisconsin has also become wetter; the average precipitation has increased 17 percent (about 5 inches) since 1950, with most of this increase occurring during the winter months. By 2050, the WICCI report projects that the Study Area will experience 10% more winter and spring precipitation and a 5% increase in summer and fall. This is a positive trend for groundwater recharge, potentially offsetting increased evapotranspiration. However, most notable for surface water quality, the frequency of extreme rainfall events is also increasing. The WICCI report projects that the frequency of extreme rainfall events (2+” within 24 hours) will increase from about 10 per decade to 16-18 per decade. The report details that the Study Area is already experiencing an increase in 100-year rainfall events, with such events ranging from 6” to 6.25” in magnitude. These increasing heavy rainfall and flooding events are not reflected in current

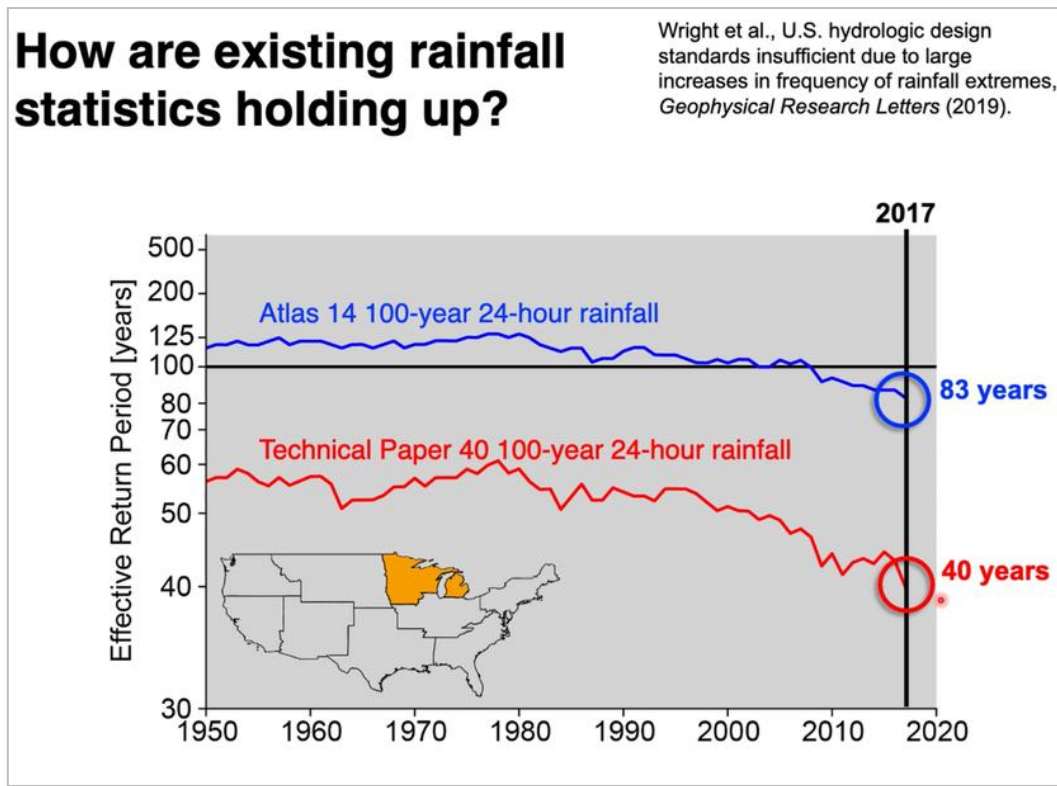
³ <https://www.umces.edu/futureurbanclimates>

floodplain maps and stormwater management models. For example, most stormwater modeling and design standards for Wisconsin municipalities use the precipitation frequency data from NOAA's Atlas 14 (based on 1900-2010 trends) and the older Technical Paper 40 (published in 1961).

Map 3.11 Selected Maps from the 2021 WICCI Report



A 2019 study summarized by the graphic below shows that a 100-year rainfall event based on Atlas 14 was occurring every 83 years by 2017 in the upper Midwest, and the frequency of such events has been increasing significantly since 2010. A separate National Weather Service-funded study from 2019 suggests that today's 100-year rainfall event will be a 20-year storm by the late 21st century. Atlas 15 reflecting more recent trends is not expected to be released before 2027. In the interim, some Wisconsin municipalities are already considering these trends. As an example, Dane County continues to use Atlas 14 data, but in 2021 it updated its erosion control and stormwater management ordinance to require peak rate control based on 200-year storms, instead of 100-year storms.



An increase in flooding will not only impact the built environment, but it will also impact the natural environment. Steep slopes, shorelines, and riparian areas will be more vulnerable to damage, erosion, and habitat degradation with increases of flooding intensity and runoff. In addition, more opportunities will exist for pollutants, sediment, and debris to enter our surface waters. This is consistent with the comments of many local officials during area mitigation planning efforts, who felt that there has been an increase in heavy rainfall events, which have been contributing to localized flash or stormwater flooding.



3.5 ENVIRONMENTALLY SENSITIVE AREAS

3.5.1 What are Environmentally Sensitive Areas (ESAs)?

Wisconsin Department of Natural Resources (WDNR) states that environmentally sensitive areas (ESAs) are “critically important” to sewer service area planning and are defined as:

"Major areas unsuitable for the installation of waste treatment systems because of physical or environmental constraints are 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).

NR 121 suggests the types of ESAs that should be excluded from development in order to prevent adverse effects on water quality should an ESA be degraded or encroached upon. WDNR has further stated that it is ultimately a local decision and the types of ESAs can vary by SSA plan, though certain ESAs, such as surface waters, 100-year floodplains, wetlands, and steep slopes, are common to all plans.

For purposes of creating, updating, amending, and administering the *Chippewa Falls-Eau Claire Urban Sewer Service Area Plan*, environmentally sensitive areas (ESAs) are:

- features of the natural environment of significant size that, if substantially disturbed, could degrade or negatively impact surface or groundwater quality,
- mapped and delineated for purposes of creating, updating or amending the SSA boundary and in greater detail for the review of specific projects and sanitary sewer extensions to determine consistency with the SSA Plan (i.e., 208 Review),
- protected from intensive land disturbances within the entire SSA regardless of the status or type of wastewater treatment,
- excluded from the developable acreage within the SSA, but may be located within the SSA boundary,
- preferably excluded from the SSA if large, contiguous ESAs are adjoining the existing or proposed SSA boundary,
- potential barriers to the provision of cost-efficient services, which could influence the SSA boundary, and,
- not encroached upon by an intensive land disturbance of this SSA Plan, unless: (i) no reasonable alternative exists or the encroachment is necessary to mitigate/remedy an existing environmental problem, (ii) if appropriate best practices are taken to protect water quality, and (iii) the ESA classification is removed through a SSA Plan amendment, subject to the definitions, policies, and exceptions of the State of Wisconsin and this SSA Plan.

Certain areas within the SSA are already protected and not expected to be intensively developed within the 20-year planning period, such as public parks, conservancy areas, and the airport grounds. For such areas, they are treated similarly to an ESA in that their acreage can be excluded from the developable acreage within the SSA, even though some improvements may occur (e.g., a new park pavilion or trailhead).

After considering the guidance of NR 121, existing environmental protections, and the natural features of the SSA Study Area, the Chippewa Falls-Eau Claire Areawide Water Quality Management Policy Advisory Committee, in consultation with Wisconsin Department of Natural Resources determined that the following are environmentally sensitive areas (ESAs) for purposes of this SSA Plan:

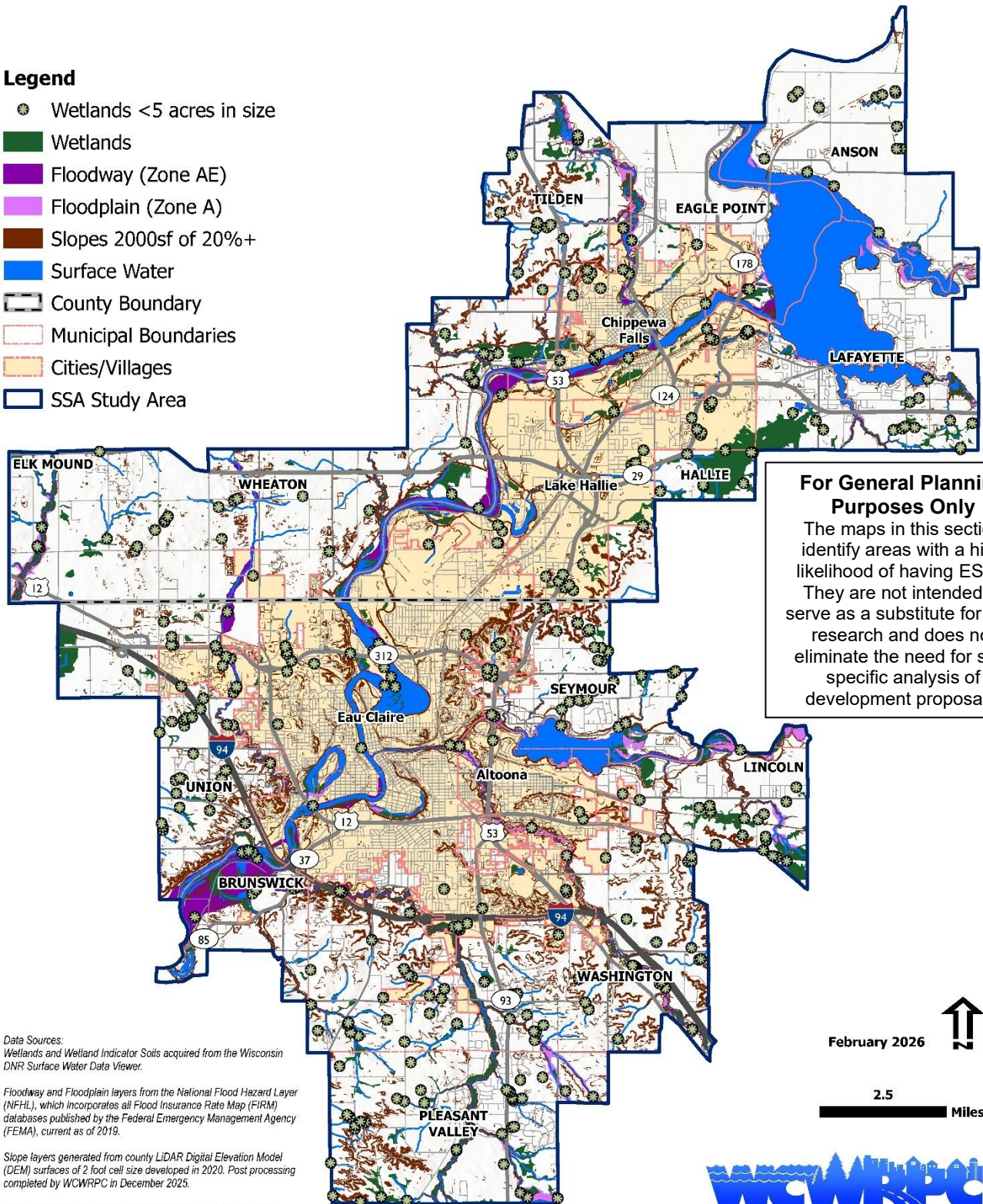
ESA	ESA Guidance
Surface Waters , when no 100-year floodplain determined.	All surface waters as shown in the WDNR Surface Water Data Viewer, though mapped intermittent streams may be removed as an ESA if sufficient verification and documentation is provided.
Floodway or 100-year Floodplain	As delineated on FEMA Flood Insurance Rate Maps and subject to any approved revisions or amendments: • The floodway for the Special Flood Hazard Area, if delineated as part of Zone AE, or • The entire 100-year floodplain (Zone A), if the floodway is not mapped
Wetlands	As identified on WDNR Wetland Inventory. If wetland-indicator soils exist, a certified wetland delineation may be required and any areas identified as wetlands shall become a Wetland ESA.
Steep Slopes	• 20% or greater in slope • Natural or unengineered • Contiguous area at least 2,000 square feet in size • Measured over 50' in run
Class A Steep Slope	• Includes 20 feet from the top and bottom; this buffer is not used when measuring the ESA, but becomes part of the ESA to be protected • Partially or wholly located within any other ESA
Class B Steep Slope	• Not a Class A Steep Slope • The 20-foot buffer is used to determine class of the slope, but it is not part of a Class B Steep Slope ESA

Map 3.12 is a compilation of the ESA maps found in this section demonstrating that these barriers to development are distributed throughout the Study Area. These mapped ESAs will change over time as more accurate information becomes available. The most recent, available maps and GIS data will be used to delineate the ESAs 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.

Map 3.12 Environmentally Sensitive Areas (ESAs)

Legend

-  Wetlands <5 acres in size
-  Wetlands
-  Floodway (Zone AE)
-  Floodplain (Zone A)
-  Slopes 2000sf of 20%+
-  Surface Water
-  County Boundary
-  Municipal Boundaries
-  Cities/Villages
-  SSA Study Area



Data Sources:
 Wetlands and Wetland Indicator Soils acquired from the Wisconsin DNR Surface Water Data Viewer.

Floodway and Floodplain layers from the National Flood Hazard Layer (NFHL), which incorporates all Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), current as of 2019.

Slope layers generated from county LiDAR Digital Elevation Model (DEM) surfaces of 2 foot cell size developed in 2020. Post processing completed by WCWRPC in December 2025.

Surface water from the National Hydrography Dataset. Additional basemap layers from Wisconsin DOA, Wisconsin DOT, and WCWRPC.

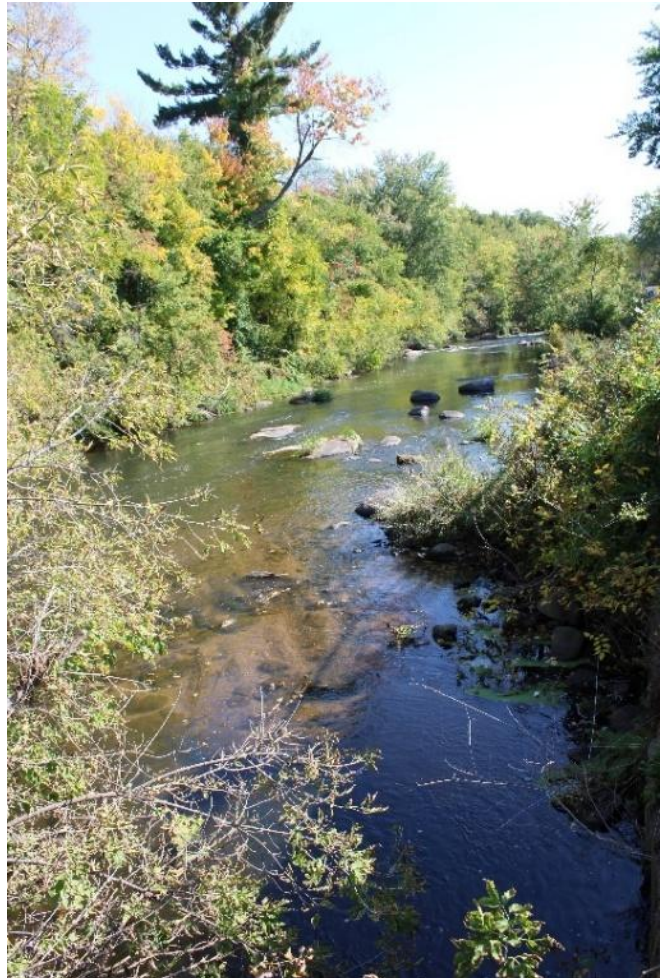


3.5.2 Surface Waters

*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 shown in the WDNR Surface Water Data Viewer.*

The surface waters within the Study Area are generally shown on **Map 3.13**. Intermittent (non-continuous) streams are considered surface water ESAs if they are mapped as a surface water on the WDNR Surface Water Data Viewer. However, on a case-by-case basis, a mapped intermittent stream will not be considered an ESA (i.e., is not an actual intermittent stream) if sufficient field verification and documentation is provided that the stream experiences flow only in response to precipitation events (rainfall or snowmelt), lacks seasonal flow (water flows continuously for parts of the year), lacks a well-defined channel, and/or has physical characteristics more closely matching the surrounding upland landscape.

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 features are waters of the United States or waters of the State, and if development or disturbance would pose a significant risk to water quality, the ESA criteria and restrictions set forth in this plan shall apply. Since 100-Year Floodplain ESA includes the surface water area, this surface water ESA does not include areas where the floodplain has been determined in order to avoid redundancy.



Surface Waters Background

Left unsaid in previous SSA plans for the urban area prior to 2018 is that surface waters are also an environmentally sensitive area. 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 relatively good quality that perform important environmental, wildlife habitat, recreational, economic, and quality of life functions for the region. The state of the surface waters within the Study Area is previously discussed in Chapter 3.3.

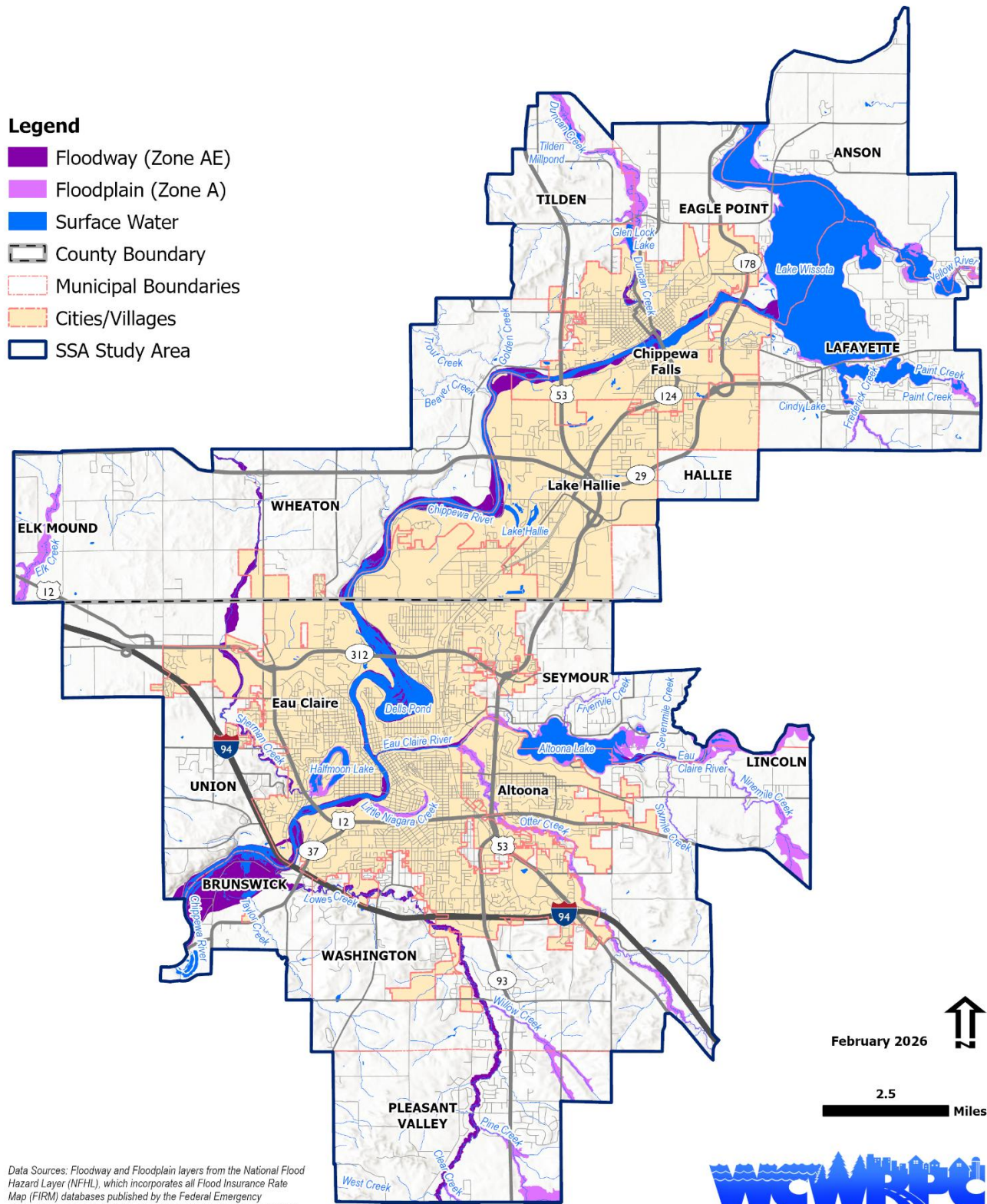
Surface waters include all stream headwaters, streams, lakes, and waterfalls, and some can have special status, such as trout streams and outstanding or exceptional resource waters. Surface waters are also often adjacent to or part of shoreland, wetland, and floodplain areas, which may help explain its absence in previous SSA Plans. No inventory of natural springs exists, so they will be considered on a case-by-case basis. However, natural springs are often associated with surface water, wetlands, or steep slopes, so most will be included within other ESAs.

Encroachment upon intermittent streams can degrade water quality downstream, even though they do not have a continuous year-round flow in at least a portion of the streambed. An intermittent (non-continuous) stream has a seasonal flow (i.e., water flows continuously during wetter parts of the year but is typically dry during drier parts of the year) with flow sourced from continual precipitation patterns (rainfall or snowmelt) and upstream flows or when groundwater is sufficiently high to provide base flow and typically characterized by a well-defined channel often containing riffles/pools, evidence of ongoing scour such as exposure of rock, gravel, or sand in the channel bottom, and likely hydric soils. Presence of aquatic species would indicate it is an intermittent or perennial stream. Accurate map data of intermittent streams is lacking, and the WDNR Surface Water Data Viewer may suggest that an intermittent stream exists but may require field investigation to confirm.

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. Local units of government may have additional setbacks or buffer areas for surface waters or certain resource waters (e.g., trout streams); no such buffers are included as part of the ESA.

WCWR

Map 3.13 Surface Waters & 100-Year Floodplains

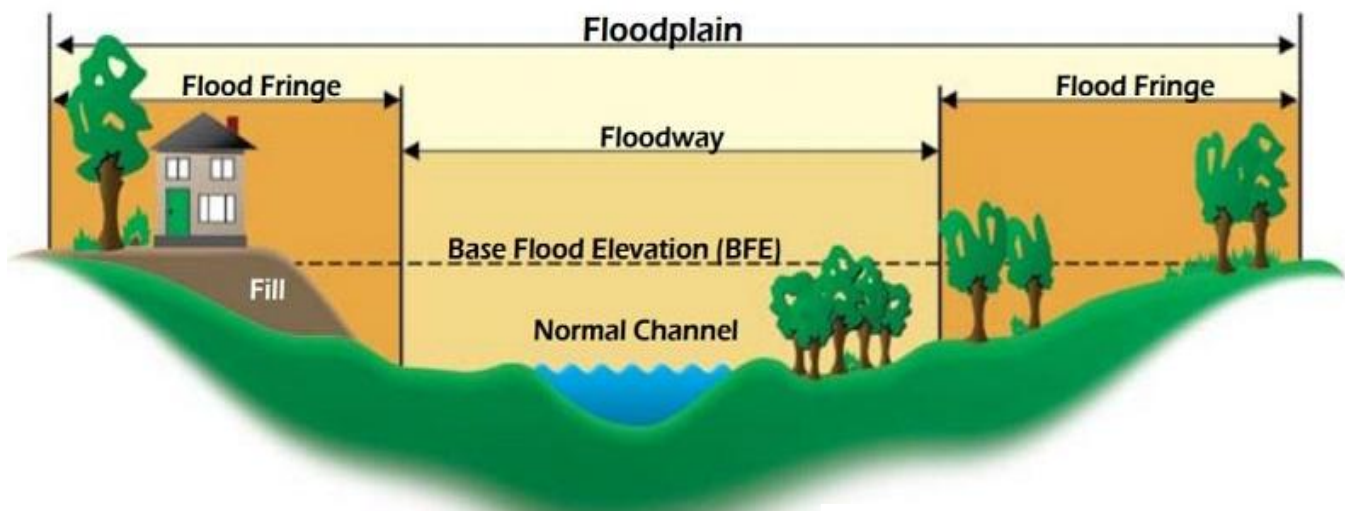


3.5.3 Floodways or 100-Year Floodplains

The 100-Year floodplain is the Special Flood Hazard Area consisting of the floodway and flood fringe (see diagram below) that 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. For this SSA Plan, the following shall be an ESA as delineated on FEMA Flood Insurance Rate Maps and subject to any approved revisions or amendments:

- (1) The floodway, if delineated and mapped as part of the Special Flood Hazard Area, which is typically mapped as Zone AE.*
- (2) Otherwise, the Special Flood Hazard Area (i.e., 100-year floodplain) in its entirety typically mapped as Zone A, if the floodway has not been delineated and mapped.*

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; development may be allowed in the flood fringe if carefully planned and elevated sufficiently above the Base Flood Elevation with dryland access. 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: Wisconsin 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 Study Area. These maps are now available in a digital form (i.e., D-FIRMs).

The 100-year floodplains are delineated as the “A” or “AE” zones on the 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. Since surface waters are also an ESA, the floodplain/floodway ESA overlaps the adjacent surface water ESA.

Zone A and Zone AE map the same thing—a 100-year flood event—though Zone AE has greater map accuracy. More detailed data is available for Zone AE, including calculated Base Flood Elevations (BFEs) and delineation of the floodway vs. flood fringe, in most cases. During the 2026 SSA Plan update, local units of government noted that the flood fringe can potentially be developed. As such the definition of this ESA was modified so that the flood fringe is not an ESA (i.e., not protected from encroachment) when the flood fringe has been delineated and mapped. Encroachment may be allowed if a structure is elevated at least two feet above the base flood elevation, dryland access is available, and net flood storage⁴ is not reduced. Due to such challenges, developing in the flood fringe can be costly and is relatively uncommon.

100-Year Floodplain/Floodway Background

The FIRMs for Eau Claire County were last updated and made effective in April 2014. Detailed topographic data (LiDAR data) was not available during the last FIRM update in order to improve floodplain map accuracy. The FIRMs for Chippewa County were recently updated and made effective in October 2023. These more recent FIRMs took advantage of better LiDAR-based topographic data, which significantly improved floodplain map accuracy.

The 100-year floodplains are shown previously on **Map 3.13**. Though improved since 2007 SSA Plan, significant concerns remain regarding the accuracy of floodplain mapping in some areas, especially within the Flood Hazard Zone A where detailed engineering and survey work has not been completed. WDNr has secured FEMA RiskMap grant funding and is currently in the process of further improving Chippewa County’s FIRM maps. No such funding has yet been secured to update and improve Eau Claire County’s FIRM maps. Given such uncertainties, the entire 100-year floodplain acreage is included as part of the ESA acreage for this SSA Plan update. Further, during SSA Plan administration (e.g., 208 reviews for sewer extensions), applicants may be required to provide documentation from WDNr and/or FEMA to confirm that proposed development is located outside of a floodplain. And the actual floodplain/flood fringe maps and ESA acreages will change over time as FIRM maps are updated and amended.

There is considerable existing development potentially located within the 100-year floodplains of the Study Area. 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.

⁴ For purposes of this plan, **flood storage** refers to an area’s ability to temporarily hold excess water, such as during a heavy rain or snow melt event, to reduce the volume, velocity, and peak flow of water moving downstream. For this plan, such areas may or may not be formally designated or mapped as flood storage areas.

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 Study Area. Flooding is also mitigated locally by natural hazards or flood mitigation plans that encourage restrictions on future floodplain development. Eau Claire County and City of Eau Claire have also undertaken large flood mitigation projects, including acquisition and elevation, to further reduce flood risks to structures. 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 or flood storage should be denied unless remedial actions (in conformance with NR 116) are identified and approved. WDNR will not approve a SSA Plan or plan amendment that is inconsistent with local or State floodplain regulations.

3.5.4 Wetlands

*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 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 as shown on the WDNR's Surface Water Data Viewer. If wetland-indicator soils (i.e., potential hydric or poorly drainage soils or areas of high water table) are shown on the Data Viewer, a site-specific survey and/or certified wetland delineation may be required as part of the land division process or when sewered development is being proposed on the site, if an intensive land disturbance may encroach upon the wetland-indicator soils. If wetlands are identified and confirmed, the area becomes a Wetland ESA. Additional wetland setbacks may be required by the State, county, or local government, but no setback areas or buffers are considered part of the ESA. Manmade, artificial wetlands not shown in the Wisconsin Wetlands Inventory are not an ESA.

Wetlands Background

Wetland areas serve as groundwater recharge zones, as flood 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 due to potential surface water impacts from disturbance. Activities such as flooding, draining, ditching, excavating and building are all regulated in wetlands.

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. 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.

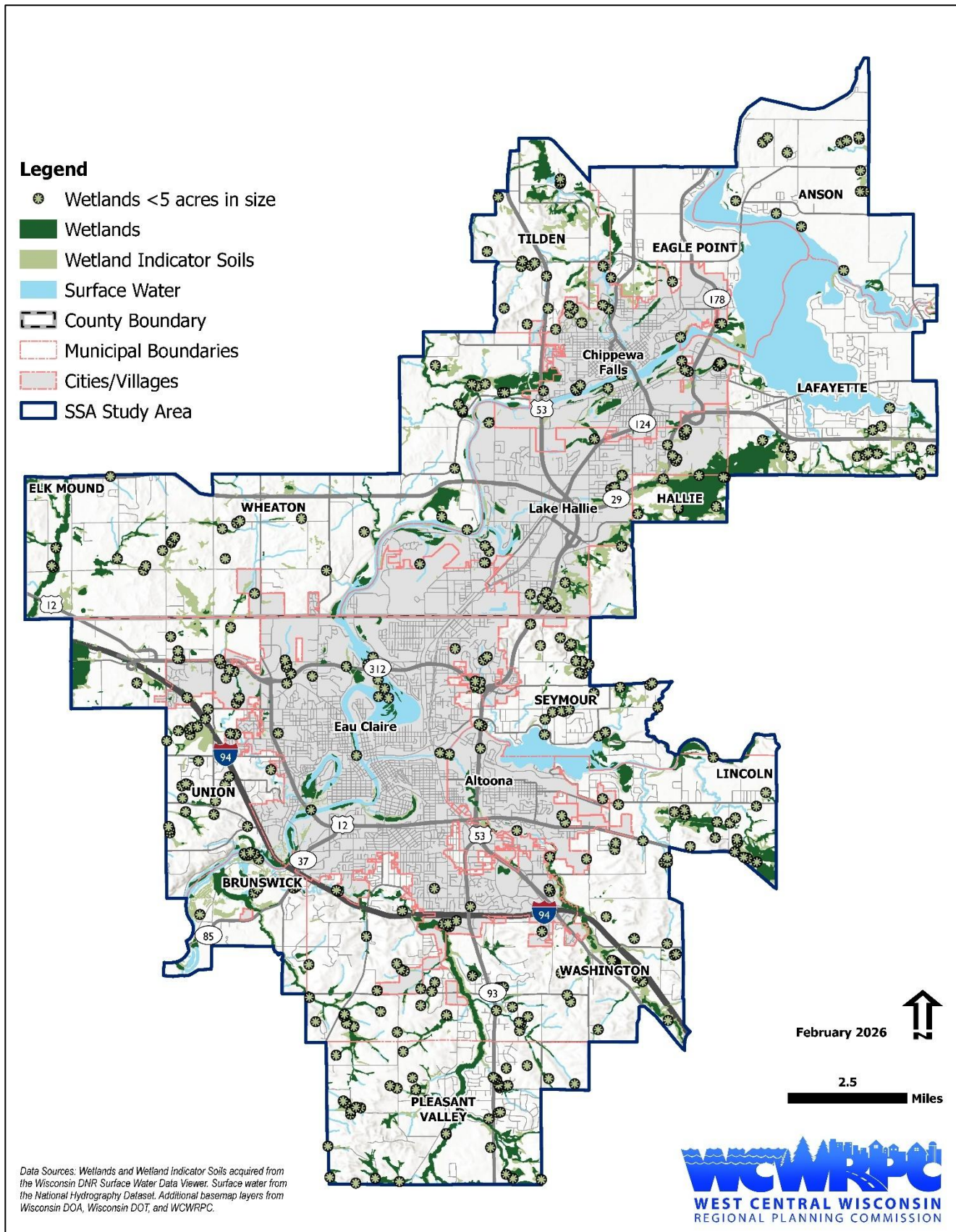
- The potential impacts of the proposed actions on other scarce natural resources in or outside of the wetland. Consideration should be for protection of the wetland when the area is or has been known to be a habitat for state or federally designated rare, threatened or endangered species; or where it 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 known regulated wetlands within the Study Area, which are shown in **Map 3.14**. 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.

Map 3.14 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 may exist, but an on-site investigation is often required to confirm or delineate whether the possible presence and extent of a wetland. The WDNR Surface Water Data Viewer will be used to ensure access to the latest wetland mapping, unless a wetland determination has been accepted by WDNR.



Map 3.14 Wetlands



3.5.5 Steep Slopes

For delineating ESAs in this plan, a steep slope is a contiguous area of natural or un-engineered slope that is at least 2,000 square feet total in size and a combination of slopes that are 20% or greater. 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.

For this SSA Plan:

- **Natural or Un-Engineered Slopes.** Only natural or un-engineered slopes are considered ESAs if they meet the other criteria in this section. The following are generally not considered steep slope ESAs:
 - Engineered, man-made steep slopes, including walk-out basements, if a grading/stabilization plan has been approved by the pertinent regulating jurisdiction(s).
 - Older, man-made slopes that were purposefully engineered or graded according to standards at the time and have since stabilized and revegetated and temporary stockpiles, spoil heap, or overburden. Such artificial slopes will be evaluated on a case-by-case basis with WDNR consultation and may be treated as a steep slope ESA depending on site characteristics, management practices, soil erodibility, and proximity to surface waters or other ESAs.
- **Minimum Slope Size.** 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.
- **Minimum Slope Width.** Slopes shall be measured over a horizontal distance of 50 feet, excluding any Class A buffer area. Slopes shall be measured as the change in elevation over the horizontal distance between consecutive contour lines and expressed as a percent. If the elevation change over the 50 feet distance is less than 20%, the area is not a Steep Slope ESA.
- **Class A Slope Buffers.** 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.

Special Considerations. Large contiguous areas of steep slopes exist that have varying drainage characteristics and level of risk to surface water quality. When determining steep slope ESAs, the following may be considered on a case-by-case basis:

- a. **Determining the steep slope ESA when multiple areas of steep slope ESA are separated by a small area of slope that does not meet minimum size or slope.** Areas exist where a single steep slope topographic feature may be separated or divided by a small area that does not meet the minimum slope (e.g., along the length of a single hillside there is a small section of 20+% slope with a run less than 50', but the hillside overall meets the steep slope ESA definition). Such areas may still be considered an ESA if:
 - The area is 20% or greater as measured over 50 feet and
 - The area is part of the same topographic slope that connects two other areas that otherwise meets the steep slope ESA definition and is within 50' of the two other adjoining steep slope ESA areas.
- b. **A portion of a steep slope ESA may be a different class based on drainage and distance to other ESAs.** When determining if a Steep Slope ESA overlaps another ESA (i.e., determining whether it is Class A or Class B), local natural drainage and runoff patterns may need to be considered. If it can be reasonably demonstrated that the natural drainage for a portion(s) of a Steep Slope ESA is not connected to another ESA, likely due to distance, or otherwise threatens water quality, then the slope can be considered a Class B slope.

