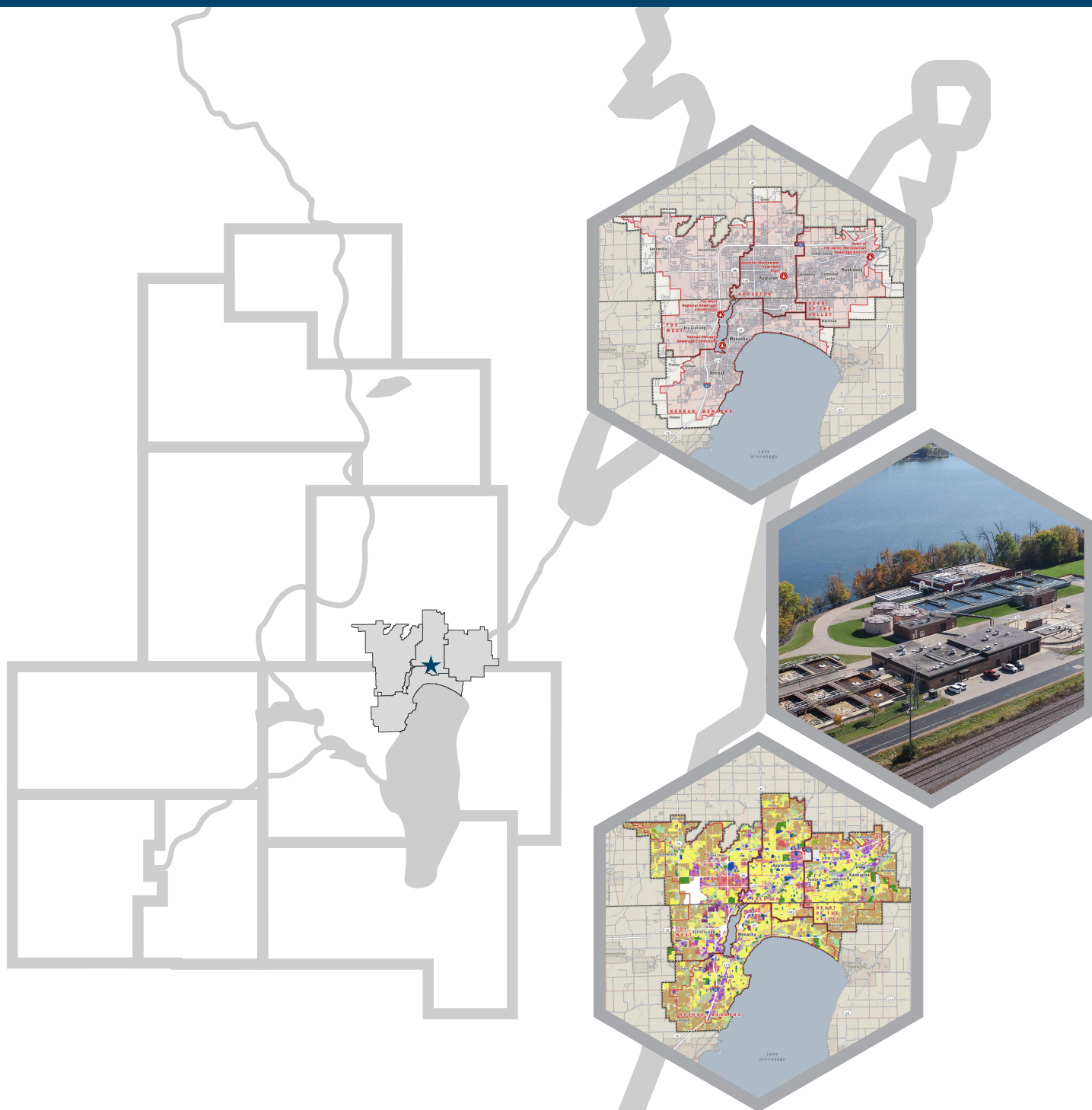


Fox Cities 2040 Sewer Service Area Plan



Draft
June 2023

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List of Acronyms and Abbreviations

ACS	American Community Survey, 5-Year Estimates
AWQMP	Areawide Water Quality Management Plan
BOD	Biochemical Oxygen Demand
CMAR	Compliance Maintenance Annual Report
CPP	Continuous Planning Process
CWA	Clean Water Act
DO	Dissolved Oxygen
DOA	Department of Administration
ECWRPC	East Central Wisconsin Regional Planning Commission
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FVWQPA	Fox Valley Water Quality Planning Agency
HOV	Heart of the Valley
GPD	Gallons per Day
MGD	Millions of Gallons per Day
PA	Planning Area
SSA	Sewer Service Area
TMDL	Total Maximum Daily Load
TP	Total Phosphorus
TSS	Total Suspended Solids
WDNR	Wisconsin Department of Natural Resources
WPDES	Wisconsin Pollutant Discharge Elimination System
WQMP	Water Quality Management Planning
WWTF	Wastewater Treatment Facility
WWTP	Wastewater Treatment Plant

Chapter 1: Introduction

Purpose

The 2040 Fox Cities Sewer Service Area (SSA) Plan updates and supersedes the 2030 Fox Cities Sewer Service Area Plan. The 2030 Fox Cities SSA Plan was approved by the Wisconsin Department of Natural Resources (WDNR) on February 13, 2006. Development in the Fox Cities has expanded beyond previous projections so a complete plan update is required to understand the growth and environmental conditions in the Fox Cities today.

