ENVIRONMENTAL ANALYSIS AND DECISION ON THE NEED
FOR AN ENVIRONMENTAL IMPACT STATEMENT (EIS)
Form 1600-8 Rev. 6-2001

Department of Natural Resources (DNR)

Region or Bureau: Bureau of Watershed Management

Type List Designation: 150.03 (6)(b).5.a

NOTE TO REVIEWERS: This document is a DNR environmental analysis that evaluates probable environmental effects and decides on the need for an EIS. The attached analysis includes a description of the proposal and the affected environment. The DNR has reviewed the attachments and, upon certification, accepts responsibility for their scope and content to fulfill requirements in s. NR 150.22, Wis. Adm. Code. Your comments should address completeness, accuracy or the EIS decision. For your comments to be considered, they must be received by the contact person before 4:30 p.m., _____, 2007.

Contact Person: Tom Gilbert

Title: Wastewater Facility Planning Coordinator

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Madison, WI 53707-7921

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E-mail Address
tom.gilbert@dnr.state.wi.us

Applicant: West Central Wisconsin Regional Planning Commission (WCWRPC). The WCWRPC utilized the existing Chippewa-Eau Claire Metropolitan Planning Organization (MPO) Policy Council to oversee the preparation of the plan update. In addition, the Policy Council appointed a Water Quality Management Technical Advisory Committee to assist in the development of the technical aspects of the plan update. The Policy Council and Water Quality Committee's membership consisted of representations from local municipalities.

Title of Proposal: Revision of the Chippewa Falls/Eau Claire Urban Service Area Plan for 2025

Location: As shown in **Attachment 1** there are eight separate areas proposed to be added to the existing Chippewa Falls/Eau Claire Sewer Service Area (SSA), and two ares which will be removed. The net additional area encompasses 7,039 acres. These areas are generally located in the urban, or urban fringe, areas associated with the Cities of Eau Claire and Chippewa Falls in Eau Claire and Chippewa Counties.

PROJECT SUMMARY

1. Overview of the proposal:

The basic purpose of the proposed amendment is to include within the planned Chippewa Falls/Eau Claire sewer service area certain lands located immediately adjacent to, but outside, the currently adopted sewer service area.

Sewer service area plans serve as a basis for Wisconsin Department of Natural Resources (WDNR) approval of state and federal funding for the planning and construction of wastewater treatment and sewerage facilities. They also serve as a basis for WDNR approval of locally proposed sanitary sewer extensions and Department of Commerce approval of private interceptor or certain building sewers. In addition, because the plans also identify environmentally sensitive areas, they serve as a guide for environmental permit decisions.

The sewer service area plans are intended to be an important planning and development guide for local communities. The plans provide the following functions:

- Identify wastewater treatment and collection system needs for sewer service areas for a 20 or more year

planning period;
- Forecast the amount and location of future urban development areas;
- Identify environmentally sensitive areas which should be preserved;
- Contain land use development forecasts and recommendations for implementing wastewater treatment and collection plans for individual sewer service areas;
- Inform developers and property owners of community policies and restrictions before development is proposed;
- Establish "holding tank" service area for isolated and rural special uses.

The proposed amended SSA plan is essentially a planning document to serve as a guide for development and sewerage system expansion. As future specific projects for development or sewerage system expansion are proposed they will be subject to state, federal and local regulations and permitting processes. These processes may include specific review and analysis under the Wisconsin Environmental Policy Act (WEPA) in accordance with chapter NR 150, Wis. Adm. Code.

2. Documents, plans, studies or memos on which this DNR review is based:

Chippewa Falls/Eau Claire Urban Service Area Plan for 2025 – Final Draft #2 - MPO Adoption on 5/3/2006 and revised 3/29/2007.

Supplemental information for the Chippewa Falls/Eau Claire Urban Service Area Plan for 2025, prepared by West Central Wisconsin Regional Planning Commission 12/7/2006.

3. Sewer Service Area Descriptions

With the inclusion of the proposed 7,039 acres of expansion area, the year 2025 Sewer Service Area is shown in **Attachment 2**. In total, it encompasses 65,264 acres, which includes 26,786 acres of undeveloped land as of January 1, 2005. The following municipal entities are located, or partially located, in the SSA.

In Chippewa County: City of Chippewa Falls, City of Eau Claire, Village of Lake Hallie, Town of Eagle point, Town of Lafayette, Town of Tilden, and Town of Wheaton
In Eau Claire County: City of Altoona, City of Eau Claire, Town of Brunswick, Town of Seymour, Town of Union and Town of Washington.

DNR EVALUATION OF PROJECT SIGNIFICANCE

4. Environmental Effects and Their Significance

A description of environmental resources and effects is provided in **Attachment 3**, which consists of Parts 3.1, 3.2, and 3.3 from the Chippewa Falls/Eau Claire Urban Service Area Plan for 2025 – Final Draft #2. This information covers the description of water resources, point and non-point source impacts, groundwater impacts, effects on geographically scarce resources, and other miscellaneous effects.

The current land uses and environmental features in the amendment addition areas are shown in **Attachments 1 and 4.** The vacant/undeveloped areas in these ares are described in greater detail in **Attachment 4**.

Extent to which the primary and secondary environmental effects listed in the supporting documents are reversible.

The loss of prime farmland and other agricultural land and the benefit it provides for wildlife is considered irreversible. Other typical effects of urbanization including air and noise pollution, traffic congestion, and waste generation are considered relatively irreversible. Adverse surface water and groundwater effects are technically reversible but this may not be practically achievable based on specific local circumstances.

5. Significance of Cumulative Effects

The cumulative effects of providing sewer and other urban services to commercial or industrial development in the amendment areas will include increased traffic, noise, air pollution and potentially stormwater runoff. Existing land in agricultural production will be lost and the rural character of the area will be converted more to an urban character. The development enabled by the SSA expansion is expected to enhance the local economy and provide jobs.

If there were insufficient industrial and commercial lands within the sewer service area to meet the demand, it is possible that development would occur with onsite sewage disposal systems. Within the relatively high densities of urban area development, sanitary sewer generally has less adverse impact on the environment than numerous onsite sewage systems, particularly as the onsite systems become old. The delineation and protection of environmentally sensitive areas through the sewer service area planning process is a positive secondary impact. The WDNR Facility Planning and Wastewater Permitting Programs oversee the maintenance of wastewater treatment standards and capacity. The Regional Water Quality Management Plan is intended to promote efficient, orderly and planned land use development patterns which allow for logical, cost-effective sewered development that incorporates sound environmental management practices.

6. Significance of Risk

The impacts to surface water, groundwater, and environmentally significant areas associated with urbanization will be controlled and mitigated to an extent such that it is anticipated water quality protection will be maintained. Sewerage systems have some potential for failure but emergency response provisions would be available and the reliability of sewer service is generally considered quite high and protective of public health and safety.

Wetlands and stream corridors represent the major features within the subject environmentally sensitive areas. All wetlands within the boundary of the proposed amendment to the sewer service area should be protected through either the implementation of the sewer service area plan itself or the Army Corps 404 wetland permit process, water quality standards for wetlands (Wis. Adm. Code, NR 103), and Wisconsin Administrative Code NR 115, the shoreland wetland program for unincorporated areas which are administered locally by counties.

Stormwater management plan development is required for any construction site activity disturbing one or more acres of land, pursuant to Chapter NR 216, Wisconsin Administrative Code.

7. Significance of Precedent

The approval of the SSA plan amendment would provide direction for local community growth but does not foreclose future options. Sewer service area plans allow amendment procedures to respond to new information and demands relative to providing water quality protection in a development setting. Chapter NR 121 also requires periodic SSA Plan updates.

8. Significance of Controversy over Environmental Effects

The Chippewa-Eau Claire Metropolitan Planning Organization held a public hearing for the proposed plan amendment on May 3, 2006 in the City of Eau Claire. No public objections or concerns to the proposed amendment were expressed at the hearing. There is no known controversy with the environmental effects of the proposed amendment.

ALTERNATIVES

9. Alternatives that would decrease or eliminate adverse environmental effects

Alternatives to the expansion of the sewer service area (SSA) at this location would be to increase density within the current SSA, or to expand the SSA in another location, or to provide a lesser, or no, expansion of the SSA. The no

expansion alternative would promote development using private onsite wastewater treatment systems. This might be implemented in some areas but the overall density of development and estimated wastewater flows are such that it has been determined to be cost-effective and environmentally beneficial to extend public sewer service. Onsite systems would discharge into local groundwater and potential groundwater impacts associated with this have not been specifically determined. The areawide water quality management planning process does not provide for a "no-growth" sewer service area if the conditions, standards, and requirements of expanding the service area are addressed.

Providing a smaller expansion of the sewer service area might serve to more effectively promote development located adjacent to the sewered urban fringe, but other factors drive development decisions to a great extent such that is uncertain if the service area boundaries would alter development patterns to any significant extent. Regardless of the service area boundaries, in-filling along the sewer urban fringe is typically most economical and promoted by other factors.

Expansion of the service areas in other locations was not considered because a primary factor for including areas was the plans, or potential, for development. The status of plans for development for each added area are described in **Attachment 4**. The added areas are adjacent to the existing SSA and generally represent a reasonable and logical extension of the service area.

Increasing density within the current SSA as an alternative to expansion is not feasible based on the forecast population and density standards adopted under local comprehensive or land use planning. The SSA process as defined under NR 121, Wis. Adm. Code, allows for the use of local municipal adopted population density standards.

Other alternatives with regard to serving the area by connecting to a different sewerage system are not considered cost-effective or feasible.

Alternative methods of mitigation for non-point or other construction related impacts may be considered on a project specific basis as developments occur.

SUMMARY OF ISSUE IDENTIFICATION ACTIVITIES

10. List agencies, citizen groups and individuals contacted regarding the project (include DNR personnel and title) and summarize public contacts, completed or proposed.

Date	Contact	Comment Summary
5/21/2007	Tom Gilbert - DNR – Wastewater Facility Planning Coordinator – WT	Prepared EA
5/2007	Chris Straight - WCWRPC	Provided supplemental information for EA

11. ☐ On-site inspection or past experience with site by evaluator.

Not Applicable

Project Name: Revision of the Chippewa Falls/Eau Claire Urban Service Area Plan for 2025 Chippewa & Eau Claire Counties

DECISION (This decision is not final until certified by the appropriate authority)

In accordance with s. 1.11, Stats., and Ch. NR 150, Adm. Code, the Department is authorized and required to determine whether it has complied with s.1.11, Stats., and Ch. NR 150, Wis. Adm. Code.