Steep Slopes Background

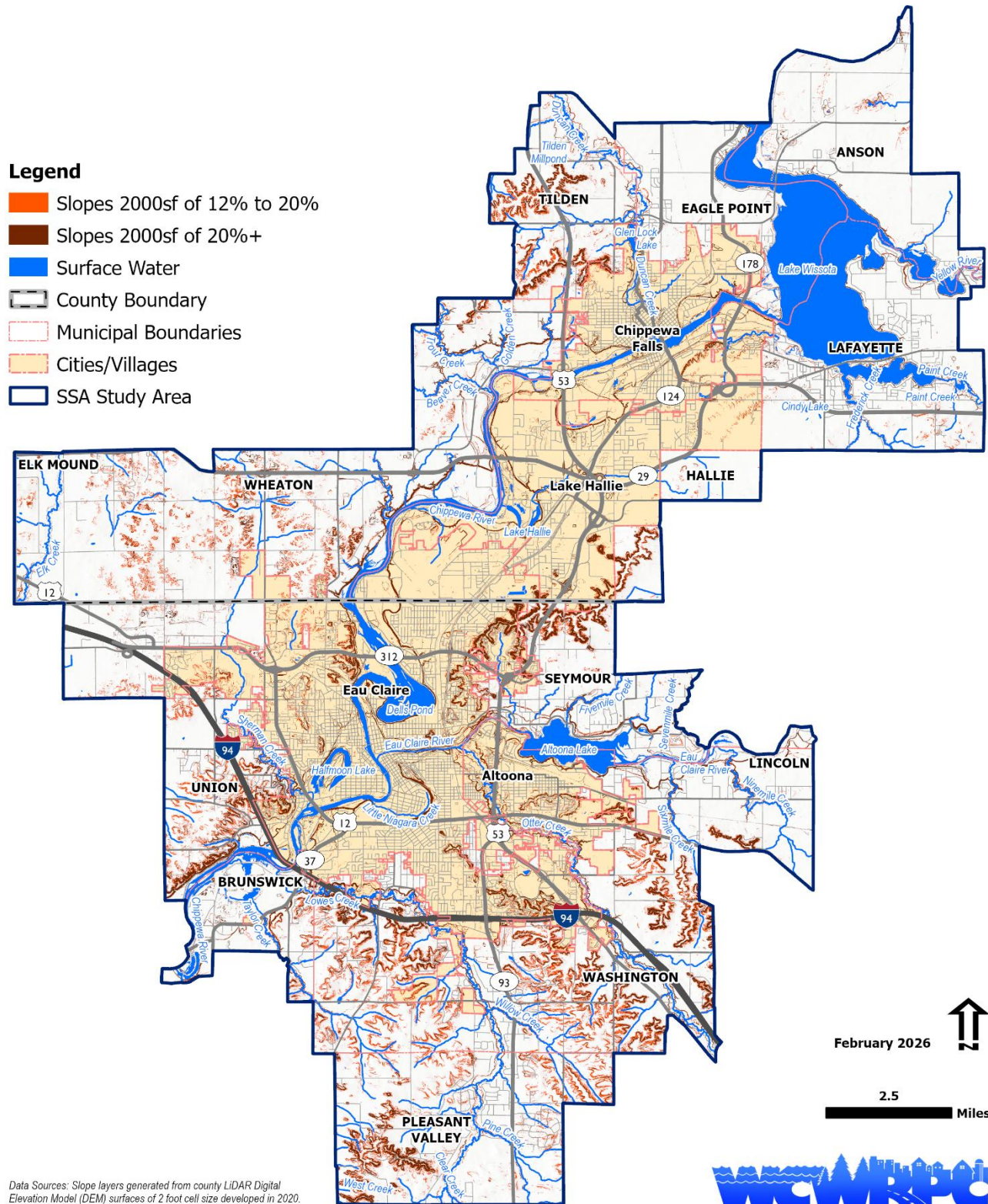
As of Summer 2024, the definition of Steep Slope ESAs varies among the counties and communities within the SSA Study Area. Consistent with most jurisdictions in the urban area, this SSA Plan recognizes that 12% (or 13%) up to 20% slopes can often be encroached upon without soil erosion or runoff with good management practices, **so this Plan does not consider slopes less than 20% to be an ESA.**

Mapping Steep Slopes. Map 3.15 shows locations of potential steep slope ESAs of 2,000 square foot or more in size within the Study Area. While this data is helpful for generally identifying areas where steep slope ESA may exist, it has a number of shortcomings requiring case-by-case consideration:

- The slopes are based on remote-sensing technology (LiDAR), which doesn't distinguish between natural and man-made slopes.
- There is no reliable way to consider the minimum 50' run criteria or to easily classify the slopes into Class A vs. Class B.
- Site-specific land surveys will have a higher level of accuracy.

For project-specific decisions, such as 208 reviews, topographic/elevation maps prepared by a licensed engineer are preferred and will often be required, especially if steep slopes potentially exist within the project area.

Map 3.15 Steep Slopes



Measuring the Slopes. Measurements are made from a point at the top of the slope in a straight line immediately downgrade and connected to a dot at the bottom (or toe) of the slope. 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). Measurements shall be made at multiple points along the topographic feature, including the steepest grades.

Soil Conditions. Soil type and the erodibility of soils are not directly considered in this SSA Plan when reviewing proposed sewer extensions or amendments except for evaluating older manmade slopes as previously discussed. However, engineering studies, erosion control plans, stormwater management practices, and other actions are often required to protect surface waters from soil runoff when utility extensions and new development are proposed. It is the responsibility of the local unit of government and other regulating agencies to consider and ensure compliance with applicable rules. Obtaining such permits and approvals are typically secured prior to requesting a 208 Review.

Steep Slopes & the 2018 Policy Update. Within the 2007 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 ESAs that should be excluded from sewer land disturbance unless a Type IV SSA Amendment 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. The SSA Plan policies were updated in 2018 to clarify and better define the ESAs and to streamline the policies, especially in regards to steep slopes. This policy update successfully reduced the number of Type IV plan amendments while improving plan administration.

12% up to 20% Slopes. 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. However, WDNR encourages local units of government to consider these 12% to 20% slopes as an ESA, especially if located in close proximity to a surface water. Should WDNR believe such slopes are not being adequately managed in the future, how these slopes are treated within this SSA Plan may be revisited.

Local jurisdictions within the Sewer Service Area are responsible for ensuring that plans and best practices are implemented to prevent erosion and runoff, including for all areas of 12% slope.

3.6 Additional Environmental Considerations

The following are additional environmental considerations that may potentially limit development or are environmental features that may benefit from protective measures or special consideration:

- a. Shorelands
- b. Groundwater Recharge & Wellhead Protection Areas
- c. Other Significant Natural Resources

For purposes of this SSA Plan, the above additional environmental considerations are primarily defined, interpreted, considered, and protected by local or State regulating jurisdictions; they are not planned for or directly protected through this SSA Plan. The above environmental considerations are:

- not classified as ESAs under this SSA Plan due to: (i) they are adequately protected by ordinance, so it would be excessively duplicative to also review and consider them during SSA Plan administration or (ii) it is not possible to clearly delineate the extent of a constraint within the entire SSA,
- not excluded from the SSA boundary, but dedicated Natural Areas and public recreational lands are excluded from the developable SSA acreage when they are known and can be delineated,
- potentially considered when evaluating proposed plan amendments, but based on the interpretation and guidance of the regulating jurisdiction(s), and
- not considered when reviewing specific projects and sanitary sewer extensions to determine consistency with the SSA Plan (i.e., 208 Reviews), but project applicants or the local community should confirm that they are being considered during planning and permitting.

It is recognized that counties and local governments within the SSA Study Area may have additional ESAs, environmental considerations, or areas to be protected (e.g., prime farmlands, natural areas, endangered species, historical/cultural resources). To the extent that the SSA Plan considers local comprehensive plans and known development plans, such features may be considered when establishing and amending the SSA boundary.

3.6.1 Shorelands

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 by the counties and municipalities 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 Background

Shorelands are usually considered prime residential building areas because of their scenic beauty. However, shorelands also provide valuable habitat for both aquatic and terrestrial animals and vegetation, and act as buffers to protect water quality.

Wisconsin requires counties, cities, and villages to protect and prevent the loss and erosion of these valuable resources by adopting and enforcing a shoreland or shoreland-wetland zoning ordinance consistent with the standards found in Chapter NR 115 or NR 117 of State Administrative Code. Shoreland regulations govern lot size, setbacks of structures from waters, landscaping, siting of wastewater systems, and filling.

In 2018, shorelands were excluded as ESAs in the context of this SSA Plan since: (i) there may be existing development in shoreland areas on private septic systems for which a sanitary sewer connection is preferred in the future, (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.

WDNR will not approve a SSA Plan or other plan action that 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.

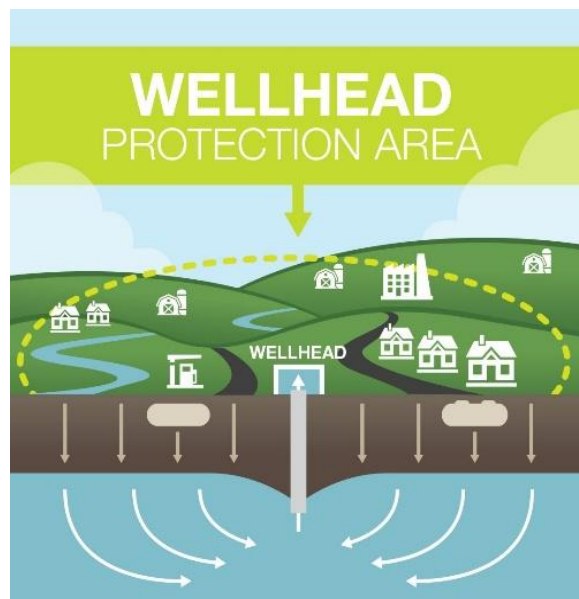
3.6.2 Groundwater Recharge & Wellhead Protection Areas

Groundwater recharge areas are places where precipitation infiltrates the ground and replenishes the water table. **Wellhead protection areas** are the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such well or wellfield. **Groundwater protection areas** encompass both of the above and are source water protection areas for public water supplies.

Groundwater recharge maintains the quantity of water in an aquifer. The natural process of recharge can be altered by land use and development. Impervious surfaces that prevent precipitation from soaking into the ground, such as buildings and pavement, affect the rate of recharge and quantity of available groundwater.

This SSA Plan recognizes that:

- This is the only environmental consideration with a groundwater focus. Overall, SSA planning places a greater emphasis on the protection of surface water quality with less attention given to groundwater.
- Groundwater recharge areas are typically not included as an ESA in most SSA Plans since recharge occurs most anywhere that rain and snow melt enters the soil and reaches the water table.
- Recharge and protection areas for wells are recognized for their importance of protecting drinking water supply. Wellheads and well fields are protected by a mix of State law, local regulations, and local planning (e.g., well setback, wellhead protection planning/zoning).
- The regulation and protection of groundwater recharge and wellhead protection areas are the responsibility of State and local regulatory bodies. Local jurisdictions can have different rules regarding allowable development within wellhead/groundwater protection areas and some areas.
- Groundwater and wellhead protection areas may influence the SSA boundary, since municipal sanitary sewer provides a higher level of groundwater protection than private septic systems within such protection areas. Otherwise, this environmental concern is not considered during the administration (e.g., performing 208 reviews) of this SSA Plan.



source: City of Sacred Heart MN

Groundwater Recharge Areas Background

The state of groundwater within the Study Area is previously discussed in Chapter 3.2, including related programs and policies.

Wellhead protection planning is administered by the WDNR as required by the U.S. Environmental Protection Agency (EPA) and the 1986 amendments to the Federal Safe Drinking Water Act. Wellhead planning and protection is encouraged for all communities but is required when any new municipal well is proposed, as required by State administrative code for all new public water supply wells constructed after May 1, 1992. The cities of Altoona, Chippewa Falls, and Eau Claire and the Village of Hallie have all created wellhead protection plans for their municipal wells and have adopted wellhead protection plans ordinances. Both Eau Claire County and Chippewa County have also adopted wellhead protection ordinances. While these ordinances vary some, they are typically overlay zoning districts that regulate land uses within the 30-day and 5-year zones of contribution (recharge areas) for municipal water supplies as well as require certain separation or setback distances.

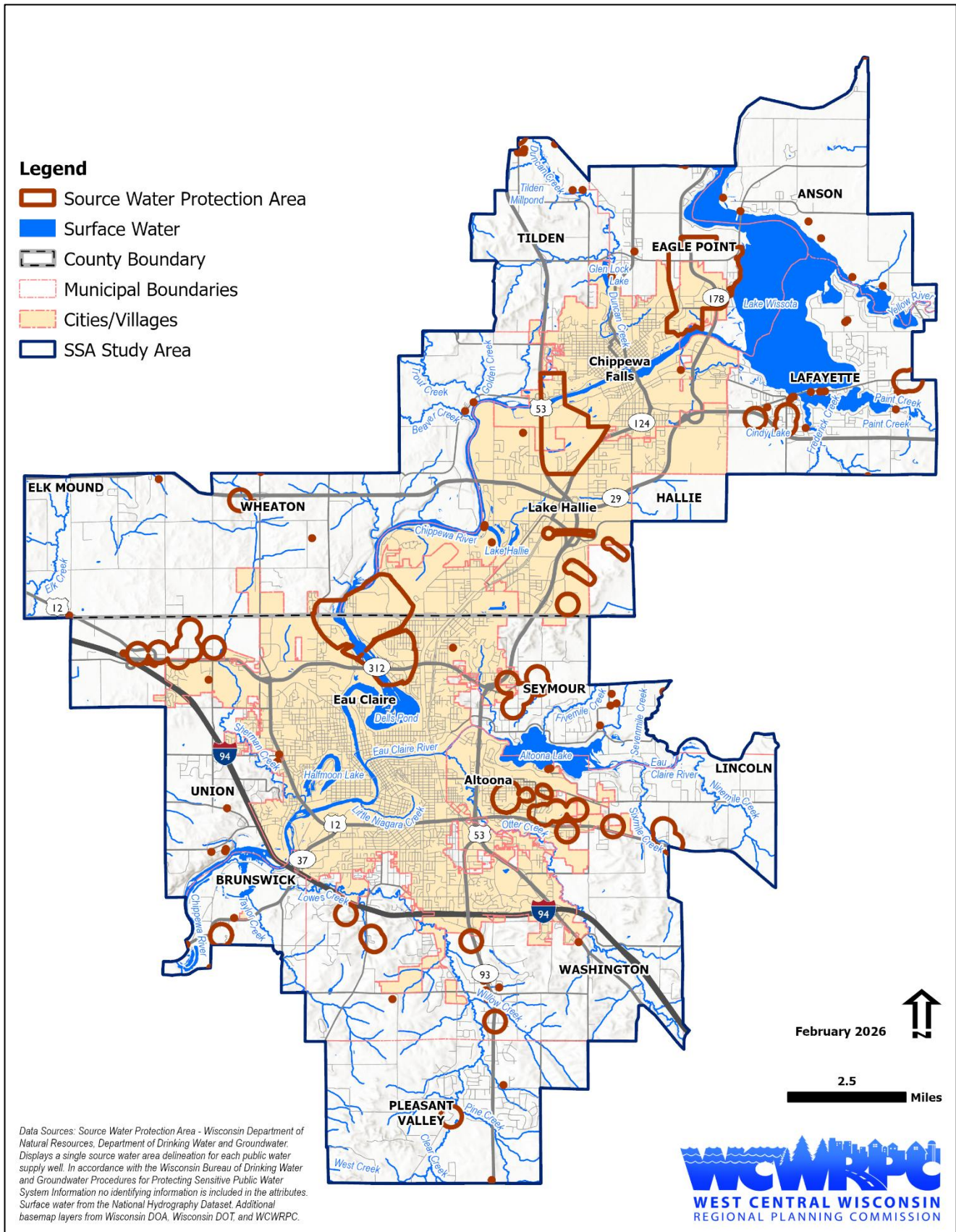
Under State rules, Groundwater (Source Water) Protection Areas exist for all public wells, which are shown in **Map 3.16** for the Study Area. These areas represent WDNR's determination of the best available estimate of the 5-year groundwater time-of-travel for areas contributing to the recharge of public wells. The extent of these protection areas vary by well type and size:

Municipal wells	Size will vary based on advanced delineation and study, else a minimum of 1,200 foot radius is used.
Other than Municipal system	1,200 foot fixed radius. A smaller community system serving a limited population, such as a mobile home park or subdivision.
Non-transient, non-community wells	1,200 foot fixed radius. Serves 25+ of the same people for 6+ months per year, such as schools and factories.
Transient non-community wells	200 foot fixed radius. Serves a transient public, such as a campground, gas station, or restaurant.

These public wells must meet certain siting, design, operation/maintenance, and reporting requirements under State code and separation distances from certain sources of contamination are enforced. However, as shown on the map, development exists and can occur within these protection areas. Additional State, county, and municipal rules regulate the installation and abandonment of private wells, including a variety of setbacks and additional rules for high-capacity wells.

Though development may be allowable within groundwater protection and recharge areas, the 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 an environmental consideration but are not an environmentally sensitive areas for which sanitary sewer connections should be discouraged.

Map 3.16 Groundwater Protection Areas



3.6.3 Other Significant Natural Resources

Other significant or unique natural resources or limiting environmental conditions, that if encroached upon could degrade surface or groundwater quality, may be considered during SSA planning or 208-reviews on a case-by-case basis. Such feature may include but are not limited to:

- *Springs, poorly drained areas, and areas of seasonally high groundwater within 1 foot of the surface.*
- *Areas of highly erodible soils located in or within 20 feet of another ESA.*
- *Areas of shallow bedrock within five feet of the surface.*
- *Closed depressions, natural sinkholes, or significant subsurface karst geology.*
- *Plants, animals, and natural communities that appear on the Wisconsin endangered and threatened species lists or in the Wisconsin Natural Heritage Inventory. Only one State-designated natural area—Putnam Park Natural Area—exists in the Study Area.*
- *Environmental corridors, if they are formally designated by local units of government in the future. Such corridors are 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.*

Our natural environment and water resources are diverse and complex. Often, accurate data is lacking or not accessible on the above, making it very difficult to consider. For example, 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, that contributes to sub-optimal management of these complex resources. Additional information and monitoring are needed in a wide range of areas.

On a case-by-case basis, the SSA Plan administrator, the Areawide Water Quality Management Advisory Committee, and/or Wisconsin Department of Natural Resources may identify other significant or unique natural resources as an environmental consideration. When a sanitary sewer extension (208 review) or plan amendment proposal is received, additional study or delineation may be required to determine if a proposed intensive land disturbance of a natural resource will impact water quality and if additional consideration or protection is warranted.

CHAPTER 4 – GROWTH & DEVELOPMENT TRENDS

4.1 SOCIO-ECONOMIC CHARACTERISTICS & TRENDS

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.

The City of Eau Claire is the largest city in the urban area and sixth largest city in Wisconsin with an estimated 2025 population of 74,039. The City of Chippewa Falls is the second largest community in the urban area, with an estimated population of 15,292. Both the City of Chippewa Falls and the City of Eau Claire are the county seats 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, some of the unincorporated towns within the Study Area have been experiencing higher rates of population growth than their nearby incorporated counterparts.

More recently, both counties have experienced above-average growth within the State. Eau Claire County (6.18%) is ranked 4th overall, and Chippewa County (3.19%) is ranked 8th overall, according to the DOA's preliminary estimates published for 2025. Both counties outpace the State average of 2.37%. Understanding where this growth is happening, and where it is likely to continue is essential to sewer service area planning.

4.1.1 *Population & Household Trends*

Population Growth

Historically, 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. **Map 4.1** shows the 2020 population counts for census blocks within the Study Area. The map does not take into account densities of population, which are shown later in Section 4.2.1.

According to the 2000 Census, the population of Study Area communities, in their entirety, totaled 116,364. That total increased to 135,233 by the 2020 Census, and the Wisconsin Department of Administration estimates the population to be 143,495 as of 2025. Every community within the Study Area has experienced significant growth in recent decades. The only community to experience a decline, the Town of Hallie, can attribute its losses to the incorporation of the Village of Lake Hallie within its boundaries. **Table 4.1** shows the change in population over the last three censuses. Prior to the incorporation of the Village of Lake Hallie, roughly 70% of the total population lived in incorporated areas. After the incorporation, that percentage increased to 73% and is slightly above 74% in 2025 estimates (74.34%).

Map 4.1 2020 Population by Census Block

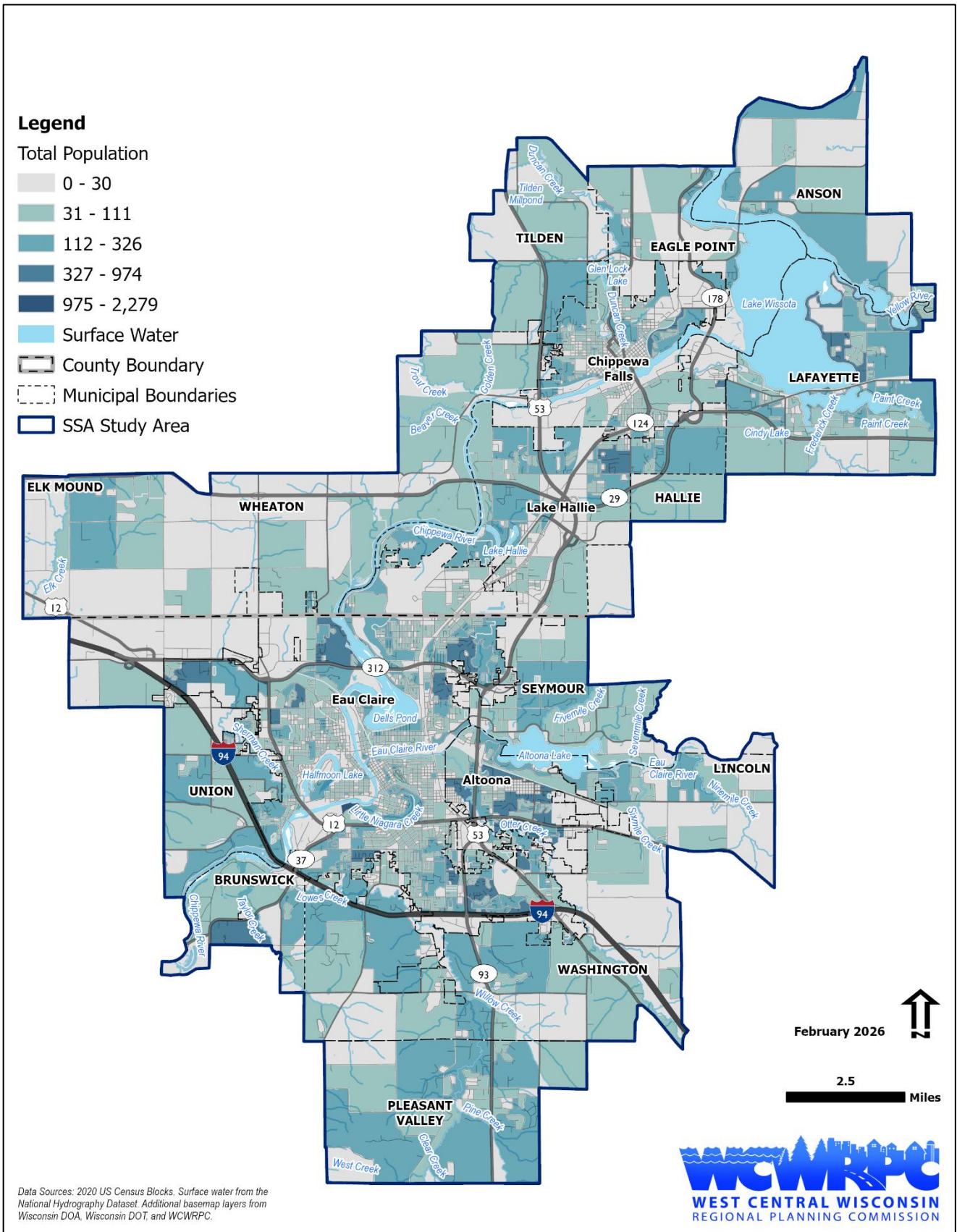


Table 4.1 Population 2000-2020

Municipality	2000	2010	2020	Change ('00-'20)
Town of Anson	1,881	2,076	2,297	+ 22.1 %
Town of Brunswick	1,598	1,624	1,958	+ 22.5 %
Town of Eagle Point	3,049	3,053	3,237	+ 6.2 %
Town of Hallie	4,703	161	153	- 96.7 %
Town of Lafayette	5,199	5,765	6,197	+ 19.2 %
Town of Pleasant Valley	2,681	3,044	3,791	+ 41.4 %
Town of Seymour	2,978	3,209	3,352	+ 12.6 %
Town of Tilden	1,185	1,485	1,516	+ 27.9 %
Town of Union	2,402	2,663	2,696	+ 12.2 %
Town of Washington	6,995	7,134	7,662	+ 9.5 %
Town of Wheaton	2,366	2,701	2,759	+ 16.6 %
Village of Lake Hallie	<i>Incorporated 2003</i>	6,448	7,170	NA
City of Altoona	6,698	6,706	8,293	+ 23.8 %
City of Chippewa Falls	12,925	13,661	14,731	+ 14.0 %
City of Eau Claire	61,704	65,931	69,421	+ 12.5 %
Unincorporated Towns	35,037	32,915	35,618	+ 1.7 %
Cities & Villages	81,327	92,746	99,615	+ 22.5 %
All Study Area Communities	116,364	125,661	135,233	+ 16.2 %
Chippewa County	55,195	62,415	66,297	+ 20.1 %
Eau Claire County	93,142	98,736	105,710	+ 13.5 %
Wisconsin	5,363,715	5,686,986	5,893,718	+ 9.9 %

source: U.S. Census

Population Growth Rate

Figure 4.1 shows the population growth rates since 1980 for unincorporated, incorporated, and all communities within the Study Area.

Table 4.2 shows the population growth rates over the past four decennial censuses. Every community except for the Town of Hallie has been growing over the past two decades; the Town of Hallie's population was significantly impacted by the incorporation of the Village of Lake Hallie in 2003.

Using a combination of decennial Census results and DOA estimates, the annual growth rate for all Study Area communities has averaged 0.85%. Incorporated communities have grown at a faster rate, averaging 1.07% annually compared to 0.33% for unincorporated communities. Growth rates were trending down between 2000-2010 before generally increasing between 2010-2025. During the last 25-years, average annual growth was highest in 2022 and 2024. These years present the highest growth within incorporated areas as well (2.64% and 2.40% respectively).

Figure 4.1 Population Growth, 1980-2025



*(c)=Census Data, (e)=WDOA Estimate

**The incorporation of the Village of Lake Hallie in 2003 created an outlier year for both incorporated and unincorporated areas, but not for the total area.

Table 4.2 Population Growth Rates 1980-2020

Municipality	1980-1990	1990-2000	2000-2010	2010-2020
Anson	2.77%	15.12%	10.37%	10.65%
Brunswick	6.73%	6.11%	1.63%	20.57%
Eagle Point	-7.56%	19.94%	0.13%	6.03%
Hallie	5.99%	3.80%	-96.58%	-4.97%
Lafayette	6.39%	16.88%	10.89%	7.49%
Pleasant Valley	8.81%	29.14%	13.54%	24.54%
Seymour	-2.48%	8.13%	7.76%	4.46%
Tilden	-0.83%	9.82%	25.32%	2.09%
Union	-8.66%	-2.20%	10.87%	1.24%
Washington	-3.39%	11.58%	1.99%	7.40%
Wheaton	-3.05%	4.83%	14.16%	2.15%
Lake Hallie	-	-	-	11.20%
Altoona	34.05%	13.74%	0.12%	23.67%
Chippewa Falls	3.90%	1.38%	5.69%	7.83%
Eau Claire	10.28%	8.62%	6.85%	5.29%
Unincorporated	0.06%	11.05%	-6.06%	8.21%
Incorporated	10.67%	7.80%	14.04%	7.41%
All Study Area Communities	7.31%	8.76%	7.99%	7.62%

Source: 1980, 1990, 2000, 2010, 2020 U.S. Decennial Census

Housing Units

The Wisconsin Department of Administration provides annual estimates of housing unit development, but the smallest unit of government included is counties. As shown in **Table 4.3**, housing development in the two Study Area counties has outpaced the State average since 2020. Over the last four years, Chippewa County has averaged 315 homes built per year, while Eau Claire County has been building 870 homes per year.

Table 4.3 WDOA Housing Units Estimates, 2020-2024

Place	4/1/2020 Census	4/1/2021 Estimate	4/1/2022 Estimate	4/1/2023 Estimate	4/1/2024 Estimate	# Change ('20-'24)	% Change ('20-'24)
Chippewa County	28,688	28,995	29,328	29,617	29,949	1,261	4.4%
Eau Claire County	44,966	45,664	46,566	47,362	48,447	3,481	7.7%
Wisconsin	2,727,726	2,749,878	2,776,637	2,801,113	2,824,401	96,675	3.5%

source: Wisconsin Department of Administration & 2020 Census

Table 4.4 shows the number of housing units in the Study Area from 2000-2023, which increased from 47,014 in 2000, to 53,774 in 2010 (+6,760 units), and 56,953 in 2020 (+3,179 units). Incorporated communities have added more units than unincorporated communities, though annexations play a part in this. It is not possible to discern how many units were added from new construction alone. Since 2000, the dispersion of housing units has held relatively constant; 75% of units in Study Area communities are in incorporated communities.

Table 4.4 Census Housing Units, 2000-2023

Place	2000 (c)	2010 (c)	2011 (a)	2012 (a)	2013 (a)	2014 (a)	2015 (a)	2016 (a)	2017 (a)	2018 (a)	2019 (a)	2020 (c)	2021 (a)	2022 (a)	2023 (a)
Anson	769	944	1,013	1,067	1,038	1,002	1,001	997	985	985	952	1,066	1,052	1,110	1,145
Brunswick	657	702	719	700	707	674	696	671	719	711	759	734	754	709	700
Eagle Point	1,027	1,345	1,205	1,311	1,293	1,337	1,423	1,477	1,393	1,518	1,590	1,582	1,485	1,423	1,443
Hallie	1,691	63	86	83	73	79	86	58	71	77	71	53	74	61	60
Lafayette	2,101	2,514	2,397	2,501	2,580	2,598	2,568	2,599	2,568	2,629	2,683	2,828	2,842	2,811	2,677
Pleasant Valley	926	1,117	1,105	1,122	1,108	1,103	1,123	1,140	1,133	1,206	1,227	1,136	1,294	1,271	1,348
Seymour	1,177	1,293	1,258	1,270	1,203	1,226	1,301	1,306	1,322	1,330	1,313	1,224	1,194	1,237	1,233
Tilden	426	564	426	457	508	549	579	624	599	588	587	635	523	525	548
Union	879	1,014	1,016	1,018	1,079	997	1,031	1,084	1,151	1,093	1,103	1,074	1,059	981	1,056
Washington	2,675	2,888	2,908	2,960	2,934	3,092	3,240	3,233	3,196	3,355	3,356	3,159	3,117	3,176	3,105
Wheaton	865	1,050	1,029	1,010	994	987	982	971	1,002	1,065	1,042	1,037	1,014	1,066	1,041
Lake Hallie	-	2,554	2,384	2,348	2,370	2,408	2,488	2,569	2,708	2,680	2,726	2,879	2,946	3,090	3,209
Altoona	3,117	3,288	3,067	3,165	2,999	3,035	2,983	3,061	3,241	3,305	3,409	3,595	3,650	3,671	3,834
Chippewa Falls	5,951	6,304	6,556	6,601	6,698	6,740	6,699	6,552	6,542	6,449	6,437	6,239	6,573	6,670	6,765
Eau Claire	24,753	28,134	28,317	28,329	28,573	28,670	28,592	28,631	28,790	28,931	29,008	29,712	29,893	30,375	30,610
Unincorporated Towns	13,193	13,494	13,162	13,499	13,517	13,644	14,030	14,160	14,139	14,557	14,683	14,528	14,408	14,370	14,356
Cities & Villages	33,821	40,280	40,324	40,443	40,640	40,853	40,762	40,813	41,281	41,365	41,580	42,425	43,062	43,806	44,418
All Study Area Communities	47,014	53,774	53,486	53,942	54,157	54,497	54,792	54,973	55,420	55,922	56,263	56,953	57,470	58,176	58,774

source: U.S. Census

Rates of Housing Development

As shown in **Table 4.5**, the rate of housing unit development has decreased across the Study Area communities since the early 2000s. Between 2000-2010, housing units increased across all communities by 14.38%. Unincorporated areas saw an increase of 16.77% and incorporated areas added 11.55% to their 2000 totals (these percentages exclude the Town of Hallie and Village of Lake Hallie due to the 2004 incorporation of the Village skewing numbers in both categories).

Between 2010 and 2020, residential development across the Study Area communities still grew, but that growth slowed by over 50%. Housing unit growth across all communities went from 14.38% to 5.91%. Unincorporated areas decreased production to 7.66%, while incorporated areas saw an increase of just 5.33% (these percentages include the Town of Hallie and Village of Lake Hallie in their respective categories).

Table 4.5 Housing Development Rates, 2000-2020

Place	2000-2010	2010-2020
Unincorporated Towns	2.28%	7.66%
Cities & Villages	19.10%	5.33%
Excluding Town of Hallie / Village of Lake Hallie		
Unincorporated Towns	16.77%	7.21%
Cities & Villages	11.55%	4.82%
All Communities		
All Study Area Communities	14.38%	5.91%

source: Wisconsin Department of Administration & 2020 Census

4.1.2 Population & Household Characteristics

Median Age

Table 4.6 shows the median ages of residents in the communities in the Study 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 Study Area. Over the past decade, the median age has been steadily increasing in all but one of the area communities, with some towns experiencing quite dramatic increases. The Town of Washington saw a slight decrease in median age. These changes reflect longer life expectancy and decreasing birth rates, but also influences other social factors such as average household size.

Table 4.6 Median Age – 2010-2020

Place	2010	2020	Change
Town of Anson	45.2	47.9	+ 2.7
Town of Brunswick	45.4	46.3	+ 0.9
Town of Eagle Point	45.6	48.9	+ 3.3
Town of Hallie	47.5	53.2	+ 5.7
Town of Lafayette	43.7	45.1	+ 1.4
Town of Pleasant Valley	43.2	43.4	+ 0.2
Town of Seymour	44.4	46.2	+ 1.8
Town of Tilden	41.9	46.0	+ 4.1
Town of Union	40.5	42.1	+ 1.6
Town of Washington	43.3	43.1	- 0.2
Town of Wheaton	42.5	45.9	+ 3.4
Village of Lake Hallie	35.3	39.7	+ 4.4
City of Altoona	37.4	39.3	+ 1.9
City of Chippewa Falls	38.0	39.4	+ 1.4
City of Eau Claire	29.8	32.8	+ 3.0
Weighted Averages by Population			
Unincorporated Towns	43.6	45.1	+ 1.5
Cities & Villages	31.9	34.8	+ 2.9
All Study Area Communities	35.0	37.5	+ 2.5
Counties & State			
Chippewa County	40.1	41.7	+ 1.6
Eau Claire County	33.4	35.6	+ 2.2
State of Wisconsin	38.5	40.1	+ 1.6

source: U.S. Census

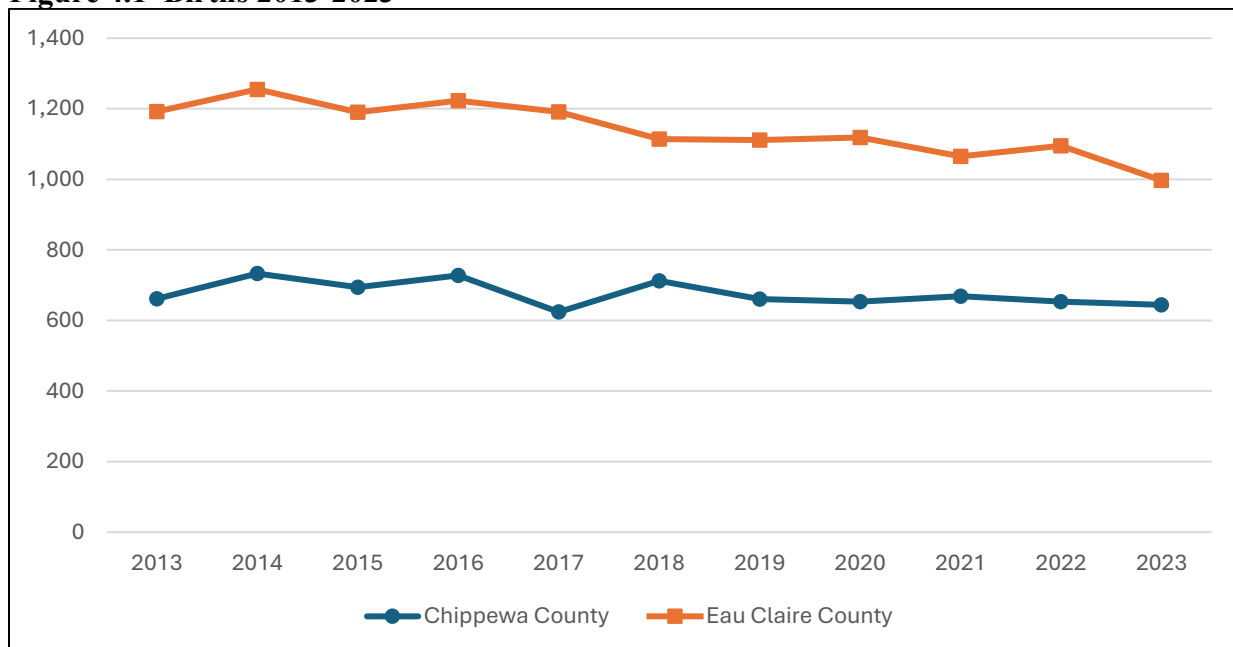
Data for natural population change (births and deaths) is only available at the county level. As shown in **Table 4.7**, Chippewa and Eau Claire County are seeing a decline in their number of births and birth rates, while their number of deaths and death rate have increased between 2010 and 2023. As of the 2023 data, Chippewa County's number of deaths is exceeding the number of births, resulting in a negative natural population change. Eau Claire County is still experiencing natural population growth, but the margins have shrunk between births and deaths.