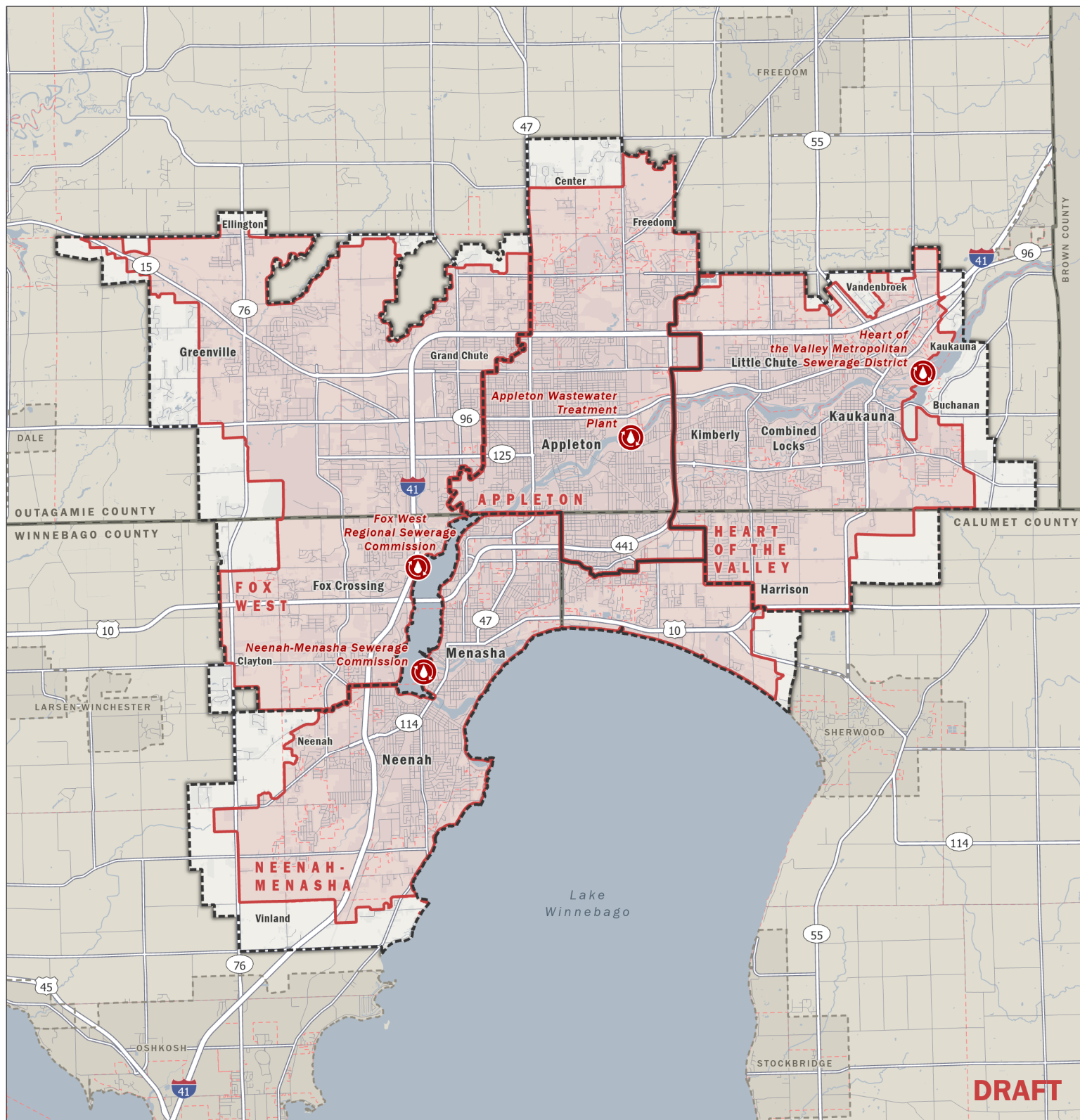
The 2040 Fox Cities SSA Plan is the fifth update of the Fox Cities SSA Plan (1985, 1991, 1997, 2006, and 2023, which is an element of the State of Wisconsin Areawide Water Quality Management (AWQM) Plan. The East Central Wisconsin Regional Planning Commission (ECWRPC) prepared the 2040 Plan and the Wisconsin Department of Natural Resources certified the Plan on **ENTER DATE** as part of the Statewide AWQM Plan. As a contracted agency of the Wisconsin Department of Natural Resources, ECWRPC is the Areawide Coordinating Agency under Wisconsin's AWQM planning program, and is therefore responsible for preparing, maintaining, and updating sewer service area plans within the designated area.

In addition to serving as a guide for sewer development, sewer service area plans have a significant impact on the protection of water quality. The 2040 Fox Cities SSA Plan provides population and land use projections, identifies environmentally sensitive areas (ESA), and delineates future growth areas for the Fox Cities Sewer Service Area. Policy recommendations encourage cost-effective and environmentally sound development patterns. Overall, sewer service area plans are intended to be an important planning and development guide for local communities.