Complete either A or B below:

A. EIS Process Not Required ☒

The attached analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion, therefore, an environmental impact statement is not required prior to final action by the Department.

B. Major Action Requiring the Full EIS Process ☐

The proposal is of such magnitude and complexity with such considerable and important impacts on the quality of the human environment that it constitutes a major action significantly affecting the quality of the human environment.

Signature of Evaluator	Date Signed
Thomas A. Miller	7-5-07

Number of responses to news release or other notice: None

Certified to be in compliance with WEPA	
Environmental Analysis and Liaison Program Staff	Date Signed
[signature]	07/05/2007

NOTICE OF APPEAL RIGHTS

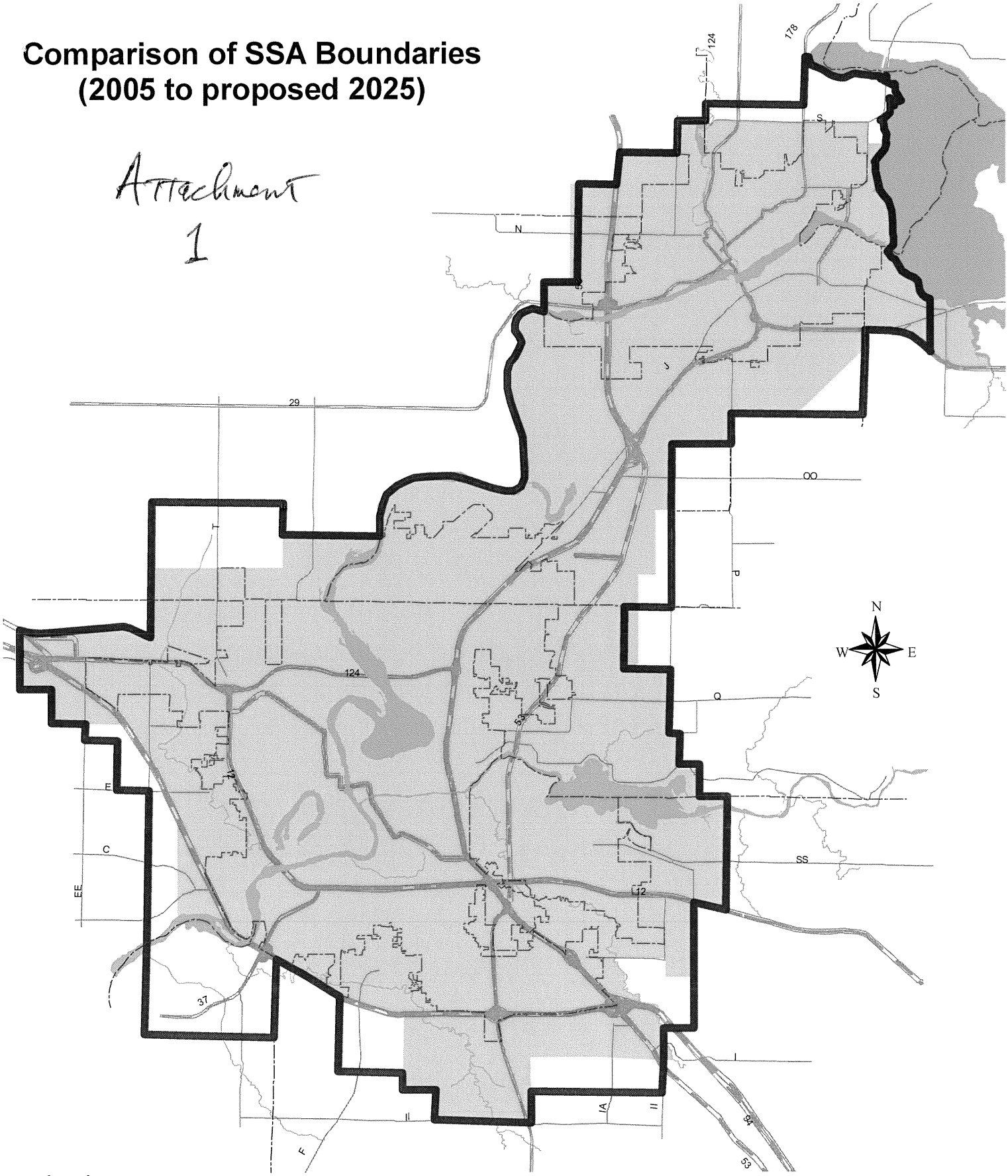
If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

For judicial review of a decision pursuant to sections 227.52 and 227.53, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

This notice is provided pursuant to section 227.48(2), Stats.

Comparison of SSA Boundaries (2005 to proposed 2025)