Table 4.7 Fertility and Deaths, 2010-2023

Chippewa County	2010	2020	2023	Change ('10-'23)
number of births	748	653	644	-13.9%
fertility rate (births per 1,000 women ages 15-44)	70.3	59.8	57.2	-18.6%
number of deaths	485	694	697	43.7%
death rate (deaths per 100,000 population)	774.2	1046.2	1040.8	34.4%
Eau Claire County	2010	2020	2023	Change ('10-'23)
number of births	1,114	1,119	997	-10.5%
fertility rate (births per 1,000 women ages 15-44)	49.6	47.5	41.2	-16.9%
number of deaths	703	1020	945	34.4%
death rate (deaths per 100,000 population)	710	963.4	875.8	23.4%

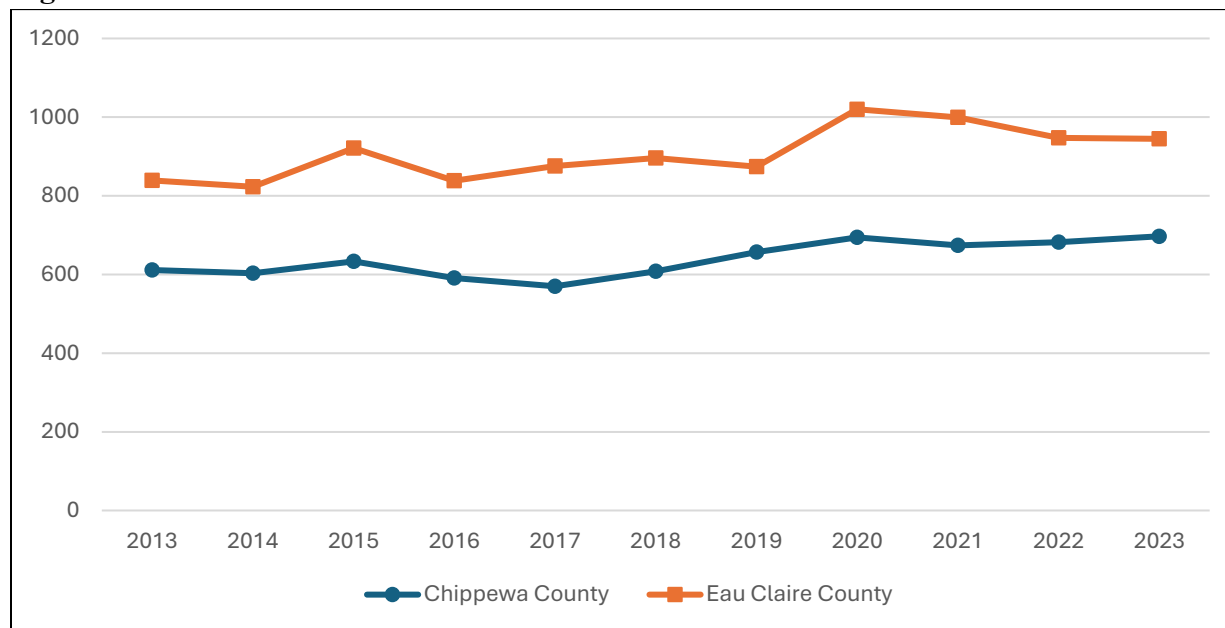
source: Wisconsin Department of Health Services

These trends become even more apparent in **Figures 4.1** and **4.2**. These charts show a relatively steady, albeit slow, decrease in the number of births during the 2010s in Chippewa and Eau Claire Counties. Eau Claire County's births are still exceeding the number of deaths, but the margin has been reduced significantly (from 353 in 2013 to 52 in 2023). Chippewa County experienced the changeover of deaths exceeding births in 2021, and that has continued to 2023. It is likely that the number of births will continue to decline while the number of deaths continues to increase, given the increase in median ages across the counties and existing fertility and mortality trends.

Figure 4.1 Births 2013-2023

source: Wisconsin Department of Health Services

Figure 4.2 Deaths 2013-2023



source: Wisconsin Department of Health Services

Net Migration

To estimate in-migration to Chippewa and Eau Claire counties, the following formula is used:

Beginning of decennial population + Births – Deaths = Expected population from Natural Increase

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

As **Table 4.8** shows, in-migration was 51% of population growth in Chippewa and Eau Claire counties from 2000 to 2020 and outpaces the natural increase. In-migration as a percentage of the population has been increasing, representing 39% of population growth from 1990 to 2000.

Table 4.8 Chippewa & Eau Claire County Net Migration – 2000-2020

	2000 Population	Expected 2020 Pop from Natural Increase	2020 Census Population	Net In-Migration
Chippewa County	55,195	58,742	66,297	7,555
Eau Claire County	93,142	101,103	105,710	4,607
Total	148,337	159,845	172,007	12,162

sources: U.S. Census; Wisconsin Department of Health Services

It is important to remember that the Study Area only represents about 38% of the Chippewa and Eau Claire counties' population, so these birth, death, and migration trends are also influenced by population trends within these counties but outside the Study Area. Such detailed data is not readily available at the municipal level for most communities.

Population per Household

As shown in **Table 4.9**, average household size has been decreasing since 2000. In 2010, communities within the study area had an average household size of 2.44 persons (using a weighted average based on number of households). By 2020, the average dropped to 2.33 persons per household. Unincorporated communities have a higher average of roughly 2.58 persons in 2020, and their average has been increasing slightly to 2.60 in 2023 according to 5-Year ACS estimates. Incorporated communities averaged 2.25 persons per household in 2020, and that number has remained stable. In 2023, the average household size of incorporated communities was 2.24.

Table 4.9 Average Household Size

Place	2000 (c)	2010 (c)	2011 (a)	2012 (a)	2013 (a)	2014 (a)	2015 (a)	2016 (a)	2017 (a)	2018 (a)	2019 (a)	2020 (c)	2021 (a)	2022 (a)	2023 (a)
Anson	2.61	2.47	2.63	2.56	2.58	2.54	2.37	2.32	2.39	2.24	2.31	2.4	2.34	2.25	2.3
Brunswick	2.54	2.46	2.4	2.37	2.44	2.52	2.54	2.53	2.56	2.67	2.68	2.47	2.68	2.88	2.59
Eagle Point	2.77	2.52	2.65	2.56	2.58	2.63	2.52	2.5	2.62	2.39	2.26	2.51	2.31	2.38	2.37
Hallie	2.84	2.68	2.03	2.02	2.14	2.09	2.42	2.57	2.7	2.52	2.51	2.55	2.36	2.3	2.4
Lafayette	2.64	2.53	2.61	2.51	2.42	2.4	2.37	2.37	2.38	2.39	2.35	2.49	2.35	2.41	2.51
Pleasant Valley	2.93	2.82	2.86	2.89	2.96	3	3.02	2.96	3	2.87	2.87	2.82	3.03	3.06	2.9
Seymour	2.67	2.6	2.65	2.54	2.73	2.66	2.6	2.6	2.56	2.54	2.59	2.56	2.82	2.84	2.86
Tilden	2.88	2.71	2.51	2.57	2.61	2.73	2.8	2.68	2.84	2.78	2.88	2.66	2.91	2.77	2.69
Union	2.88	2.69	2.79	2.79	2.64	2.83	2.77	2.66	2.57	2.67	2.69	2.62	2.65	2.73	2.57
Washington	2.67	2.57	2.49	2.44	2.48	2.4	2.4	2.42	2.46	2.45	2.45	2.62	2.61	2.6	2.59
Wheaton	2.78	2.69	2.72	2.82	2.92	2.96	3	3.05	3.01	2.85	2.84	2.62	2.93	2.72	2.75
Lake Hallie	-	2.62	2.69	2.73	2.81	2.76	2.7	2.63	2.53	2.53	2.5	2.53	2.43	2.35	2.3
Altoona	2.31	2.32	2.25	2.22	2.33	2.38	2.48	2.5	2.43	2.44	2.36	2.24	2.39	2.38	2.37
Chippewa Falls	2.18	2.18	2.18	2.14	2.11	2.09	2.08	2.13	2.12	2.17	2.2	2.14	2.19	2.15	2.11
Eau Claire	2.37	2.29	2.29	2.29	2.3	2.3	2.33	2.33	2.33	2.33	2.34	2.25	2.31	2.27	2.25
<i>Weighted Averages (by number of households)</i>															
Towns	2.73	2.60	2.62	2.57	2.59	2.59	2.57	2.55	2.58	2.53	2.53	2.58	2.60	2.62	2.60
Cities & Villages	2.33	2.30	2.29	2.29	2.30	2.30	2.32	2.33	2.32	2.33	2.33	2.25	2.31	2.27	2.24
Totals	2.44	2.37	2.37	2.36	2.37	2.37	2.38	2.39	2.38	2.38	2.38	2.33	2.38	2.35	2.33

source: U.S. Census Bureau, (c) = Decennial Census, (a) = ACS 5-Year Estimates

4.1.3 Population Projections

The Wisconsin Department of Administration (WDOA) updated its population projections in 2024 and are reflected in **Table 4.10** below. The new WDOA projections are significantly different from previous versions and Wisconsin is projected to lose population for the first time, which “trickled down” to and impacted projections at the county and local levels. For 2025, the more accurate WDOA population estimate is used rather than a projection. WDOA projections are not available in 5-year increments; to arrive at the 2045 population projection, WCWRPC calculated half the population growth between the 2040 and 2050 decennial projections.

Of the fifteen communities in the Study Area, four are now projected by WDOA to lose population: the towns of Seymour, Union, and Wheaton, as well as the City of Chippewa Falls. It is important to note that DOA projections are based on fertility and mortality rates more than inbound and outbound migration, as the latter are harder to predict.

Table 4.10 WDOA Population Projections, with 2025 Estimates

	2020	2025 Estimates	2030	2040	2045	2050	Change ('20-'50)
Town of Anson	2,297	2,376	2,392	2,489	2,501	2,512	+ 9.4 %
Town of Brunswick	1,958	2,002	2,044	2,128	2,162	2,195	+ 12.1 %
Town of Eagle Point	3,237	3,323	3,267	3,308	3,284	3,260	+ 0.7 %
Town of Hallie	153	190	190	225	238	251	+ 64.1 %
Town of Lafayette	6,197	6,583	6,693	7,177	7,304	7,430	+ 19.9 %
Town of Pleasant Valley	3,791	4,067	4,288	4,755	4,959	5,163	+ 36.2 %
Town of Seymour	3,352	3,399	3,322	3,301	3,284	3,267	- 2.5 %
Town of Tilden	1,516	1,569	1,533	1,554	1,544	1,534	+ 1.2 %
Town of Union	2,696	2,681	2,544	2,411	2,344	2,277	- 15.5 %
Town of Washington	7,662	7,788	7,753	7,854	7,882	7,910	+ 3.2 %
Town of Wheaton	2,759	2,839	2,771	2,793	2,767	2,741	- 0.7 %
Village of Lake Hallie	7,170	7,512	7,490	7,815	7,862	7,908	+ 10.3 %
City of Altoona	8,293	9,835	10,753	13,006	14,030	15,054	+ 81.5 %
City of Chippewa Falls	14,731	15,292	14,290	13,935	13,598	13,260	- 10.0 %
City of Eau Claire	69,421	74,039	71,744	74,055	74,918	75,780	+ 9.2 %
Unincorporated Towns	35,618	36,817	36,797	37,995	38,268	38,540	8.20%
Cities & Villages	99,615	106,678	104,277	108,811	110,407	112,002	12.43%
All Study Area Communities	65,812	143,495	69,330	72,751	73,757	74,762	+ 13.6 %
Chippewa County	66,297	68,414	66,630	67,200	66,595	65,990	- 0.5 %
Eau Claire County	105,710	112,246	110,405	114,945	116,785	118,625	+ 12.2 %
Wisconsin	5,893,718	6,033,734	5,890,915	5,841,620	5,775,870	5,710,120	- 3.1 %

source: Wisconsin Department of Administration Projections, 2024 vintage

Table 4.11 compares the 2020 Census, 2025 WDOA population estimate, and the WDOA 2030 projected population. In contrast to the projections in Table 4.6, all but one community within the Study Area saw a population increase between 2020 to 2025, and many communities have already exceeded WDOA’s 2030 projections.

Table 4.11 Comparison of Census and Wisconsin DOA Population Statistics

Municipality	2020 (c)	2025 (e)	2030 (p)	Population Change 2020-2025	5-Year Population Growth Needed to Achieve 2030 Projection
Anson	2,297	2,376	2,392	79	16
Brunswick	1,958	2,002	2,044	44	42
Eagle Point	3,237	3,323	3,267	86	(56)
Hallie	153	190	190	37	-
Lafayette	6,197	6,583	6,693	386	110
Pleasant Valley	3,791	4,067	4,288	276	221
Seymour	3,352	3,399	3,322	47	(77)
Tilden	1,516	1,569	1,533	53	(36)
Union	2,696	2,681	2,544	(15)	(137)
Washington	7,662	7,788	7,753	126	(35)
Wheaton	2,759	2,839	2,771	80	(68)
Lake Hallie	7,170	7,512	7,490	342	(22)
Altoona	8,293	9,835	10,753	1,542	918
Chippewa Falls	14,731	15,292	14,290	561	(1,002)
Eau Claire	69,421	74,039	71,744	4,618	(2,295)
Unincorporated	35,618	36,817	36,797	1,199	(20)
Incorporated	99,615	106,678	104,277	7,063	(2,401)
Study Area Communities	135,233	143,495	141,074	8,262	(2,421)

source: U.S. Census Bureau, (c) = Decennial Census, Wisconsin Department of Administration (e) = 2025 Population Estimates, (p) = 2024 vintage Population Projections

It should be noted that all but one community within the Study Area is growing and growing at a rate that will exceed WDOA’s 2030 projections. **Table 4.11** shows, in several cases, 2025 DOA estimates of community populations are already exceeding the 2030 projection.

4.1.4 Employment & Commuting Trends

The Wisconsin Department of Workforce Development estimates that Eau Claire Metropolitan Statistical Area (Eau Claire & Chippewa counties) added 7,317 jobs between 2020 and 2025. Shown in Table 4.12, Health Care and Social Assistance provide the most jobs (17,150) of all industry clusters, while it and the Accommodations and Food industry cluster added the most jobs (+1,772 and 1,756 respectively) over the 5-year period. The highest growth rates were in smaller industry clusters such as Utilities (110%) and Arts, Entertainment, and Recreation (65%).

Table 4.12 Industry Employment 2020-2025, Eau Claire MSA

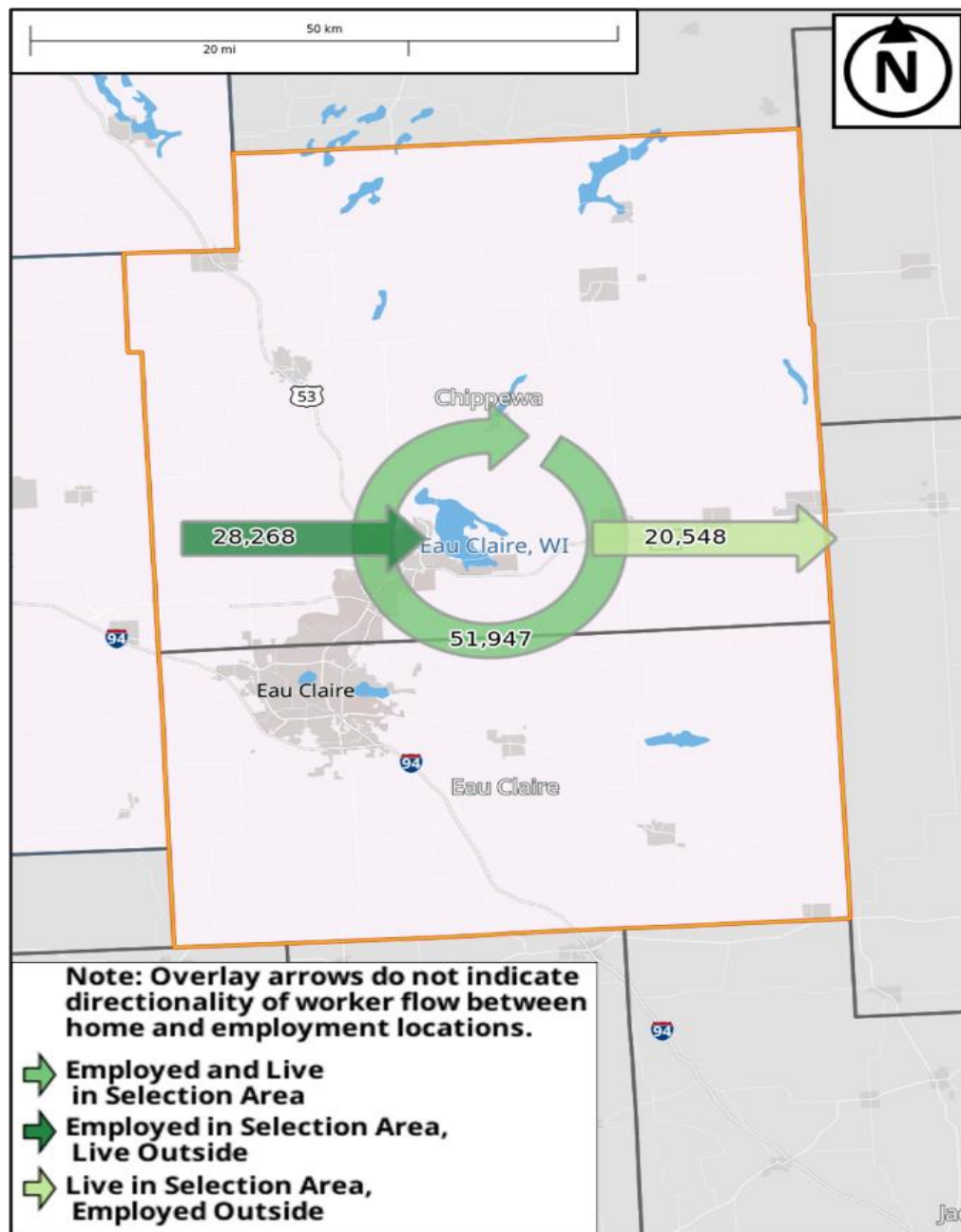
NAICS	Description	2020 Jobs	2025 Jobs	2020 - 2025 Change	2020 - 2025 % Change
62	Health Care and Social Assistance	15,379	17,150	1,772	12%
90	Government	11,217	12,006	789	7%
44	Retail Trade	10,814	11,573	760	7%
31	Manufacturing	10,799	10,921	122	1%
72	Accommodation and Food Services	6,392	8,149	1,756	27%
23	Construction	4,506	5,101	596	13%
48	Transportation and Warehousing	3,836	4,815	979	26%
81	Other Services (except Public Administration)	3,929	4,394	465	12%
56	Administrative and Support and Waste Management and Remediation Services	3,601	3,289	(312)	(9%)
42	Wholesale Trade	2,879	3,276	398	14%
54	Professional, Scientific, and Technical Services	3,068	3,224	156	5%
55	Management of Companies and Enterprises	2,925	2,739	(186)	(6%)
52	Finance and Insurance	3,511	2,347	(1,164)	(33%)
71	Arts, Entertainment, and Recreation	1,049	1,730	681	65%
61	Educational Services	1,234	1,330	96	8%
53	Real Estate and Rental and Leasing	828	1,097	269	33%
11	Agriculture, Forestry, Fishing and Hunting	992	1,012	20	2%
51	Information	714	734	20	3%
22	Utilities	95	200	105	110%
21	Mining, Quarrying, and Oil and Gas Extraction	66	60	(5)	(8%)
99	Unclassified Industry	0	0	0	0%
TOTAL		87,832	95,149	7,317	8%

source: Lightcast Q1 2026 Data Set, Wisconsin Department of Workforce Development

According to the March 2025 Wisconsin MSA Outlook, produced by the Wisconsin Department of Revenue, the Eau Claire Metropolitan Statistical Area (MSA) was the 3rd largest growing employment area in Wisconsin over the past five years at 3.8%, only behind the Kenosha (10.8%) and Madison (4.0%) MSAs. Despite this growth, per capita personal income remains one of the lowest in the state (\$59,135), only ahead of the Janesville – Beloit MSA (\$56,319) and below the State average (\$64,969).

Figure 4.3 shows the commuter trends in the MSA (Eau Claire & Chippewa counties). According to 2023 data, 28,268 workers commute in from outside the area, while 20,548 workers leave the area for work. The majority of employment, 51,947 workers, both live and work within the MSA, underscoring its significance as an employment and residential hub. A map of the distribution of employment (jobs) within the Study Area is available in Section 4.2.

Figure 4.3 2023 Worker Flow for Chippewa & Eau Claire Counties



Source: U.S. Census Bureau

4.2 GROWTH CHARACTERISTICS

This section summarizes the population and land use trends within the Study Area. Sections 4.2 and 4.4 of this SSA Plan update rely heavily on Traffic Analysis Zone (TAZ) map data prepared by Wisconsin Department of Transportation (WDOT) in 2025 to help guide the delineation of the SSA boundary. The methodology in Section 4.4.1 discusses the TAZ data approach in more detail.

4.2.1 Study Area Population Distribution

The Study Area's population is most concentrated in the cities with some higher densities in the northeast of the Village of Lake Hallie, near the border with Chippewa Falls, as shown on **Map 4.2**. The area with the highest density within the Study Area is around the University of Wisconsin-Eau Claire campus. The Town of Lafayette contains several pockets of denser populations around Lake Wissota. Otherwise, unincorporated areas have much lower population densities.

4.2.2 Study Area Land Use Trends & Patterns

The residential land use trends (and the public/institutional uses that support the population) are a reflection of the data showed in Section 4.1 for the Study Area communities:

- From 2000-2025, population has increased by over 27,100 residents (+23%), with about 66% of this population growth occurring in the sewered cities of Altoona, Chippewa Falls, and Eau Claire.
- From 2015 to 2023, the cities and villages experienced an increase of 3,656 housing units compared to an addition of 326 units in the unincorporated towns.

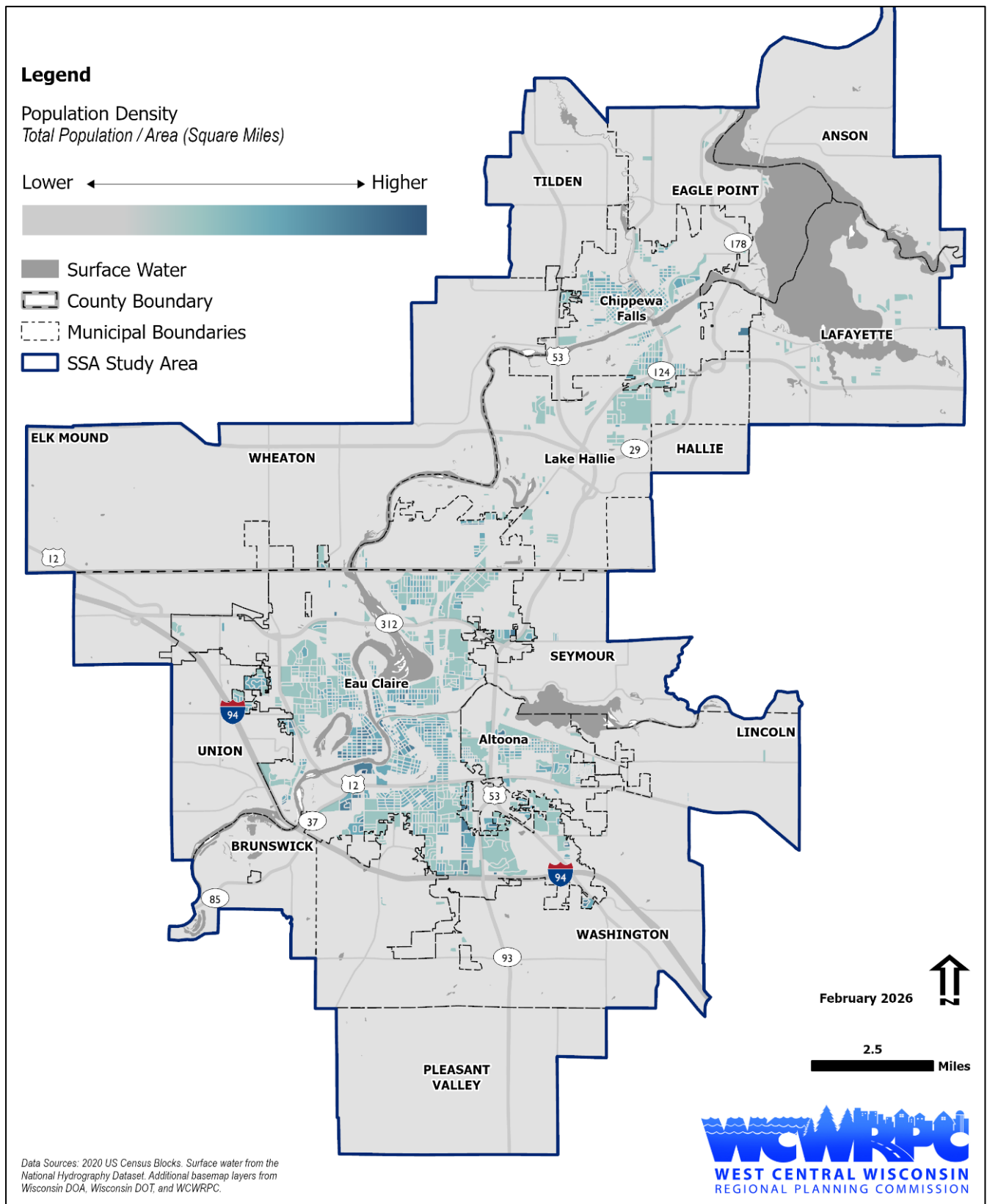
Recent commercial and industrial assessed acreage trends for the Study Area are shown in **Table 4.13**. Overall, the cities and village saw an increase of about 578 acres of assessed commercial & industrial land, while assessed acreage decreased in the towns.

Map 3.5 in Section 3 provides a general overview of the land use patterns within the Study Area. About 33% of the Study Area's land cover can be classified as developed, though less than 10% is developed at a medium or higher density. As a reflection of general land use patterns and densities, **Map 4.3** and **Map 4.4** on the following pages provide insights into the 2022 estimated distribution of households and employment throughout the Study Area utilizing the TAZ map data.

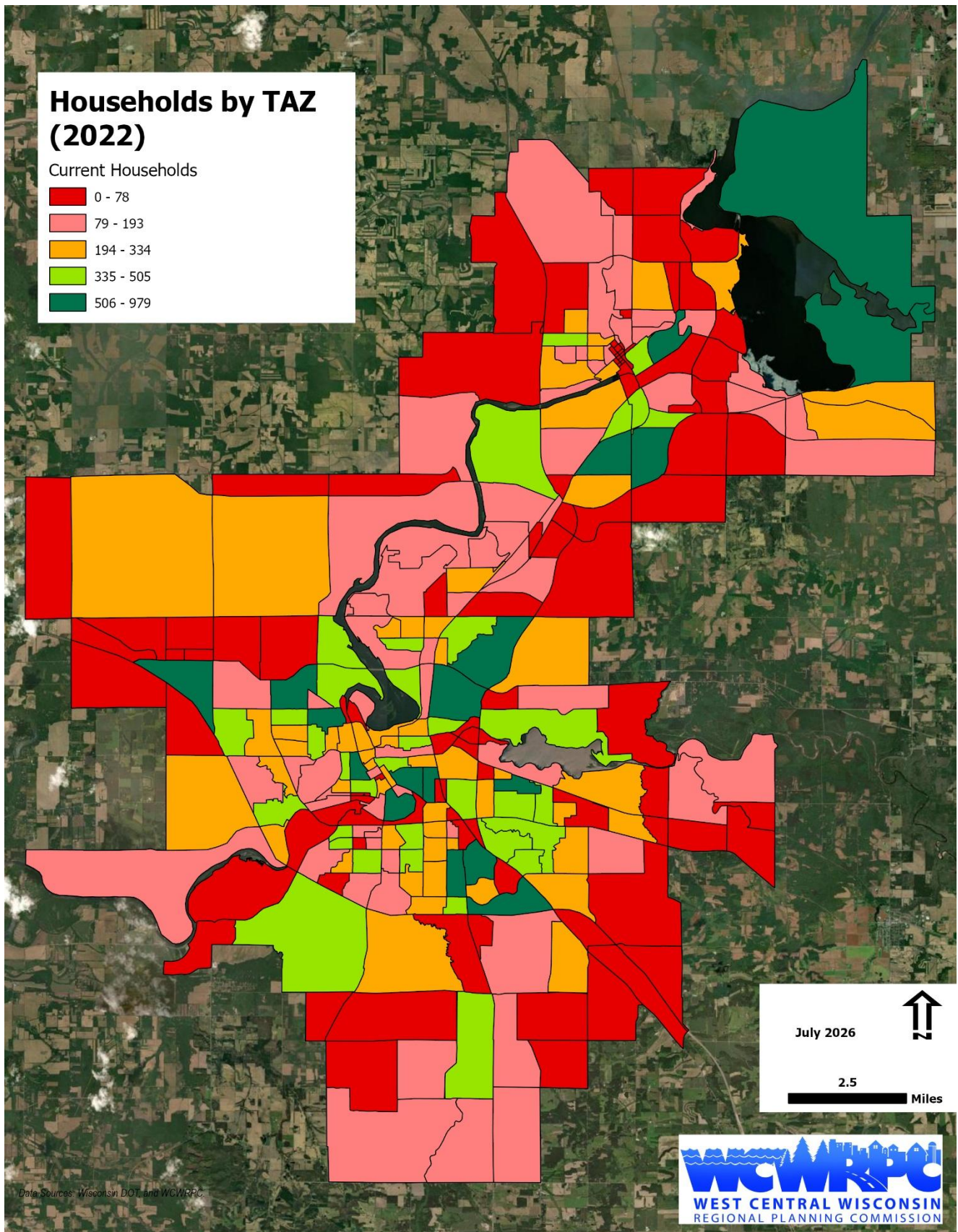
Table 4.13 Commercial & Industrial Acreage, 2019-2024

	Acres	
	Commercial	Industrial
Unincorporated Towns		
2019	3,697	1,177
2024	3,884	929
City of Altoona		
2019	649	44
2024	693	43
Village of Lake Hallie		
2019	1,337	152
2024	1,306	169
City of Chippewa Falls		
2019	1,120	426
2024	1,410	325
City of Eau Claire		
2019	3,033	800
2024	3,280	913
All Incorporated Areas		
2019	6,139	1,422
2024	6,689	1,450
All Study Area Communities		
2019	9,836	2,599
2024	10,573	2,379

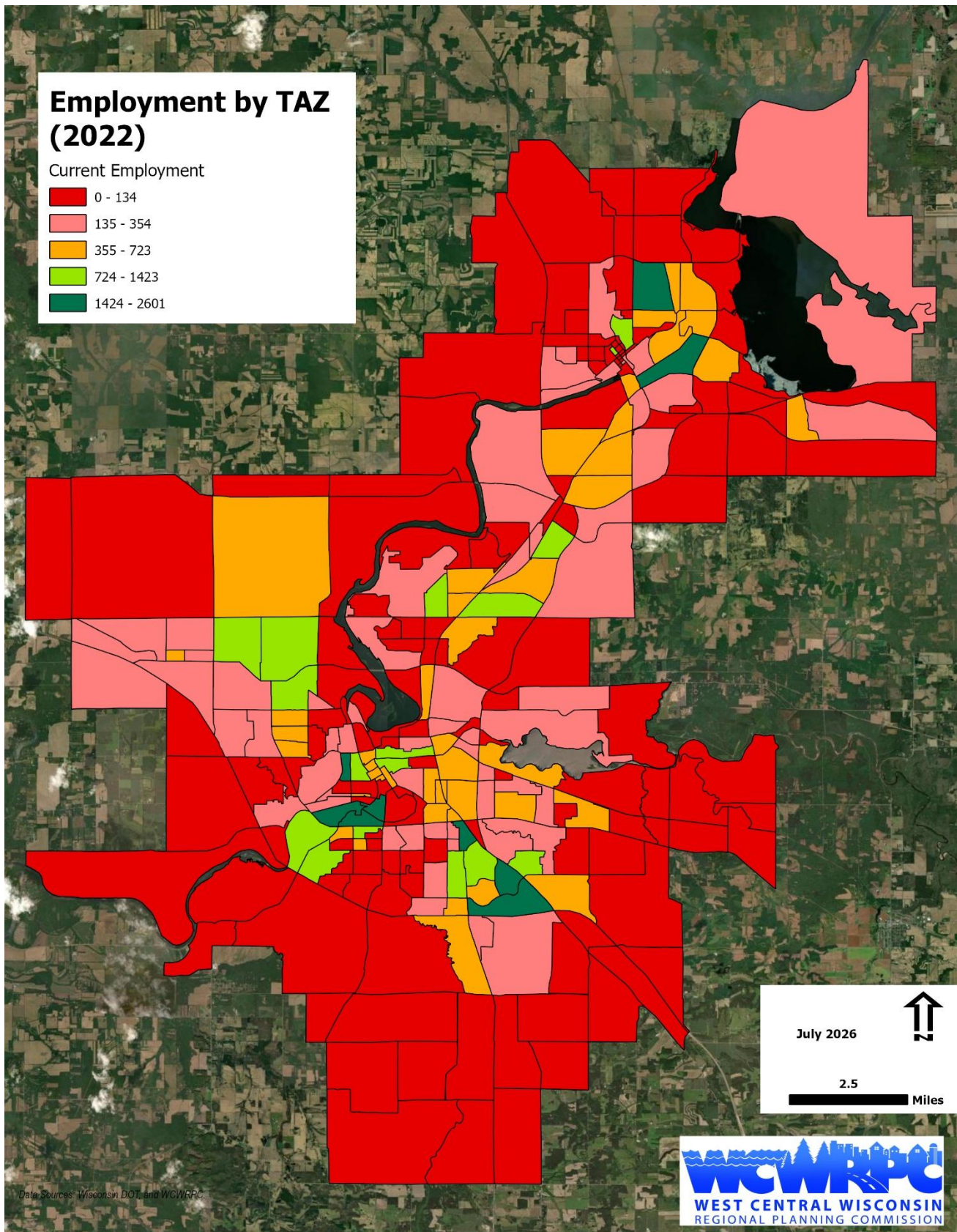
Map 4.2 Population Densities by Census Block 2020



Map 4.3 2022 Households within the Study Area by TAZ



Map 4.4 2022 Employment within the Study Area by TAZ



Residential/Population Development Density Standards for Sewered Growth

NR121.05(g)2.b. requires the establishment of population density standards for the planning of urban, sewerred growth. For this SSA Plan, **Table 4.14** identifies the approved average residential population densities for the urban, sewerred communities.