Description of the Study Area

The 2040 Fox Cities SSA Plan is comprised of four separate sewer service areas and planning areas, spanning 20 municipalities and three counties. The sewer service areas and planning areas are associated with the four wastewater treatment facilities in the Fox Cities: Neenah-Menasha Sewerage Commission, Fox West Regional Sewerage Commission, Appleton Wastewater Treatment Plant, and the Heart of the Valley Metropolitan Sewerage District. The Fox River Valley is one of the most urbanized and industrialized areas in the State of Wisconsin.¹ Due to the regionalization of municipal collection and treatment of wastewater and the interconnectedness of the governmental relationships in the Fox Valley, the four Sewer Service Area Plans are updated at the same time in one Fox Cities SSA Plan. See **Map 1** for the Fox Cities SSAs.

¹ "Lower Fox River Basin", Wisconsin DNR, <https://dnr.wisconsin.gov/topic/Watersheds/basins/lowerfox>



Wastewater Treatment Facility

Municipal Boundary

County Boundary



2040 Fox Cities Sewer Service Area Boundary



2040 Fox Cities Planning Area Boundary



Neighboring Planning Area Boundary



0 1 2
Scale in Miles

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Source:
SSA data provided by ECWRPC, 2023. Base data provided by Regional Counties, 2023.

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Overview of Planning Procedure and Public Involvement

The 2040 Fox Cities SSA Plan was developed in accordance with state and federal guidelines and involved various public input measures including:

- 2020 – 2023 Individual meetings and numerous email correspondences and phone conversations with Communities (Appendix F)
- Sewer Service Area Information Meetings (Appendix F)
 - Appleton SSA – January 19, 2023
 - Fox West SSA – January 23, 2023
 - Neenah-Menasha SSA – January 26, 2023
 - Heart of the Valley SSA – January 31, 2023
- Public Notice – Enter Date (Appendix C)
- Community Facility Committee Public Hearing – Enter Date (Appendix D)
- East Central Wisconsin Regional Planning Commission Resolution Approval – Enter Date (Appendix B)
- Wisconsin Department of Natural Resources Approval - Enter Date

Planning Procedure

Sewer Service Area Plans are prepared to identify areas where public sanitary sewer service could be provided in a cost effective and environmentally sound manner. However, sewer service area planning is not intended to restrict a community's growth, obligate wastewater treatment plants to provide sewer throughout the planning boundary, or to affect community annexation policy.² Service provisions must conform with local, regional, state, and federal rules, regulations, and plans.

All Sewer Service Area Plans are consistent with the requirements from the Wisconsin Administrative Code NR121 pertaining to Areawide Water Quality Management Plans. Ideally, SSA Plans are re-evaluated on an approximate 5-year interval. Funding, staff availability, urban growth demands, and regional/state policy changes and proposals may alter this time interval. When updated, the following items are addressed:

- 1) A review and update of 20-year population, housing, and employment trends and projections;
- 2) A review and update of land use demands based on socio-economic conditions and projections;
- 3) A review and update of existing physical conditions, including:
 - (a) Existing land uses;
 - (b) Proposed land uses (based on local, county, regional, and state plans);
 - (c) Water quality and natural resource (ESA) characteristics, changes, and issues;
 - (d) Design capacity of the wastewater treatment facility (WWTF);
- 4) A description of relevant events since the last plan update pertaining to sanitary sewer or having an impact on future sewer service, including:
 - (a) Major WWTF improvements or changes;

² "Sewer Service Area Planning", Wisconsin DNR, <https://dnr.wisconsin.gov/topic/SurfaceWater/SSAPanning.html>

- (b) Major collection system improvements or changes;
 - (c) Local governmental changes (i.e., sanitary district formations, intergovernmental boundary / service agreements, Comprehensive Plan updates, regulations and requirements, etc.);
 - (d) SSA Plan amendments and acreage consumption since the last plan update;
- 5) A review and modification of mapping elements, if necessary, to accommodate future sewer growth and development, including:
- (a) Proposed major sewer system improvements and/or regional connections
 - (b) A revised Sewer Service Area Boundary;
 - (c) A revised Planning Area Boundary;
 - (d) Environmentally Sensitive Areas;
- 6) A review of local governmental actions and regulations which have implemented the Sewer Service Area Plan;
- 7) An update of public participation and educational outreach efforts;
- 8) A review of the institutional structure for plan update and amendment review and approval and for plan implementation;
- 9) A review and revision of goals, objectives, and policies, if necessary;
- 10) The development of recommendations and strategies for plan implementation.

Chapter 2: Water Quality Management Planning Background and History

Clean Water Act

The Federal Water Pollution Control Act was enacted in 1948. Growing concerns about water pollution led Congress to sign major revisions into law in the form of the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500) and 1977. Commonly referred to as the Clean Water Act (CWA), the CWA marked the expansion and beginning of a new approach to “restore and maintain the chemical, physical, and biological integrity of the Nation’s Waters” (P.L. 92-500 Sec. 101). The Environmental Protection Agency (EPA) was authorized to delegate certain water pollution control programs and responsibilities to the states, and in 1974 Wisconsin officially obtained EPA delegation with federal oversight.³

Areawide Water Quality Management (AWQM) Planning Legal Foundation

AWQM Plans are used by the State to direct implementation of programs using water quality assessments to identify water quality problems, consider alternative solutions, and recommend control measures. The purpose of the program is to evaluate various means of achieving state and federal water quality goals and standards set forth in the Clean Water Act.