Attachment 1



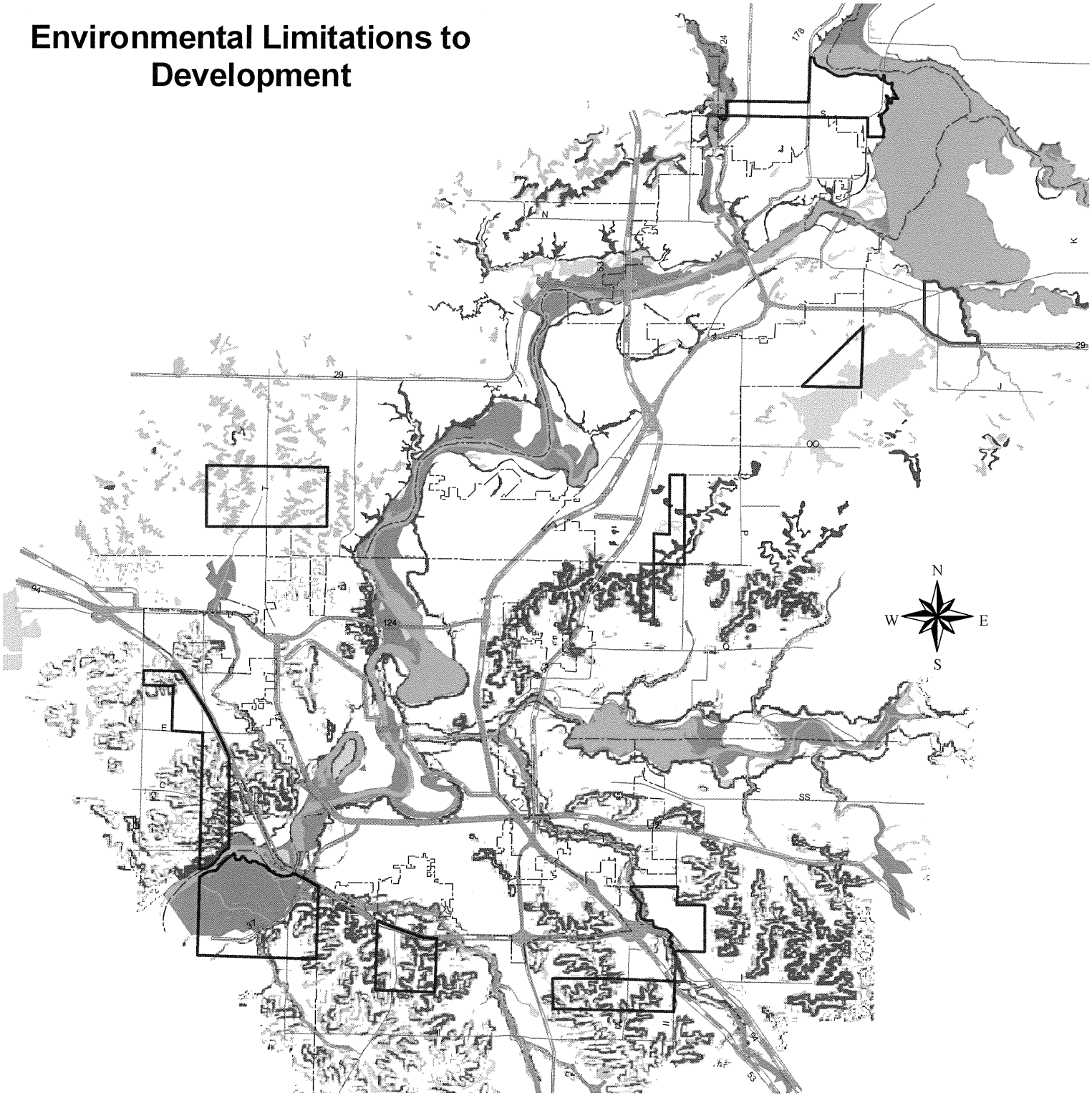
Proposed SSA Boundary -- 2025

2005 Sewer Service Area

Municipal Limits

West Central Wisconsin Regional Planning Commission

Environmental Limitations to Development



Proposed Additions to 2025 SSA

Proposed Subtractions to 2025 SSA

Environmentally Sensitive Areas

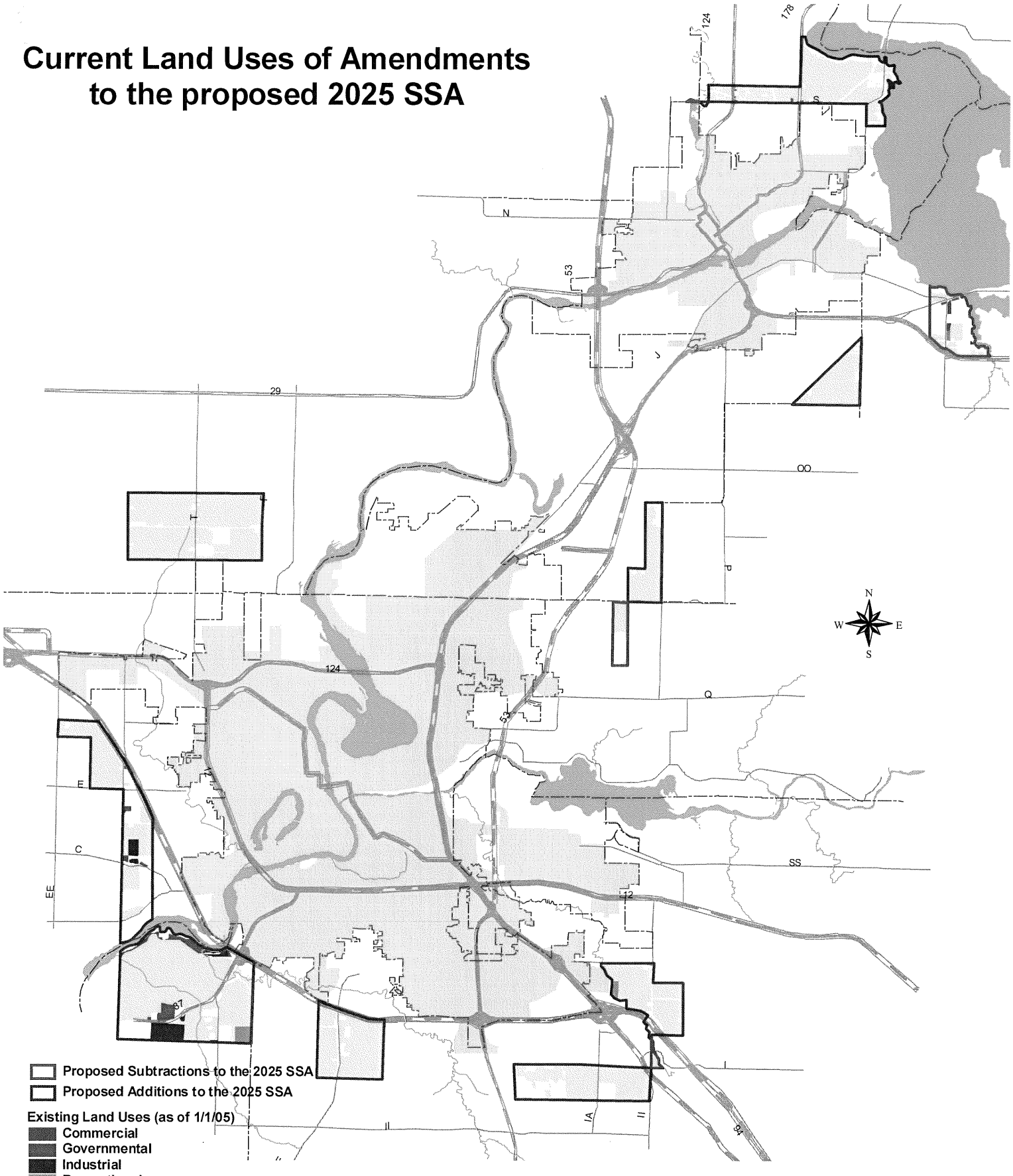
- 13 to 20% slope
- >20% slope
- Floodplain
- Wetlands and Other (e.g., small ponds)
- Surface Waters

Municipal Boundaries (as of 1/1/05)

West Central Wisconsin Regional Planning Commission

12/07/06

Current Land Uses of Amendments to the proposed 2025 SSA



Proposed Subtractions to the 2025 SSA

Proposed Additions to the 2025 SSA

Existing Land Uses (as of 1/1/05)

- Commercial
- Governmental
- Industrial
- Recreational
- Residential
- Vacant/Undeveloped
- Surface Waters

Approx. Sewered Areas (as of 1/1/05)

Municipal Boundaries (as of 1/1/05)

West Central Wisconsin Regional Planning Commission

12/07/06

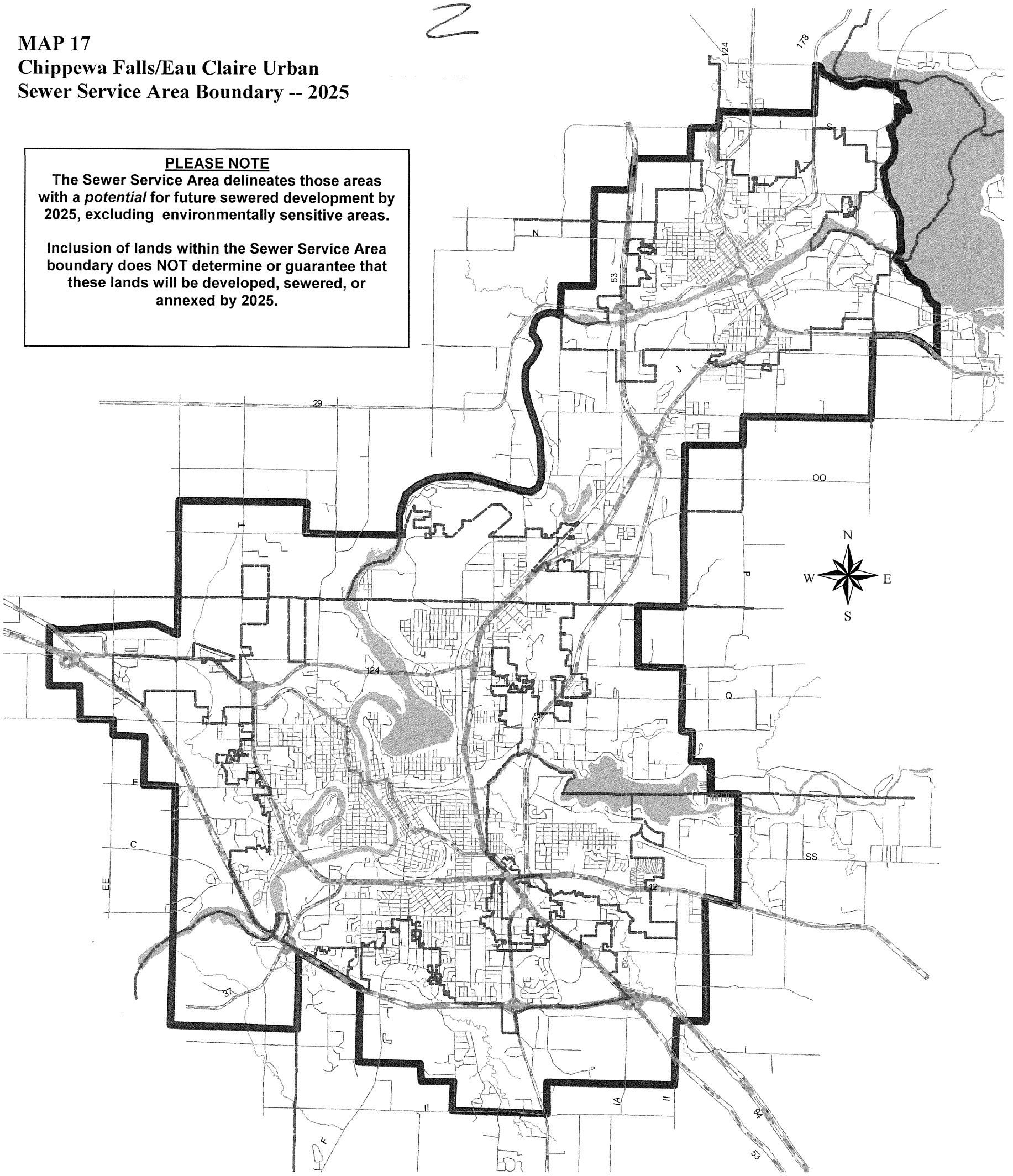
Attachment 2

MAP 17
Chippewa Falls/Eau Claire Urban Sewer Service Area Boundary -- 2025

PLEASE NOTE

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

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



Sewer Service Area Boundary - 2025
Municipal Boundaries

West Central Wisconsin Regional Planning Commission

CHAPTER 3 –
SEWER SERVICE AREA DELINEATION

3.1 PLANNING PROCESS

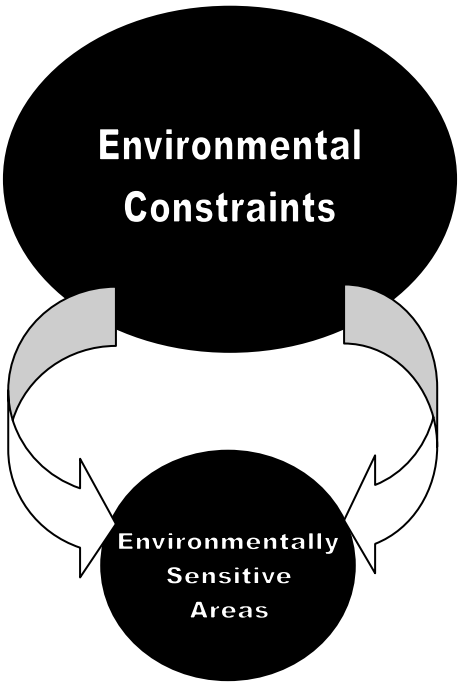
To delineate the sewer service area boundary, four primary factors need to be considered:

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

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

3.2 DELINEATION OF ENVIRONMENTAL CONSTRAINTS OR LIMITING LOCAL CONDITIONS

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



Environmental constraints are potentially limiting conditions to development or environmental features which could benefit from protective measures. Environmental constraints may include, but are not limited to: wetlands, shorelands, floodplains, steep slopes, highly erodible soils, bedrock outcrops, other limiting soil types, groundwater recharge areas, wellhead protection areas, prime farmlands, unique

or threatened natural resources, parks, and sites of special historical or cultural significance.

While all environmental constraints should be considered during the planning process, not every constraint may constitute an environmentally sensitive area which should be excluded from the sewer service area. And in some instances, sanitary sewer service may be preferred as a protective measure for an environmental feature or constraint.

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

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

- wetlands
- shorelands, using WisDNR definitions
- floodplains
- steep slopes
- natural areas and endangered habitats
- parks and recreation areas
- trout streams
- prime farmlands
- wellhead protection zones

3.2.1 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 (NR 103, Wisconsin Administrative Code). Wetlands may be seasonal or permanent and are commonly referred to as swamps, marshes, or bogs.

Wetland areas serve as groundwater recharge zones, as water storage areas during flooding events, and also as a habitat for a variety of plants and animals. Wetlands act like a sieve, filtering out silts before they can enter streams and lakes. Particular attention must be given wetlands within shorelands to assure protection from development. Activities such as flooding, draining, ditching, excavating and building are all regulated in wetlands. The Wisconsin Department of Natural Resources' (WisDNR) guidelines for sewer service area planning state that all wetlands should be identified as environmental constraints and be excluded from local sanitary sewer areas. The WisDNR guidelines offer additional direction for the evaluation of plans and plan amendments which would

impact a wetland. Wisconsin Wetland Inventory maps and 1"=400' scale aerial photographs were used to delineate all regulated wetlands within the planning area as shown in Map 4.

MAP 4
Wetlands

3.2.2 Floodplains

A floodplain is typically an area of relatively flat land on either side of a water body covered by water during a regional (100-year) flood event. It contains layers of sediments deposited by the river or lake during floods and encompasses both the floodway and flood fringe. The floodway is the main channel of the river and the adjoining land which are required to carry the main flow of a 100-year flood event. The flood fringe is that part of the floodplain outside the floodway which plays a water storage role during a flood event, but water depth and velocity is generally much lower than compared with the floodway.