Table 4.14 Residential Lot Densities in Acres per Unit

	Single-Family Average Lot	Duplex Average Lot	Average Lot Size
City of Altoona	0.14 acres	0.10 acres	0.20 acres
City of Chippewa Falls	0.27 acres	0.11 acres	0.19 acres
City of Eau Claire	0.25 acres	0.16 acres	0.21 acres

To help determine the average population/residential density standards in Table 4.14, recent residential development densities were analyzed for infrastructure demands and unit sizes/types deemed appropriate by the market and discussions occurred with the sewerred municipalities to determine their anticipated average residential development densities for potential growth areas.

4.3 LAND USE PLANS & BOUNDARY AGREEMENTS

4.3.1 Comprehensive & Land Use Plans

The following table summarizes the status of comprehensive and land use planning for the municipalities within the Study Area.

Table 4.14 Summary of Community Land Use Plans

Town/ Village/City	Comprehensive or Land Use Plan	Other Comments
Town of Anson	Comp Plan 2025	There are a limited number of commercial and industrial uses throughout the Town, and that is not expected to change significantly. Preferred Future Land Use Map identifies residential development along Chippewa River and Lake Wissota. Limited commercial and residential hamlet development in unincorporated Jim Falls.
Town of Brunswick	Comp Plan 2009 Utilizes County Zoning Requirements	The Plan Committee acknowledged there is not a strong demand for commercial businesses outside of the I-94/STH 37 corridor. Future Land Use map shows residential in the northwest quarter of the town.
Town of Eagle Point	Comp Plan 2009 (includes a Generalized Future Land Use Map) Updated 2016 Utilizes County Zoning & Subdivision Requirements	Commercial and industrial development in Eagle Point has been limited by the lack of municipal water and sewer infrastructure. Most of the commercial and/or manufacturing pressure will likely occur in the southern portion of the Town, near the City of Chippewa Falls. Population density varies considerably across the Town, with a much higher density found in the southern portion of the Town, as well as along water resources, such as the Chippewa River. Future land use in the Town will primarily remain agriculturally dominated, with residential uses increasing slightly over the next 25 years. Without water and sewer infrastructure in place, it is unlikely that larger commercial and industrial users will develop in Eagle Point. Eagle Point is projected to need 543 residential dwelling units, 32 acres of commercial, and 5 acres of industrial land by 2030 The Town will encourage commercial/industrial development to occur within the City of Chippewa Falls, which has identified and developed sites. The Land Use Plan shows commercial development adjacent to the City of Chippewa Falls.
Town of Hallie	Comp Plan 2010	As of 2010, under County Zoning. There have been no annexations to the Village nor has there been pressure to subdivide agricultural land into residential development. Prime agricultural land will remain the primary use. About 32 acres along CTH "P" near the Village is suitable for commercial and low-impact manufacturing; the Town envisions no industrial development. Acreage available for up to 120 s.f. homes on 1.5-acre lots; no duplexes or multi-family dwellings envisioned.

Town of Lafayette	Comp Plan 2010 Amended 2020	Development in north Lafayette will likely consist of residential use. Promote the development of primarily larger lot, single-family homes, with a mix of two-family. Commercial development pressure will likely occur in the northwestern part of the town, close to Chippewa Falls, initially and then spread as other development occurs. Logical expansion will take place adjacent to current Commercial areas, specifically at the western quarter of County Highway J / Park Avenue, along both North and South Service Roads of County Highway X, on the south side of Highway X across from Ray's Beach Park, and in the 50th Avenue / County Highway J Area. Promote commercial development in the area around the intersection of 50th Avenue, County Highway J, and State Highway 29. Residential and tourism-based commercial development pressure is expected to be highest along or near Lake Wissota, with more intensive residential and commercial development pressure occurring near State Highway 29 and in areas closer to the City of Chippewa Falls. The southern portion of Lafayette is expected to remain primarily non-residential and non-commercial.
Town of Pleasant Valley	Comp Plan 2023	Future Land Use map shows higher density "Rural Residential" development occurring north of County Highway HH / V and west of County Highway I.
Town of Seymour	Comp Plan 2019	Development within the planned 2025 Eau Claire Sewer Service Area should be arranged for potential re-subdivision into City-sized lots to facilitate the efficient and economical delivery of future municipal utilities. Commercial land has been outlined near the intersection of CTH Q and USH 53. The best uses will be those that serve a rural nature. Future Land Use Map shows urban mixed uses adjacent to the City of Eau Claire and rural residential in the western quarter of the Town (in the vicinity of the cities of Altoona and Eau Claire).
Town of Tilden	Comp Plan 2009	Tilden has experienced residential development mainly around its perimeter as well as along major highways and water fronts. Tilden has experienced commercial development along the Highway 53 corridor. Future Land Use Map (Map X) projects commercial development along the US Highway 53 corridor and County Highway S.
Town of Union	Comp Plan 2018	The Town will need 1,728 acres of residential, 233 acres of commercial, and 136 acres of industrial lands by 2030. The most appropriate commercial and industrial uses will be those that serve community needs or those that provide employment and serve the larger region in the Highway 12/312 and I-94 corridor. Future Land Use Map shows industrial/commercial uses along the north (US Highway 12 and I-94 corridors north to town limits) and Rural Residential adjacent to the City of Eau Claire and Chippewa River.
Town of Washington	Comp Plan 2018	Future Land Use Map shows commercial and industrial uses along State Highway 93, US Highway 12, and I-94. Urban Mixed Use, Rural Residential, and Rural Transition are identified around these corridors and adjacent to the cities of Eau Claire and Altoona.)

Town of Wheaton	Comp Plan 2021 has 5-acre min. lot size in subdivision ordinance	Residential land uses are scattered throughout the Town but there are more high-density subdivisions located south of State Highway 29. The intersection of State Highway 29 and County Highway T is becoming a hub for industrial and commercial land uses as well as County Highway X near the City of Chippewa Falls boundary and an area south of State Highway 29 near the Chippewa River. 1,004 acres are needed to accommodate future residential, commercial, and industrial growth. The Town of Wheaton wants to identify three intersections along County Highway T as areas for special consideration as the Eau Claire MPA grows: County Highway X, State Highway 29, and north of 20th Avenue. The Town wants to explore development tools such as boundary agreements or sanitary districts to coordinate commercial and industrial development with neighboring incorporated municipalities to jointly plan the future of the area and provide benefits to each party.
Village of Lake Hallie		Future Land Use map shows growth areas to the Village's northwest and west. A business park growth area is shown south of State Highway 29 to County Highway OO. One residential growth area is bounded by State Highway 29, 40 th Avenue, and County Highway P. Another is shown to the Village's northeast, bounded by County Highway J, 165 th Street, County Highway X, Balsam Drive (if extended south), and wetlands to the south.
City of Altoona		Future Land Use map projects residential development east of the City. Higher concentrations of residential development are shown north of County Highway SS to the City's 1.5 mile ETJ, and on the south side of the City, north of Prill Road and east to Six Mile Creek. Limited industrial development is identified along US Highway 12 and commercial development is identified along Prill Road.
City of Chippewa Falls		Future Land Use map identifies: • a commercial growth area at the southwest corner of County Highway S and US Highway 53 (northwest of the City). • Residential growth areas along County Highway S (northwest and northeast of the City), 140th Street (north), US Highway 53 (west), and State Highway 29 (southeast) An industrial growth area on the northeast side, from the City's border to 95th Avenue.
City of Eau Claire	Comp Plan Adopted 2015; Comp Plan Update 2022; Comp Plan Amended 2025; Major Comp Plan Update in 2026	Future Land Use map projects Low Density Housing in the majority of the areas between the City's municipal limits and current SSA boundary. Commercial growth is shown along I-94 near its intersections with US Highway 53 and US Highway 29. Industrial areas are shown to the northwest along US Highway 12 and State Highway 312.

The future land use maps from current city, village, and town comprehensive plans were used to help determine the Study Area boundary (discussed in Chapter 2) and guides the MPO and WDOT in establishing the growth projections for the TAZs, which will be further discussed in Section 4.4.

4.3.2 Boundary Agreements

The following intergovernmental agreements related to land were identified by municipalities during the planning process. These agreements do not rise to the level of a Cooperative Boundary Agreement as defined under Wis. Stats. § 66.0307. None of these agreements set ultimate incorporation boundaries or related timelines for annexation to a city or village, nor do the agreements firmly define future growth areas that could help guide the updated SSA boundary in Chapter 6. Many additional intergovernmental agreements for emergency services, stormwater management, and other services and programs do exist throughout the Study Area, but they do not directly influence the provision of sanitary sewer and are not included in the table.

Agreement Type & Additional Information	Between	
	City / Village	Town(s)
Intergovernmental Agreement (Extra Territorial Jurisdiction) Set minimum standards for non-sewered development depending on location within or outside SSA. Strives to maintain rural density of 1 sf lot/10ac within the SSA to potentially allow for future urban services. Agreement was continued in Feb 2021 for 10 years. Within the City of Eau Claire’s 3-mile extraterritorial jurisdiction (ETJ), the agreement encourages “compact and cost-effective development in the towns and City’s perimeter by allowing appropriate infill lots, allowing clustered development lots, and preserving working farms and sustainable development patterns.” It further discusses consistency in land division regulations between the communities’ comprehensive plans. This agreement is especially pertinent to this planning process as it identifies two classes of land: those within the ETJ and within the SSA boundary, and those within the ETJ, but not within the SSA boundary; modifications to the SSA boundary will effect the execution of this agreement.	Eau Claire	Brunswick Pleasant Valley Seymour Union Washington Wheaton
Intergovernmental Agreement Amendment (SSA, Comp Planning & Zoning)	Eau Claire	Washington
Extraterritorial Agreements The City of Altoona and Town of Washington have executed five additional extraterritorial agreements for specific landowners related to annexations or the City’s extraterritorial jurisdiction.	Altoona	Washington

4.4 FORECAST OF URBAN (SEWERED) GROWTH

4.4.1 Methodology for Projecting Urban (Sewered) Growth

General Assumptions

For projecting potential sewer, urban growth in the Study Area, and ultimately the SSA boundary, the following assumptions are used:

- Urban, sewer growth and the SSA boundary will largely be driven by projected growth within the three sewer communities—the cities of Altoona, Chippewa Falls, and Eau Claire.
- The Village of Lake Hallie is largely unsewered, but is included within the current SSA boundary and has expressed interest in obtaining sanitary sewer service for future growth from the City of Eau Claire and/or City of Chippewa Falls. The Village’s future land use map envisions residential and business park growth to the northeast of the Village, which includes portions of the Towns of Hallie and Lafayette and could potentially overlap future sewer growth from the City of Chippewa Falls. Further, there are significant ESA wetlands and high water tables in this area; there may be environmental benefits of providing sanitary sewer for any permitted growth in this area. Due to such uncertainties, determining possible future sewer growth in that general area is driven more by the WDOT Transportation Analysis Zone (TAZ) forecasts than the projections for the Village alone.
- NR 121 requires that the sewer service area be delineated based on WDOA 20-year population forecasts. These forecasts are built into the residential growth projections within this SSA Plan update in two ways: (1) the WDOA projected growth rates were used to the projected 2045 households for sewer communities and (2) the forecasts were incorporated into the Transportation Analysis Zone (TAZ) projections, which are further described later in this section.
- When projecting residential (household) sewer growth, a 30% market factor was added to recognize the uncertainty in 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. A 30% market factor was utilized in the 2007 SSA Plan, which states that the 30% 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.” Given the market factor, it is unlikely that all of the SSA will develop within the planning period. Unlike the 2007 SSA Plan, a specific public infrastructure/right-of-way factor or allowance is not included, since this is effectively considered as part of the TAZ projections.
- Employment projections have been established by WDOT for each TAZ within the Study Area. Significant areas of anticipated commercial or industrial growth (employment areas) should be sewer. Acreage needs can be highly variable for these land uses, so future land use plans and current development pressures must also be considered.

- All other types of growth (e.g., institutional, educational, public / utility) are not independently projected. Rather, these types of development are incorporated into residential and commercial / industrial acreage demands through the market allowance and the TAZ employment growth projections.
- Except as provided for above, it is anticipated that other growth within the unincorporated towns within the Study Area will continue to be at rural densities that will allow for the safe installation and long-term maintenance of individual onsite septic systems or smaller, shared treatment systems.

General Approach

To project urban (sewered) growth, the following general approach was used:

1. Forecasting residential (household) sewer growth

- a. Revised population projections - Utilizing the WDOA projected population growth areas in Table 4.10, the population projections were adjusted using the WDOA 2025 estimate as a starting point for the municipalities likely to be sewer in the future (cities) or desiring sanitary sewer service (village).
- b. Household growth projections - WDOT average household sizes utilized in the TAZ analysis for the incorporated cities and village were applied to the revised projections noted in (a) above.
- c. Market Factor - A 30% market factor was applied to the household growth projections to estimate the number of additional households each incorporated municipality anticipated in 2045. This represents the potential residential (household) sewer demand that should be accommodated within the updated SSA boundary.
- d. Forecasted Growth Demand - The household growth forecast, with market factor, were compared to the projected TAZ household growth areas that are already sewer to identify “infill areas” to be removed from the household demand. The remainder is the forecasted residential sewer growth outside existing sewer areas (i.e., number of additional households demanding new sewer).

2. Forecasting commercial & industrial sewer growth

- a. TAZ driven – The WDOT TAZ data was used to forecast employment growth for each analysis zone. Significant concentrations of employment growth, regardless of type, are best served by sanitary sewer when cost effective. By using the TAZ data, creating separate acreage projections for these other uses is unnecessary.

Traffic Analysis Zones (TAZs)

Similar to the last SSA Plan update in 2007, this plan update utilizes Transportation Analysis Zone (TAZ) data from the urban area’s *Long-Range Transportation Plan*. TAZs experiencing increases in either the number of households or employment are candidates for inclusion in the SSA boundary within Chapter 6.

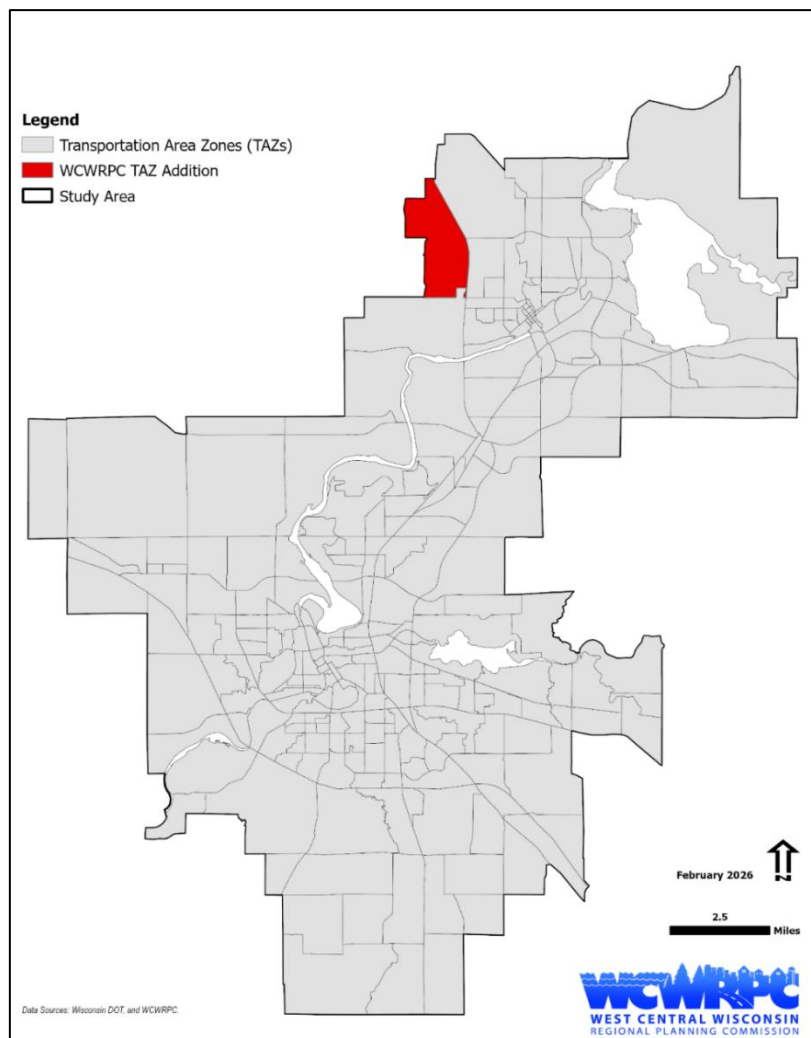
The Wisconsin Department of Transportation (WDOT) develops Transportation Analysis Zones (TAZs) as part of their transportation forecasting models. TAZs have been developed for the Eau Claire MSA. The most recent TAZs, developed in 2025, incorporated WDOA 2025 vintage population projections, which ensure compliance with NR 121 requirements, and developed detailed household and employment projections. Further, the utilization of the TAZ data within this plan fosters consistency between this sewer service area plan and the recently approved *Long-Range Transportation Plan* for the Chippewa-Eau Claire Metropolitan Planning Area.

Map 4.3 and **Map 4.4** previously showed the 2022 households and employment within the Study Area for each TAZ. The TAZs were utilized as part of the urban growth forecast for four reasons:

1. WDOA population projections are developed at the municipal level. TAZs are smaller geographic areas. WDOT allocated WDOA's projections throughout the MSA's TAZs, which allows for a more refined assessment of future growth and demand.
2. TAZs projects the number of households and employment, which is not provided in WDOA's projections.
3. WDOT worked with MPO planners and municipal engineering and planning staff to refine its forecasts with local land use planning and development realities. This refinement provides some of the required analysis required within sewer service area planning.
4. The TAZs were adopted by the MPO Policy Council, creating mutual agreement on projections and forecasts across study area communities.

Map 4.5 shows that one portion of the Study Area was not incorporated into WDOT's TAZs. This area, identified in red on the map, had to be created by WCWRPC staff. Staff utilized census block data to establish the 2022 baseline and utilized local plans to develop 2055 projections that matched comparable TAZs.

Map 4.5
Study Area
Transportation Analysis
Zones (TAZs)



4.4.2 Redevelopment & Infill Opportunities

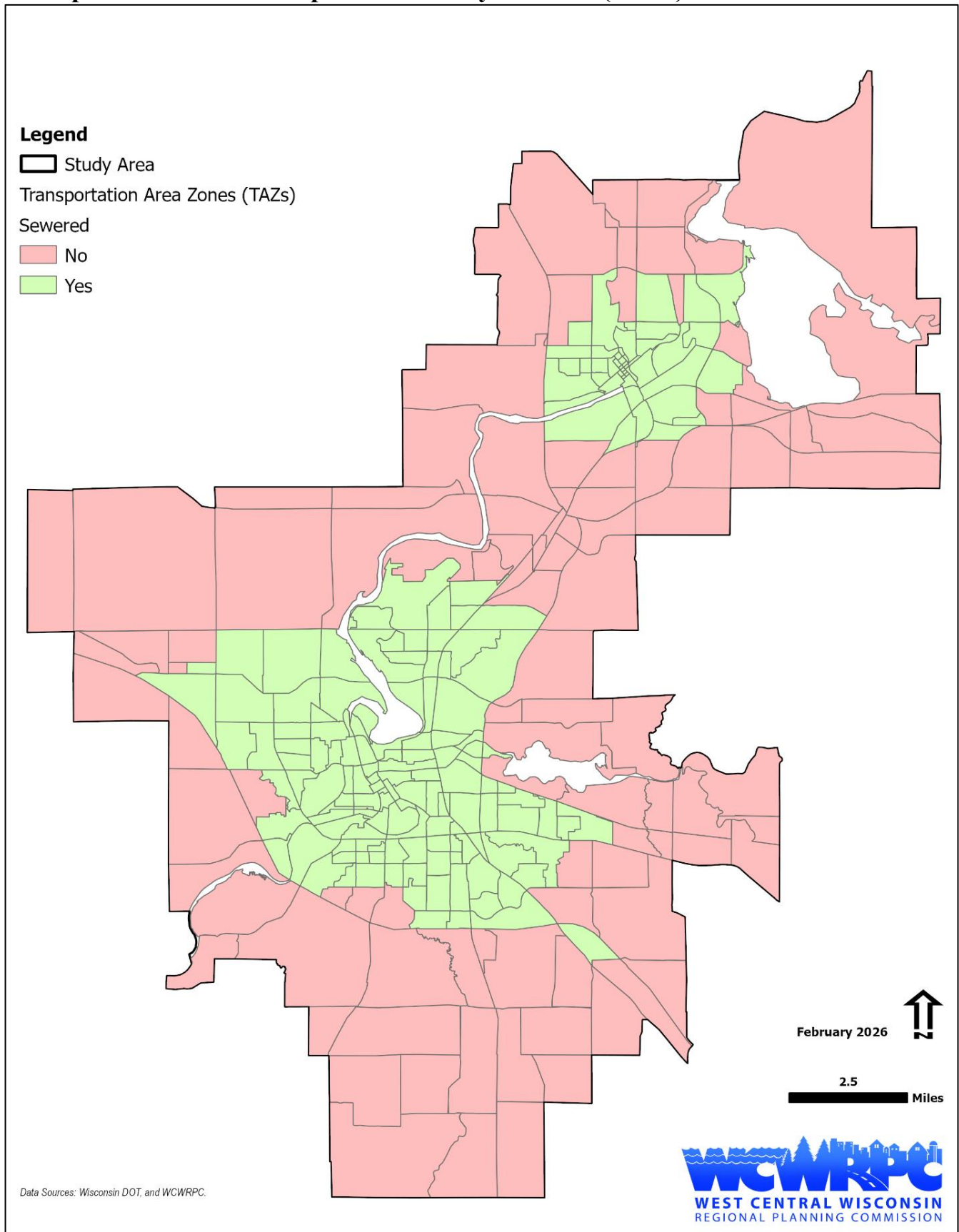
To help determine where new sewer service may be needed over the 20 years to support residential growth, redevelopment or “infill” opportunities within currently sewered areas must first be considered and removed from the projected new demand.

WCWRPC worked with City of Altoona, Chippewa Falls, and Eau Claire Engineering Departments to identify existing sewer infrastructure. Any parcels within 50 feet of existing sewer mains were classified as “sewered” parcels. All others were classified as “unsewered”. A boundary around all “sewered” parcels was developed to identify the “Sewered Area” within each community, which is later shown in **Map 5.1** within the next Chapter.

For this SSA Plan, sewered TAZs are treated as potential infill areas, while the remaining unsewered TAZs may be possible growth areas. The Sewered Area boundaries were overlaid onto the TAZ boundaries to identify “sewered” and “unsewered” TAZs. “Sewered” TAZs were any zone with more than 50% of its area located within the Sewered Area. Sewered and unsewered TAZs are shown in **Map 4.6**.

Within the TAZs, DOT projected growth in employment and households. Section 4.4.3 uses these infill/growth TAZ numbers to help determine the residential (household) demand projections and, ultimately, where this growth will occur in Chapter 6.

Map 4.6 Sewered Transportation Analysis Zones (TAZs)



4.4.3 Forecasted Residential Sewered Growth

To allow for a comparison with the WDOT TAZ household projections, the population projections in Table 4.10 (see Section 4.1.3) must be converted to households. Again, this analysis assumes that residential (household) sewer growth within the Study Area will be driven by the projected growth of those municipalities with sanitary sewer services, principally the cities of Altoona, Chippewa Falls, and Eau Claire. While the Village of Lake Hallie is included in the following tables for consideration when establishing the SSA boundary (see Chapter 6), sanitary sewer service is not currently provided to Village residents, though the Village has expressed a desire for such service for future growth.

Revised Population Projections

Due to concerns that population growth is already outpace WDOA projections, as evidenced by Table 4.10, WCWRPC applied the 20-year growth rates projected by WDOA to the 2025 WDOA estimates to obtain an adjusted 2045 population forecast, shown in **Table 4.15**.

Table 4.15 Adjusted 2045 Population Calculation

	2025 Estimated Population (WDOA)	2025-2045 Growth Rate (Based on WDOA Projections)	2045 Adjusted Population (RPC)
Altoona	9,835	47.3%	14,490
Chippewa Falls	15,292	-6.3%	14,330
Lake Hallie	7,512	7.3%	8,057
Eau Claire	74,039	6.1%	78,586

Source: Wisconsin DOA Population Estimates & Growth Rates, WCWRPC

Household Growth Projections

Household projections were not provided in the WDOA's projections in 2025. The Wisconsin Department of Transportation utilized WDOA's projections to develop their own household projections for the TAZs. Using WDOT's data for household sizes and 2025 population projections in Table 4.15, WCWRPC estimated the number of households in 2025 and projected number in 2045 in **Table 4.16**.

Table 4.16 Household Growth Projections

	2025			2045			2025-2045
	HH Size	Population Estimate	HHs	HH Size	Population Projection	HHs	HH Growth
Altoona	2.21	9,835	4,450	2.13	14,490	6,819	2,368
Chippewa Falls	2.05	15,292	7,460	1.98	14,330	7,237	-222
Lake Hallie	2.41	7,512	3,117	2.30	8,057	3,503	386
Eau Claire	2.22	74,039	33,351	2.14	78,586	36,785	3,434

Market Factor Allowance

Shown in **Table 4.17**, a 30% market factor was applied to the 2025-2045 household growth in Table 4.16.

Table 4.17 Adjusted Household Demand

	HH Growth	Market Factor	Additional Households Needed by 2045
Altoona	2,368	30%	3,079
Chippewa Falls	-222		0
Lake Hallie	386		502
Eau Claire	3,434		4,465

Forecasted Residential Sewered Growth Demand

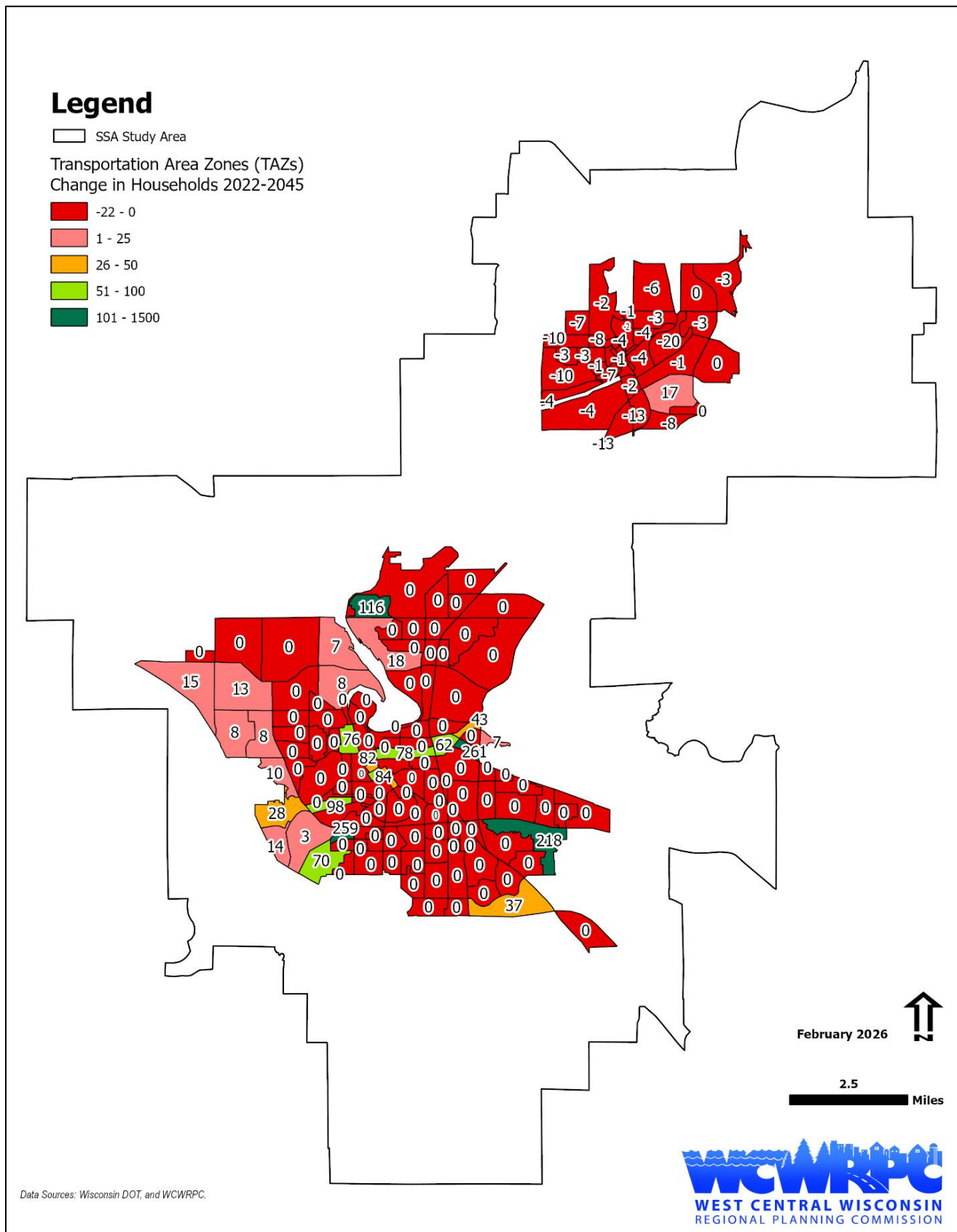
Map 4.7 shows WDOT-projected household growth by TAZ within the currently sewered “infill” areas. **Table 4.18** excludes the household growth for these infill areas to yield the forecasted sewered households in growth areas that are currently not sewered. When estimating infill households, one TAZ in the southeast of the Study Area had its 218 households split between the cities of Eau Claire (73) and Altoona (145) as it is split between the two communities. The City of Altoona’s infill households were also decreased by 261 to reflect that residential development within the River Prairie area has been fully built out offering no opportunities for infill in that area.

Table 4.18 Adjusted Household Demand in Growth Areas for 2045

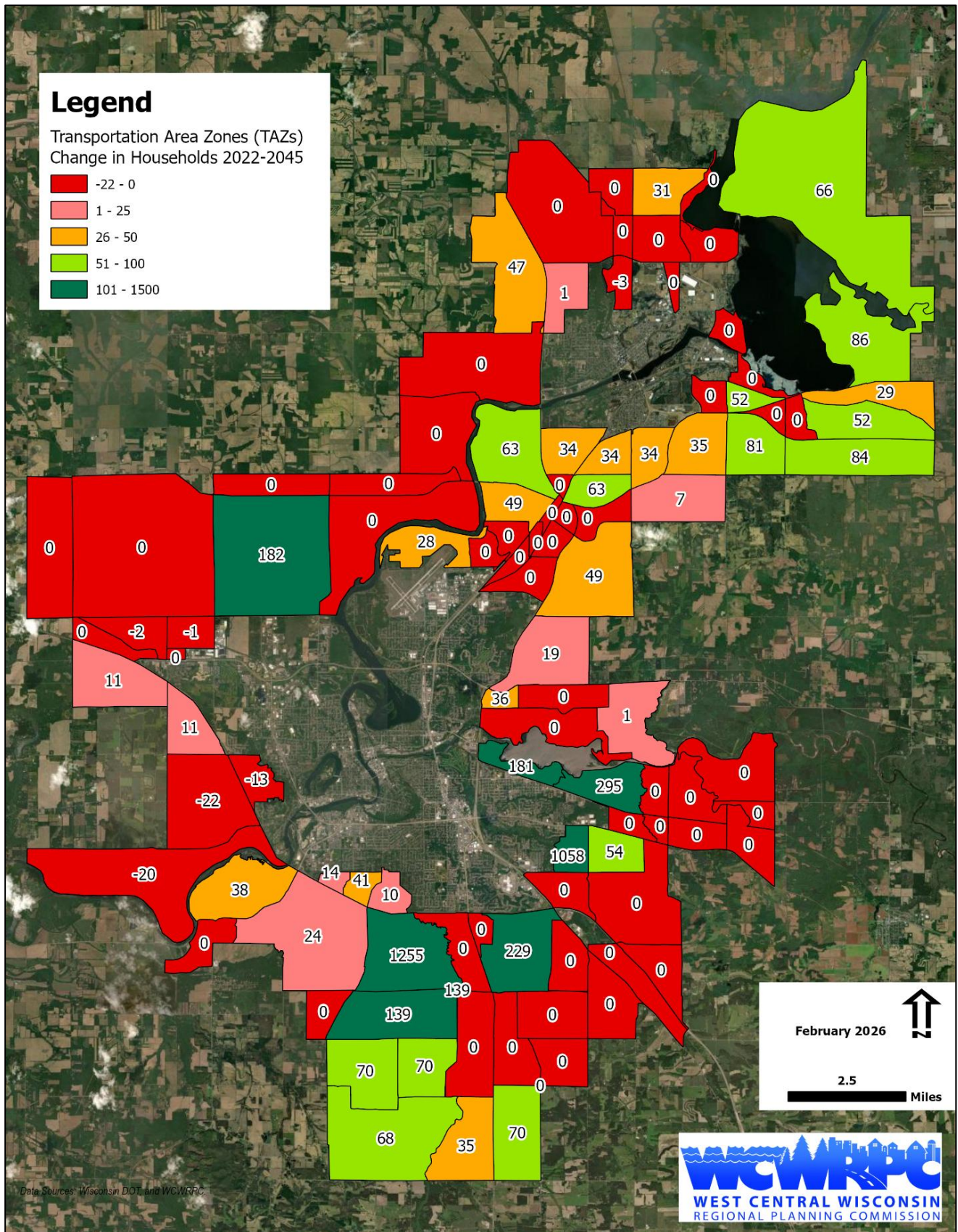
	Additional Households Needed by 2045	Infill Households	Total Growth Area Households Needed
Altoona	3,079	152	2,927
Chippewa Falls	0	(156)	0
Lake Hallie	502	<i>unsewered</i>	502
Eau Claire	4,465	1,360	3,105

In total, 6,534 additional sewered households are projected for the currently unsewered TAZs. **Map 4.8**, which shows the unsewered household growth projected by WDOT for each TAZ, will be used to guide and “distribute” the adjusted household demand and develop the SSA boundary in Chapter 6.