Wisconsin’s AWQM Plan is not one single document. Instead, it is a compilation of multiple documents: basin (watershed) plans, sewer service area plans, facility plans, sewer extensions, and all other conformance reviews for water quality. The following is a list of elements in the AWQMP Program as established under Title 40, Chapter I, Subchapter D, Part 130 of the Code of Federal Regulations (40 CFR 130.6):

1. Total Maximum Daily Loads (Sections 303(d) and e(3)(c))
2. Effluent Limitations (Section 303 (e)(3)(A))
3. Municipal and Industrial Waste Treatment (Section 208 (B)(2)(A) and (B))
4. Nonpoint source management and control (describe Best Management Practices (BMP) that the agency has selected to control nonpoint source pollution where needed)
5. Management Agencies (Section 208(b)(2)(D) and 303 (e)(3)(E))
6. Implementation measures (Section 208(b)(2)(E))
7. Dredge or fill program (Section 208(b)(4)(B))
8. Basin Plans (Section 209)
9. Ground water (control ground water pollution using Section 208(b)(2)(K))

³ “Wastewater”, Wisconsin DNR, <https://dnr.wisconsin.gov/topic/Wastewater>

The Wisconsin Department of Natural Resources is authorized under section 283.83, Wis. Statutes, to develop a Continuous Planning Process (CPP) Plan. The State CPP establishes all aspects related to ensuring the protection and preservation of water quality to meet the requirements in Section 303(e) of the Clean Water Act. The CPP describes water quality programs and activities, public engagement, and program implementation associated with the AWQMP. The CPP is also required to follow a national framework which includes: Water Quality Condition (Basin) Plans, Facility Plans and Specifications, and Sewer Service Area Plans.⁴ The WDNR sends annual updates from each element to the Environmental Protection Agency (EPA) as a formal amendment to the Statewide Areawide Water Quality Management Plan.⁵

Designated Planning Areas and Agencies

Section 208 of the Clean Water Act established criteria for developing an areawide waste treatment management planning program. This program is an areawide planning and management approach to attain water quality goals and address water pollution through the review and study of point source pollution (such as municipal and industrial wastewaters), and non-point sources (such as stormwater runoff).

In 1974, Wisconsin State Governor Patrick J. Lucey designated three major urban areas under Section 208 as water quality planning areas: Dane County, Fox Valley Water Quality Area, and South Eastern Wisconsin Region. In order to receive a Section 208 designation, each area had to meet the criteria specified in the Area and Agency Designation Regulations. Local governments in the 208-planning area had to either have in operation a coordinated waste treatment system or show their intent to join together to take part in the 208-planning process in order to develop a water quality management plan resulting in a coordinated waste treatment management system for the area.⁶

Specific designated planning agencies appointed under 33 U.S.C 1288 (a) (2) oversee all aspects of planning in the 208-designated areas. The Fox Valley Water Quality Planning Agency (FVWQPA) was originally a collaboration between ECWRPC and the Green Bay/Brown County Planning Commission. ECWRPC and Brown County are the two planning agencies that span the Fox Valley Water Quality Planning Area today. The Fox River Designated Water Quality Management Area comprises major portions of the four urban counties surrounding Lake Winnebago (Calumet, Fond du Lac, Outagamie, and Winnebago Counties). The 1,243.7 square mile area has been specially designated for water quality planning because of the concentration of industries and urbanization along the Fox River and Lake Winnebago.

⁴ “Wisconsin’s Nonpoint Source Program Management Plan FFY 2021-2025”, EPA Approved 2021, <https://dnr.wisconsin.gov/sites/default/files/topic/Nonpoint/NPSProgramManagementPlan20212025.pdf>

⁵ “Water Quality Planning and Management”, Code of Federal Regulations 40 CFR 130

⁶ “Wisconsin’s Nonpoint Source Program Management Plan FFY 2021-2025”, EPA Approved 2021, <https://dnr.wisconsin.gov/sites/default/files/topic/Nonpoint/NPSProgramManagementPlan20212025.pdf>

In June 1977, ECWRPC completed initial sewer service area plans for 23 communities within the Fox Valley area under contract with the Fox Valley Water Quality Planning Agency. The service area plans were adopted as part of the Point Source element of the Fox Valley Water Quality Management Plan in January 1979. See **Map 2** for the current SSA Plans in the ECWRPC Region.

On December 31, 1989, the FVWQPA was disbanded and the WDNR took over as the designated planning agency responsible for implementation of water quality planning in the Fox Valley Water Quality Area. Southeast Wisconsin Regional Planning Commission (SEWRPC) is still the original designated agency overseeing planning functions for the Southeastern WI Region. Currently, Brown County, Dane County, and ECWRPC are the three contracted designated planning agencies with the WDNR that oversee the planning functions on behalf of WDNR for the 208-designated areas.