Floodplains play an important role in filtering stormwater before it reaches surface water and by removing pollutants and debris from inland river waters during a flood event. Floodplains also offer important water storage areas during flood events to help reduce the impacts of flooding downstream.

Floodplain zoning is required to be implemented by counties, cities and villages by Wisconsin Statute 87.30(1); and the WisDNR will not approve a sewer service plan which is inconsistent with local floodplain ordinances. The purpose of Wisconsin Administrative Code NR116, Floodplain Management Program, is the protection of property and public investments from the effects of flooding. Federal Emergency Management Agency Flood Insurance Rate Maps (FIRMs) identify the 100-year floodplain and were used to delineate flood hazard areas within the planning area. These are shown on Map 5 on the following page.

Flood hazard areas are prevalent throughout the planning area, though many local governments question the accuracy of the FEMA FIRM maps. Variations in the width of the flood hazard zones are common due to topography and water volumes. FEMA and WisDNR are currently in the process of updating the FIRM maps for Wisconsin, though this update will not be complete for the planning area prior to completion of this plan.

In the planning area, there is considerable existing development within 100-year floodplains. The largest concentrations of existing floodplain development lie along the Chippewa River in downtown Eau Claire, in downtown Chippewa Falls, and in the Village of Lake Hallie. A considerable amount of potential floodplain development has also occurred along Lowes Creek in the Towns of Washington and Pleasant Valley. However, local topography may effectively minimize the risk of flooding to structures in

many of these areas. Flooding for all communities in the planning area has been covered by natural hazards or flood mitigation plans which encourage restrictions on future floodplain development. Area counties and communities have limited future development within floodplains through ordinances.

Due to the inherent risks to development in floodplain areas, the WisDNR guidelines for sewer service area planning recommend that floodplains should be excluded from local sewer service areas. In particular, the guidelines recommend that floodways not be included in the sewer service area, except in cases where development already exists. The WisDNR guidelines also state that amendments or plans which result in a reduction of the floodwater conveyance capacity should be denied unless remedial actions (in conformance with NR 116) are identified and approved. Amendments or plans which result in a reduction of storm or flood water storage should also be avoided or remedial actions identified.

MAP 5
Floodplains

3.2.3 Shoreland Zoning

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

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

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

3.2.4 Steep Slopes

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).

Steep slopes are considered, in this plan and by the WisDNR, to be any area of 12% or greater slope and consisting of any soil type. Bare ground on slopes 12% or greater are considered vulnerable to soil erosion, depending on the characteristics of the soil type and site. Soil erosion on slopes 12% to 20% is often manageable with good practices. The WisDNR discourages development of slopes greater than 20% since they are more prone to erosion without more intensive or engineered best management practices and erosion control planning (e.g., retaining walls, stormwater management systems, terracing).

Any development on these slopes could result in high construction costs and severe erosion with resultant negative impacts to surface waters. Therefore, development on steep slopes should be discouraged. The WisDNR guidance goes on to specify that sewer service area plans should exclude steep slopes greater than 12%, which are near a stream, from the sanitary sewer service.

Any amendments to allow development on steep slopes must consider direct runoff into streams or rivers and must follow locally approved construction erosion control ordinances and the institution of best management practices to control on-site runoff. Amendments or plans which are inconsistent with local erosion control ordinances or for sewered development on steep slopes which would result in direct run-off into a stream should be prohibited.

One method of identifying the steep slopes within the planning area is locating those slopes classified as having a severe or very severe erosion hazard potential (category D through F) by the Natural Resources Conservation Service. Topographic mapping and digital elevation modeling can also be used to identify steep slopes. The steep slopes shown on Map 6 on the following page were identified using a combination of these tools. In the implementation of this plan however, each property and proposal should be evaluated on a case-by-case basis to determine the extent of any steep slopes.

The definition and regulation of steep slopes by the communities within the planning area vary and are summarized below:

Chippewa County & Chippewa Falls -- steep slopes regulated in shoreland areas only

Eau Claire County – development prohibited on slopes greater than 6% in shorelands; subdivision plats must identify all slopes of 20% or greater, and development of these areas is discouraged

City of Eau Claire – slopes 20+% require engineered management practices

City of Altoona – slopes 20+% must be identified on site plans

Town of Union – discourages development on slopes 12+% in its land division regulations

Other – varies in community plans, with most towns falling under their respective county

Within the 1990 sewer service area 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. The plan further delineated all areas of 20% or greater slope as environmentally sensitive areas which should be excluded from intensive urban use. Under the existing plan, sewer extensions on slopes greater than 20% within the sewer service area require a Type IV plan amendment and an erosion control plan which are reviewed on a case-by-case basis to ensure that there will be no significant adverse water quality and/or environmental impacts.

MAP 6
Steep Slopes

3.2.5 State Natural Areas and Endangered Habitats

The WisDNR Bureau of Endangered Resources conducts data searches for natural areas and endangered plants and animals and maintains the Wisconsin Natural Heritage Inventory (NHI). The NHI program focuses on locating and documenting occurrences of rare species and natural communities, including state and federal endangered and threatened species. The Bureau urges that special notice be taken to protect any and all endangered resources from development.

Both aquatic and terrestrial occurrences of rare, threatened, or endangered plant and animal species and habitats have been found throughout much of the planning area as shown on Maps 7 and 8 on the following pages produced by the Wisconsin Department of Natural Resources using NHI data. Such occurrences have been identified for large portions of the urban area, including the majority of the City of Eau Claire and City of Altoona as well as much of the Village of Lake Hallie. Potential aquatic occurrences of rare species occur throughout the lengths of the Chippewa and Eau Claire Rivers within the planning area. Locations of the endangered resources can change and a full inventory of existing locations is not readily available, so each development project should be analyzed on a case-by-case basis.

Only one State-designated natural area—Putnam Park Natural Area—exists in the planning area. The 105-acre Putnam Park Natural Area is located within the City of Eau Claire and is home to one State-designated threatened plant species. Located east from

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

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

MAP 7
Chippewa County Rare Species & Natural Communities

MAP 8
Eau Claire County Rare Species & Natural Communities

3.2.6 Parks and Recreation Areas

Parks and recreation areas are important environmental assets to local communities but can vary greatly in use, size, recreational amenities, and natural features. The largest park in the planning area is the 1,062-acre Lake Wissota State Park, east of Lake Wissota in the Town of Anson.

Though only Putnam Park has been officially designated as a State Natural Area, there are other recreation areas and open spaces scattered throughout the planning area which are important environmental features which may compel or necessitate local protection. Such conservancy and passive recreation locations include:

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

Town of Washington Conservancy Area (Town of Washington)

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

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

3.2.7 Trout Streams

Map 9 on the following page shows the currently designated trout streams in the planning area. Portions of two Class 1 trout streams (Trout Creek and Beaver Creek) are located in Chippewa County in the Town of Wheaton. Portions of six trout streams are located in Eau Claire County, varying from Class 1 to Class 3. The different trout stream classes are defined below:

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

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

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

Trout fishing is an intimate recreational activity with avid participation among many anglers. Over the past ten years, about 135,000 inland trout stamps have been sold in Wisconsin annually. Because brook and rainbow trout require cold, clear waters with silt-free bottoms, their presence is also considered an indicator of good water quality and

adequate water quantity. Trout habitat can degrade due to numerous factors such as bank and upland soil erosion, loss of riparian vegetation, water diversion, logging and mining activities, and point and non–point source pollution from municipal development and agriculture. In addition, construction of dams, road crossings, and other structures impede the ability of rainbow trout to migrate upstream and down-stream, which is critical to successful completion of their life cycles.

MAP 9
Trout Streams
(within the sewer service planning area)

3.2.8 Prime Farmlands

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

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

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

Soils that fall into classes I, II, and III of the Natural Resources Conservation Services capability unit classification system are usually considered prime agricultural lands. These prime farmlands in the planning area are considerable, especially north and west of Chippewa River as shown on Map 10 on the following page. Due to the hilly topography and soil types found throughout much of the area, large portions of the existing farmland is used for dairy and pasture rather than row crops.

MAP 10
Prime Farmlands

3.2.9 Wellhead Protection and Groundwater Recharge Areas

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

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

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

3.2.10 Historical Resources

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

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

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

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

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

Distribution of AHI Properties

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

3.3 WATER QUALITY ASSESSMENT

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

> "*Inventory and discuss the areas contributing to local adverse water quality impacts including industrial, agricultural and other pollutant sources. Review applicable local priority watershed reports, basin plans, wellhead protection plans, wastewater facility plans and local knowledge for pollutant factors.*[1]"

The guidance also states that discussion "should" be included in the sewer service area plan on local stormwater management and erosion control issues, plans, ordinances, and any related recommendations.

The development of sewer service area plans for urban areas is mandated to maintain compliance with the Federal Water Pollution Contact Act Amendment (P.L. 92-500) in 1972 which

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

established Areawide Water Quality Management Planning requirements under Section 208. As these titles suggest, the protection of water quality is an inherent goal of this planning process; and a review of local water quality issues and programs is necessary. The assessment provided here is an overview, and the reader should refer to "The State of Lower Chippewa River Basin" report prepared in 2001 by the Wisconsin Department of Natural Resources for a more detailed discussion of area water quality issues.

3.3.1 Point Source Water Quality Impacts

A point source is a stationary location or fixed facility from which pollutants are discharged or emitted (e.g., smokestack, pipe). Potential point sources for water quality pollution in the planning area are numerous. Map 11 at the end of this sub-section shows the water resources and the locations of the primary outfall points and structures in the planning area, such as wastewater treatment plant discharge points.

The WisDNR Bureau for Remediation and Redevelopment Tracking System (BRRTS) identifies 1,066 contaminated sites, including spills, leaking underground storage tanks, and Superfund sites, in the Cities of Eau Claire, Chippewa Falls, and Altoona. Spills and leaking underground storage tanks are the most common causes of contamination in the three cities, constituting 457 (43%) and 339 (32%) of the database entries respectively.

There are five sites within the planning area which are listed in the Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) database as Superfund sites by the Federal Environmental Protection Agency due to contamination which poses a risk to human health and/or the environment. Three of these sites have been remediated and may be removed from the list in the future. Groundwater contamination from volatile organic compounds (VOCs) has been identified at the other two sites, National Presto Industries, Inc. and the Eau Claire Municipal Well Fields; and both have been designated as Superfund sites and are being monitored. According to the CERCLIS database, there is a "direct relationship between the contaminants at the [Presto Industries] site and those found at the Eau Claire Municipal Well Field."[2] VOC's are a group of commonly used chemicals found in fuels, degreasers, solvents, cosmetics, drugs, and dry cleaning solution. At both sites, under current conditions, potential or actual human exposures are under control. The City of Eau Claire municipal water supply is monitored closely, and there have been no violations of Clean Water Act water quality standards for tested contaminants for over the past five years.