Map 4.7 Projected Household Growth for Sewered TAZs, 2022-2045



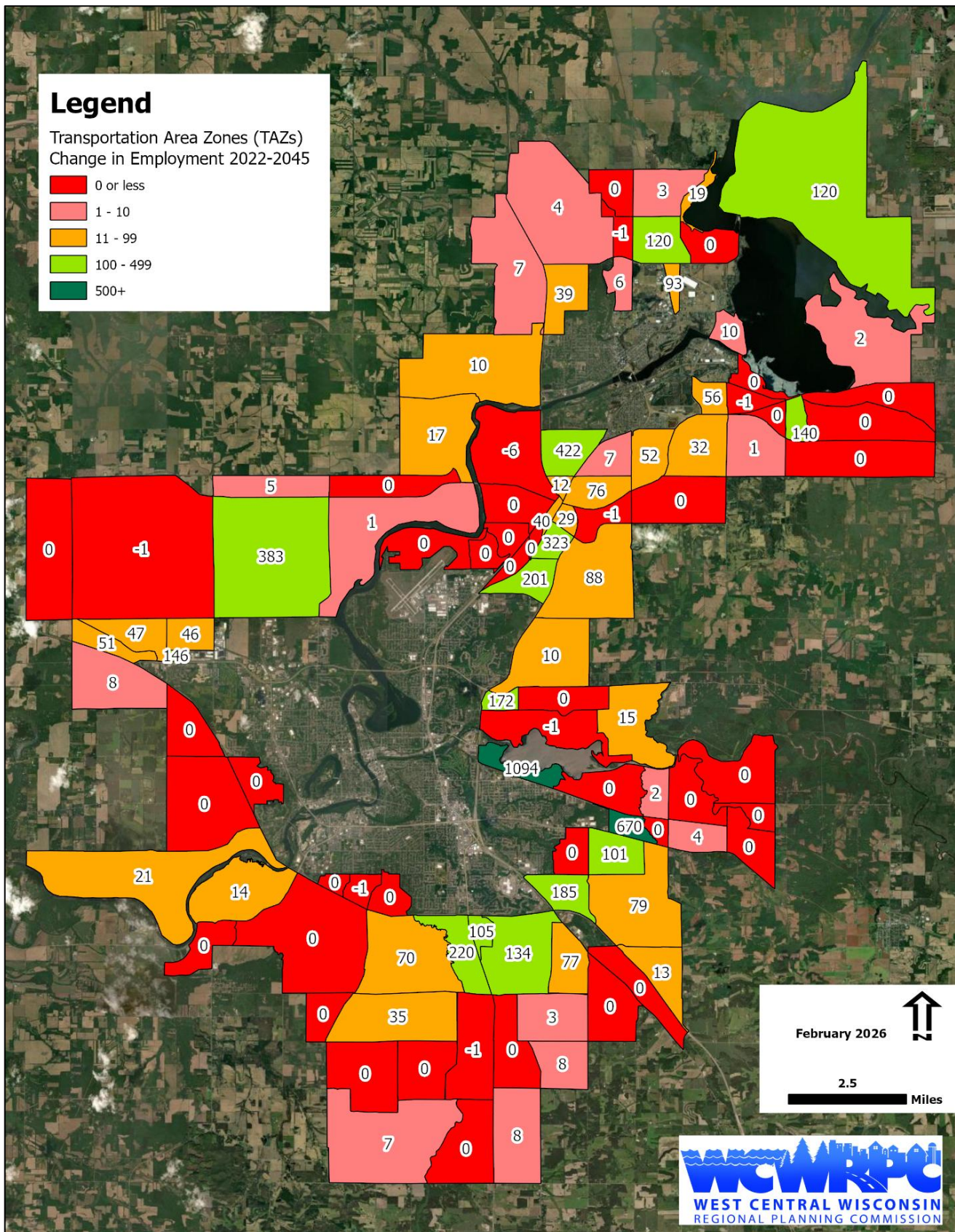
Map 4.8 Projected Household Growth for Unsewered TAZs, 2022-2045



4.4.3 Forecasted Non-Residential Sewered Growth

Non-residential sewered growth forecasts, especially for commercial and industrial development, for the planning period are driven by the projected change in employment for the TAZs. For purposes of guiding the updated SSA boundary, the focus is on those currently unsewered TAZs (or portions thereof) projected to experience significant increases in employment by 2045 as reflected in Map 4.9. Since this plan assumes that concentrations of employment growth are best served by sanitary sewer when cost effective, separate acreage projections for non-residential growth are unnecessary.

Map 4.9 Employment Change for Unsewered TAZs 2022-2045



CHAPTER 5 – WASTEWATER FACILITY ASSESSMENT

This chapter summarizes the existing and future characteristics of the wastewater treatment processes and facilities within the Study Area. NR 121 requires that the SSA Plan identify sewage collection needs and the most cost-effective regional wastewater system approach, which must be consistent with approved facility plans wherever possible.

Wastewater treatment facilities managed by the cities of Chippewa Falls and Eau Claire provide the majority of treatment for the cities of Altoona, Chippewa Falls, and Eau Claire; most other development in the Study Area are served by private, on-site systems. The Chippewa Falls and Eau Claire facilities meet all regulatory effluent limits. Based solely on total capacity and Wisconsin Department of Administration (WDOA) population projections, current treatment facilities have adequate capacity to support projected growth for Chippewa Falls, Eau Claire, and Altoona, though facility plans and other studies identify needed system improvements to accommodate projected growth. A smaller treatment system in Lake Hallie serves limited commercial development; the Village's Comprehensive Plan has identified the lack of sanitary sewer as a key barrier to anticipated growth for the community.

Existing unsewered development, physical features on the landscape (e.g., topography, rivers, highways), and intergovernmental relationships are the primary barriers to the cost-effective expansion of sanitary sewer; such barriers must be considered when determining the SSA boundary.

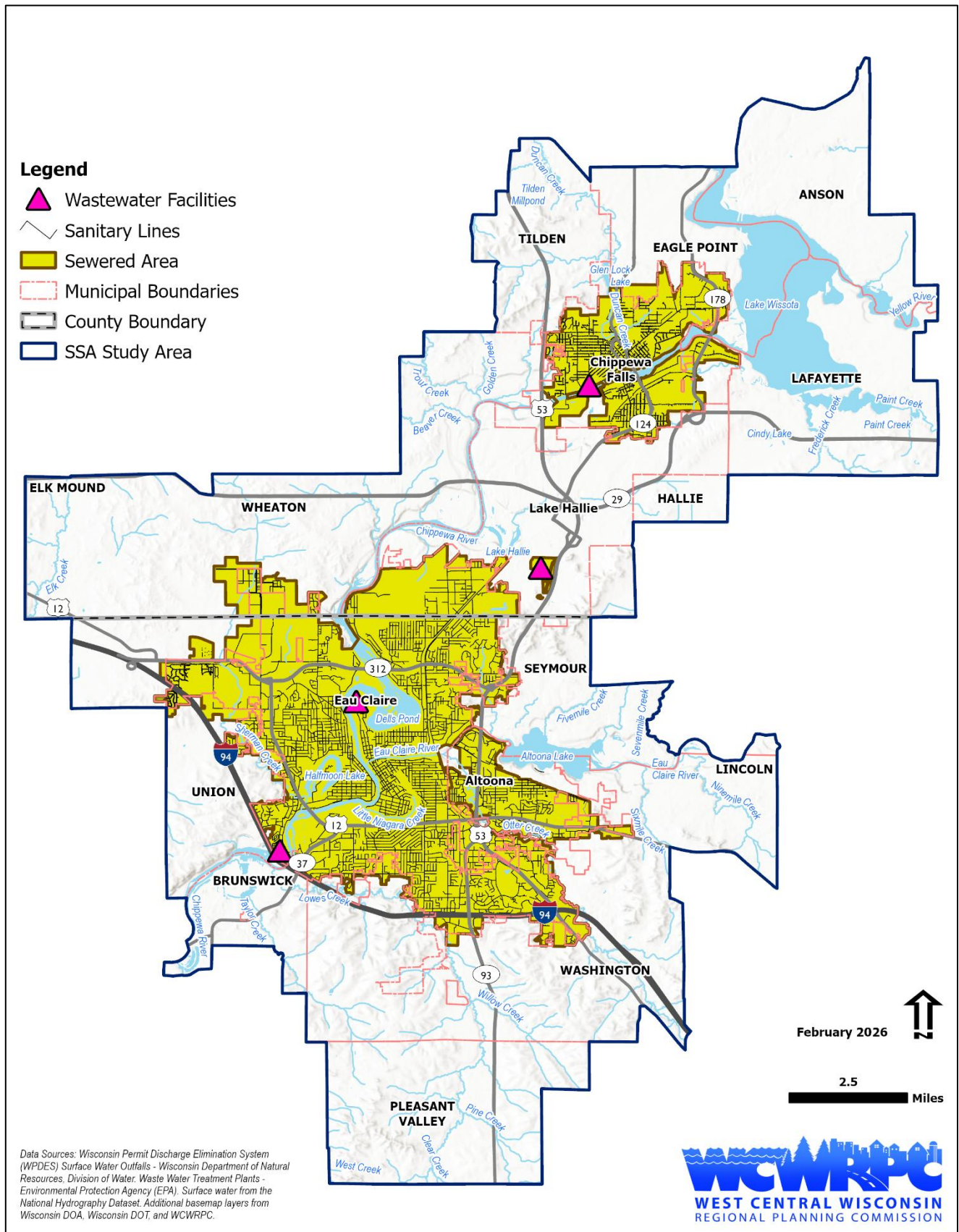
5.1 WASTEWATER FACILITIES & FACILITY PLANS

As shown on **Map 5.1**, there are currently two municipal and one private wastewater treatment facility (WWTF) in the Chippewa Falls - Eau Claire sewer service area. The publicly owned facilities are the City of Chippewa Falls facility serving the City of Chippewa Falls and the City of Eau Claire facility serving Eau Claire and Altoona. The privately operated facility is operated by the Cascades Tissue Group. There is also a public cluster septic system owned by the Village of Lake Hallie which serves 18 commercial parcels in a business development area along US Highway 53.

The **City of Chippewa Falls** facility is located at 1125 W. River Street in Chippewa Falls. It is situated along the northern bank of the Chippewa River in the western portion of the City. The WWTF uses activated sludge as the primary treatment then uses anaerobic digestion to treat the sludge. The treated sludge is then land applied. The treated effluent is discharged into the Chippewa River adjacent to the facility.

The **City of Eau Claire** facility is located at 1000 Ferry Street in Eau Claire along the western bank of the Chippewa River. The WWTF uses activated sludge as the primary treatment then uses anaerobic digestion to treat the sludge. The treated sludge is then land applied. The treated effluent is discharged into the Chippewa River adjacent to the facility.

Map 5.1 Wastewater Facilities & Sewered Areas



The **City of Altoona** maintains its own collection system with six liftstations, which are served by two major liftstations (Otter Creek & River Prairie) operated by the City of Eau Claire with the waste processed at the Eau Claire wastewater treatment plant. This intergovernmental agreement is covered by a contract that expires on December 31, 2033, though negotiations are underway to potentially extend the timeline. Altoona also operates one small municipal conventional pressurized POWTS with a design flow of 4320 gpd for a small number of homes on Kewin Street (south side of Lake Altoona).

The **Village of Lake Hallie** is not currently served by municipal sanitary sewer. While no area within the Village is actively planned to be connected to the Chippewa Falls or Eau Claire systems, the Village has expressed interest in exploring options to establish municipal sewer in the Village, either as a Village system, or an extension of the Chippewa Falls or Eau Claire systems. Given the desire for municipal sewer, it is important that the Village remain inside the SSA boundary. The Village has participated in the planning process for this plan. There is a Village-owned septic system. The system currently has four of the planned six dispersion fields built with a current capacity of 36,000 gpd. The two additional fields will be constructed as the available commercial/industrial lots are developed. At full capacity, the system is planned to have a capacity of 54,000 gpd influent flow when fully developed. Map 5.1 shows the relatively small area served by this system located immediately west of Highway 53 along Commercial Boulevard and north of Melby Street. There are announced plans to build a hospital on one of the vacant lots within this area. If that were to happen, the hospital would need to construct its own septic system to process the specialized needs of a large healthcare facility. Since this system is designed to serve a small, well-defined area, it is not included in the projections for this plan, nor in the facility plan discussion.

The **Cascade Tissue Group** owns and operates a WWTP, which serves the paper manufacturing plant located at 1200 Forest Street in Eau Claire, adjacent to the Dells Dam on the Chippewa River. The following description was taken from a 2022 WDNR memo regarding the facility's WPDES Permit #WI-0003077-10-0:

“The process wastewater from the pulp recovery and other papermaking activities is treated at the Cascades Tissue primary and secondary wastewater treatment facility (WWTF). The wastewaters are treated by gravity settling in a primary clarifier, aerated biological treatment, and final settling in the secondary clarifier. Inks and coatings captured in the dissolved air flotation units make up 50% of the organic load to the WWTF. The papermaking wastewaters and filtrate from the sludge belt presses are the other two main loads to the WWTF. Approximately 25,000 gallons per day of boiler blowdown and about 10,000 gallons per day of boiler water treatment wastewater and landfill leachate are minor additional loads to the WWTF. All spent cooling water is rerouted back into the deinking or paper making process. The final treated wastewater is either discharged through the Dells Dam (Outfall 001) to the Chippewa River or routed back into the papermaking process for reuse. The sanitary wastewater from the factory restrooms is conveyed to the Eau Claire Municipal Wastewater Treatment Plant.”

Since this facility operates outside the oversight of the local governments, details of the facility's capacities are not included within the growth projections of this SSA Plan.

The Cascade Group, Chippewa Falls, and Eau Claire WWTFs all have Wisconsin Pollutant Discharge Elimination System (WPDES) permits for surface water outfalls to the Chippewa River; these outfalls are located on the River immediately adjacent to their WWTFs. National Presto Industries also has a WPDES permit for an outfall to the Chippewa River for the discharge of contaminated groundwater that is pumped and treated.

Current Permit Limits for Chippewa Falls & Eau Claire WWTFs

Table 5.1 displays the monthly permit limits and average levels for the two publicly owned facilities for total suspended solids (TSS) and biochemical oxygen demand (BOD) for each wastewater treatment facility. **Table 5.2** compares data across the wastewater treatment facilities such as the population they are serving, design and average flow, treatment type, and sludge treatment and disposal.

Table 5.1: Monthly Permit Levels and Average Levels for BOD and TSS by Facility

	Chippewa Falls Wastewater Treatment Plant		Eau Claire Wastewater Treatment Plant	
	Permit Effluent Limit	Monthly Average Effluent	Permit Effluent Limit	Monthly Average Effluent
Biological Oxygen Demand (BOD mg/L)	25	6.4	30	6.4
Total Suspended Solids (TSS mg/L)	30	3.7	30	3.4

Table 5.2: Wastewater Treatment Facility Plan Data by Facility

	Chippewa Falls Wastewater Treatment Plant	Eau Claire Wastewater Treatment Plant
Original Date Constructed	1952	1940
Most Recent Significant Upgrade	1996	2017
Population Served, 2020 Census	14,731	75,531
WPDES Permit Number	WI-0023604-10-0	WI-0023850-10-0
Permit Expiration Date	9/30/2025	3/31/2028
Receiving Water	Chippewa River	Chippewa River
Design Flow (mgd)	7.18	12
Average Flow (mgd)	2.081	7.4
BOD Design Loading (lbs/day)	5,330	28,000
BOD Average Loading (lbs/day)	3,763	20,309
Treatment Type	Activated Sludge	Activated Sludge
Sludge Treatment	Anaerobic Digestion	Anaerobic Digestion
Sludge Disposal	Land Application	Land Application

Both WWTFs are meeting permit effluent limits for the effluent flowing into the Chippewa River with average daily flows well below design flows.

Wastewater Flow Projections

Projected wastewater treatment plan flows and loadings for the sewered areas for 2045 were calculated using existing flows, existing BOD loadings, and Wisconsin Department of Administration (DOA) population projections for the areas covered by each WWTF. **Table 5.3** displays the projected population for each sewered communities. The 2045 forecasts are consistent with Table 4.15 in the previous Chapter. While Lake Hallie does not have a public WWTF, it is included for planning purposes. Comparing Tables 5.1 and 5.3, there is available flow capacity at each WWTF for BOD and TSS permit effluent limits (i.e., monthly average flows multiplied by the percent population changes would be less than the permit effluent limits). **Therefore, it is expected that the current WWTF in each sewered system within the SSA will be able to handle the additional flow from the projected residential growth envisioned in Chapter 4 through the year 2045.** However, this only considers BOD and TSS, and is based solely on a percentage of population growth.

Table 5.3: Forecasted 2045 Sewered Population

	2025 Estimated Population	2045 Forecasted Population (see Table 4.15)	Percentage change
Chippewa Falls	15,292	14,330	-6.3%
Altoona	9,835	14,490	+47.3%
Eau Claire	74,039	78,586	+6.1%
EC-Altoona Combined	83,874	98,076	+16.7%
Lake Hallie*	7,512	8,057	+7.3%

** Lake Hallie's residences are currently unsewered, but provided here for planning purposes.*

The City of Eau Claire provided an updated analysis of WWTF capacity, which states that “there is no current or immediately imminent effluent or biosolids regulation that the Facility cannot satisfy as it is current configured and operated.” The data and description in Table 5.4 was taken the 2025 Facility Plan Amendment suggesting that a number of parameters would likely be near or exceeding capacity by 2045 based on current facilities and projections.

As with all projections, it is assumed that the conditions of the past will continue. It does not take into consideration a significant change in the rate of growth or future WWTF upgrades. Many conditions can change in the future that could adjust the trajectory of the projections. Using the above methodology to predict demand in 2045, it is expected that the current WWTFs will likely be able to handle the additional flow from the projected residential growth in the year 2045. However, these projections do not include commercial, industrial, and institutional wastewater needs and only reflect projected BOD and TSS needs. As explained in the following subsection, improvements are needed at both wastewater facilities to accommodate all anticipated sewered growth.

Table 5.4 Eau Claire WWTF Present Day and Future Capacity Assessment

Historical effluent quality is excellent. The Facility has more capacity than that implied by its current ratings. In the next couple of years, the City will perform a thorough capacity analysis and submit to the WDNR a request to re-rate the capacities shaded in Table 12. There is no need to perform or benefit to performing that capacity analysis now: [1] the Facility has a perfect effluent compliance record for BOD, TSS, NH3-N, and TP, and [2] the Facility is consistently receiving 4.0 CMAR scores. The Facility has adequate capacity today and well into the future.

Table 12 - Present-Day and Future Capacity Assessment

Parameter	Units	Present-Day	Year 2045	Nameplate Capacity	Present-Day (%)	Year 2045 (%)
Population	-	77,714	86,700	-	-	-
Flow (MM)	mgd	10.1	11.2	12	84%	94% ⁽¹⁾
BOD (MM)	ppd	24,749	27,611	28,000	88%	99% ⁽¹⁾
TSS (MM)	ppd	21,066	23,502	22,900	92%	103% ⁽¹⁾
NH3-N (MM)	ppd	2,176	2,427	4,358	50%	56%
TP (MM)	ppd	519	578	466	111% ⁽²⁾	124% ⁽¹⁾
Digestion (MM)	gpd	74,956	83,623	200,000	37%	42%
Biosolids Storage	gpd	23,954	26,723	29,056	82%	92% ⁽¹⁾

1. Facility has more capacity than its nameplate capacities. The City will perform a capacity analysis and submit to the WDNR a re-rate request as loadings increase and approach these capacities.
2. Historical effluent phosphorus quality and compliance has been excellent. No violations since the last major upgrade was commissioned circa 2015. The Facility clearly has far more capacity than its nameplate.

Provided by City of Eau Claire, August 2026 from 2025 Facility Plan Amendment

Status of Facility Plans for Chippewa Falls & Eau Claire WWTFs

Wastewater facility plans shall be prepared for each reviewable project involving new or modified sewerage systems owned by municipal or other non-industrial entities pursuant to s. NR 110.08(1), Wis. Adm. Code. The basic purpose of facility planning is to assess the condition of a sewerage system, establish a need for improvement, evaluate options to address system needs and to identify the cost-effective alternative. Facility plans identify wastewater needs and treatment facility improvements for a 20-year planning period. As required by NR 110, facility plans must include design flow calculations consistent with population projections and must consider various potential solutions to address wastewater management needs. In short, these plans demonstrate the need for proposed public wastewater treatment facility projects by: (i) systematically evaluating feasible alternatives and (ii) selecting the most cost-effective means of meeting effluent limits and water quality standards.

Eau Claire Wastewater System

In the recently approved Capital Improvement Plan, the City has outlined significant improvements to the WWTF over the next several years intended to improve efficiency, reliability, and increase capacity.

The headworks building (influent) requires major updates. This is the most critical part of the wastewater treatment process as it lifts all the water to the plant for treatment. It has been identified in the 2024 WWTP facilities plan. Bringing in innovative and new technology this project will

increase efficiencies while addressing failing equipment. This project will be replacing screw pumps, motors, and gearboxes. Utilities will be replacing screening equipment, new compactors, and hydraulic concerns while also giving the plant more accurate influent flow measurement and sampling for increased accuracy of the whole treatment process.

The effluent end of the WWTP requires updates. The current chlorination/dechlorination disinfection will be replaced with ultraviolet (UV) light disinfection. The existing chlorination/dechlorination system is aging and the concrete chlorine contact basins are rapidly deteriorating. The project will also include eliminating the flood pump setup which is used during times when the Chippewa River is at the flood stage. This setup was originally constructed in 1980 and has not been modified since. A concrete submersible pumping station with a dedicated power supply and controls will be installed. Finally, effluent laser meters will be installed to improve flow-proportional processes (RAS pumping or chemical feed rates).

Modifications will also be made to the existing aeration grid. Rather than having a single aeration grid, it will be split into two separate grids. This will allow better control of the dissolved oxygen leading to improved treatment and energy efficiency. A sustainability-focused and renewable-energy improvement through the addition of a solar array will be installed and would supply additional renewable electricity to the WWTP.

Each of the above projects have been identified in the 2024 WWTP Facilities Plan Amendment. These are large projects and rather than being in a constant state of “design and construction” over a number of years, they have been put together as a single project.

Chippewa Falls Wastewater System

At this time, there is not an updated Facility Plan available to inform this SSA update.

In the last 1.5 years the City of Chippewa Falls has seen a big change in their influent loading. This combined with a new phosphorus limit in the City’s next discharge permit resulted in the City executing a contract for a phosphorus optimization project. This project is still early in the design phase as of June 2026. With this project the City hopes to install an inline phosphorus analyzer along with new chemical feed pump skids that will allow the plant to read the phosphorus levels in real time and chemically dose accordingly.

The current WWTF Facility Plan for Chippewa Falls is outdated. The City has executed a contract to update the Facility Plan, with planning work to begin in June 2026. This Facility Plan will assess the plant’s current condition and what it needs in order to provide the treatment of waste for years to come. As part of this Facility Plan project, the City will be completing a capital improvement plan update. This capital improvement plan will be used to determine the next route for the City of Chippewa Falls wastewater Treatment Plant.

5.2 LANDSPREADING & RESIDUAL WASTE

Both publicly owned WWTFs use landspreading to dispose of sludge after it has been treated with anaerobic digestion. With growing concerns with PFAs, there is a potential that it will be more difficult to find willing landowners with appropriate land upon which landspreading will be allowed. Landspreading is only allowed if sludge is disposed of properly and at safe levels of potential contaminants to groundwater. The City of Eau Claire's construction of a PFAs treatment facility will lessen concerns with PFAs in wastewater. Source water diversification can also help reduce concentrations of possible contaminants.

The Chippewa Falls WWTF has 150 acres being used for land application. Tests conducted in the last four years on the cake sludge show that the sludge does not exceed the High Quality or Ceiling limits for arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, or zinc. The level of molybdenum did exceed the 80% level in one month. The source of the molybdenum is identified, and their discharge is limited by a Local Discharge Permit.

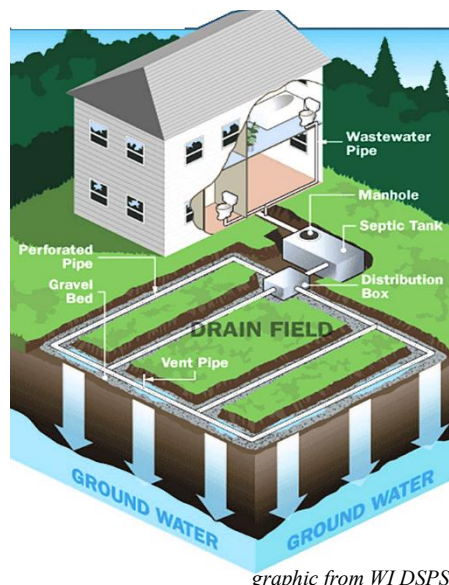
The Eau Claire WWTF has 1,001 acres being used for the land application of 9 million gallons of bio-solids annually. Tests conducted in the last four years on the cake sludge show that the sludge does not exceed the 80% the High Quality or Ceiling limits for arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, or zinc.

Land disposal is currently dependent on having willing private partners. With growing concerns about PFAS and other media coverage of the risk of residual chemicals, there is the potential that it will be more difficult to find acreage upon which landspreading is allowed. With the implementation of the PFAS treatment facility within the City of Eau Claire, it is expected the levels of detectable PFAS will lower within the sludge related to landspreading; the City is conducting testing related to the measurement.

5.3 PRIVATE ONSITE WASTEWATER TREATMENT & HOLDING TANKS

Private onsite wastewater systems (POWTS) store, treat, or dispose of wastewater (or perform a combination of these functions) on the site at which the wastewater is generated. POWTS are used in those unsewered areas that are not served by existing sanitary sewer systems. Within the Study Area, this includes all areas outside those currently sewered areas shown in Map 5.1. Most POWTS types within the Study Area are conventional septic systems with drainfields or mound systems, with some scattered holding tanks.

It is important to require compliance for POWTS maintenance (POWTS) due to the potential for groundwater contamination. Many private wells in the Study Area already have high nitrates and communities have expressed concerns with growing water quality threats such as pharmaceuticals. Some POWTS are aging on smaller lots, which could make it a challenge for future system



graphic from WIDSPS

replacement. While construction permitting and regular pumping reporting are required, there is no specific tracking or known concentration of failing POWTS within the Study Area.

As reflected in the population data in Section 4, the Study Area continues to experience rapid growth in many of its unsewered communities. This growth is accompanied by an increasingly important need to properly treat and dispose of wastewater. POWTS represent an alternative to accommodate development where public sewer does not exist and is not cost-effective.

5.4 REGIONAL WASTEWATER TREATMENT APPROACH

State of Wisconsin Requirements

NR 121 requires as part of SSA planning that the most cost-effective regional wastewater systems for urban areas shall be identified over a 20-year planning period based upon an analysis of alternative waste treatment system configurations. Wherever possible, applicable recommendations of approved facility plans shall be used to determine the urban area's treatment needs. This analysis shall be consistent with NR 110.09, and shall include a cost-effectiveness analysis of regional versus individual treatment facilities for the outlying areas including subsurface waste disposal systems. Water quality and other environmental impacts shall also be considered.

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.

WDNR considers a municipal wastewater treatment system (sanitary sewer) to provide the highest level of environmental protection, planning, management, and monitoring. Such facilities are the preferred treatment system when service can be provided in a cost-effective manner. Elevated nitrate levels in groundwater within the Study Area is a significant concern and individual septic systems can be a source of nitrogen in groundwater.

Onsite community wastewater treatment systems collect wastewater from individual residential or commercial users by a sewer connection that feeds a shared onsite wastewater treatment system that aerobically treats the effluent to reduce BOD, TSS and nitrate levels and discharges the treated effluent to a dispersal system where it recharges the groundwater. Onsite systems receiving less than 12,000 gallons per day are regulated by the Wisconsin Department of Safety and Professional

Services (DSPS). Systems exceeding 12,000 gallons per day permitted through the Wisconsin Department of Natural Resources (DNR) and perform a joint review with DSPS.⁵

Analysis of Regional Alternatives

The existing *Chippewa Falls-Eau Claire Urban Sewer Service Area Plan for 2025* (2007 SSA Plan) references an analysis from the *Sewer Service Area Plan for 2010* of 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 (Chippewa Falls and Eau Claire) was the most cost-effective method of providing treatment for the service area. The 2007 SSA Plan also noted that 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.

Some key changes since the 2007 SSA Plan are:

- The Study Area continues to grow as noted in Section 4. Growth at lower densities on POWTS in some unincorporated areas is a barrier to the cost-effective extension of sanitary sewer in the future.
- The cities continue to update facility plans and capital improvement plans to improve their WWTFs and collection systems to accommodate anticipated growth. No insurmountable barriers have been identified that would make such improvements not cost effective.
- The Village of Lake Hallie has developed a municipal-owned community/cluster septic system to support the development of a commercial corridor. The Village has also expressed strong interest in entering into an intergovernmental agreement with Chippewa Falls or Eau Claire for wastewater service to support anticipated growth.
- Annexations have occurred and some intergovernmental relationships have been strained, while no formal boundary agreements have been established. Incorporation of part of the Town of Washington to village status was pursued but the petition was dismissed by the Wisconsin Department of Administration in April 2026.
- Some comprehensive plans have encouraged onsite community wastewater treatment systems have been encouraged as an alternative to support “light density” within unincorporated development areas. Such systems have been very uncommon to date.
- Holding tanks systems continue to be considered a system of last resort. Holding tanks may be the only feasible option on smaller lots with failing septic systems where adequate space does not exist for a new traditional or mound septic system. No large holding tanks requiring a holding tank service area (see Chapter 8) have been proposed.
- Concerns over groundwater quality have increased.

⁵ Municipalities may also adopt related standards. The Town of Washington has requirements for onsite community wastewater treatment systems in its Subdivision Code. Four of these systems have been installed in Washington; 3 residential systems and 1 commercial system.

In light of the information in this Chapter, the most cost-effective and environmentally sound regional wastewater approach within the Sewer Service Area would include:

- No new WWTFs are necessary or anticipated within the next 20 years, though the need for a site-specific industrial or other treatment facility (like Cascade Tissue) could arise.
- Continue to maintain and improve the Eau Claire and Chippewa Falls wastewater treatment facilities in accordance with regularly updated and State-approved facility plans, with the City of Eau Claire providing treatment for the City of Altoona's collection system in accordance with intergovernmental agreement(s).
- Encourage the cities of Eau Claire and Chippewa Falls to collaborate with the Village of Lake Hallie to explore the provision of sanitary sewer to growth areas within the Village, if cost effective.
- Extend municipal sanitary sewer to serve urban growth areas (i.e., areas of proposed new development at higher densities and/or concentrations of commercial/industrial development) only if cost-effective.
- Onsite community wastewater treatment systems are appropriate for lower-density residential or commercial growth as permitted and regulated by the DSPS or DNR, if properly maintained.
- Subdivisions and other areas of existing unsewered development at "light densities" are likely not cost-effective for the provision of sanitary sewer unless there are failing POWTS or elevated water quality concerns. However, such areas are not necessarily a barrier to extending sanitary sewer to nearby growth areas.
- Municipal sanitary sewer is generally the preferred wastewater treatment alternative in areas where there are elevated water quality concerns (e.g., wellhead protection areas, high groundwater table, bedrock near surface), when cost effective.
- Physical features, such as 4-lane highways, large floodplains, and Lake Wissota, can be barriers to the cost-effective provision of municipal wastewater service.
- Encourage cooperative planning, cooperative boundary agreements, and service agreements between local governments to achieve the most cost-effective and environmentally sound wastewater approach for the Study Area.
- Local comprehensive plans reflect social concerns and goals of each community that must be considered during wastewater planning. Consideration of local comprehensive plans must be balanced with the other aspects of cost-effectiveness discussed above, especially when community plans conflict.

CHAPTER 6 – SEWER SERVICE AREA DELINEATION

6.1 WHAT IS THE SEWER SERVICE AREA BOUNDARY

NR 121.05 requires that the Sewer Service Area (SSA) Plan identify areas for which sanitary sewer may be needed or desirable within the next 20 years to accommodate forecasted growth. The SSA boundary represents a long-term vision for the growth of the urban area identifying what could potentially be sewered.

The SSA boundary is the geographic extent of the Sewer Service Area (SSA). Sewer Service Areas (SSAs) are typically smaller than the SSA Study Area, which is described in Chapter 2. Data is collected for the larger Study Area, which helps to define the more focused SSA.

PLEASE NOTE

Inclusion of lands within the Sewer Service Area (SSA) boundary does NOT determine or guarantee that these lands will be developed, sewered, or annexed by 2045.

The SSA includes areas with a *potential* for future sewered development or areas for which sanitary sewer may be desirable by 2045, excluding the environmentally sensitive areas defined in Section 3.5. for which intensive land disturbances should be avoided. The SSA boundary is guided by the 20-year growth forecasts and criteria in NR 121 and NR 110, including identifying the most cost-effective and environmentally sound regional mix of wastewater treatment solutions for the Study Area. This boundary is driven by projected growth and the cost-effective provision of sanitary sewer, not water quality issues, though an area might be added to the SSA if sanitary sewer is desired due to a unique threat to water quality. Once the SSA boundary is established as part of an approved update to the SSA Plan, sanitary sewer extensions are not allowed outside the SSA boundary without a SSA Plan amendment. The SSA Plan and its boundary should be reviewed every five years, with periodic updates to reflect changes in growth, land use, and wastewater management.

6.2 OVERALL DELINEATION APPROACH

For administrative purposes, the SSA boundary must follow well-defined physical features that can be described in the legal description in Appendix 2, such as quarter sections and road center lines. To achieve this, the boundary may include some areas that are not expected to be sewered within the next 20 years.

Building upon Chapter 4, and the general approach and growth assumptions in Chapter 4.4.1, the following four primary steps guided the overall 2045 SSA delineation approach:

1. Creating the initial SSA boundary focused on the projected household and employment growth within WisDOT's TAZs and the Long-Range Transportation Plan approved by the Chippewa-Eau Claire Metropolitan Planning Organization's Policy Council. Preliminary potential growth areas were non-sewered TAZs for which sanitary sewer may be cost-effectively extended in the future.

A preliminary boundary was drawn targeting non-sewered TAZs with significant, projected growth (+25 or more employees or households). The draft boundary included some TAZs with limited growth projections for one of two reasons:

- The majority of the TAZ was already within municipal limits
 - Inclusion simplified the overall SSA boundary for more efficient administrative and practical purposes.
2. Potential Residential Growth Areas – The SSA boundary needs to accommodate the projected urban households identified in Section 4.4.2 and Table 4.15 within currently unsewered, potential growth areas. The growth area households for the cities of Altoona and Eau Claire in Table 4.18 were distributed among the TAZs (or parts thereof) based on the TAZ household projections in Map 4.8 (and Map 6.2). For example, the City of Altoona had 2,927 growth households to “place on the map” within growth areas based on Table 4.18. Wisconsin DOA projected no population growth for the City of Chippewa Falls, so the updated SSA boundary reflects no residential growth areas for the City at this time. As discussed in Chapter 4, due to uncertainties regarding sewerage growth northeast of the Village of Lake Hallie, determining growth for that general area is driven more by the WDOT Transportation Analysis Zone (TAZ) forecasts than the projections for the Village alone.
3. Refining the Residential Growth Areas – Due to changing growth plans since WDOT’s preparation of the TAZ projections, and due to the use of a market factor in Chapter 4, the updated SSA boundary includes more residential growth in some areas than what is provided for in the TAZ household projections.

The cities of Eau Claire and Altoona proposed anticipated sewerage residential growth for additional areas based on more recent plans, anticipated residential mix (i.e., 1-2 unit vs. 3+ unit) and recent development density trends. For the potential growth areas, the developable acreage was calculated by excluding ESAs, existing development, or specific dedicated uses (e.g., railroad property) and a 20% public infrastructure/right-of-way allowance⁶ was included to accommodate new streets, small parks, electric utilities, etc. When splitting TAZs, either through expansion or contraction of the proposed boundary, more detailed analysis was required. In short, the cities needed to:

- Identify the developable parcels within the modified or alternative growth area (those parcels at least 5 acres in size and with no more than \$10,000 in assessed improvement value)
- Calculate the developable area (removing ESAs and a 20% allowance for infrastructure)
- Calculate the number of residential units that could be developed within the developable area utilizing the density standards established in Chapter 4.

⁶ The 20% infrastructure allowance and 30% market allowance utilized in this SSA Plan update is the same allowance factors used in the 2007 SSA Plan.

- Ensure that the proposed residential growth for all proposed sewer growth areas for the city are still be consistent with the growth area household projections in Table 4.18.
4. Commercial/Industrial/Employment Growth Areas - As discussed in Chapter 4.4.3, the SSA Plan assumes that projected employment concentrations within Map 4.9 are best served by sanitary sewer when it can cost-effectively be provided. Those TAZs (or parts thereof) with significant projected employment growth, generally 25+ employees) were included in the SSA boundary.

If a community believed other employment growth areas should also be included in the SSA boundary, perhaps due to changes in plans since the TAZ projections, they were asked to provide evidence of imminent development pressures (e.g., approved zone changes, approved or submitted subdivision requests, developer agreements, and/or development plan submittals or approvals).