The remainder of the State is identified as “non-designated water quality management areas” which lie outside the Section 208 designated water quality planning boundaries in Wisconsin. “Non-designated area” communities that are urban areas with a population over 10,000 people are required to have sewer service area planning conducted by a local agency or the WDNR. Within the East Central region, there are seven sewer service area plans in effect within the non-designated 208 area. The “non-designated” portion of the East Central region, as well as the remainder of the state, are further divided into major river basins. For each river basin the WDNR has prepared a water quality plan.

The State of Wisconsin has embodied many of the federal areawide and facility planning requirements in the Wisconsin Administrative Codes. These administrative rules set forth procedures and standards regarding the preparation of these plans and their implementation. Specific sections of the code directly pertaining to these activities are chapter NR 121, Wis. Adm. Code for water quality and areawide waste treatment planning and management and NR 110, Wis. Adm. Code concerning wastewater facility planning and sanitary sewer extension planning.

Water Quality Condition (Basin) Planning

A geographic area where precipitation falls and is channeled into a local waterbody is called a watershed. A water basin is the geographic area comprised of multiple watersheds. The basin drains the entire land area into a particular body of water. Watershed plans establish water quality conditions and management recommendations. The WDNR has prepared watershed plans for all priority watersheds consisting of an assessment, program implementation, and project evaluation strategy. Watershed plans are prepared in accordance with ss. NR 120.08. Watershed assessments analyze the water quality, identify pollutants and threats to water quality such as nonpoint source and point source types, and recommend best management practices.

Program implementation includes an education outreach strategy, identifying federal, state, and local regulations, and a schedule and strategy for reducing nutrients and pollutants. A project evaluation plan is prepared for each priority watershed and contains all the criteria and procedures for evaluating the watershed. Data in the plans are generally incorporated into SSA Planning through the delineation of ESAs and identifying pollutant Total Maximum Daily Loads (TMDLs). Once the Plans are approved by the WDNR, they also need to be approved as a revision to the Areawide Water Quality Management Plan for the site-specific appropriate water basin. The revisions follow the procedure in ss. NR 121.07 and 121.08.⁷

Wastewater Facility Planning

Wastewater Facility Plans apply to any new or modified sewerage system involved with a municipal or non-industrial facility. Broadly, facility planning assesses the treatment design, cost-effectiveness, and conformance with the areawide water quality management plans and population projections. Planning also involves an evaluation of the facility's ability to meet established water quality standards and effluent limitations. The systematic planning process, as outlined in NR 110, ensures wastewater treatment facilities are built in a well-informed, economical, and environmentally sound manner.⁸