The planning area is also home to over 125 Tier Two facilities and over 40 Extremely Hazardous Substances (EHS) facilities. By Federal law, Tier Two facilities must annually file a Material Safety Data Sheet which identifies any hazardous chemicals present at or above 10,000 pounds at the site. EHS facilities store and/or use at least one of over 300 chemicals with extremely toxic properties and requires the development of an emergency response plan. A number of exemptions are allowed from these reporting requirements, however, including gas stations, routine agricultural products, and hospitals. Within the cities of Altoona, Chippewa Falls, and

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

Eau Claire alone there are over 1,400 storage tanks, mostly for gas, diesel, or fuel oil, registered with the Wisconsin Department of Commerce.

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

3.3.2 Non-Point Water Quality Impacts

Portions of the planning area are still in agricultural production. The application of fertilizers, herbicides, and pesticides in crop production can all have negative impacts on surface and groundwater quality if not managed properly. Likewise, animal waste and manure storage can have additional negative impacts. Excessive bank erosion in wooded or heavily pastured areas continues today on some local streams and rivers, and 150 years of soil erosion has led to heavy deposition of fine sediment in many streambeds. Local farmers utilize a variety of conservation management practices to reduce such impacts and to maintain compliance with applicable State and Federal regulations. Additional measures, such as bank restoration, have been undertaken in more critical occurrences.

Currently, the planning area includes approximately 53,000 acres of undeveloped land. Continued urbanization in the Eau Claire and Chippewa Falls area increases the number of potential non-point sources of water pollution affecting both surface and groundwater resources. As impervious surfaces increase (i.e., roads, parking lots, buildings/roofs) and natural groundwater recharge areas are encroached upon (i.e., wetlands, shorelands), the amount of surface stormwater runoff can increase, resulting in flooding damage, increasing erosion, and/or increasing organic and inorganic pollutant loadings. This run-off can carry oil and fluids from roads and parking lots, pesticides and herbicides from lawns, and other contaminants which impact water quality. Over the long term, if natural surface water systems are destroyed or fragmented, recharge areas can dry up and baseflows in streams can decrease, resulting in a loss of wildlife habitat and increasing flood potential. Also, as the amount of surface waters decrease, the proportion of nutrients, suspended solids, or pollutants increases which can further contribute to water quality problems (e.g., eutrophication).

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

3.3.3 Groundwater Impacts

As land is developed and converted from open space, forests, or farmlands, it can have a cumulative effect on the quality and quantity of groundwater. Groundwater recharge is expected to continue to decrease as impervious surfaces increase as the ground is paved over. Concurrently, with the increase in residential, commercial, and industrial development, there will

be an increasing demand for groundwater. And, as discussed, development on private wastewater systems outside the sewer service areas can pose significant risks, especially since the majority of these structures also utilize private wells. Run-off from heavily-used roads, parking lots, lawn pesticides, and other activities can also pose a risk to these private wells.

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

3.3.4 Water Quality Protection

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

State of the Lower Chippewa River Basin Report

Completed in 2001 as required by Section 208 of the Federal Clean Water Act, this document was prepared by the Wisconsin Department of Natural Resources and guides water resource activities in the Lower Chippewa River Basin. This water quality management basin plan includes an analysis and recommendations on surface water quality, non-point sources, and groundwater, expanding on the assessment provided in the previous subsections. The *Chippewa Falls/Eau Claire Urban Sewer Service Plan for 2025* is a companion document and addendum to the basin plan.

Chippewa Falls/Eau Claire Urban Sewer Service Plan for 2010

The current planning effort is an update of the previous sewer service area plan completed in 1990. The plan identifies environmental corridors (sensitive areas), delineates the sewer service boundary, and provides procedures for new sewer connections or extensions.

Local Wastewater Treatment and Facility Plans

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

Erosion Controls and Stormwater Management Planning

By State of Wisconsin law (NR 216, NR 151), construction sites that disturb one or more acres of soil are required to obtain a construction site erosion control permit and develop a stormwater management plan.

Chippewa County

Steep slopes are regulated in shoreland areas only. It is anticipated that the County may adopt stormwater management and erosion control ordinances in the near future fairly similar to the existing ordinances for the City of Chippewa Falls.

Eau Claire County

Stormwater management and erosion controls are addressed when proposing a land division as part of the County subdivision regulations. SEH, Inc is currently under contract with the County to prepare a county stormwater management plan. The County will be preparing a stormwater management ordinance and erosion control ordinance in accordance with State models at some time in the future once the plan is complete.

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

City of Eau Claire

The City of Eau Claire continues to refer to its *1992 Comprehensive Stormwater Management Plan* when making decisions regarding stormwater volume, rate, storage, quality, and erosion control. The *City of Eau Claire Comprehensive Plan* includes recommendations to review and amend the Stormwater Management Plan for certain sub-areas and watersheds based on changing land uses. The comprehensive plan goes on to recommend that a regional stormwater management plan for all watersheds in the metropolitan area should be prepared. Slopes 20+% require appropriate, engineered erosion control practices. Wastewater connections to development on slopes of 20-30% require a special sewer service area plan amendment.

City of Chippewa Falls

The City of Chippewa Falls does have a stormwater management ordinance and a construction site erosion control ordinance. Currently, a stormwater management plan is being developed. A base model of stormwater flows for the City is being created to help identify possible trouble spots; best management practices will then be recommended in the stormwater management plan to address these trouble spots and help reduce suspended solids. Slopes along rivers would be most vulnerable to erosion. Current local ordinances do not regulate steep slopes.

City of Altoona

Per its comprehensive plan, the City will require new development projects to include City-approved stormwater management facilities. Slopes 20+% are identified and considered as part of the their environmental assessment for review of land divisions. Their comprehensive plan includes the objective of preserving steep slopes (15+%). Per its comprehensive plan, all site

plans, preliminary plats, and CSMs are required to accurately depict all environmental corridor natural resource elements, including steep slopes. In general, areas prone to erosion concerns tend to be located in shorelands with sandy soils.

Priority Watershed Planning

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

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

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

For each designated priority watershed, WisDNR develops a non-point source control plan with management actions, implementation policies, and procedures which encompass:

- erosion control and sediment management
- specific pollution reduction goals, including goals for each urban area
- animal waste, nutrient, and pesticide management
- stormwater, groundwater, and surface water management
- related information, communication, and educational efforts
- related ordinances, enforcement, and monitoring

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

Local Impaired Waters (2004 303D List)

Section 303(d) of the Federal Clean Water Act requires each state to periodically submit to EPA for approval a list of impaired waters. Impaired waters are those that are not meeting the state's

water quality standards. The Department of Natural Resources last submitted an updated list to EPA in April 2004.

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

The following are the impaired surface waters within the planning area:

Chippewa River (low priority):	pollutants -	mercury, metals, PCBs
	impairments -	aquatic toxicity, fish consumption advisory
Lake Hallie (medium priority):	pollutants -	sedimentation, phosphorus
	impairments -	eutrophication, pH, sedimentation
Lake Wissota (medium priority):	pollutants -	sedimentation, phosphorus
	impairments -	eutrophication, pH, sedimentation
Half Moon Lake:	pollutants -	phosphorus
(approved TMDL Plan)	impairments -	pH, eutrophication

Provided by the Wisconsin Department of Natural Resources, Map 11 on the following page shows the extent of the local impaired waters and other water resources in the area.

MAP 11
Water Resources

Other Local Land-Use Controls and Plans

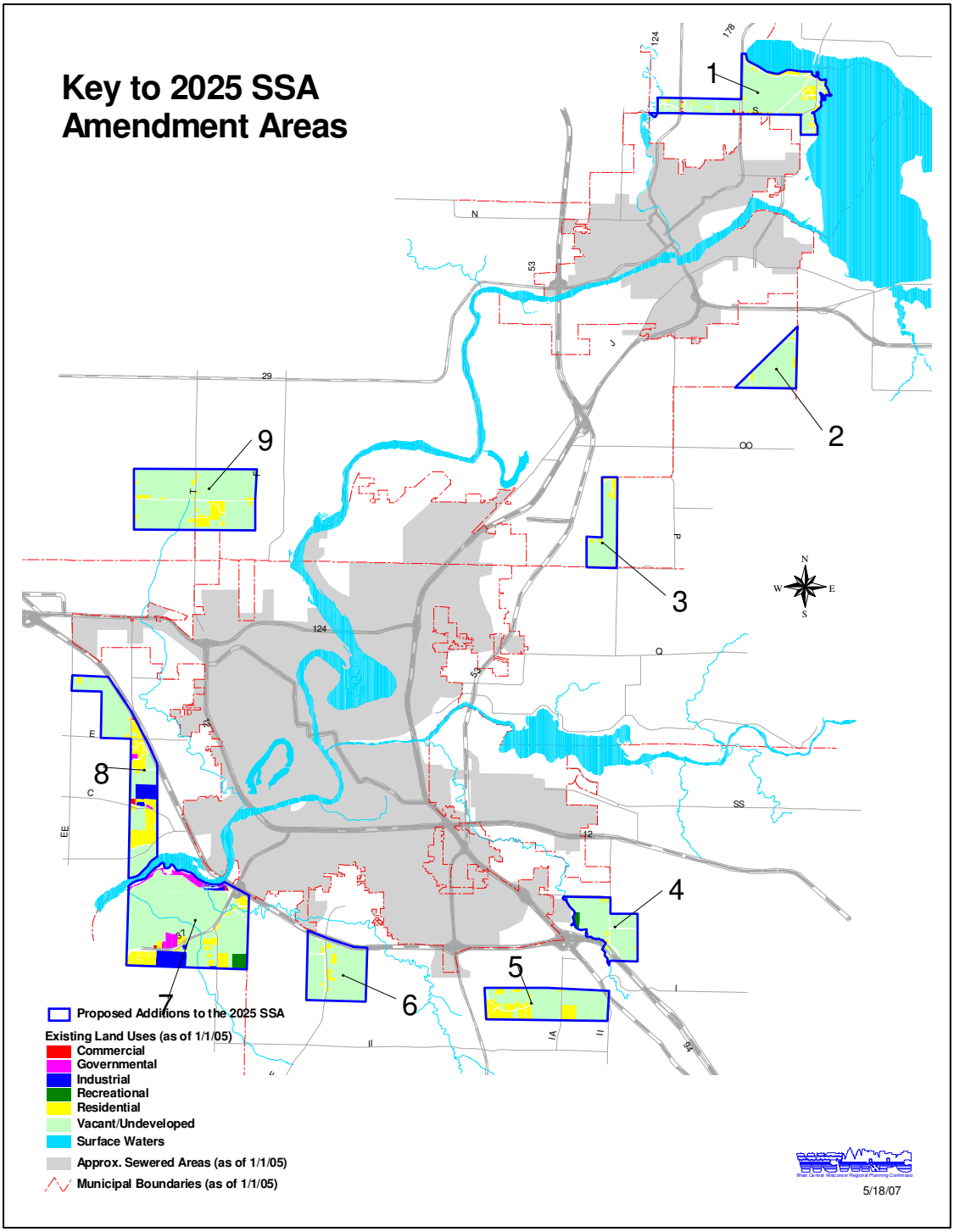
Local governments utilize a variety of land-use controls to further protect water quality, such as shoreland/wetland zoning, floodplain zoning, and wellhead protection planning discussed previously. Proposed projects located in wetlands and navigable waters must also be reviewed by the U.S. Army Corps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