The SSA boundary went through multiple iterations before being finalized. The draft SSA boundary was shared with the Technical Advisory Committee for review, and to allow more refined modifications based on plans, anticipated development pressures, ESAs, and engineering constraints.

6.3 SEWER SERVICE AREA BOUNDARY 2045

The 2045 Sewer Service Area (SSA) boundary as approved by the Wisconsin Department of Natural Resources is shown as **Map 6.1**.

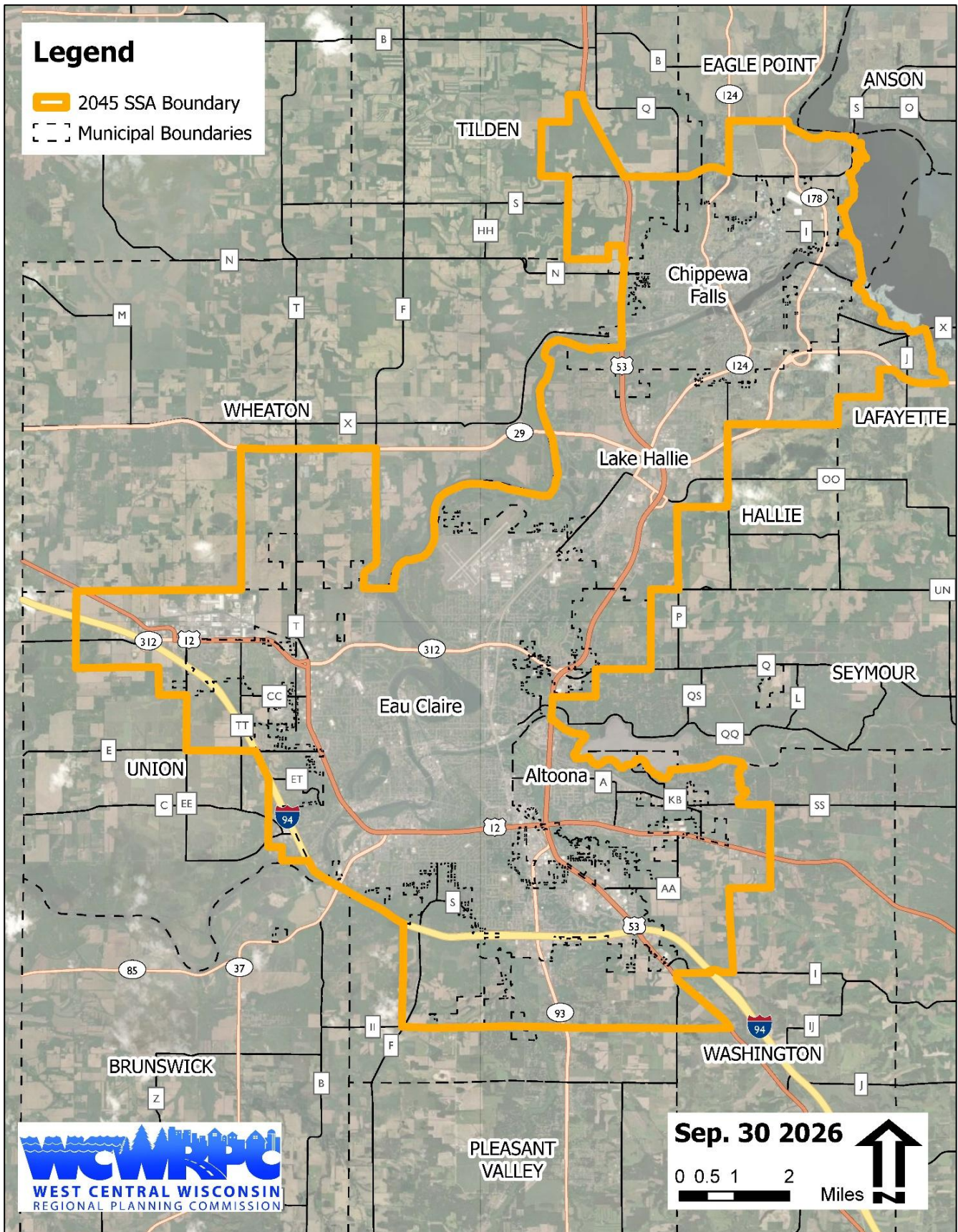
As represented on Map 6.1, the 2045 SSA boundary follows section lines, quarter section lines, or quarter-quarter sections of lines as surveyed under the U.S. Public Land Survey System, except the following extents of boundary:

- The centerline of I-94, between the towns of Washington and Union (approximately 11,097 linear feet).
- The centerline of I-94 in the Town of Union between County Highway E and County Highway ET, generally (approximately 2,938 linear feet).
- The centerline of County Highway F, between Plum Creek Drive, generally, and County Line Road (approximately 3,099 linear feet).
- The eastern highwater mark of the Chippewa River, generally following the municipal limit of the City of Eau Claire from County Line Road, generally, to US Highway 53 (approximately 45,158 linear feet).
- The centerline of US Highway 53 from the southern bank of the Chippewa River to Bridgewater Avenue, generally (approximately 8,453 linear feet).
- The centerline of US Highway 53 from 100th Avenue (Meinen Road) to County Highway S (approximately 8,884 linear feet).

- The centerline of County Highway S from US Highway 53 to State Highway 124 (approximately 10,322 linear feet).
- The high-water mark of the Chippewa River and Lake Wissota, from 95th Avenue, generally, to State Highway 29 (approximately 45,652 linear feet).
- The centerline of State Highway 29 from the high-water mark of Lake Wissota to 50th Avenue (approximately 5,373 linear feet).
- Centerline of US Highway 53 from Tower Drive to the high-water mark of the southern bank of the Eau Claire River (approximately 2,196 linear feet).
- High-water mark of the southern bank of the Eau Claire River and Lake Altoona from US Highway 53 to Six Mile Creek (approximately 25,027 linear feet).
- High-water mark of the east bank of Six Mile Creek from the Eau Claire River to County Highway SS (approximately 6,180 linear feet).
- The centerline of County Highway I and a portion of the centerline of I-94 in the Town of Washington (approximately 2,596 linear feet).
- Centerline of US Highway 53 from Hillview Road to Bowe Road (approximately 7,109 linear feet).

This boundary includes existing sewer areas and additional areas with the greatest potential for future sewer development by 2045, with environmentally sensitive areas to be protected from intensive land disturbances. The boundary is sized to accommodate the projected urban (sewered) household growth and employment growth described in Chapter 4 while recognizing the wastewater capacity and cost-effectiveness considerations in Chapter 5.

Map 6.1 2045 Chippewa Falls – Eau Claire Sewer Service Area Boundary



6.4 POTENTIAL URBAN GROWTH AREAS

To arrive at Map 6.1, the Transportation Analysis Zone (TAZ) data in **Maps 6.2** and **6.3** were used to allocate households and identify employment centers. Table 6.1 further breaks down the potential sewer residential growth by municipality. The “Remaining Households to be Allocated” identifies the projected number of households and residential acreage demand that was allocated to areas for which no household growth was forecasted within the TAZ projections on Map 6.2 (i.e., the “red” TAZs). For example, the City of Altoona has 1,339 households projected for 2045 that needed to be allocated to TAZs for which the Long-Range Transportation Plan had little or no projected residential growth.

Table 6.1 Residential Urban Growth Area Distribution

	2045 Projected Growth in Urban Households	Households Allocated to Sewered or Unsewered TAZs that have Projected HH Growth	Remaining Households to be Allocated
Altoona	2,927	1,588	1,339
Chippewa Falls	0	0	0
Eau Claire	3,105	1,789	1,261
Lake Hallie	502	365 within Village	164 per TAZ forecasts
Totals	6,534	3,742	2,764

Within Map 6.1, no sanitary sewer districts have been specifically proposed within the unincorporated towns. However, the provision of sewer service to urban development within an unincorporated town is still possible in the future under intergovernmental agreements for areas within the SSA boundary.

The following is a summary of the potential or most likely urban (sewered) growth areas for the SSA Plan update.

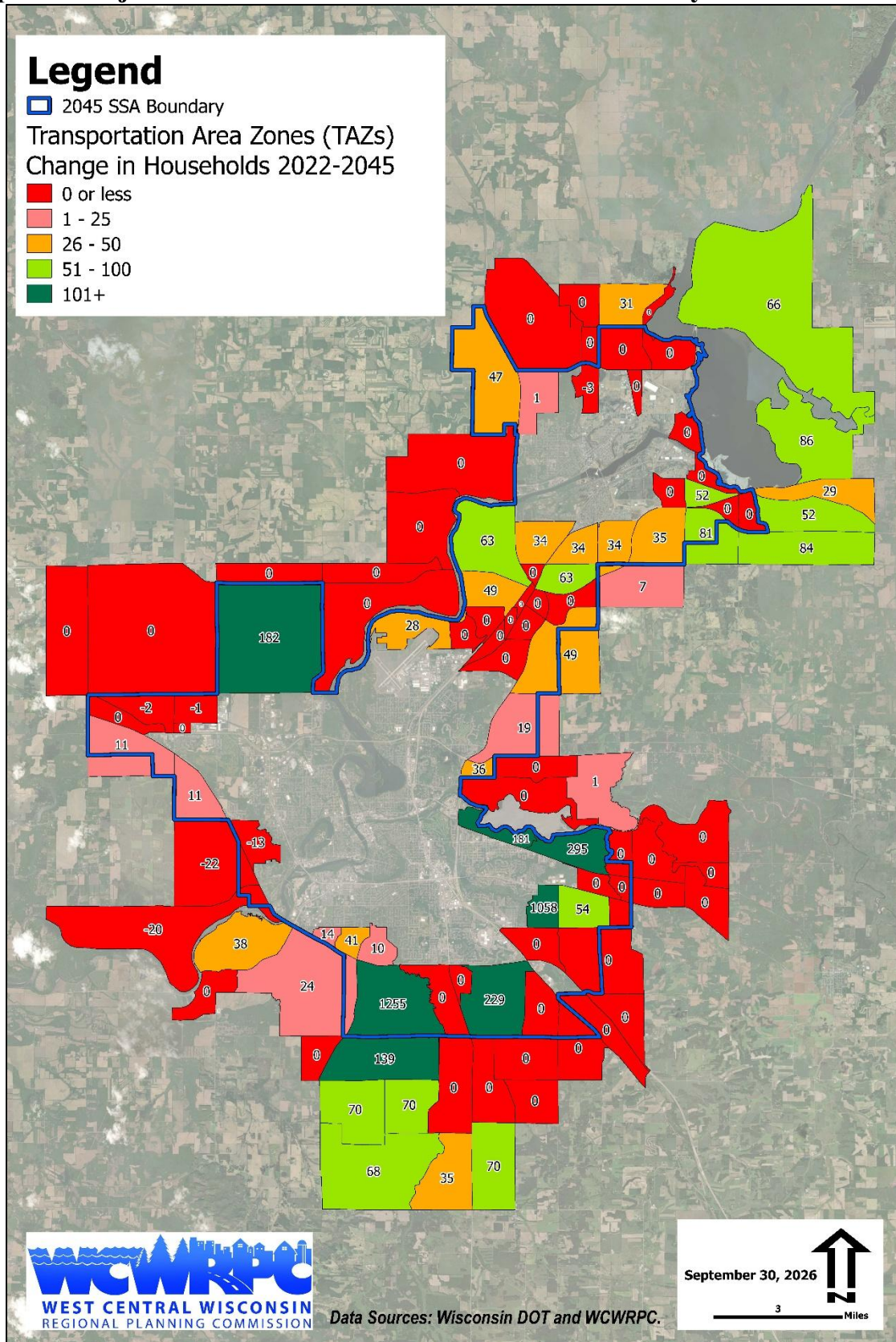
City of Altoona Urban Growth Areas

Over half of Altoona’s projected household growth could be allocated to TAZs within or adjacent to the City based on the TAZ household projections. The remaining “Other Households” to be allocated was estimated to require about 321 developable acres. To accommodate these other households, the SSA boundary was expanded into TAZs with little or no projected household growth on the City’s east and south sides:

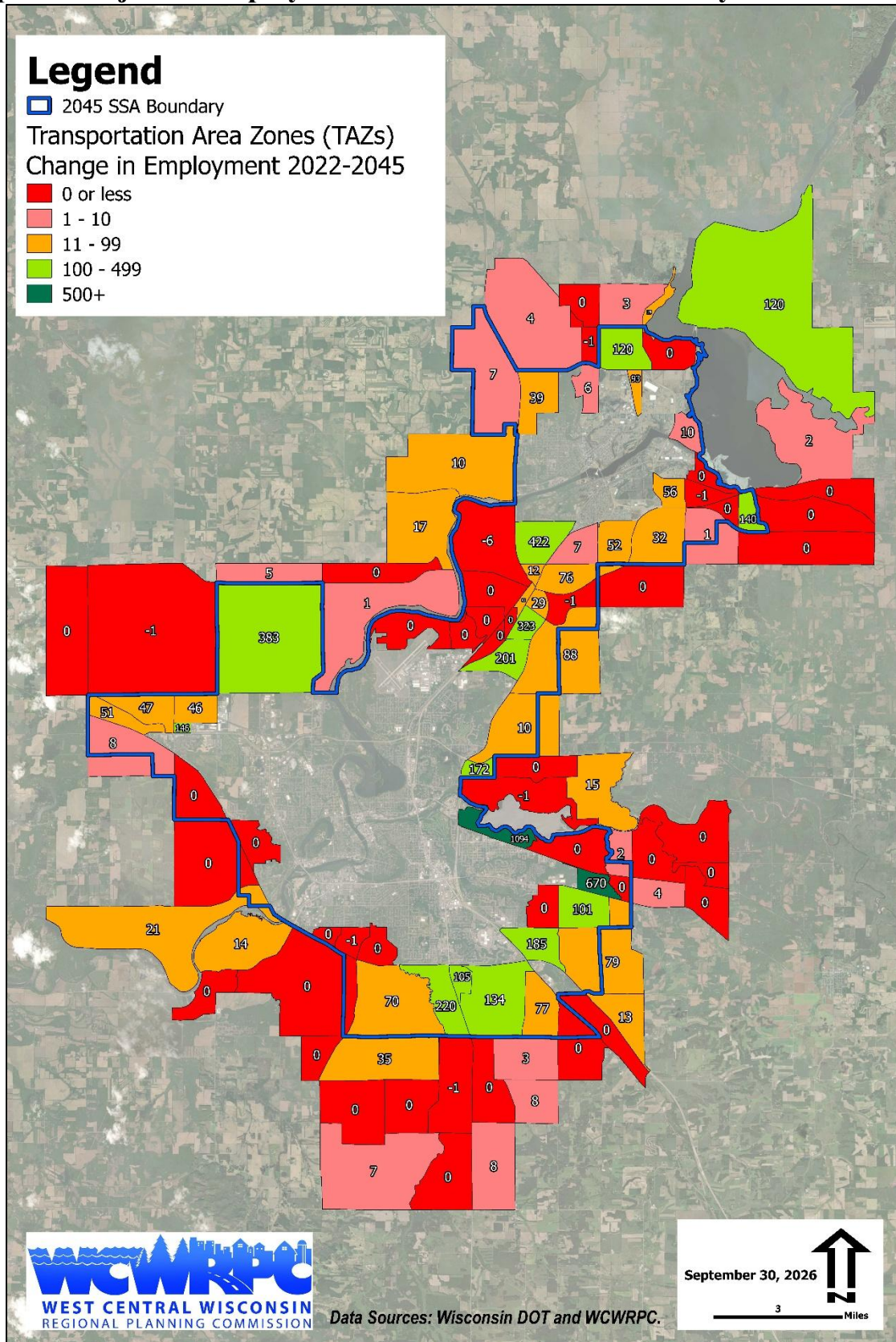
- An area east of 6-mile creek and north of USH 12 is included that has approximately 180 developable acres, of which about 130 acres would most likely be residential if developed.
- An area to the south of Prill Road of about 437 developable acres of which roughly 219 acres would most likely be residential if developed; part of this area north of I-94 would most likely be commercial/industrial if developed.

The Town of Washington reviewed these additions and agreed to their inclusion in the SSA boundary. As Map 6.3 shows, some areas east and southeast of the City were also included within the SSA boundary due to the projected employment growth.

Map 6.2 Projected Household Growth Areas – TAZ Analysis



Map 6.3 Projected Employment Growth Areas – TAZ Analysis



City of Chippewa Falls Urban Growth Area

No residential growth areas are identified based on the WDOA population projections for the City. Consistent with local comprehensive plans, growth areas adjacent to the City were included in the SSA boundary based on commercial/industrial (employment) growth, most notably:

- A commercial growth area to the northwest extending to the USH 53 and CTH “S” interchange. Both the City and Town of Tilden comprehensive plans envision commercial development near this interchange that would likely exceed the TAZ employment projections.
- A business park/industrial growth area generally along and north of County Highway S. While the portion (TAZ) east of Highway 178 was not identified for growth within the TAZ projections, this part was later added for consistency with the City’s comprehensive plan, due to its proximity to Lake Wissota to the north, since it was included in the 2007 SSA boundary, and to avoid creating an unusual gap within the SSA.

City of Eau Claire Urban Growth Areas

About 58% of Eau Claire’s projected household growth could be allocated to TAZs within or adjacent to the City based on the TAZ household projections. The remaining “Other Households” to allocated was estimated to require at least 265 developable acres. To accommodate these other households, the SSA boundary was expanded into TAZs with little or no projected household growth in the following areas:

- An area on the City’s southeast side bounded by USH 53 to the northeast and CTH “II” to the south. About 82 acres of this area would most likely be residential if developed in the future. Employment growth of 77 jobs was also projected for this triangular TAZ.
- A north-south portion of a much larger TAZ was included just west of West Lowes Creek Road and bounded by I-94 on its north end and CTH “II” to the south with about 127 developable acres that would most likely be residential if developed.
- To the southwest of the City, an area near where Crescent Avenue intersects with CTH “C” and Christian Avenue was included. This includes a portion of the former County Jam property, which could be redeveloped in the future for residential and light commercial uses with about 56 developable acres.

As Map 6.3 showed, multiple TAZs surrounding the City were projected to experience significant employment growth and are also included within the SSA boundary. The Town of Washington reviewed the first two additions (bullets) above and agreed to their inclusion in the SSA boundary.

Three additional areas for non-residential development were requested by the City to be added to the SSA boundary but where not projected to grow per the TAZ forecasts, lacked imminent development pressures, and were ultimately excluded from the boundary:

1. An area northwest of the intersection of County Line Road and S 50th Street (north of the Menards headquarters campus).
2. An area between I-94 and US Highway 12 (west of Texaco Drive). This area was also outside of the Study Area and a requested amendment to the Study Area was denied by the Local Water Quality Advisory Committee in May 2026.

3. A roughly 341-acre area within the Town of Union generally bounded by the Dunn County Line to the west, I-94 to the north, Elk Creek Road to the east, and Partridge Road to the south. This area was considered later in the plan update process given that the City of Eau Claire expected to close on the purchase of 237 acres within this area as of October 1, 2026, even though it was not included in the original Study Area boundary. The Town of Union identifies this area for Rural Preservation on the future land use map of its comprehensive plan. The City has identified this area, in part, for potential commercial or light industrial development.

The area was the focus of significant debate. The Technical Advisory Committee did not achieve a consensus on a draft SSA boundary, so this area was included within the public hearing draft of the SSA Plan for public comment and for discussion by the Local Water Quality Advisory Committee (MPO Policy Council). A meeting between Town of Union and City of Eau Claire representatives on September 21, 2026, was unable to obtain a consensus or compromise on the inclusion of this area. Six written comments (letters/memos) on the draft SSA Plan were received—two from City of Eau Claire departments supporting the boundary and three opposing the boundary’s inclusion of the 341-ac area; a sixth letter requested a boundary change or exemption in another area. During the public hearing, the City spoke in favor of the boundary, the Town of Union spoke against the inclusion of 341-acre area, and three members of the public spoke against the inclusion of this area. Concerns over the area’s inclusion largely focused on it not being within the SSA Study Area, its late addition to the planning process, the differences in preferred planned uses between the Town and City, the uncertainty of its development schedule, and the existence of significant wetlands and proximity to a Class I trout stream. After considering public comments and these circumstances, the Local Water Quality Advisory Committee approved the SSA Plan without the inclusion of the 341-acre area within the SSA boundary.

For the above, the Water Quality Advisory Committee noted that Chapter 9.4 provides a process for amending the SSA Boundary, should a development project materialize and the need for sewer infrastructure arises in the above areas.

Village of Lake Hallie Growth Areas

As noted previously, due to uncertainties regarding sewer growth east and northeast of the Village of Lake Hallie, determining growth for that general area is driven more by the WDOT Transportation Analysis Zone (TAZ) forecasts than the projections for the Village alone. As reflected in Table 6.1 and Map 6.2, about 72% of the Village’s projected household growth could be accommodated within TAZ areas that are located within the Village’s corporate limits.

The SSA boundary includes additional TAZ areas outside the Village limits to the northeast that WDOT projected would growth by about 164 households. Employment growth is projected for the Village’s periphery. The Village’s comprehensive plan envisions a possible business park east of Highway “P” and southeast of STH 29. The Village of Lake Hallie and Town of Hallie met in August 2026 to delineate the SSA boundary and determined no additional area in the Town of Hallie needed to be included at this time.

The significant employment growth projected for the far eastern TAZ within the Town of Lafayette also influenced the SSA boundary in this area. It is also notable that potential growth identified in the Village and City of Chippewa Falls comprehensive plans also overlap in this area. Beyond the planned smaller treatment system to serve commercial development, there are no firm plans at this time to provide sanitary sewer to the Village of Lake Hallie or these potential growth areas, though the Village has expressed strong interest in sanitary sewer service.

6.5 SUMMARY OF BOUNDARY CHANGES SINCE 2007 PLAN

Map 6.4 compares the 2045 SSA boundary to the 2007 SSA boundary, as amended in 2023. As summarized in **Table 6.2** below, the 2045 SSA boundary encompasses approximately 69,337 acres or about 108 square miles. The 2045 boundary is roughly 4,070 acres larger than the boundary identified within the 2007 SSA Plan as amended.

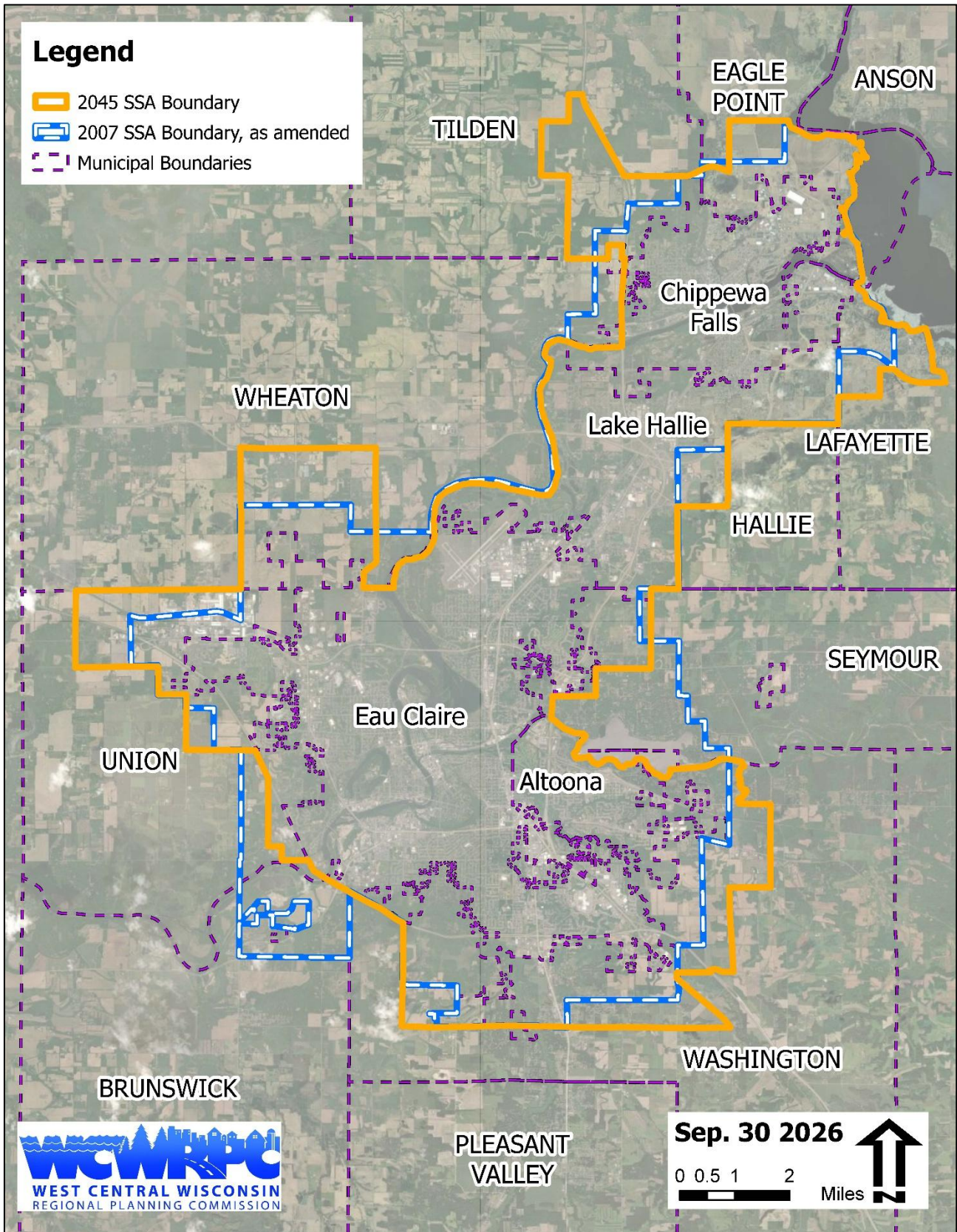
The 2023 “Orchard Hills” Type I boundary amendment “swapped” about 219 acres within the SSA boundary; the acreage difference between the donor and receiving areas as part of this swap was less than one acre, so the total SSA boundary acreage has not significantly changed since 2007 prior to this SSA Plan update.

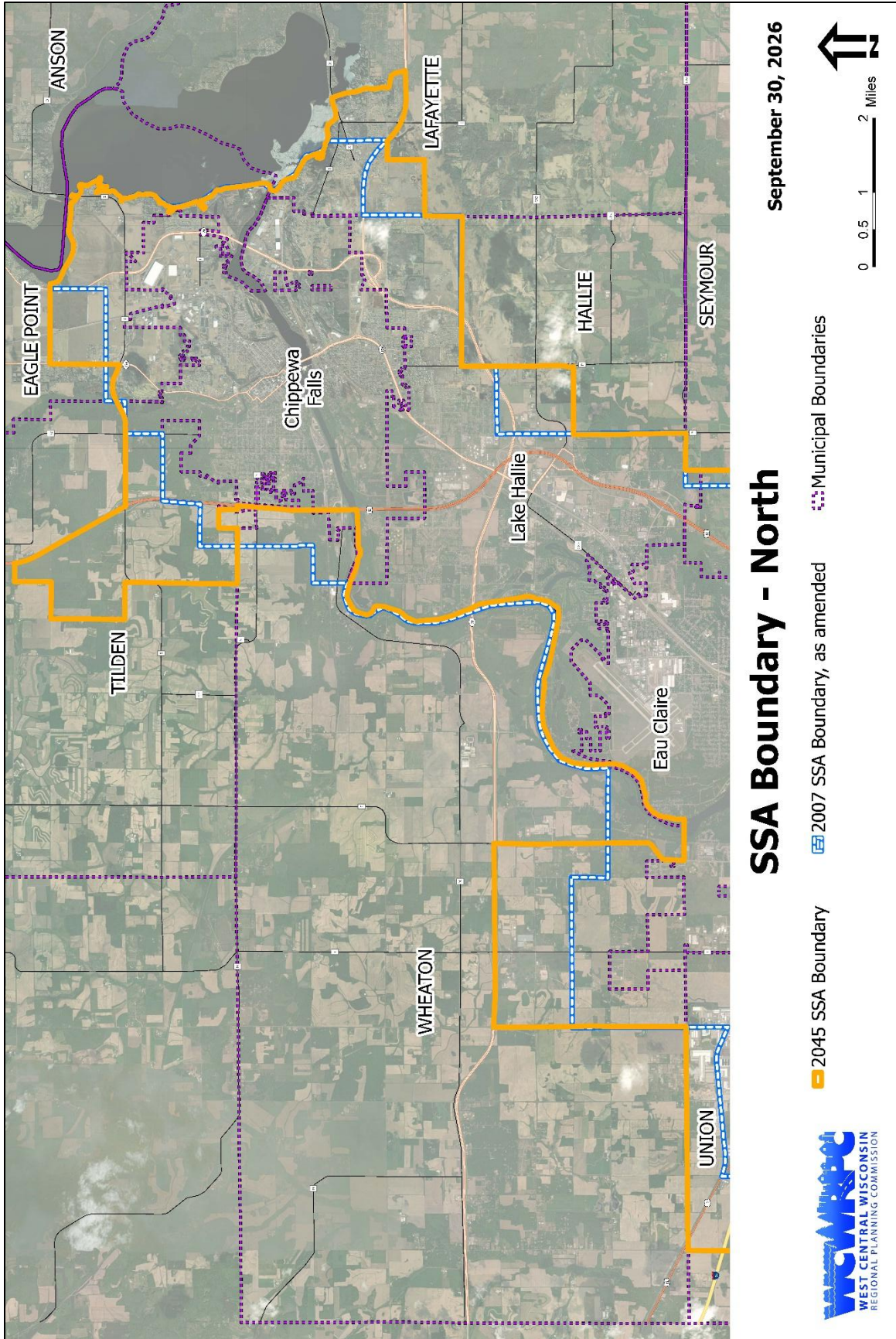
Table 6.2 Acreage Comparison of 2007 and 2045 SSA Boundaries

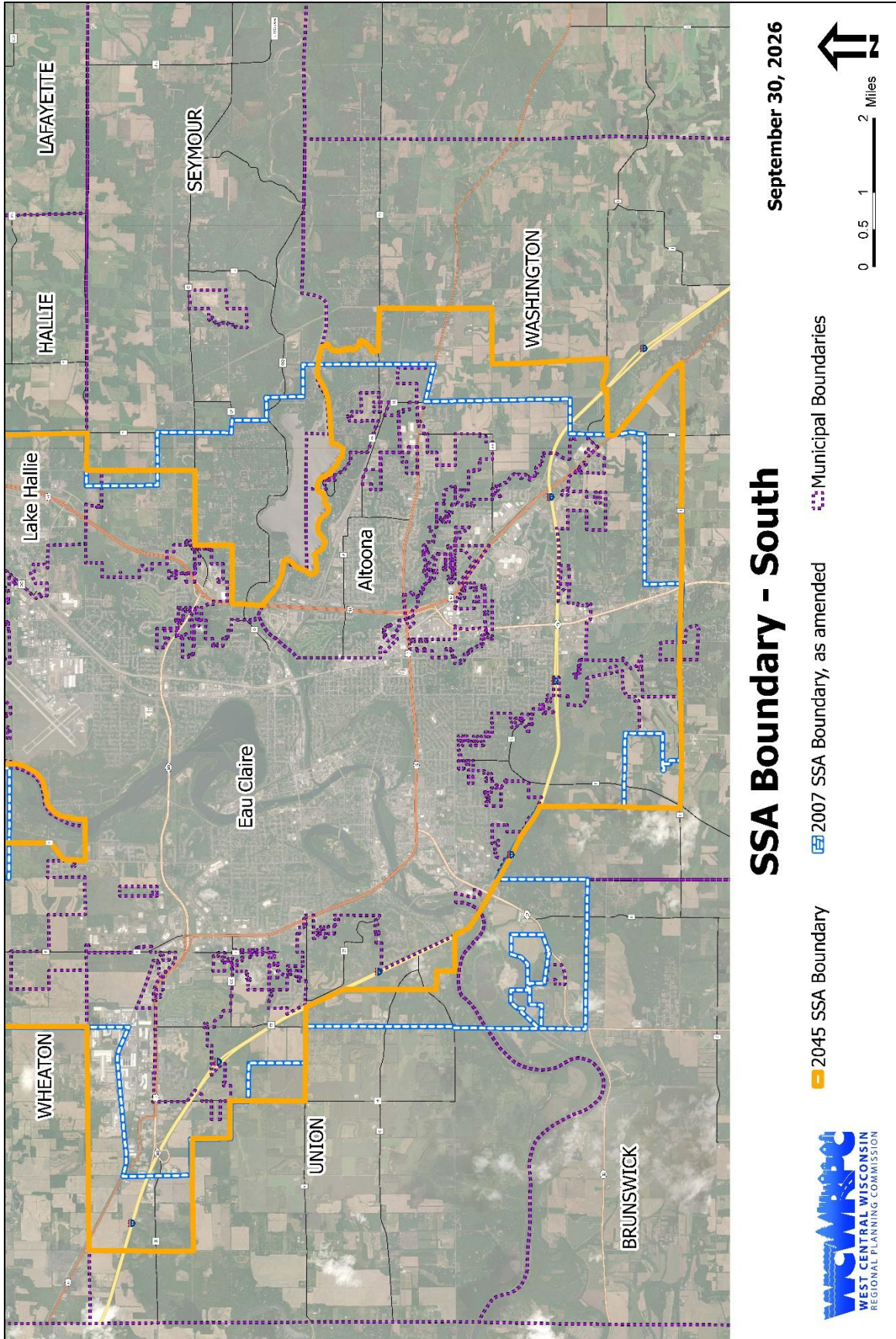
	2007 SSA Boundary w/ 2023 Amendment			2045 SSA Boundary			Difference
	Acres in Boundary	ESA Acres in Boundary	Remaining Acres	Acres in Boundary	ESA Acres in Boundary	Remaining Acres	
TOTAL ACRES	65,266.89	13,030.04	52,236.84	69,336.82	11,404.32	57,932.50	+4,069.93

Whereas Environmentally Sensitive Areas (ESAs) made up almost 20% of the acreage in the previous plan, ESAs account for 16.45% of the acreage within the new SSA boundary. The new boundary follows the high-water marks of the Chippewa River and Lake Altoona in a more conservative manner, excluding Lake Altoona entirely and portions of the Chippewa River. The boundary was also decreased significantly within the Town of Brunswick to remove ESAs that were previously included in the Sewer Service Area. The net result is an increase of roughly 5,696 acres in useable acreage within the SSA boundary compared to the previous boundary.

Map 6.4 Comparison of the 2007 and 2045 Sewer Service Area Boundaries







CHAPTER 7 – GOALS, OBJECTIVES, AND POLICIES

Goal is a long-term desired outcome 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 Falls-Eau Claire Urban Area through the protection of surface water quality, while recognizing the diversity in character and resources of the area's communities.

Mandatory vs. Advisory Policies are identified for each objective. Those **Mandatory Policies** that direct action using the words "will" or "shall" are mandatory for compliance with the Chippewa Falls-Eau Claire Urban Sewer Service Area Plan.

In contrast, those **Advisory Policies** that direct action using the word "should" are advisory and serve as guides, reflecting a common vision of the communities within the Study Area. Local governments can achieve such advisory policies by implementing the planning and regulatory tools they are authorized to use, such as, comprehensive planning, zoning, subdivision controls, impact fees, and site plan review. There are discretion and flexibility in how local governments implement many of the advisory policies and some of these policies do not include narrow definitions. Compliance with **Advisory Policies** is not required as part of Sewer Service Area 208 Compliance Reviews or Plan Amendments, but should be considered as part of SSA Plan updates.

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.**

Mandatory Policies

Policy 1.1.1 **SSA Boundary.** The SSA boundary is driven by projected urban (sewered) growth, the most cost-effective regional mix of wastewater management solutions, and, in certain cases, the need to extend sanitary sewer to an area in order to protect water quality. Sanitary sewer extensions will not be made beyond the 20-year urban sewer service area (SSA), unless the plan is amended. It is recognized that growth areas may be phased to

guide orderly development and the SSA boundary may need to be amended in the future to accommodate growth that was unanticipated in the Wisconsin Department of Administration population forecasts or this plan. The policies of this Chapter only apply to the lands within the SSA and not the larger SSA Study Area, except Policy 1.1.6.