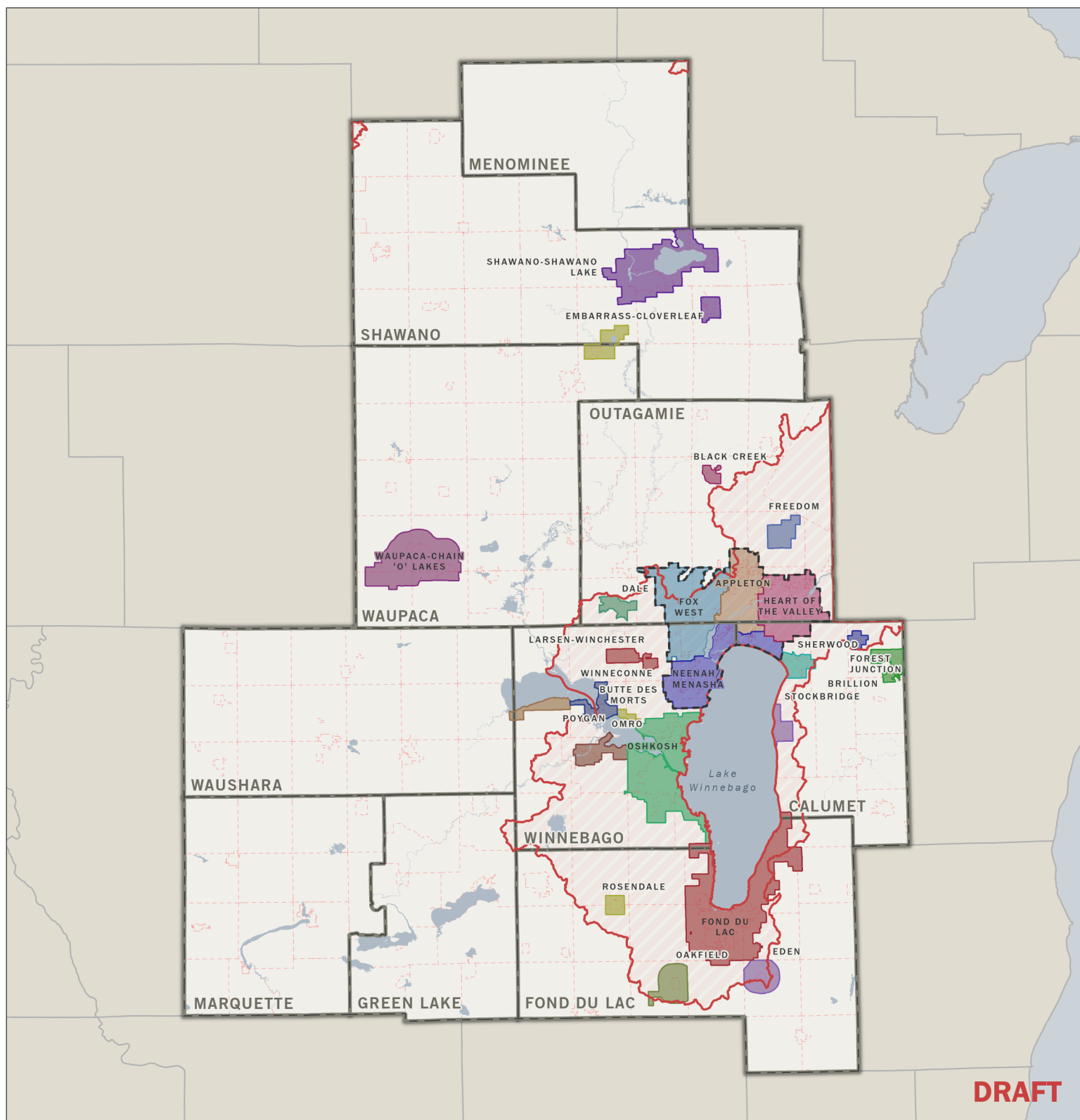
Sewer Service Area Planning

The preparation of sewer service area plans for Section 208-designated water quality management areas is an important aspect of the AWQM program. As set forth in NR 121, sewer service area planning identifies lands which can be serviced by sanitary sewer due to population projections, projected development, and community growth trends. Sewer service area planning also identifies environmentally sensitive areas (such as streams, floodplains, and wetlands) where sewer service is excluded to protect the community from adverse water quality impacts and to achieve state and federal water quality goals.⁹

⁷ "Watershed Plans", Wisconsin Administrative Code, Chapter NR 120.08

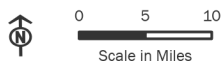
⁸ "Sewerage Systems", Wisconsin Administrative Code, Chapter NR 110

⁹ "Areawide Water Quality Management Plans", Wisconsin Administrative Code, Chapter NR 121



DRAFT

- - - - - Municipal Boundary
- — — — — County Boundary
- 2040 Fox Cities SSA Planning Area Boundary
- Water Quality Management Section 208 Boundary



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Chapter 3: Water Quality Assessment

Introduction

Water is an important resource for drinking, recreation, wildlife habitat, agriculture, and energy production. High water quality both sustains healthy ecological systems and support human uses. Additional benefits of high water quality include aesthetic appeal and higher property values.¹⁰ Unfortunately, the condition of groundwater, wetlands, and other waterbodies are negatively impacted by contaminants that enter the water. Poor water quality requires investment to treat polluted waterways. Therefore, there are many costs associated with low water quality, ranging from human health risk to loss in outdoor recreation tourism revenue. Measuring water quality regularly can help identify contaminated waterbodies and protect water resources in the Fox Cities.

Drinking Water

Household drinking water can be delivered from a public water system or a private well. Public water systems consist of facilities that collect, treat, store, and distribute water for human consumption. Private wells are any opening in the ground used to access and collect groundwater.¹¹ The water supply for both systems consists of either groundwater or surface water. The Federal Safe Drinking Water Act of 1974 and the subsequent amendments of 1986 and 1996, established regulation standards and guidelines to protect drinking water. These standards set by the EPA help ensure the water is safe and healthy for human consumption.¹² Treatment of raw surface water or groundwater is necessary to remove harmful constituents such as bacteria, suspended solids, and high concentrations of dissolved solids.