The following are some additional plans and ordinances applicable to the planning area which are related to water quality management:

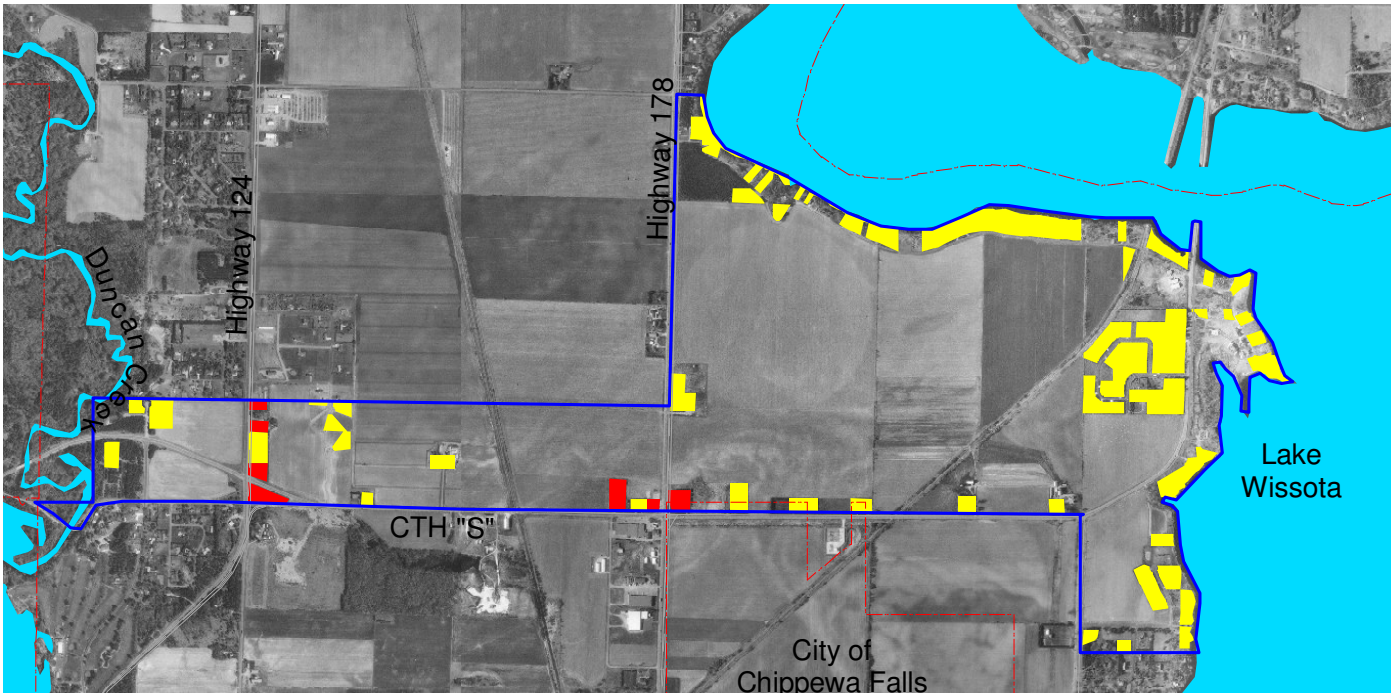
- Lake Altoona Management Plan, 1981
- Lake Altoona Protection & Rehabilitation District Implementation Plan, 1988
- Eau Claire County Groundwater Management Plan, 1994
- Chippewa County Animal Waste Management Ordinance
- Eau Claire County Animal Waste Storage Ordinance

LAND-USE SUMMARY FOR PROPOSED 2025 CHIPPEWA FALL/EAU CLAIRE SEWER SERVICE AMENDMENT AREAS

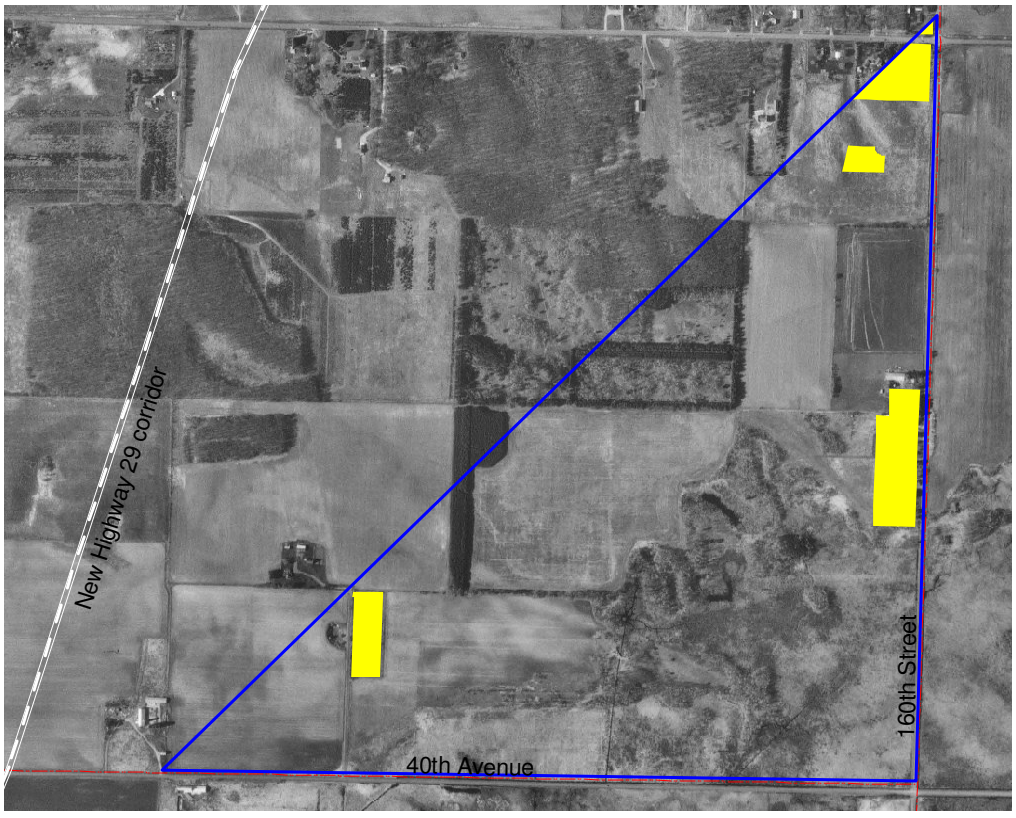
This summary for the proposed 9 amendment areas is for general planning purposes only. Base orthophotos are from 1999. Some discrepancies between GIS overlays and the base orthophotos exist and does not necessarily reflect recent development. Analysis of planned uses, constraints, and other features based on the draft SSA Plan update dated 5/3/06.



Area:	1
Approx. Size:	917 acres
Location:	Town of Eagle Point Chippewa County
General Physical Features:	Very flat overall with very little topographic relief. On north side of the City of Chippewa Falls. Highways 178, 124, and "S" all transverse the area.
Current Development:	Heavy residential development along lakeshore to east. Significant residential and commercial development also occurring along or near highways, though most of the area remains undeveloped.
Planned or Proposed Development:	Given lack of barriers to development, proximity to City, and current development trends, additional development in the area anticipated.
Vacant Areas:	Almost all of the identified vacant areas are in agricultural production, with the exception of small, scattered forested areas (most less than 5 acres in size) adjacent to Lake Wissota, and some limited, small forested areas on the western end near Duncan Creek.
Water Features:	The area is bound by Lake Wissota to the east and Duncan Creek to the west. Lake Wissota is a 303(d) medium priority impaired water.
Environmentally Sensitive Features:	Minimal overall. Small corridor of floodplains immediately adjacent to Lake Wissota and along Duncan Creek. Very small area of moderately steep slope (12%-20%) near Duncan Creek.