- Policy 1.1.2 **Sewer Extensions & City Boundaries.** 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 intergovernmental agreement or cooperative boundary agreement between the involved governmental entities, or the area falls within an area planned for commercial/industrial growth.
- Policy 1.1.3 **Annexation-Neutral.** The Sewer Service Area Plan (SSA Plan) and the SSA boundary will not be used to promote nor hinder annexation petitions or urban density development; the SSA boundary does not delineate or guarantee those lands that may be annexed. The SSA Plan is in addition to and does not supersede any other municipal or intergovernmental plans, boundary agreements, development agreements, or similar plans and agreements.
- Policy 1.1.4 **Intergovernmental Communications.** Copies of 208-conformance review letters and plan amendment reports shall be provided to all local units of government included within the immediate or ultimate service areas for a proposed sewer extension. When a sanitary sewer extension will transect land or right-of-way owned by a unit of government other than the unit of government providing the municipal sanitary sewer, the 208-conformance review application must include documentation from that unit of government demonstrating their approval of the proposed extension.
- Policy 1.1.5 **SSA Plan Amendments.** Proposed plan amendments shall be located within or have a common boundary with the current sewer service area. When evaluating swappable and developed/developable acreages for Type I and Type II amendments, the acreages of environmentally sensitive areas (ESAs) shall be excluded, but right-of-way and public infrastructure shall be included.⁷ For Type I amendments, areas to be swapped must be within 5% of the total developed/developable acreage, whichever is greater. Unless a unique water quality or environmental concern exists (e.g., failing septic systems, conservation easements), residential areas proposed to be added to the SSA as part of a Type I and Type II amendment will consider the average residential density standards in Chapter 4.2.2 when evaluating efficient development⁸ Chapter 9.4 includes additional requirements related to plan amendments.
- Policy 1.1.6 **Local Water Quality Advisory Committee.** A local policy advisory committee made up of representatives of the various local units of government in the Study Area shall be maintained to assist Wisconsin Department of Natural Resources (WDNR) in SSA

⁷ When updating the 2026 SSA Plan boundary, ESAs were excluded when projecting developable acreage.

⁸ The minimum average household density includes a typical allowance for public right-of-way, stormwater management, etc., likely 10%-20% of the total development area. Larger dedicated public lands (e.g., parks, airports, regional stormwater ponds), areas protected by conservation easement, and ESAs should not be included when determining density.

planning and to act in an advisory role to the department in urban growth and water quality matters concerning the implementation of the SSA Plan.⁹

- Policy 1.1.7 **Plan Administrator.** With WDNR approval, a local Plan Administrator for the SSA shall be designated to act as a local advisor to WDNR on matters pertaining to the SSA Plan, to guide compliance with the mandatory policies of this Chapter, and to provide overall administrative support for implementation of the SSA Plan.¹⁰
- Policy 1.1.8 **Local Planning Agency.** WDNR shall designate a local planning agency under contract to coordinate with the Local Water Quality Advisory Committee and WDNR in the review and update of the SSA Plan. The Local Planning Agency may or may not be the Plan Administrator, but may be required to provide support to the Plan Administrator during some SSA Plan amendments. If the Plan Administrator and Local Planning Agency are different entities, by mutual agreement the Local Planning Agency may perform the role of the Plan Administrator described in Section 9.4 during plan amendments.
- Policy 1.1.9 **SSA Plan Reviews & Updates.** The SSA Plan shall be reviewed by the Plan Administrator, in coordination with the Local Water Quality Advisory Committee, at least once every five years and updated to address any significant policy or boundary changes.
- Subject to WDNR funding and support, a full review and possible update/amendment to the SSA boundary shall occur at least once every 5-10 years, preferably following the release of updated Wisconsin Department of Administration (WDOA) population forecasts. Such a review is strongly recommended following the next release of WDOA population forecasts based on the 2030 decennial census. Unsewered development within the sewer service area may necessitate a SSA boundary update or amendment in order to reallocate forecasted growth. Limited changes to the SSA boundary may be addressed through a Type I or II SSA Plan amendment rather than a more comprehensive update.

Advisory Policies

- Policy 1.1.10 Local government comprehensive plans should be updated every ten years to reflect changing economic and physical conditions. Cooperative boundary and land use planning between local units of government is strongly encouraged.
- Policy 1.1.11 Urban development should be encouraged to "infill" vacant developable lands within city boundaries, then be staged outward according to local plans.
- Policy 1.1.12 Sewer extensions that reflect the contiguous and compact pattern of development should receive priority over extensions that will contribute to urban sprawl. Satellite sewer service areas extended to serve an existing development that has failing onsite sewage systems or otherwise protect water quality may be an exception
- Policy 1.1.13 The supply of land dedicated to urban development should approximate current and future needs as determined from population, employment/business, and land use projections, and be based on locally determined density standards.

⁹ As of January 2026, the MPO Policy Council has been serving as the Local Water Quality Advisory Committee.

¹⁰ As of January 2026, West Central Wisconsin Regional Planning Commission (WCWRPC) has been serving as the local Plan Administrator and WDNR-designated Local Planning Agency.

- Policy 1.1.14 Future commercial and industrial development should be guided to similar, compatible areas planned for such uses and be readily accessible to major transportation systems.
- Policy 1.1.15 Future residential development should occur adjacent to existing development to contain costs of public service provisions, and reflect compact and orderly development.
- Policy 1.1.16 The presence of Environmentally Sensitive Areas (ESAs) does not prohibit an area's inclusion within the SSA boundary. ESAs are excluded from the developable acreage within the SSA, but may be located within the SSA boundary. It is preferred that large, contiguous ESAs that are adjoining or overlapping the proposed SSA boundary be excluded from the SSA boundary.

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

Advisory Policies

- 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 proposed for designated farmland preservation areas with high-quality Class 1 or 2 soils for agricultural crop production should be discouraged consistent with applicable farmland preservation plans.

Goal 2:
Provide and maintain a full range of community facilities and services that are efficient, economical, and environmentally sound.

Objective 2.1 Provide municipal sanitary sewer systems that will effectively and economically serve urban development.

Mandatory Policies

Policy 2.1.1 SSA Plan Consistency. When a subdivision plat, condominium plat, certified survey map, or sewer 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 sewer 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 ESA had previously been disturbed or encroached upon. Once development occurs, the local regulating jurisdiction has a responsibility for SSA Plan consistency, including ensuring that intensive land disturbances do not occur within environmentally sensitive areas.

Policy 2.1.2 Initiating Review/Amendment Requests. A request for a 208-conformance 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 Local Water Quality Advisory Committee, or a municipality within the sewer service area.

Policy 2.1.3 Scope of 208-Conformance Reviews. 208-conformance reviews are conducted to confirm that: (1) the area to be served by a sewer extension or hook-up is located within the SSA boundary and (2) ESAs will be protected from disturbance subject to the policies and exceptions of this chapter.

208-conformance review shall consider not only the corridor of the proposed sanitary sewer extension or private hook-up (lands to be disturbed during its construction) for conformance with this SSA Plan, but also include the review of maps, development maps, engineering studies, etc., for the immediate and any future, ultimate areas that will be served by the sanitary sewer extension or hook-up.

If the ultimate service area is located outside the SSA, the 208-conformance review will be limited to lands within the SSA until such time that a SSA boundary amendment is approved.

208 Reviews & Sewer Extensions

A 208-Conformance Review Letter refers to the water quality management review letter issued by the Plan Administrator (or a local municipality for a private hookup) 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 2.1.15.

- Policy 2.1.4 **208-Conformance Review Timing.** Submittal of a 208 Review application to the Plan Administrator shall occur after the local municipality has approved any required certified survey map/subdivision plat, site plans, water quality-related permits, and/or development agreements. Grading of the project site shall not commence until after the 208-conformance review is completed. When an ESA exists within the project area, any required grading plans, engineering reports, or other such studies shall also first be approved by the regulating entity and local municipality, and referenced in the 208 Review application.
- On a case-by-case basis, the Plan Administrator may waive this policy when certain permit/compliance certifications are not issued until after certain actions have been completed (e.g., FEMA Letter of Map Revision, WDNR Notice of Intent for construction site stormwater permit). In such cases, the 208-conformance letter shall be conditional, including conditions ensuring the protection of any ESAs within the service area, obtaining all other required permit approvals, and compliance with any other SSA Plan policies.
- Policy 2.1.5 **Timing of Engineering Studies and CSMs/Plats.** A project plan that is consistent with the SSA Plan resulting from an acceptable engineering study that is submitted to and approved by the local regulating entity before a subdivision plat or certified survey map is recorded shall allow the land divider to represent appropriate changes on the subdivision plat or certified survey map.
- A project plan that is consistent with the SSA Plan 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 ESAs as unbuildable and protected from intensive land disturbances.
- Policy 2.1.6 **Conditional Approvals.** At the discretion of the Plan Administrator or WDNR, 208 review letters and plan amendments may include conditions that are consistent with the goals, objectives, and policies of this Chapter.
- Policy 2.1.7 **Other Rules Still Apply.** The issuance of a 208-conformance 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.
- Policy 2.1.8 **Cost-Effectiveness.** Evaluation of cost-effectiveness for determining the SSA boundary and any plan amendments shall consider financial, environmental, social, and other non-monetary factors as a whole over the SSA Plan's 20-year planning period. When the monetary costs of alternatives are approximately equal (within 10% of each other), then non-monetary factors shall be used to make a decision on cost-effectiveness.¹¹ According to WDNR, a municipal wastewater treatment system (sanitary sewer system) provides the highest level of environmental protection, planning, management, and monitoring, and is the preferred regional wastewater solution when service can be provided in a cost-effective

¹¹ NR 110 and NR121 defines *cost-effective analysis* as “a systematic comparison of alternative means of meeting state water quality standards, effluent limitation or other treatment standards in order to identify the alternative which will minimize the total resources costs over the planning period. These resources costs include monetary costs and environmental as well as other non-monetary costs.

manner. Where municipal wastewater treatment is not cost-effective and challenges exist for on-site private systems, shared community wastewater systems may be an alternative if proper siting and maintenance is performed.

- Policy 2.1.9 **Liftstations.** The installation, replacement, or upgrade of a liftstation, with no new, planned extension, for municipal sanitary sewer does not require a 208-conformance review. However, the disturbance of an ESA during the liftstation’s construction shall be avoided and would be subject to the policies in Goal 3.
- Policy 2.1.10 **Hook-ups & PIMS.** 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 State code, reviewing the proposal for conformance with this Sewer Service Area Plan, and issuing a 208-review letter if required as discussed in Section 9.2. This review authority does not extend to the review and approval of plan amendments. This policy and the related procedures in Section 9.2 are under review by the State of Wisconsin, and may need to be modified in the future.
- Policy 2.1.11 **Holding Tanks.** 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. On a case-by-case basis, the local regulating jurisdiction may determine that holding tanks or shared cluster systems are preferred over other private onsite wastewater treatment solutions due to site conditions, such as sandy soils; connection to a sanitary sewer system is preferred when cost-effective. Chapter 8 includes additional policies and responsibilities related to the permitting of holding tanks and designation of holding tank service areas.
- Policy 2.1.12 **Replacement of Existing Sanitary Sewer Lines.** Unless otherwise required by WDNR, a 208-conformance review is not required for the replacement of existing, previously permitted public sanitary sewer lines if the new collection system will utilize the same route (e.g., same right-of-way or easement area) and the system will not serve a new growth area. For a proposed re-routing of a replacement collection system, the new route shall be reviewed to ensure that utilities are routed or located to minimize or avoid impacts on environmentally sensitive areas (ESAs), but a 208-conformance review is not generally required. Any areas served by the proposed replacement are subject to the other SSA Plan policies of this plan.

Advisory Policies

- Policy 2.1.13 Sanitary sewer extensions should be concurrent with the timing or provision of other public facilities and services and consistent with wastewater treatment facility plans.
- Policy 2.1.14 Sewer extensions should occur contiguous to existing systems, according to local staging plans, where facilities can accommodate them.
- Policy 2.1.15 The benefits of extending sanitary sewer to an existing development with failing private septic systems to protect water quality may outweigh financial cost-effectiveness. 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 2.1.16 Sanitary sewer system construction and sizing should be staged to encourage lower capital investment and flexibility.
- Policy 2.1.17 Existing capacity in sanitary sewer systems should be used before making substantial expansions or extensions.
- Policy 2.1.18 Landowners with private wells should be aware of the importance of regular testing, and threats to their water supply, including risks related to private septic system maintenance. Regulations related to the maintenance/compliance of private septic systems, shared wastewater systems, and well setbacks will be enforced. Developers of unsewered subdivisions should demonstrate through site plans that wells and septic systems can be properly spaced.
- Policy 2.1.19 The number of waste treatment plants should generally be minimized to avoid duplication of facilities, institute economies of scale, and lessen environmental degradation.
- Policy 2.1.20 Analysis of the PFAs and other groundwater contamination risks from landspreading of municipal and other wastewater sludge within the Study Area is recommended. Such analysis and modeling should strive to identify areas of elevated groundwater contamination risk. Recommendations from such analysis should be incorporated into local/county groundwater management plans.

Goal #3: Environmentally Sensitive Areas

Protect water quality through the consideration of environmental constraints and the protection of environmentally sensitive areas from encroachment by intensive land disturbances within the sewer service area.

Note: Given the emphasis of SSA planning on the protection of environmentally sensitive areas (ESAs) and water quality, Goal #3 is more robust than the previous two goals and provides detailed guidance for plan administration. All policies in Goal #3 are mandatory, though a portion of some policies may be discretionary.

Objective 3.1 Areas environmentally unsuitable for development shall be delineated, tracked, and protected from intensive land disturbances.

Mandatory Policies – General Water Quality & ESA Protection

- Policy 3.1.1 **Protection of Environmentally Sensitive Areas (ESAs).** The ESAs in Chapter 3.5 shall be protected and not encroached upon by any **intensive land disturbance** within the Sewer Service Area (SSA) regardless of the status or type of wastewater treatment, subject to the policies and exceptions of this Chapter.

The plan allows, without a plan amendment, sewer extensions or hookups on lots that are partially within an ESA 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. Counties and municipalities must ensure that sufficient setbacks and erosion control measures are taken, as determined by local zoning or land development controls.

- Policy 3.1.2 **Intensive Land Disturbances.** For this plan, intensive land disturbances shall 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, excluding permitted retaining walls;
 - 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,
 - grading, filling, and dewatering related to the above, even if a structure or impervious surface does not encroach upon an ESA directly.
- Policy 3.1.3 **ESA Encroachments shall be Avoided.** An ESA encroachment by an intensive land disturbance and a Type IV (ESA) Sewer Service Area Amendment shall 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. A self-created hardship or desire to maximize developable area are not sufficient justifications for the approval of a Type IV amendment.
- Policy 3.1.4 **Determining Reasonable & Avoidable for Encroachments.** The Plan Commission or similar planning body of the municipality in which a proposed ESA encroachment is located will make the determination whether the encroachment has **no reasonable alternatives, was avoidable, or was necessary to mitigate or remedy an existing environmental problem.** This determination shall be clearly stated in an official record (e.g., meeting minutes); approval of a plan or plat that shows the encroachment is insufficient documentation alone. The SSA Plan Administrator will alert WDNR to this determination as part of a 208 review.
- Policy 3.1.5 **Unapproved ESA Encroachment.** Any unapproved alteration of any ESAs within the SSA to remove the status of these areas as an environmentally sensitive area, and hence make them available for sewered or unsewered development, is prohibited. 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 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 3.1.6 **Wetlands & Wetland-Indicator Soils.** The filling or removal of a wetland, in whole or part, shall require a Type IV SSA Plan Amendment (or minor amendment under Policy 3.1.28), even if WDNR had otherwise previously approved or issued an exemption determination for the wetland encroachment.
- If wetland-indicator soils are shown on the WDNR Surface Water Data Viewer, a site-specific survey and/or certified wetland delineation performed by a third party, qualified

delineator may be required on a case-by-case basis if an intensive land disturbance may encroach upon the wetland-indicator soils. Such a delineation may be required by the local regulating jurisdiction as part of their permitting processes or by the Plan Administrator with WDNR consultation prior to issuing a 208-conformance review determination. If wetlands are identified and confirmed, the area shall become a Wetland ESA.

- Policy 3.1.7 **Floodplains and Shorelands.** When the flood fringe is delineated and mapped as part of the *Special Flood Hazard Area*, construction and grading for utilities and stormwater improvements are allowable within the flood fringe if erosion and stormwater management plans have been approved; additional development may be allowed in the flood fringe if carefully planned and elevated sufficiently above the Base Flood Elevation with dryland access. 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. Land disturbances in regulated shoreland areas are allowed to the extent permitted by State and local ordinances and approved by the regulating entity. However, some ESAs (e.g., steep slopes, floodplain/floodways, wetlands) may overlap with shoreland areas and such areas are covered under this Plan.
- Policy 3.1.8 **Groundwater and Wellhead Protection Areas.** It is expected that Chippewa and Eau Claire Counties will continue to maintain groundwater testing and protection programs that engage communities to protect groundwater and address the related challenges identified in Chapter 3.2. Wellheads for public drinking water will continue to be enforced consistent with State law.
- Policy 3.1.9 **Additional Environmental Considerations.** The additional environmental considerations in Chapter 3.6 are primarily defined, interpreted, considered, and protected by local or State regulating jurisdictions; they are not planned for or directly protected through this SSA Plan. These additional constraints are typically not considered ESAs under this SSA Plan and are not excluded from the developable SSA acreage, though may overlap with an ESA. When evaluating a SSA Plan amendment, the regulating jurisdiction(s) will interpret and evaluate any additional environmental considerations. Sanitary sewer extensions and development into physical or cultural resource areas not included as an ESA in this plan shall conform to applicable local, state, and federal rules and regulations.
- The applicant shall be asked to identify any such unique features as part of a 208-conformance review or plan amendment request. WDNR and the Plan Administrator may consider unique environmental characteristics or features (e.g., springs, closed depressions) on a case-by-case basis.
- Policy 3.1.10 **Stormwater Management.** Local units of government shall continue to ensure the enforcement of construction site erosion controls and stormwater management ordinances, ensure that stormwater facilities are adequately sized, and maintain related permits. Additional flood and stormwater management planning, programming, and related regulations, as well as low-impact development approaches that reduce impervious surfaces and limit run-off are encouraged, especially for areas near surface waters and wetlands. If properly permitted, stormwater management improvements are allowable within the flood fringe (see definitions in Section 3.5.3) without a plan amendment. Encroachment upon and grading of non-navigable, intermittent (non-continuous) streams is allowable if erosion control/stormwater management plans have been approved.

Policy 3.1.11 **Intermittent (Non-Continuous) Streams.** Encroachment upon and grading of an intermittent (non-continuous) stream shown on the WDNR Surface Water Data Viewer is allowable on a case-by-case basis if: (1) the applicant provides sufficient field verification and documentation to determine that an actual intermittent stream does not exist as described in Section 3.5.2 and (2) erosion control/stormwater management plans have been approved for the project area.

Policy 3.1.12 **Relationship to Local Plans & Policies.** The ESA definitions in this Chapter are common and shared for their entire SSA Study Area for purposes of this SSA Plan. Counties and communities may have ESA definitions and policies that differ from this SSA Plan, including additional or more stringent standards.

The ESA definitions herein are only required for implementation and administration of this SSA Plan within the sewer service area. Decisions regarding the update, amendment, compliance, or administration of the SSA Plan shall be consistent with the definitions and policies in the SSA Plan. In cases of such differences, the most restrictive definitions and policies would, in effect, apply but would be administered separately. Since local units of government do have a responsibility and compliance role during implementation of the SSA Plan, consistency with ESA definitions is encouraged, but is not required.

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 this Sewer Service Area (SSA) Plan as well as consider and abide by other applicable local, state, and federal rules pertaining to water quality and wetland protection. Local comprehensive plans and land use ordinances shall guide development away from environmentally sensitive areas within the SSA. Sufficient setbacks and erosion control measures shall 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.

Policy 3.1.13 **Failure to implement SSA Plan regulations and policies** may impact sewer extension approvals within those municipalities where WDNR or WDSPS determine that improvements in enforcement are needed. 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 steep slope ESAs, regardless of class or location, 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 if it be determined that the policies and procedures in this SSA Plan are not being adequately implemented or adhered to.

Mandatory Policies - Steep Slope ESAs

Policy 3.1.14 **Steep Slopes near Surface Waters.** Any proposed projects or SSA Plan amendments for development on any 12+% slopes that would result in direct runoff into a stream shall be prohibited. Mitigation measures to protect water quality shall be required when necessary.

Policy 3.1.15 **Identifying Steep Slope ESAs.** Slope shall be defined, measured, delineated, and classified as described in Chapter 3.5.5, subject to the exclusions in Policy 3.1.26. The local regulating jurisdiction may be more restrictive in its definition and protection of steep slopes.

Policy 3.1.16 **Steep Slope Exclusions.** The following are not considered Steep Slope ESAs under this SSA Plan, if an **engineering study** with a grading/stabilization plan 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.:

- a. Engineered, man-made steep slopes, including walk-out basements, if a grading/stabilization plan has been approved by the pertinent regulating jurisdiction(s).
- b. Older, man-made slopes that were purposefully engineered or graded according to standards at the time and have since stabilized. Such artificial slopes will be evaluated by the Plan Administrator on a case-by-case basis with WDNR consultation and may be treated as a Steep Slope ESA depending on site characteristics, soil erodibility, and proximity to surface waters or other ESAs.
- c. Temporary man-made piles of soil (i.e., spoils piles, dirt stock piles) that were created in the last five years.

Policy 3.1.17 **Steep Slope Protections.** 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.
- ii. Intensive land disturbances, including the excepted activities in Policy 3.1.26, shall avoid encroachment upon any steep slope ESAs to the extent reasonably possible.
- iii. If **no reasonable alternative exists** and an encroachment upon a steep slope ESA is unavoidable:
 - a Type IV SSA Plan Amendment may be required as discussed within other policies of this chapter.
 - an engineering study with a grading/stabilization plan prepared by a Wisconsin-licensed engineer shall be required, filed with, and approved by the local regulating entity to demonstrate the suitability of the proposed intensive land disturbance while ensuring that erosion will be prevented and surface water and groundwater quality will not be negatively impacted.

Policy 3.1.18 **Class B Steep Slope Amendment Exception.** As an ESA, an encroachment upon a Class B steep slope by an intensive land disturbance shall only be approved in unusual circumstances **where no reasonable alternative exists** and/or when the encroachment is

Summary of Steep Slope ESA Definitions

- Natural or un-engineered 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 – Other Steep Slope ESA's that are not Class A slopes.

See Chapter 3.5 for full definitions.

necessary to mitigate or remedy an existing environmental problem. 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 study or its equivalent has been approved by the local regulating jurisdiction and such encroachments are reported to SSA Plan Administrator for tracking purposes. Depending on the nature of the encroachment, site, and potential for negative water quality impacts, the municipality and/or Plan Administrator will consult with WDNR to determine whether a Type IV SSA Amendment is necessary.

Policy 3.1.19 Cost-Effectiveness of an ESA Amendment. Plan Amendments to allow sewer development on steep slope ESAs shall be the most cost-effective development alternative and shall comply with locally approved construction erosion control ordinances.

Engineering Studies and Stabilization Plans

For this SSA Plan, an engineering study with grading/stabilization plan includes 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 without negatively impacting water quality.

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. At its discretion, the Plan Administrator may require that a copy of any approved engineering studies or stabilizations plans be provided with a 208-conformance review request.

Mandatory - ESA Review & Plan Administration

Policy 3.1.20 Mapping of ESAs. The ESAs mapped in this SSA Plan are an approximate representation of known conditions at the time of map preparation. Not all ESAs may be mapped or mapped accurately. Such physical features may change over time from natural or human causes and new ESAs may be formed. 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, the SSA Plan Administrator, a county, or municipality, the ESA boundaries and acreages as mapped in this plan may be corrected by the Plan Administrator

to reflect more accurate information. The Plan Administrator may request technical support or approval of WDNR, municipalities, and others when considering such requests. Such corrections, including the addition of previously unmapped ESAs, will be tracked by the Plan Administrator, but shall not require a Type IV Sewer Service Area Plan Amendment unless determined that an amendment is needed by the Administrator, the local Water Quality Management Advisory Committee, 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 3.1.21 **Delineation of ESAs.** As part of applications for 208-conformance reviews and SSA Plan amendments, the applicant shall identify if any ESAs or other environmental considerations defined within Chapters 3.5 & 3.6 are known to exist within the area to be served by the project, will be impacted by the project, and if any related permits or approvals have been approved or will be required.

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

When an intensive land disturbance occurs, the ESA definitions and SSA Plan policies that are in effect at the time of the disturbance 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.

- Policy 3.1.22 **Considering ESAs during SSA Plan Administration.** The applicant shall provide the Plan Administrator sufficient information and approved plans or water quality-related studies to allow for a determination of whether any ESAs will be encroached upon by an intensive land disturbance.

When requesting a 208 Review, the following are strongly recommended and may be required by the Plan Administrator and/or WDNR:

- a. The 208-conformance review request should not be made until any site plans, erosion control plans, engineering studies, special hydraulic analyses, etc. have been approved by the regulating authorities that ensure that ESAs will be protected.
- b. ESAs within a property, certified survey map, or subdivision to be served by sanitary sewer should be identified as an outlot and designated as being protected from intensive land disturbances. It is the responsibility of the landowners and municipality to ensure such outlots are not encroached upon.

It is recognized that detailed site plans are not always available when a sanitary sewer extension is proposed. In such instances, the Plan Administrator may issue a 208-conformance letter with conditions that any ESAs be protected or may request additional information, water quality-related studies, or actions in consultation with WDNR. The local municipality in which the project is located has the primary responsibility of ensuring that any conditions in the 208-conformance letter are enforced.

- Policy 3.1.23 **ESA Encroachment when a 208 Review is Required.** If encroachment of an ESA by an intensive land disturbance is expected and a 208-review letter is required from the Plan Administrator (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 water quality-related environmental concerns 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 and protected from intensive land disturbances 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.

Policy 3.1.24 **Encroachment when no 208 Review is 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 the intensive land disturbance is part of sewer 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 the Plan Administrator 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 3.1.25 **Responsibilities of Local Units of Government.** As an undesignated urban sewer service area, the administration of this SSA Plan requires cooperation and consistent compliance by all local units of government. Many of the policies in this chapter refer to the responsibilities of the communities and regulating jurisdictions within the SSA. In addition to these responsibilities:

- a. Counties and communities shall inform the Plan Administrator of any changes regarding ESA location, encroachment, and size/acreage changes for tracking purposes, including updated ESA mapping data.
- b. Local regulating entities and the Plan Administrator 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.

SSA Type IV (ESA Encroachment) Amendment Policies & Exceptions

Policy 3.1.26 **Type IV Amendments Required, with Exceptions.** An encroachment of any ESA defined in Chapter 3.5. 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 and exceptions of this chapter. WDNR has the discretion to require a Type IV SSA Plan Amendment at any time for a proposed or unpermitted encroachment of an ESA.

Policy 3.1.27 **Exceptions to Type IV (ESA) SSA Amendments.** The following land uses may not necessitate a Type IV SSA Plan Amendment if the utmost care is taken to protect water quality. For the following exceptions, Policies 2.1.3 & 2.1.4 apply; **no reasonable alternative shall exist** and the encroachment is unavoidable as documented by the local Plan Commission, similar planning authority, or municipal staff (e.g., planning or zoning administrator) if empowered to make such decisions.

Only crossings for utilities, stormwater, and public streets shall be permitted to encroach upon surface water, floodplain/floodway, and wetland ESAs without a Type IV SSA Amendment, except passive public recreational facilities (e.g., picnic areas, trails) and sports fields without seating or structures may be allowed in floodplain/floodway ESAs if the community can demonstrate that flood storage will not be reduced.¹²

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 sewer development not located within the ESA or an 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 as part of the development;
- public 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;
- 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 are encouraged if possible;
- forestry practices and grubbing, to the extent allowed by local regulating jurisdiction(s);
- grading, filling, 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 all previously specified ESA encroachment exceptions in Policy 3.1.26 if all other required water quality-related permits and approvals are received and mitigation plans have been approved by regulating entities for any potential adverse water quality-related impacts. In such instances, engineering studies, stabilization plans, hydraulic studies, and any other needed water quality-related approvals shall be obtained by the regulating jurisdiction(s) prior to requesting a related 208-conformance review. An exception to this requirement is a preliminary approval may be sufficient if a permit/compliance certification is not issued until after certain actions have been completed (e.g., FEMA Letter of Map Revision).

¹² Private streets and driveways are not an exception and cannot encroach upon surface waters, floodplains/floodways, and wetlands, unless an agreement is in place that the roadway will be dedicated as a public road with the intent to turn over maintenance to the municipality. On a case-by-case basis, the Plan Administrator, in consultation with WDNR, may require a hydraulic analysis to demonstrate that flood storage will not be reduced.

Any such disturbance of an ESA, regardless if encroached upon by an exempted activity or not, 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. If a 208-review letter is not required, the SSA Plan policies still apply and the encroachment shall be reported to the SSA Plan Administrator.

- Policy 3.1.28 **Directional Borings.** WDNR-approved directional or horizontal borings for utilizes and infrastructure under a surface water, floodplain/floodway, or wetland ESA is not considered an ESA encroachment if the installation of the boring commences and terminates outside of an ESA. Documentation showing the locations of a proposed boring and nearby ESAs must be submitted as part of a 208-conformance review request.
- Policy 3.1.29 **Minor Type IV Amendments.** 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. It is expected that the application and Plan Administrator staff report for a minor amendment will be brief. The application must still include sufficient documentation showing the location of the ESAs, the nature of the encroachment, a determination that the encroachment was unavoidable and not alternative exists, mitigation measures, and the status of related permits/approvals. The amendment may be approved by the SSA Plan Administrator following Plan Administrator consultation with and concurrence by WDNR Water Quality staff. The Plan Administrator and WDNR staff have the discretion to require the full amendment review and approval process as described in Chapter 6.4. depending on characteristics such as the site, the ESA, and potential water quality impacts. All permits and approvals related to the Type IV Amendment must be in place prior to submittal and approval of a 208-conformance review letter per Policies 2.1.4 and 2.1.5.

CHAPTER 8 - HOLDING TANK SERVICE AREAS

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 NR 113 was being changed, NR 205 was being revised to clarify Publicly Owned Treatment Works (POTW) obligations to accept septage¹³. 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 NR 113:

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, this is the area that a POTW is responsible for planning the cost-effective regional wastewater treatment alternative. The SSA Study Area described in Chapter 2 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 (i.e., the SSA boundary established by this SSA Plan) 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 following general requirements are 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. Large commercial, industrial, recreational, or residential development holding tank private onsite wastewater treatment systems (POWTS) that singly or when added together or increased by successive additions generate 3,000 gallons of septage per day or greater shall contract with a wastewater treatment facility for treatment of the septage.
3. **A holding tank service area must be delineated for any holding tank outside the sewer service area, but within the SSA Study Area, if generating 3,000 gallons or more of septage a day.** The service area for a POTW may include both an urban sewer service area

¹³ The current NR 113 was created effective January 1, 1997, with subsequent corrections. The current NR 205 of the Wisconsin Administrative Code was created effective October 1, 1984.

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 seweraged during the design life of the POTW. Also, holding tanks may be located in either service area and a Holding Tank Service Area Amendment is required.

4. Within a POTW planning area, any new holding tanks for new development, outside of the sewer service area and inside the POTW 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 agreement and seek a water quality management plan amendment by the SSA Plan Administrator 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. The SSA Plan Administrator will evaluate the amendment request and may recommend the holding tank owner consider other POTWs because of cost effectiveness or environmental concerns.
5. 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 that all such wastewater will only be disposed of at a POTW.
6. 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 areas¹⁴.
 - 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.

7. POTW's are required to accept, treat, and dispose of septage under certain circumstances as directed by 281.49 State Statutes and NR 205.

¹⁴ 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 SSA 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 and village public works staff, there were no holding tanks in the SSA Study Area, and outside the sewer service area, required to contract with the POTW.**

The following table from the WDNR website summarizes State regulatory oversight for all holding tanks regardless of location:

SUMMARY OF HOLDING TANK PLAN REVIEW REQUIREMENTS

Wastewater type	Holding tank design	Requirements
Domestic	Generates less than 3,000 gallons per day	DSPS (or applicable designated agent) Plan Approval [exit DNR] (No DNR involvement)
Domestic	Generates 3,000 or more gallons per day	DSPS (or applicable designated agent) Plan Approval [exit DNR] , but DSPS must obtain verification from the DNR that there is an agreement of commitment that tank contents will be disposed of at a publicly owned wastewater treatment plant.
Non-Domestic	Any size	DNR Plan Approved Submit DNR Form 3400-185 [PDF]
Mixture of Domestic and Non-Domestic	Any size	Submit DNR Form 3400-185 [PDF] to DNR for "concurrence" review/determination and obtain DSPS Plan Approval

Holding Tank Service Area Amendments

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. This is a Type III SSA Plan Amendment under this plan. The Type III SSA Plan Amendment procedures are outlined in Chapter 9.3 of this plan.

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 exceptions noted in Chapter 7 shall also apply.

CHAPTER 9 – PLAN IMPLEMENTATION

The *Chippewa Falls-Eau Claire Urban Sewer Service Area (SSA) 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. **The procedures in Chapter 9 provide guidance to the Plan Administrator and promote conformance with the mandated policies in Chapter 7, though limited administrative flexibility and discretion shall also be permitted when reasonable and with WDNR consent.**

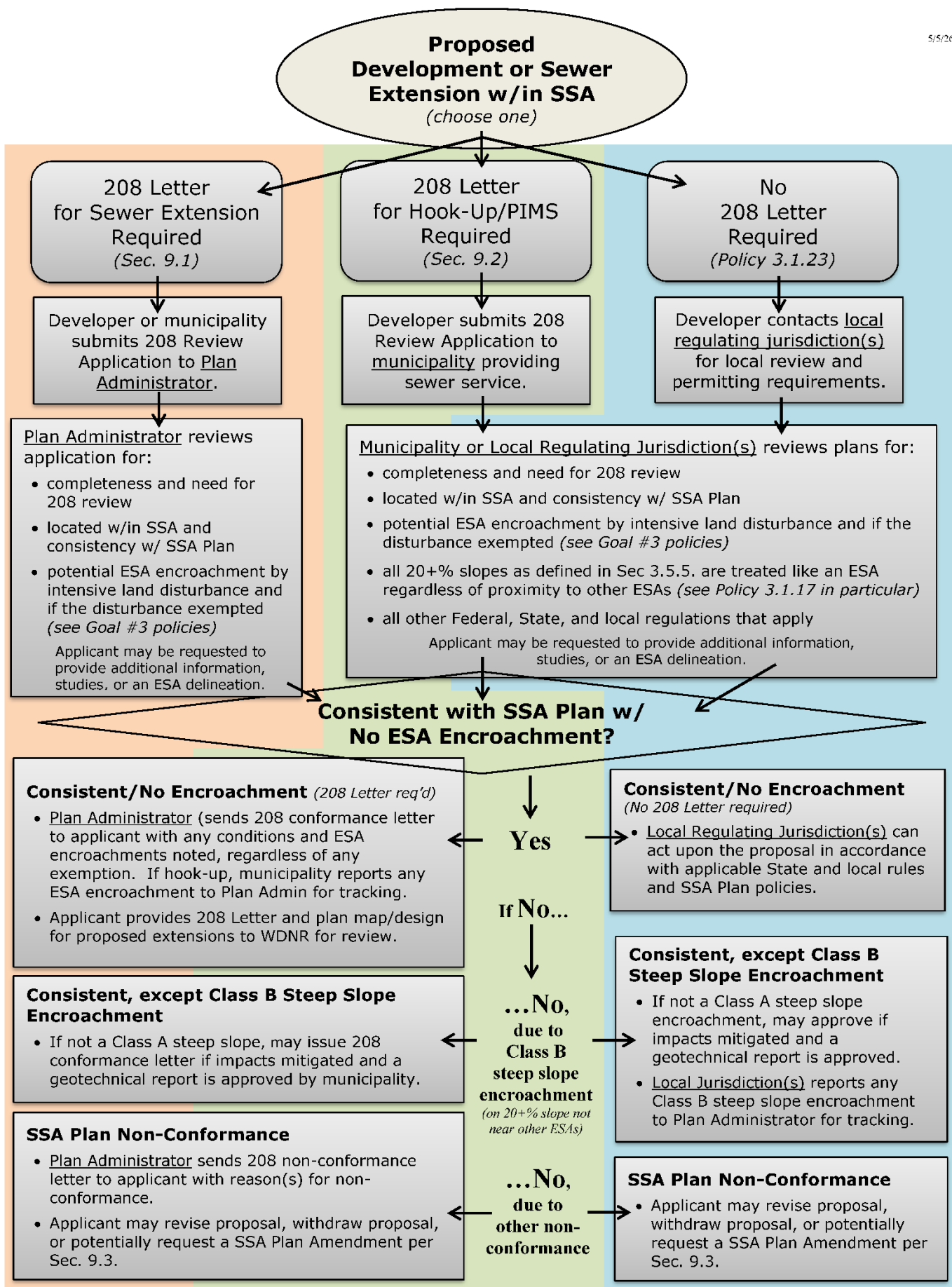
Developers and local officials must be aware of the policies and environmentally sensitive area criteria detailed within this plan when proposing or considering new development within the Sewer Service Area. Any approvals or conformance letters issued under this SSA Plan do not constitute approval of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

The Local Water Quality Advisory Committee and communities in the Study Area recognize the importance of residential, commercial, industrial, and other 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.