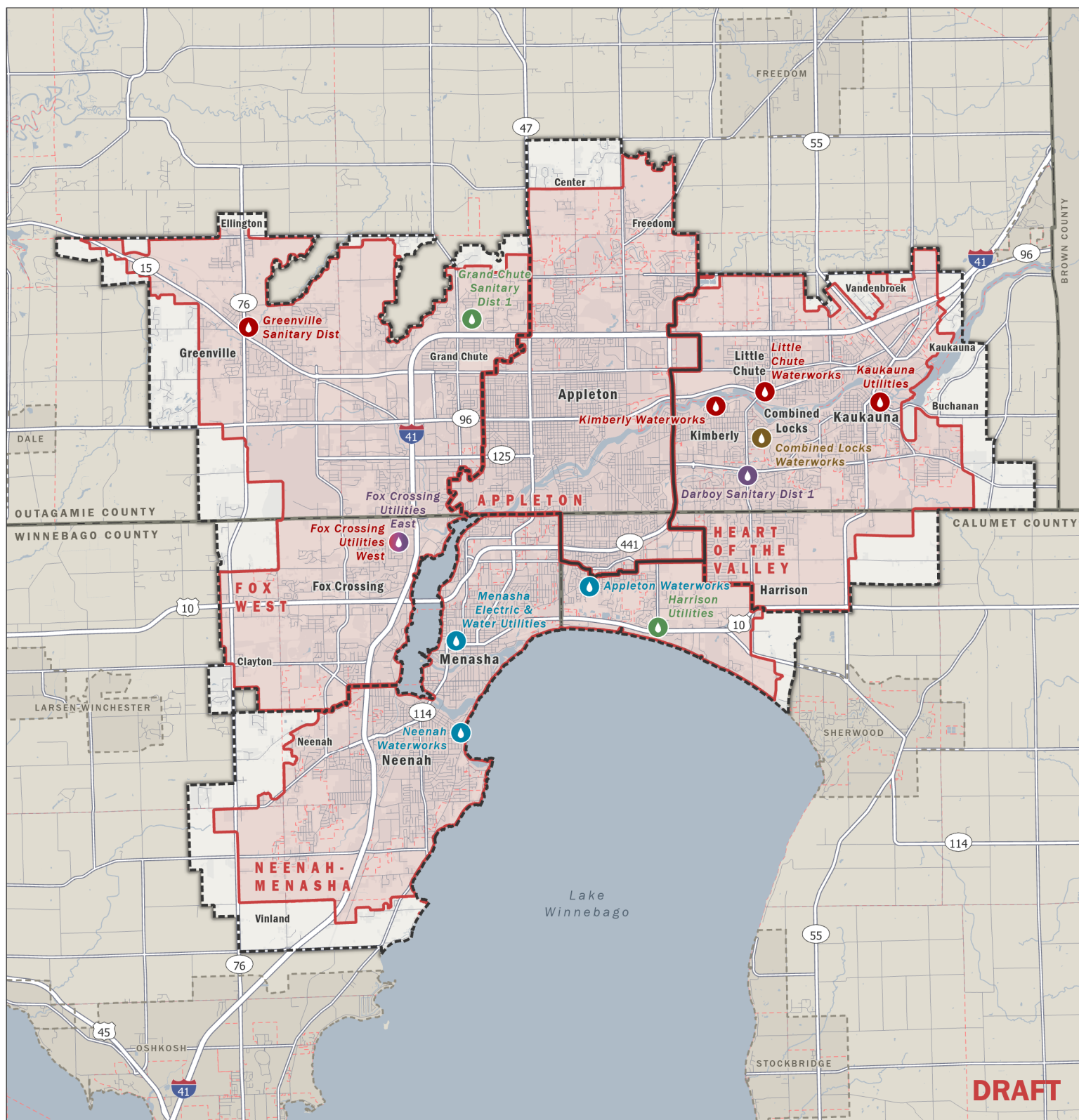
The main steps to the treatment of public water supply consist of coagulation and flocculation of dissolved particles in the water; sedimentation of the floc; filtration of the clean water to remove dissolved particles; and disinfection to kill any bacteria, viruses, parasites, and other germs.¹³ These steps warrant a safe water supply, improve the taste and clarity of drinking water, and make it more suitable for use in industrial processes. There are a number of public drinking water treatment facilities in the Fox Cities that source their water from surface water, such as Lake Winnebago. Other communities source their water from groundwater. Some households may have on-site private wells drawing groundwater. **Map 3** shows the municipal water sources for the communities in our region.

¹⁰ “Water Quality Standards: Costs and Benefits”, Minnesota Pollution Control Agency, 2022

¹¹ “Requirements for the Operation and Maintenance of Public Water Systems” Wisconsin Administrative Code NR 810.02(24)

¹² “Public Drinking Water System Data”, Wisconsin DNR

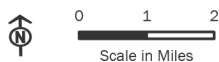
¹³ “Water Treatment”, Centers for Disease Control and Prevention, 2022



Local Water Plant Water Source

- Ground Water
- Surface Water
- Purchased Ground Water
- Purchased Surface Water
- Multiple Sources

- Municipal Boundary
- County Boundary
- 2040 Fox Cities Sewer Service Area Boundary
- 2040 Fox Cities Planning Area Boundary
- Neighboring Planning Area Boundary



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Source:
SSA data provided by ECWRPC, 2023. Base data provided by Regional Counties, 2023.

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Groundwater Protection

Groundwater is any water “occurring in a saturated subsurface geological formation of rock or soil.”¹⁴ Sources of groundwater include horizontal collectors; infiltration lines; springs; and dug, drilled, or other types of wells.¹⁵ Groundwater that is useable and accessible to wells, lakes, streams, and springs is contained in geological formations called aquifers. Aquifers allow water in the ground to move and fill in the pores and cracks. Wisconsin has four aquifers of varying depths and thicknesses. The following is a list of the aquifers from the shallowest to the deepest:

1. Sand and gravel aquifers - vulnerable to pollution and contamination;
2. Eastern dolomite aquifers - contaminated water travels quickly through this aquifer;
3. Sandstone and dolomite aquifer - primary source of groundwater for many cities in WI;
4. Crystalline bedrock - generally produces enough water for household use.¹⁶

Groundwater is an important environmental resource. From drinking water, to crop irrigation, and feeding spring-fed lakes and streams, groundwater is a vital resource in Wisconsin. Efforts to protect the groundwater used for public water supplies developed more formally from the 1986 Amendments to the Safe Drinking Water Act, establishing the state wellhead protection (WHP) Program. Under section NR 811.16, Wis. Adm. Code, the WDNR must approve the WHP Plan for all municipal wells. These plans include delineating the groundwater flow, recharge area, risk assessment, management plan, water conservation, and providing public education. Part of the risk assessment includes identifying potential contaminants in the area such as arsenic. This is a naturally occurring element that is present in rocks and soils but can also dissolve and be transported by groundwater. In areas with high arsenic rich minerals, special well casings for new well constructions were established by the WDNR. New guidelines and testing ensure members of the community are protected from adverse water quality impacts.¹⁷