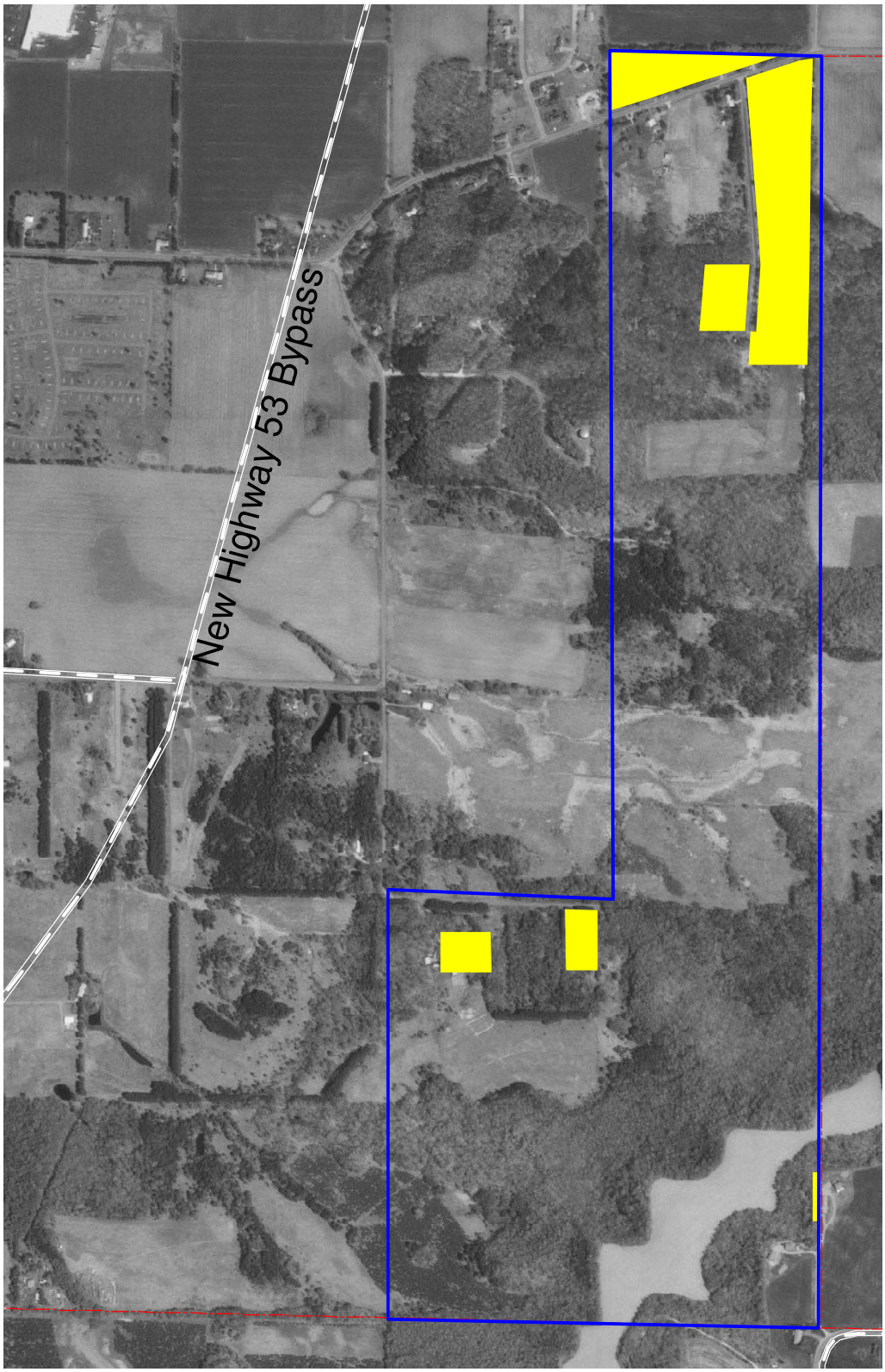
Area:	2
Approx. Size:	330 acres
Location:	Village of Lake Hallie Chippewa County
General Physical Features:	Relatively flat overall with high groundwater table over much of southeastern third of the area.
Current Development:	About 14 acres of scattered residential development, with a small subdivision on the northern part of the area. Mostly undeveloped.
Planned or Proposed Development:	Just east of the new Highway 29 corridor. Residential development in area indicates a strong potential for future homes in the area. Now part of the Village of Lake Hallie.
Vacant Areas:	Approximately one-third of the area is vacant, uncultivated wetlands and related shrub ground cover. About 20-30 acres is wooded, scrub, and small areas of pine plantation on the western edge of the area.
Water Features:	No significant water features noted.
Environmentally Sensitive Features:	Approximately 95 acres (abt. 30% of the total area) in southeastern part of the area include wetlands and wet meadow, with some standing water and shrub/scrub growth. Moderately steep slopes (12-20%) can be found in an about 10-acre northern portion of the area.



Area:	3
Approx. Size:	318 acres
Location:	Village of Lake Hallie Chippewa County
General Physical Features:	Hilly area located just east of new Highway 53 bypass.
Current Development:	About 26 acres of scattered residential development, excluding road right-of way.
Planned or Proposed Development:	No major plans known, but relatively convenient access to new Highway 53 bypass for many locations within the area. Now part of the Village of Lake Hallie.
Vacant Areas:	Vacant areas consist of approximately 50 acres of farm fields & pasture, about 35 acres of wetlands & scrub in the middle of the area, and 186 acres of forested or lightly wooded lands.
Water Features:	No significant water features noted.
Environmentally Sensitive Features:	Within about 30 acres of the central portion of Area #3, persistent wet meadow of wet soils can be found. Shallow depth to bedrock also exists in some portions of the area, especially on the south end.

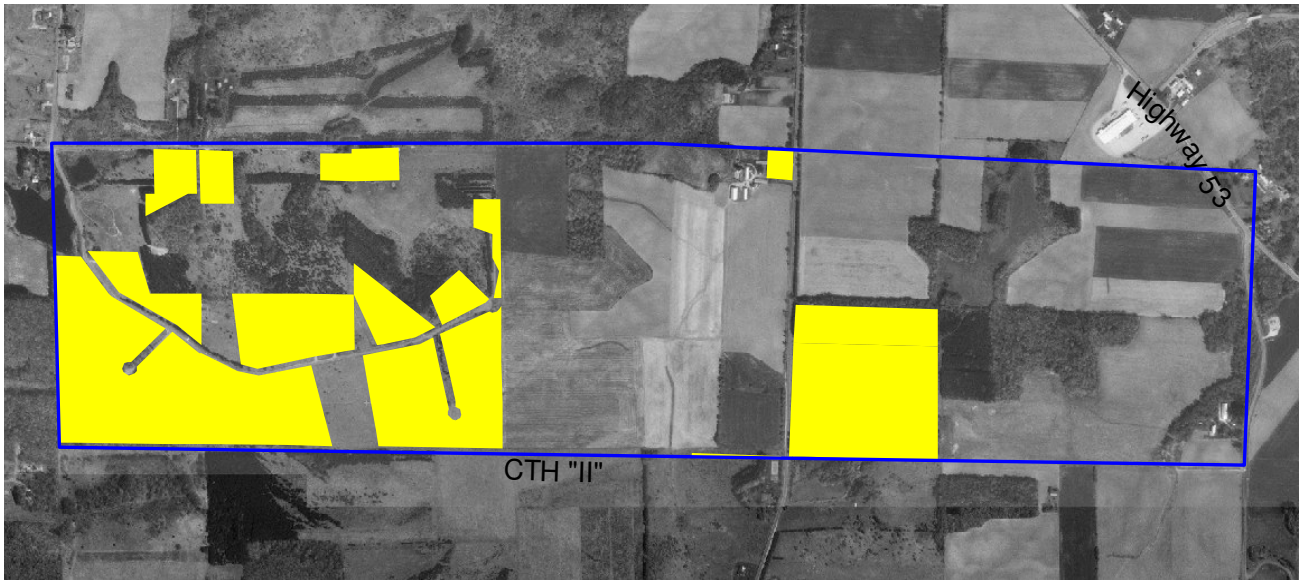
see figure on next page

Area 3



Area:	4
Approx. Size:	520 acres
Location:	Town of Washington Eau Claire County
General Physical Features:	Fairly flat overall, with some elevation drop off as you approach Otter Creek which bounds the area on the west side. Road on north side accesses primary commercial area to the west.
Current Development:	Scattered residential development near roadways (abt. 25 acres total). Large Interstate-94 right-of-way on southern end of the area. 16-acre recreational area along Otter Creek.
Planned or Proposed Development:	Given lack of barriers to development, proximity to City, and current development trends, additional development in the area anticipated.
Vacant Areas:	Heavily forested (abt. 57 acres) near Otter Creek, with about 25 acres of other pine plantation or forest. Most of remaining vacant areas is cultivated agricultural lands (abt. 375 acres), with the exception of about 20 acres of Interstate 94 corridor.
Water Features:	The area is bound by Otter Creek on western edge, which is a popular local recreational water and a Class 3 trout stream.
Environmentally Sensitive Features:	Minimal sensitive features in unforested vacant areas. Primary sensitive areas are steep slopes (12+%) and limited floodplain adjacent to Otter Creek.

Area:	5
Approx. Size:	673 acres
Location:	Town of Washington Eau Claire
General Physical Features:	Area of rolling hills with some steep slopes. Largely in agricultural production in past, with forests on the steepest slopes.
Current Development:	Large areas of residential development already existing (abt.165 acres), especially in the western portions of the area.
Planned or Proposed Development:	Good access to Highway 93 and, thus Interstate 94. Experiencing significant residential growth. Large portions of the vacant land would be considered infill development of lots already platted.
Vacant Areas:	About 335 acres of the vacant areas are in agricultural cultivation or pasture. About 30-50 acres are scrub, young woodlands, or fallow areas left uncultivated for a lengthy time. The remaining 120-140 acres are in scattered wooded areas.
Water Features:	No significant water features noted, other than a wetlands area in the northwest corner of the subject area.
Environmentally Sensitive Features:	Potentially steep slopes (12+%) can be found over much of the western third of the area, including the already developed housing sites, and throughout most wooded and upland areas. The majority of the undeveloped agricultural lands have no known sensitive features.