9.1 PROCEDURES FOR 208 REVIEW FOR SEWER EXTENSIONS

The designated Plan Administrator will review proposed sanitary sewer extensions for conformance with the SSA Plan when a Section 208-conformance 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. Preliminary Consultation. Potential applicants and developers are encouraged to consult with the Plan Administrator early in their planning process and prior to preparing a subdivision plat to help anticipate concerns with a project's conformance with the SSA Plan. Such preliminary consultations are not a requirement. The Plan Administrator's guidance is preliminary and is not a conformance review, which occurs in Step 4 after a complete application is received.
2. Timing of 208 Conformance Reviews. The 208-conformance review shall be the final, required permit review and approval for a proposed project in most cases. See Policies 2.1.4 and 2.1.5.



3. Application to Plan Administrator. 208 Review applications for sewer extensions are typically submitted to the Plan Administrator by the landowner or landowner's representative (e.g., land engineering firm), but may be submitted by a municipality. Applications must include:
- A cover letter¹⁵ requesting the Section 208-conformance review with contact information, project name, address/location information, and acreage to be served by the sewer extension or hook-up as well as the general characteristics and length of the sanitary sewer extension. The letter should also describe any potential or proposed disturbance of an environmentally sensitive area (ESA), if known.
 - A project location map showing the sanitary sewer extension and, in most cases, a map showing the geographic extent of the project area served by the sewer extension.
 - Unless waived by the Plan Administrator, the application must identify the extent and acreage for an **immediate service area** that is the focus on the 208-conformance review. If additional areas may also be served by the sanitary sewer extension or hook-up in the future, the application must also include the extent and acreage for the potential **ultimate service area**.¹⁶ **The immediate service area for which the 208-conformance letter is issued shall consist of one or more full parcels.**
 - In cases where public infrastructure improvements are being planned with no proposed development plans for an immediate service area, the Plan Administrator may issue a 208-conformance letter without considering the immediate or ultimate service area. As a condition of approval, a 208-conformance review shall be required at a later date for the service area once plans become available.
 - 1 set of construction/engineering plans showing utility connections and locations, as well as plans/maps showing the planned footprint of any buildings, streets, parking areas, or other intensive land disturbance for the **immediate service area**. Preliminary or final certified survey maps and subdivision plats should be provided if available. Typically, detailed plans, including anticipated land divisions, are not available for the **ultimate service area** and (one or more) separate 208 conformance reviews may be needed in the future for the ultimate service area. If potential ESAs exist and plans showing building footprints and other potential land disturbances are not available at the time of the 208-conformance review, the Plan Administrator may:
 - Require additional information so that the conformance review can be completed, and/or

¹⁵ The cover letter may be replaced by an application form with additional required information at the discretion of the Plan Administrator. An application fee may also be required.

¹⁶ Designation of an area as a potential **ultimate service area** does not guarantee that utilities will be provided to that area or the area will be developed in the future.

- Issue a 208-conformance letter with conditions that no intensive land disturbance may encroach upon an ESA without an SSA Plan amendment. See Policies 2.1.6 and 3.1.21.
- Additional maps and/or plans delineating and estimating acreages for any known environmentally sensitive areas (i.e., surface waters, 100-year floodplain/floodway, wetlands, and steep slopes of 20+%) within the immediate and ultimate project areas. See Policies 3.1.19 – 3.1.21.
- The status of other required permits and approvals, especially those related to stormwater management, erosion control, wetlands, or surface water protection. Best management practices are required for any encroachment upon a steep slope of 12+⁰% and should be noted in the cover letter or included in the engineering plans.¹⁷
- If any ESA encroachment is unavoidable and no reasonable alternative exists, even if exempted under policies, documentation should be included as required by Policies 3.1.3 and 3.1.4.
- The Plan Administration may require an application fee for 208-conformance reviews at their discretion.

Submittal of a 208 Review application to the Plan Administrator 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 must also first be approved by the local municipality and submitted with or referenced in the 208 Review applications.

For proposed project areas containing ESA that may potentially be encroached upon, it is advisable that the applicant contact the Plan Administrator relatively early in the development process, prior to submitting a 208-review application, for an initial consultation regarding SSA Plan conformance. Applications may be delivered to the Plan Administrator by email, but the Plan Administrator not responsible for delays should e-mail correspondence not be delivered, accidentally screened as spam, etc.; applicants are encouraged to verify receipt of application by the Plan Administrator.

4. Plan Administrator Review. The Plan Administrator, in consultation with WDNR staff if needed, determines the completeness of a 208 Review application. The Plan Administrator will review all applications for:
 - completeness and need for the 208-conformance review;
 - 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,

¹⁷ Inadequate enforcement of the Uniform Dwelling Code or local erosion controls may result in Wisconsin Department of Natural Resources denial of sewer extension requests into areas of 12% to 20% slopes within the municipality.

- consistency and conformance with the required policies of this Sewer Service Area Plan.

Consistent with the policies within Chapter 7, the Plan Administrator's 208-conformance review role is limited to the previous points. Under this SSA Plan, the following are the responsibilities of the regulating jurisdiction(s) and not the Plan Administrator:

- any required site visits and inspections;
- contacting other permitting agencies (unless the applicant);
- reviewing proposals to determine if a sewer extension or proposed new development is feasible, can be sewer, and is cost-effective, when located within the SSA boundary;
- providing technical or engineering review or guidance on where sewer can or cannot be located (if known ESAs are avoided), the design of stormwater management and erosion controls, hydraulic studies, wetland determinations, or other engineering/technical analysis;
- consideration of the availability and capacity of infrastructure and other services, including consistency with capital improvement plans, facility plans, official mapping, etc.;
- reviewing and approving certified survey maps, subdivision plats, land use permits or development plans for consistency with zoning, comprehensive plans, long-term growth plans, intergovernmental agreements, etc.;
- determining whether a proposed ESA encroachment is reasonable and unavoidable;
- identifying and reporting potential ESA encroachments when no 208-conformance review is required (see Section 9.3);
- ensuring that development occurs in a manner that is consistent with construction plans, land divisions, and, once issued, 208-conformance letters and conditions; and,
- facilitating compliance with local or state rules or policies outside of those policies and procedures explicitly required in Chapters 7, 8, and 9 of this SSA Plan.

The Plan Administrator may request or require additional information as part of the conformance review, especially when a potential encroachment of an environmentally sensitive area (ESA) exists or the extent of an ESA is uncertain. If there is any doubt as to whether an intensive land disturbance associated with the sewer extension project may encroach upon an ESA, the Plan Administrator may consult with and request site specific information from the local municipality, WDNR, and/or developer. For example, the Plan Administrator may contact WDNR regarding a possible encroachment upon wetland-indicator soils 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 an advisory recommendation to WDNR on the application. Under circumstances where the Plan Administrator is unable to make a determination of SSA Plan conformance, the Plan Administrator may request a special review and/or determination by the Local Water Quality Advisory Committee or WDNR.

5. Plan Administrator Issues 208 Letter. The 208-review letter is an advisory recommendation to WDNR regarding a proposed sanitary sewer extension's conformance with the SSA Plan. the Plan Administrator will issue a sewer service area conformance or non-conformance letter (208-review letter) to the applicant **within 15 days of receipt of a complete application** necessary to perform the review, unless the Plan Administrator is otherwise unable to make a conformance determination (e.g., requires additional information, requires review/input from the Local Water Quality Advisory Committee or WDNR).
 - The Plan Administrator may issue a 208-conformance letter with conditions as discussed in Policy 2.1.6. the Plan Administrator 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. See Policies 3.1.3 and 3.1.4. **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 the Plan Administrator 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, the Plan Administrator 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.
 - The Plan Administrator 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.
6. 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 the Plan Administrator to the applicant. The applicant has the following primary options:
 - The applicant may contact the Plan Administrator to determine if there is an incorrect interpretation or a misunderstanding had taken place.
 - The applicant may revise or withdraw their application. If an application is amended or request altered, the applicant must notify the Administrator that it wishes to have the proposed extension re-evaluated. For significant changes or elapsed time, the applicant may be required to resubmit their application in whole.
 - The applicant may request a SSA Plan amendment.

- 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.
7. **Tracking & Reporting.** As of April 2026, WDNR requires that 208-conformance letters and other official SSA Plan-related actions be uploaded to their Surface Water Integrated Monitoring System (SWIMS) database. Additional local tracking and records management are recommended. Tracking and reporting requirements may change over time.

9.2 PROCEDURES FOR SEWER HOOKUP REVIEW

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. However, Section 208 hook-up reviews are required for private interceptor main sewers (PIMS) that discharge to a municipal wastewater treatment facility. Section SPS 381.01(193), Wis. Adm. Code, defines a PIMS as “a sewer serving two or more buildings and not part of the municipal sewer system”. The Section 208 hook-up review checks that the PIMS conforms with the SSA Plan or has been “designed in accordance with the appropriate water quality management plan” per s. SPS 382.30 (12)(b), Wis. Adm. Code.

The process for 208-conformance 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 Providing Wastewater Service.** The application requirements and timing of a sewer hook-up review are generally the same as the requirements in 9.1. The Municipality Providing Service may require an application fee at their discretion.
2. **Application Review.** The Municipality Providing Service reviews the application for conformance with the SSA Plan, including potential ESA encroachment by intensive land disturbances. All other Federal, State, and local regulations also apply, and the local regulating jurisdiction may have additional standards and requirements that are stricter than those within the SSA Plan to the extent allowed for by law. The Municipality may contact the Plan Administrator and/or WDNR for support during application review.
3. **Municipality Providing Service Issues 208 Letter.** If the requested sewer hookup is in conformance with the SSA Plan, a 208-conformance letter will be sent to the applicant. The sewer service area conformance letter and other materials required by WisDSPS must then be retained by the applicant. A copy of the letter must also be provided to the Plan Administrator for tracking and reporting.

If an ESA encroachment by an intensive land disturbance is proposed, a 208-conformance letter cannot be issued unless a Type IV SSA Plan amendment is first approved in accordance with the policies of this SSA Plan. A 208-conformance letter issued by a municipality must note any ESA encroachment regardless of the project's location or type of encroachment.

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 Providing Service to the applicant. The applicant has options similar to those identified in Chapter 9.1 (e.g., amending their application, requesting a plan amendment), in addition to appealing the decision under any local municipal rules.
5. Tracking & Reporting. As of April 2026, WDNR requires that all 208-conformance letters and other official SSA Plan-related actions be uploaded to their Surface Water Integrated Monitoring System (SWIMS) database. Additional local tracking and records management are recommended. Tracking and reporting requirements may change over time.

9.3 SSA PLAN CONFORMANCE IF NO 208-CONFORMANCE REVIEW

The counties and municipalities within the Sewer Service Area, as local regulating jurisdictions, have the responsibility to review development within the sewer service area 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 the local regulating jurisdiction receives any proposal/application for any proposed intensive land disturbance or sanitary sewer connections within the sewer service area, the local jurisdiction 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,
- any other concerns regarding consistency and conformance with the required policies of this Sewer Service Area Plan, including the need for a 208 Review letter or SSA Plan amendment.

In some cases, there may be multiple local regulating jurisdictions reviewing and permitting a single project area. In such cases, all regulating jurisdictions should review the proposed development for SSA Plan conformance, though coordination between these jurisdictions is encouraged.

Within the sewer service area, all 20+% slopes as defined in Chapter 3.5.5 of the SSA Plan shall be treated like an ESA regardless of proximity to other ESAs. The regulating jurisdiction 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 Chapters 9.1 and 9.3 (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 the Plan Administrator for tracking purposes. Should the local regulating jurisdiction have any questions regarding this section, they should contact the Plan Administrator and/or Local Planning Agency.

9.4 SEWER SERVICE AREA AMENDMENTS

With the possibility of changes in development patterns or unique site-specific conditions, a mechanism for reviewing and revising the sewer service area (SSA) is essential. The amendment process allows communities to alter the SSA by using additional technical data, considering new community needs and trends, and addressing water-quality concerns in a cost-effective manner.

This initial part of Chapter 9.4 describes the overall SSA amendment process in general. This is followed by four subsections (i.e., 9.4.1, 9.4.2, 9.4.3, & 9.4.4) with additional procedures and criteria for each of the SSA Plan Amendment types. All amendment records and updated boundary maps will be maintained by the SSA Plan Administrator. If the Plan Administrator and Local Planning Agency are different entities, the role of the Plan Administrator described hereafter within Section 9.4 may be performed by the Local Planning Agency by mutual agreement.

Types of Amendments

Four types of amendments may be made to the Sewer Service Area:

- 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).

Plan amendments must be carefully considered. For Types I, II, and III amendments, the amendment process provides limited flexibility with sufficient justification to accommodate changes in growth patterns or projections that were not anticipated in Chapters 4 and 6. If the SSA Plan is regularly reviewed and updated every 5-10 years, then the need for Type I and Type II amendments in particular are lessened.

General Amendment Process

As reflected in the flowchart, all amendment requests follow the same general process, except Type IV minor amendments of less than one acre, which may skip Steps 3-7; see Policy 3.1.28.

Step 1: Application. 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, the Local Water Quality Advisory Committee, or SSA Plan Administrator. An application should only be submitted after authorization and action by the appropriate municipal decision-making body (e.g., Board/Council, Plan Commission).

Step 2: Staff Report. The Plan Administrator, in consultation with WDNR staff if needed, determines the completeness of an SSA Plan amendment application, including if additional information is needed. The SSA Plan Administrator will contact the applicant for clarification or more information, at the applicant's expense, as needed. The SSA Plan Administrator will also contact WDNR to discuss the proposed amendment. The Plan Administrator may require an in-person or virtual meeting with the applicant, WDNR staff, or other stakeholders prior to completing its staff report. Once an application is deemed complete, the Plan Administrator will review the application and, **within 30 days**, prepare a staff report considering the criteria later in this section along with any recommendations or suggested conditions and provide the staff report to the Water Quality Advisory Committee. For amendments involving multiple municipalities, the Plan Administrator may extend the timeline to **45 days** to allow for a discussion meeting and obtain input from the municipalities potentially impacted by the amendment.

As reflected in Policy 3.1.28, for Type IV minor amendments, the Plan Administrator 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 SSA Plan policies in Chapter 4, the SSA Plan Administrator may request an administrative review from WDNR, which has the discretion to skip Steps 3-6.

Step 3: Technical Committee Review. (Optional) The Local Water Quality Advisory Committee may designate a Technical Advisory Committee to review amendment applications and SSA Plan Administrator staff reports, then make an advisory recommendation to the Advisory



Committee. In such cases, the applicant is encouraged to be present at such meetings in order to answer questions. Technical Committee reviews should be properly noticed, public meetings, but do not offer an opportunity for public comment. The SSA Plan Administrator may collect additional information or revise its staff report as a result of the Technical Advisory Committee review.

Step 4: Public Hearing. Regardless of Step 3, **within 60 days** of the receipt of a complete staff report in Step 2, the Local Water Quality Advisory Committee will conduct a public hearing during which the Plan Administrator staff will present its report, the applicant will have an opportunity to present their request and answer questions, and an opportunity for public comment is provided.

The public hearing will be properly noticed in accordance with Plan Administrator policies and State Open Meetings Rules requirements, including an invitation for written public comments on the amendment. The public hearing notice will be a Class 1 notice published in the local official newspaper **at least 14 days** prior to the hearing. The notice shall also be posted and distributed **at least 14 days** prior to the meeting date to the following:

- Notice posted at the Plan Administrator’s 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 the Local Water Quality Advisory Committee or the Plan Administrator email lists
- E-mailed to the Plan Administrator local media list for the study area

For Type I, II, and III amendments, the applicant municipality must provide to the Plan Administrator 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, the Plan Administrator will distribute the public meeting notice by U.S. Mail to these landowners.

The notice shall invite written comment on the proposed plan amendment, which will be provided to the Advisory Committee and WDNR. Written comments must be sent to the Plan Administrator by U.S. Mail and received by the Plan Administrator prior to the public hearing during which public comment is invited.

Step 5: Advisory Committee Action. After consideration of the reports, and any public comments in Step 4, the Local Water Quality Advisory Committee shall evaluate the proposed amendment's consistency with specified amendment criteria later in this section and act upon amendment request during a public meeting **within 60 days** of being provided the staff report in Step 2. The Local Water Quality Advisory Committee's action is advisory to WDNR.

The Local Water Quality Advisory Committee may approve, approve with conditions, or deny the application. The applicant may request that the Local Water Quality Advisory Committee table the action if additional information is needed or to modify their request. Step 5 may occur during the same meeting of, but following, Step 4. **Within 15 days** following the Local Water Quality Advisory Committee decision, the Plan Administrator will provide all materials, public comments, and the Local Water Quality Advisory Committee's meeting minutes (or resolution) to WDNR for a final decision on the amendment request.

Step 6: Comments on Advisory Committee Action. Any person, organization, or governmental body in favor of, objecting to, or providing information on the decision of the Local Water Quality Advisory Committee may submit written comments to WDNR **within 30 days** after the Local Water Quality Advisory Committee's advisory decision in Step 5. This includes appeals as described in Chapter 9.6.

Step 7: WDNR Decision. The Plan Administrator will submit all amendment documentation to WDNR (see Amendment Submissions later in this section). 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 Local Water Quality Advisory Committee, policies and procedures of the Sewer Service Area Plan, and NR 121/NR 110 of the Wisconsin Administrative Code. WDNR will inform the applicant and the Plan Administrator of its decision on amendment requests **within 60 days** of the Local Water Quality Advisory Committee's decision.

It is important to remember that SSA Plan approvals are formal amendments to the State's Areawide Water Quality Management Plan. Any plan amendments, once approved by the Local Water Quality Advisory Committee are forwarded to the WDNR for administrative decision to update the State's AWQM Plan. These decisions must consider the requirements outlined in State Administrative Code. WDNR regularly transmits updates to USEPA for certification as an amendment to the State's WQM Plan.

Post-WDNR Approval: Following WDNR approval of an amendment, the Plan Administrator will modify the sewer service area map and track any changes. Once a SSA Plan amendment is approved, the Plan Administrator can commence with the review of any 208-conformance review applications related to the project, if needed.

Consideration of SSA Plan Amendments shall focus on consistency with the required policies in Chapter 7 and the criteria specific to each amendment type within Sections 9.4.1, 9.4.2, 9.4.3, & 9.4.4.

As a water quality management plan, 208-conformance and amendment reviews do not consider other aspects of planning, such as road safety, non-sewer utility capacity, farmland preservation, historical or cultural resources, etc.

Amendment Applications

An application for an amendment to the Sewer Service Plan must include:

- A cover letter or completed application form, requesting and describing the amendment with contact information, project name, project locations, etc. The cover letter or application form should briefly identify, include, or be accompanied by:
 - type(s) of amendment(s) being requested;
 - a map showing the geographic extent and acreages of the immediate and ultimate service area that will be served by a sanitary sewer extension or hook-up related to the amendment, if any;
 - existing and proposed land use, development density and planned/known intensive land disturbances, including related maps;
 - a justification of why the amendment is needed and reasonable (see Policies 3.1.3 & 3.1.4);
 - existing and proposed services for the area (e.g., water, sewer, roads), including the cost-effectiveness of the wastewater treatment solution (address Policy 2.1.8), a description of the proposed wastewater treatment solution for the service areas, including the length of any planned sanitary sewer extensions; and an assurance that adequate wastewater treatment capacity is available for the proposed development.
 - 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 or other regulating jurisdictions.
- All maps should be of sufficient detail to accurately identify boundaries.
- 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 boundary amendment requests, the application should:
 - Include maps, acreages, and a legal description of all areas to be added or deleted from the SSA boundary. For Type I amendments, this information must be provided for both the **sending areas** (areas being deleted from the SSA) and **receiving areas** (areas being added to the SSA).
 - 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. This must be completed **at least 14 days** prior to the public hearing.

- Include, if available, subdivision plats, construction sets, site plans, and ESA surveys/delineation.¹⁸ ESAs must be generally mapped in extent, including acreages, so that an estimated, developable acreage for all involved lands is included with the application; ESAs are unbuildable unless a Type IV ESA amendment is approved.
- For Type IV ESA amendments, the application should:
 - Include 1 set of construction/engineering plans showing utility connections and locations, including the planned footprint of any buildings or other intensive land disturbance.
 - Include maps and acreages of any known ESAs within the immediate and ultimate service areas as well as any potential or proposed disturbance of an ESA or any water quality impacts, including detailed maps and acreages showing the extent and nature of the ESA encroachment(s) for which the amendment is being requested.
 - Documentation that the amendment is reasonable and the encroachment could not be avoided (see Policies 3.1.3 & 3.1.4);
 - Include 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 Plan Administrator 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 application and staff report for a Type IV minor amendment is expected to be brief. A single application may be submitted for more than one type of amendment. The Plan Administrator or WDNR may request that the applicant provide additional studies or data needed to fully consider the potential impacts of the proposed amendment. See the sub-sections below for additional application guidance.

Plan Administrator's Amendment Submissions to WDNR

The Plan Administrator will submit, at a minimum, the following to WDNR for action on a proposed SSA Plan Amendment:

1. Cover letter or memo from the Plan Administrator noting the following:
 - Existing SSA Plan name/date and the amendment name/location/acreage
 - Type of action/amendment requested
 - Basis of the SSA amendment request
 - Timeline of key dates (e.g., application to Plan Administration, public hearing, local decision dates, consultations/submittal to WDNR).
2. Amendment application

¹⁸ Detailed maps and plans, such as construction sets and subdivision plats, are not typically required as part of a Type I, II, or III SSA Plan Amendment, but may assist with the amendment review. Instead, such documents are typically required as part of a 208-conformance review.

3. Staff Report with analysis of proposed action and recommendation(s)
4. List and documentation of Local Water Quality Advisory Committee and other public involvement, including related meetings conducted by local municipalities
5. Public notice for public hearing and Local Water Quality Advisory Committee meetings
6. Minutes and/or resolution by the Local Water Quality Advisory Committee
7. Other relevant information as required by the SSA Plan

Only a cover letter/memo, amendment application, and staff report are required for minor amendments and it is expected, in most instances, that these documents will be much briefer than a “full amendment” (See Policy 3.1.28).

Tracking & Reporting

As of April 2026, WDNR requires that amendment submission, reports, decisions, and other official SSA Plan-related actions be uploaded to their Surface Water Integrated Monitoring System (SWIMS) database; once uploaded, a link(s) to the uploaded document(s) should be emailed to WDNR water quality staff. Additional local tracking and records management are recommended. Tracking and reporting requirements may change over time

9.4.1 Type I Amendment (“Swap”). 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. If residential development is proposed, this "swap" requirement will keep the locally approved minimum average population or household density figures in Chapter 4.1 unchanged. A Type I Amendment application should include accurate maps and be very clear in defining which areas are being swapped. Any ESAs should be mapped and excluded from the acreages being swapped. Requests of this type should be submitted to the Administrator 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.

The Plan Administrator staff report and the review of the proposed amendment by the Water Quality Advisory Committee and WDNR shall be based on these criteria:

1. Cost-effectiveness of the proposed wastewater treatment solution (See Policy 2.1.8).
2. There will be no significant adverse water quality impact associated with providing sewer service to the area.
3. The proposed amendment is consistent with the required policies of this plan.
4. Existing or planned sewerage systems have sufficient capacity to treat projected flows.
5. The areas to be swapped are within 5% of the total developed/developable acreage, whichever is greater. (See Policy 1.1.5).

9.4.2 Type II Amendment (“Addition/Subtraction”). 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 (SSA) unless one or more of the following circumstances exist: (1) additional area is needed to accommodate unanticipated population growth; (2) a change in local population densities from the locally approved minimum average population or household density Chapter 4.1 have been approved by the local municipality; (3) failing on-site wastewater systems, and/or (4) the imminent development of a commercial/industrial area, with no residential growth, is proposed to be developed within three years.¹⁹ A Type II Amendment application must include population numbers, land use acreages, and other information to demonstrate that these three factors have been met. With WDNR concurrence, Type II Amendments may be considered on a community-by-community basis, including the forecasts and growth areas for each community specified in Chapters 4 and 6, rather than considering the acreage and circumstances for the SSA as a whole.²⁰

Requests of this type should be submitted to the Plan Administrator 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.

The Plan Administrator staff report and the review of the proposed amendment by the Water Quality Advisory Committee and WDNR shall be based on these criteria:

1. The extent to which the proposed amendment meets the four previous characteristics.
2. If the added area includes residential uses, identifying if a significant difference in the projected population and the actual population of the municipality exists.
3. Cost-effectiveness of the proposed wastewater treatment solution (See Policy 2.1.8).
4. There will be no significant adverse water quality impact associated with providing sewer service to the area.
5. The proposed amendment is consistent with the required policies of this plan.
6. Existing or planned sewerage systems have sufficient capacity to treat projected flows.

9.4.3 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 SSA Plan Study Area and outside the Sewer Service Area boundary that generates 3,000 gallons or more of septage per day. Further explanation of holding tank service areas is contained in Chapter 8 of this plan. A

¹⁹ For proposed commercial/industrial growth, the applicant must demonstrate to the satisfaction of the Plan Administrator and the Local Water Quality Advisory Committee that such development is imminent and will occur within three years.

²⁰ The 2026 Plan changes for Type II amendments were added due to local concerns with the accuracy of the latest Wisconsin Department of Administration population forecasts upon which the SSA growth acreages were determined.

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 SSA Plan Administrator and must include all previously described materials and documentation required for all SSA Plan amendments as well as the following:

1. A map of the proposed holding tank service area as well the identification of any existing holding tanks intersecting or within 1,000 feet of the 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. Narrative explaining that the proposed amendment is consistent with the policies and goals of this plan.

The SSA Plan Administrator will review the proposed amendment based on the information above and compliance with the policies and goals of this SSA Plan, including current requirements noted in Chapter 8.

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 subject to the policies and exceptions of this plan; an amendment will be allowable 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 review by the SSA Plan Administrator, the amendment must be reviewed by the Urban Area's Water Quality Advisory Committee, which will recommend approval or disapproval of the amendment request to WDNR. Following the Advisory Committee's action, the amendment request shall be submitted to WDNR for final approval.

9.4.4 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 (ESA). Essentially, a Type IV amendment removes the ESA acreage from the SSA Plan. The plan recognizes the possible conflict between development and preservation of ESAs, and this amendment is an attempt to allow both to co-exist.

Requests of this type should be submitted to the Plan Administrator by the city, village, or town in which the immediate service area is located. 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.

During the preparation of the staff report, the Plan Administrator and WDNR staff will cooperatively review and analyze the proposed amendment. **The Plan Administrator staff report and the review of the proposed amendment by the Water Quality Advisory Committee and WDNR shall be based on these criteria:**

1. The project is located within the sewer service area.
2. There will be no significant adverse water quality impact associated with the proposed intensive land disturbance.
3. The proposed amendment is consistent with the required policies of this plan.
4. The applicant has provided adequate documentation that no reasonable alternative exists to avoid the amendment. See Policies 3.1.3 and 3.1.4.
5. Documentation that all appropriate local, State, and Federal water quality-related permits and engineering studies (such as erosion control, stormwater management, wetland preservation, floodplain, etc.) have been or will be granted for the proposed development.

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 ESA 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 allows development of an ESA with minimal environmental impacts. To that end, the Plan Administrator or Local Water Quality Advisory Committee may recommend and WDNR may approve the amendment with specific conditions that must be met to ensure protection of the potentially affected water resources.

Once approved, the property owner shall record an affidavit or other legal document with the County Register of Deeds Office that documents the Type IV amendment with a graphic or map (e.g., a restrictive covenant, outlots, and/or notes on a certificate survey map and/or plat) that documents the extent of the approved ESA encroachment and the required protection of any other ESAs within the project area from encroachment by intensive land disturbance.

9.5 SEWER SERVICE AREA PLAN UPDATES

Sewer Service Area (SSA) Plan updates are facilitated by the WDNR-designated Local Planning Agency, typically with financial support from WDNR and/or sewer municipalities within the study area. A plan update may be limited to certain chapters or aspects of the SSA Plan and may (or may not) include a revision to the study (planning) area. A limited change to the SSA boundary is addressed through a Type I or II amendment and not a plan update.

NR 121 calls for sewer service area plan status review and a possible plan update every five years. At a minimum, it is recommended that the growth projections and SSA boundary be revisited following the release of updated Wisconsin Department of Administration population projections based on the latest Federal decennial census data. Frequent SSA plan amendments or the execution of intergovernmental boundary agreements that conflict with SSA boundary 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. See Policy 1.1.9.

Similar to the steps for considering plan amendments, a plan update requires:

- Discussion and advisory review by Local Water Quality Advisory Committee.
- A public hearing on the draft plan update conducted by the Local Planning Agency with a Class I public hearing notice published **at least 14 days** prior to the hearing. The notice shall identify where the updated plan is available online for download. The notice shall invite written comment on the draft plan, which will be provided to the Advisory Committee and WDNR. Written comments shall be sent by U.S. Mail and received by the Plan Administrator prior to the public hearing during which public comment is invited. All municipalities within the Study Area shall receive a copy of the notice.
- Advisory action by the Local Water Quality Advisory Committee.
- WDNR approval of the updated SSA Plan, potentially with revisions.

Plan updates involving boundary changes do not require individual notification of or mailings to landowners.

9.6 APPEALS OF SEWER SERVICE AREA PLAN DECISIONS

Administrative Appeals. An action or administrative decision made by the Plan Administrator or a municipality in the administration of this plan may be appealed to the Local Water Quality Advisory Committee Policy by a party directly impacted by the decision. The Local Water Quality Advisory Committee shall consider all available facts provided by the administrative entity and appealing party, then make a recommendation to WDNR **within 60 days** of the receipt of the appeal, unless the appealing party waives this timeframe. 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. Copies of such appeals should be provided to the Plan Administrator for local tracking purposes. WDNR or WisDSPS shall grant, conditionally grant, deny, or take other appropriate action on the appeal.

Appeals of Amendments and Other Plan Actions. Since the actions of the Plan Administrator and the Local Water Quality Advisory Committee regarding a plan amendment are advisory, any such appeal of a plan amendment decision by the Plan Administrator or the Local Water Quality Advisory Committee should be directed to WDNR **within 15 days** of the decision. Appeals of any other actions under this plan should also be directed to the 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.

Copies of such appeals should be provided to the Plan Administrator for local tracking purposes.

Appendix A:

**Public Hearing Notice
on Draft SSA Plan Update**

NOTICE OF PUBLIC HEARING
on the
Update of the Chippewa Falls-Eau Claire Urban Sewer Service Area Plan for 2045

Notice is hereby given that the Chippewa-Eau Claire Metropolitan Planning Organization (MPO) will hold a public hearing to take testimony concerning the proposed update of the Chippewa Falls-Eau Claire Urban Sewer Service Area Plan for 2045. The public hearing will be conducted on September 30, 2026, immediately following a brief presentation starting at 5:30 p.m. in the Eau Claire Room on the second floor of Building D2, Banbury Place, at 800 Wisconsin Street, Eau Claire, Wisconsin.

In accordance with the Federal Water Pollution Control Act Amendments of 1972 (PL92-500) as well as NR 110 and NR 121 of the Wisconsin Administrative Code, the Sewer Service Area Plan anticipates the Chippewa Falls-Eau Claire urban area's future needs for wastewater treatment to help protect the urban area from adverse water quality impacts through a cost-effective and environmentally sound 20-year sewerage system growth plan. The public can access the final draft of the plan at the West Central Wisconsin Regional Planning Commission (WCWRPC) website at <https://www.wcwrpc.org/chippewa-eauclaire-ssa-update>.

For those unable to attend the public hearing, written comments should be sent to WCWRPC c/o Chris Straight, 800 Wisconsin Street, Bldg D2, Mail Box 9, Eau Claire, WI 54703 or emailed to chris@wcwrpc.org. All correspondence will become part of the public record. Written comments must be received by WCWRPC no later than 12:00 PM on September 25, 2026. The Chippewa-Eau Claire MPO will consider any written comments regarding the draft plan update following the public hearing and prior to advisory recommendation to the Wisconsin Department of Natural Resources on the plan.

For further information or questions, contact Chris Straight, WCWRPC, at 715-836-2918 or chris@wcwrpc.org.

Dated: September 3, 2026

Published: September 10, 2026

Appendix B:

Local Water Quality Advisory Committee Action on SSA Plan Update

**Chippewa-Eau Claire MPO
Resolution No. 26-10**

UPDATE OF THE CHIPPEWA FALLS-EAU CLAIRE URBAN SEWER SERVICE AREA PLAN FOR 2045

WHEREAS, a Sewer Service Area Plan was adopted in 1990 and was last fully updated in 2007 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 2045* (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) Policy Council serves as the Local Water Quality Advisory Committee that acts in an advisory role to the Wisconsin Department of Natural Resources (WDNR) in matters concerning the preparation and implementation of the SSA Plan; and

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

WHEREAS, beginning in July 2024, WCWRPC has been meeting with a newly formed Water Quality Management Technical Advisory Committee representing units of government within the urban area to fully update the SSA Plan and the Committee has provided advisory recommendations to the MPO Policy Council, and

WHEREAS, the updated SSA Plan considers and incorporates growth forecasts developed by the Wisconsin Department of Transportation that are consistent with current Wisconsin Department of Administration population projections and have been adopted by the MPO as part of the urban area's long-range transportation plan; and

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

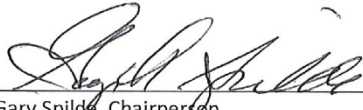
NOW, THEREFORE BE IT RESOLVED BY THE CHIPPEWA-EAU CLAIRE METROPOLITAN PLANNING ORGANIZATION (MPO) POLICY COUNCIL:

- i. That the Chippewa-Eau Claire MPO Policy Council recommends to WDNR the approval of the *Chippewa Falls-Eau Claire Sewer Service Area Plan for 2045* update; 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 SSA Plan are in effect, including needed local assistance in plan implementation and reporting.

Adopted this 30th day of September, 2026

APPROVED:



Gary Spilge, Chairperson
Chippewa-Eau Claire
Metropolitan Planning Organization

ATTEST:



Eric Anderson, MPO Secretary
Chippewa-Eau Claire
Metropolitan Planning Organization