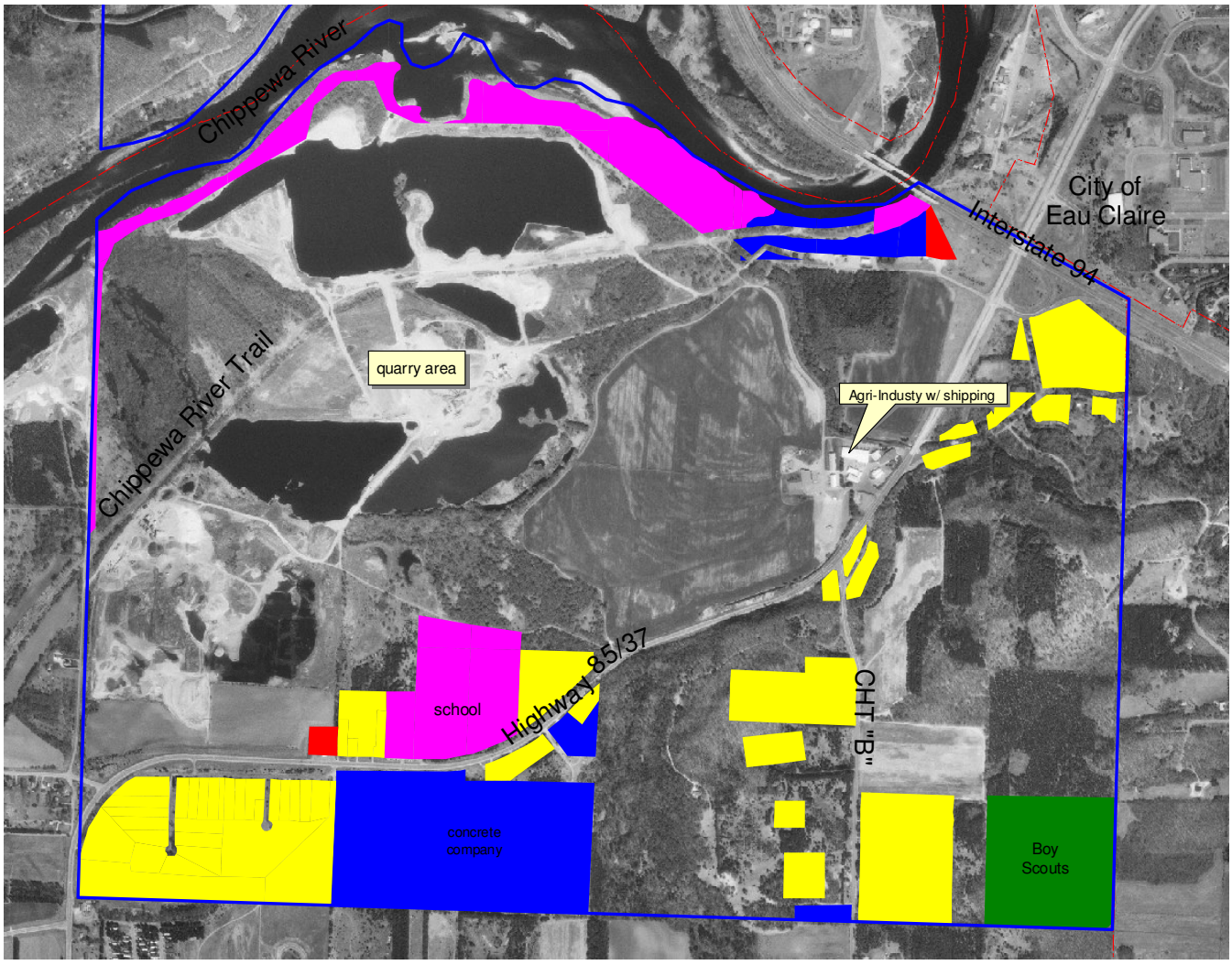


Area:	6
Approx. Size:	628 acres
Location:	Town of Washington Eau Claire County
General Physical Features:	Rolling hills with many areas of steep slopes. Interstate 94 bounds the area on the north side, though there is no direct access.
Current Development:	Scattered residential development and farmsteads (abt 31 acres total) primarily along CTH "F", but mostly undeveloped to date. About 30 acres of Interstate and other roadways.
Planned or Proposed Development:	During the SSA planning process, there was discussion regarding a potential significant residential development for this area.
Vacant Areas:	About 329 acres of forest, wooded hilltops, pasture, and scrub, some of which is associated with road right-of-way. The majority of the remaining vacant acreage in the area (abt. 230 acres) is in agricultural uses and cultivation.
Water Features:	No significant water features noted.
Environmentally Sensitive Features:	Much of Area #6 potentially has steep slopes (12+%), with the exception of some of the cultivated agricultural fields.

Area:	7
Approx. Size:	1,871 acres
Location:	Town of Brunswick Eau Claire County
General Physical Features:	Large areas of floodplain exist north and west of Highway 85/37, while rolling hills and areas of steep slopes dominate east of Highway 85/37. Excellent access to Interstate 94 and the City of Eau Claire via Highway 85/37 which transverses the subject area.
Current Development:	Current development includes an agricultural-based industry north of Highway 85/37. Significant residential development has occurred along Highway 85/37 and CTH "B", along with a school and concrete company. Public land along the Chippewa R. has been preserved for recreational use. Approx. 40 ac. in the SE corner is owned by the Boy Scouts.
Planned or Proposed Development:	Significant discussion on a potentially large planned unit development has taken place, which would likely include floodplain mitigation strategies. Some discussion has also taken place on a potential second residential development in the area as well.
Vacant Areas:	About 535 acres in pine plantation, wooded hillsides, and scrub, with the largest contiguous areas south and east of Highway 85/37. About 265 acres in agricultural production or operations, primarily in the flat floodplain north of the Highway. The primary quarry area consists of about 475 acres, including surface waters which have flooded quarry ponds.
Water Features:	Chippewa River bounds the area on the north side, which has been designated as a 303D impaired water. Portion of Lowes Creek in north part of area is a Class II Trout Stream. Large ponds have formed in the flooded quarry pits. Smaller Taylor Creek also runs through the area.
Environmentally Sensitive Features:	A large portion of the vacant area is in the floodplain of the Chippewa River. Notably, a State recreational trail also transects the area.

see figure on next page

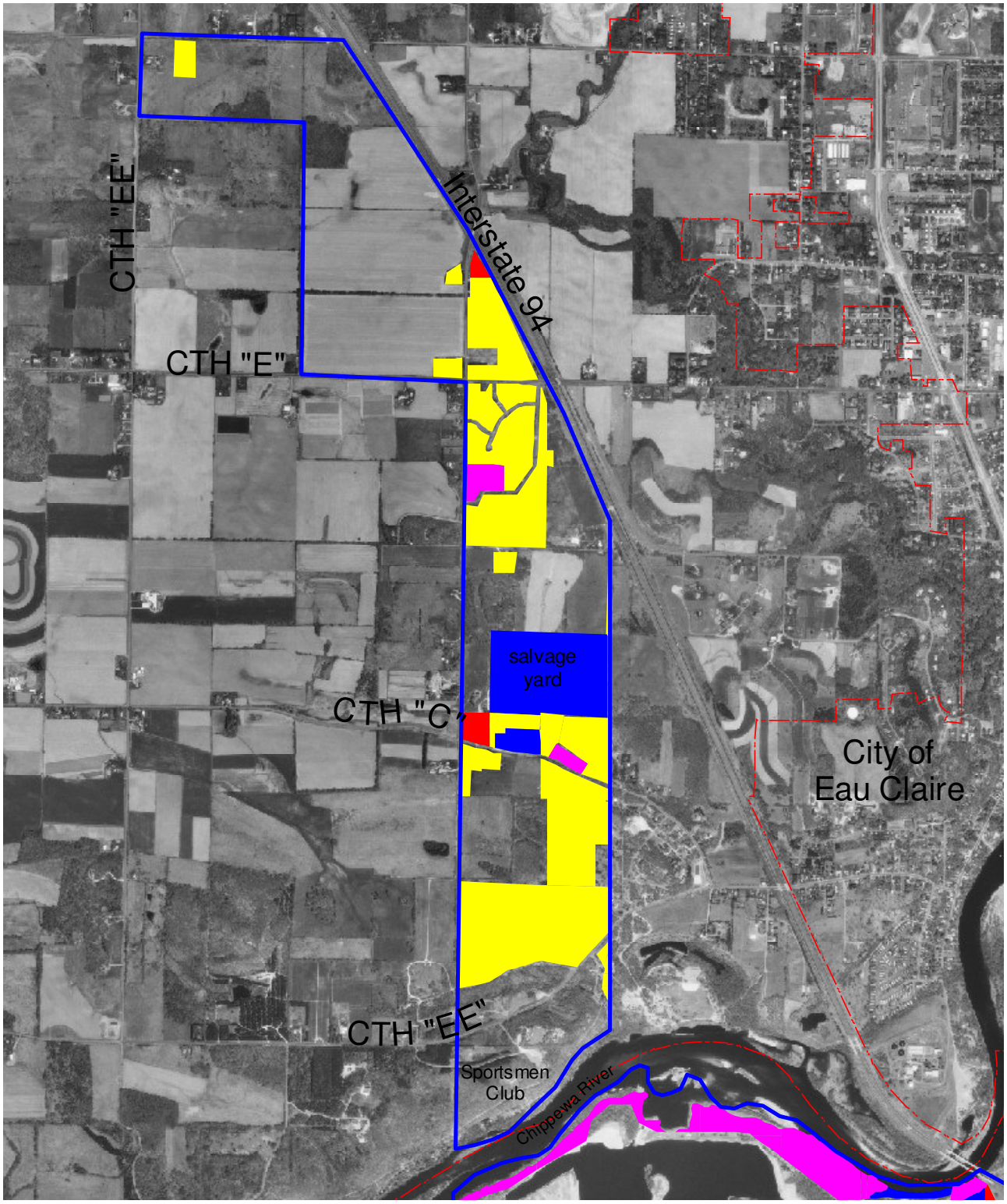
Area #7


Chippewa River
City of
Eau Claire
Interstate 94
Chippewa River Trail
quarry area
Agri-Industy w/ shipping
school
Highway 85/37
CHT "B"
concrete
company
Boy
Scouts

Area:	8
Approx. Size:	956 acres
Location:	Town of Union Eau Claire County
General Physical Features:	Rolling hills with many areas of steep slopes south of CTH "E" to the Chippewa River which borders the south end of this area. Large contiguous area of flat, cultivated crop fields north of CTH "E". Just west of Interstate 94 which borders a large portion of the east side of this area.
Current Development:	Significant residential growth has been occurring in this area. Existing development totals approximately 360 acres, including a large salvage yard approximately 60 acres in size but not including road or street right-of-ways.
Planned or Proposed Development:	Ongoing development pressure expected for the area given proximity to the City of Eau Claire.
Vacant Areas:	About 225 acres of cultivated crop land, mostly north of CTH "E". Scattered in the area is about 150 acres of scrub, fallow, and pasture lands. Wooded areas are scattered consisting of about 150 acres total. About 45 acres of mixed woodland and scrub is on the south end near the River belongs to a sportsman's club and likely will not be developed.
Water Features:	Chippewa River bounds the area on the south side, which is a 303d impaired water.
Environmentally Sensitive Features:	Many areas south of CTH "E" potentially has steep slopes (12+%), as well as portions of the northern 80 or so acres. Minimal floodplain along the Chippewa River.

see figure on next page

Area #8


CTH "EE"
Interstate 94
CTH "E"
salvage yard
CTH "C"
City of Eau Claire
CTH "EE"
Sportsmen Club
Chippewa River

Area:	9
Approx. Size:	1,294 acres
Location:	Town of Wheaton Chippewa County
General Physical Features:	Flat or gently rolling topography overall with large cultivated areas for agricultural crops. Few wooded areas.
Current Development:	Scattered residential development and farmsteads of about 100 acres total, but mostly undeveloped.
Planned or Proposed Development:	Traffic on CTH "T" has been increasing, especially since completion of the new 4-lane Highway 29 corridor to the north.
Vacant Areas:	Majority of the vacant areas are cultivated agricultural lands, with the primary exceptions of an approx. 22 acre sand/gravel pit, about 66 acres of scattered wooded areas, and road right-of-way.
Water Features:	Upper extent of Sherman Creek included in the area which is intermittent during dry seasons.
Environmentally Sensitive Features:	Some moderately steep slopes (12-20%) scattered within the area. A small wetland of standing water approximately 3 acres in size has been identified.