Karst is a landscape feature resulting from dissolved rocks. Karst occurs most often from soluble rock formations that have cracks and openings for the water to move through readily. When water moves rapidly through the rock, it is an easy conduit for contaminants causing polluted groundwater. A karst landscape may have open fractures, caves, ponds, or sinkholes that are either exposed or covered by soil. Shallow fractured carbonate bedrock indicates a potential for karsts and increased vulnerability to groundwater contamination.¹⁸

¹⁴ “Water and Sewage”, Wisconsin Administrative Code Chapter 281.01 (18)

¹⁵ “Requirements for the Operation and Maintenance of Public Water Systems” Wisconsin Administrative Code NR 810.02(24)

¹⁶ “Wisconsin Aquifers”. Wisconsin Geological and Natural History Survey: Division of Extension

¹⁷ “Wisconsin Groundwater Coordinating Council Report to the Legislature”, Wisconsin DNR, 2021

¹⁸ “What is Karst”, Wisconsin Geological and Natural History Survey: Division of Extension

Surface Water Protection

Surface waters are generally defined as any natural or artificial lakes as well as naturally flowing streams. They are further defined in various statutes as wetlands, wastewater effluent channels including drainage ditches, and diffused surface waters which include any water from rain, snowmelt, and intermittent streams (NR 102.03(7) and 104.02(1)).¹⁹

Wis. Admin. Code Chapters NR 102 to NR 105 establish water quality standards for surface waters in Wisconsin to preserve and enhance the water quality. These statutes protect the use of water resources for public health and welfare, aquatic life and fish, animals, recreation use, agricultural use, industrial use, and any other lawful use.²⁰

Other Wisconsin statutes work in conjunction with NR 102 to NR 105. In particular, Wis. Admin. Code Chapter 283 “Pollution Discharge Elimination” outlines effluent limitations, phosphorus variances, and standards for toxic and pretreatment of effluent. Effluent is the discharge of wastewater into a surface water. Establishing effluent limitations is another method to help protect the State’s surface water quality and is discussed in more detail in the point source pollution section.²¹

Total Maximum Daily Load (TMDL)

Total Maximum Daily Load (TMDL) is the amount of a pollutant that can enter a waterbody and still maintain water quality standards. TMDLs are developed to reduce pollutants from entering the waterbody and establish a contaminant reduction schedule. Examples of potential sources include runoff from the landscape, stormwater, industrial wastewater, municipal water, and natural runoff from wetlands and forests. TMDLs are a key tool used to meet water quality standards and are implemented through various methods such as Wisconsin pollutant discharge elimination system (WPDES) permits. Nonpoint source implementation requires collaboration with a range of stakeholders and regulatory programs.²²

¹⁹ “Uses and Designated Standards”, Wisconsin Administrative Code Chapter NR 104

²⁰ “Water Quality Standards for Wisconsin Surface Waters”, Wisconsin Administrative Code Chapter NR 102

²¹ “Pollution Discharge Elimination”, Wisconsin Administrative Code Chapter 283

²² “TMDL Overview”, Wisconsin DNR

Point Source Pollution and Management

As defined by the EPA, point source pollution is “any single identifiable source of pollution from which pollutants are discharged.” The WDNR regulates the wastewater operations that discharge into surface or groundwater through WPDES permits. Wastewater treatment facilities develop Facility Plans which are reviewed by the WDNR. Stormwater sewers are also a point source as they collect rainwater and urban runoff from locations such as infrastructure, soil erosion, and municipal salt storage areas and empty at one outfall pipe into a surface water. Another system in place to implement point source total maximum daily loads (TMDLs) is through the Municipal Separate Storm Sewer Systems (MS4) permit program, which is outlined in Wis. Adm. Code Chapter NR 216.

Nonpoint Source Pollution and Management

Water quality is affected by point sources and nonpoint sources. Nonpoint source pollution drains from sources including agricultural runoff such as excess fertilizers or insecticides; urban runoff such as oil, grease, and other toxins; and sediment runoff from eroding streambanks or construction sites. Chapter NR 151, Wis. Adm. Code establishes runoff pollution performance standards for non-agriculture, transportation, and agricultural practices, to achieve TMDLs.²³ Wisconsin also has a Targeted Runoff Management (TRM) Grant Program which offers grants to communities to help control Nonpoint source pollution.²⁴

Impaired Waters

Section 303(d) of the Clean Water Act states that each State shall publish a list of all the waters that do not meet water quality standards every two years. Waters on the Section 303(d) list must develop TMDLs. In Wisconsin, all stream and river conditions are assessed for the use designations of each waterbody: Fish and Aquatic Life, Recreational use, Fish Consumption, and General Uses. There are minimum threshold requirements for each designation. If the specific waterway is not meeting that criteria for its designated use, it is considered impaired.²⁵ Table 1 lists impaired waters in the 2040 SSA Planning Boundary including the pollutant(s), pollutant source(s), and waterbody impairments.

²³ “Runoff Management”, Wisconsin Administrative Code Chapter NR 151

²⁴ “Targeted Runoff Management Grant Program, Wisconsin DNR

²⁵ “Nonpoint Source Implementation Plan for the Plum and Kankapot Creek Watersheds”, Outagamie County land Conservation Department, 2014

Table 1. 2022 Impaired Waters List of Waterbodies in the Fox Cities SSA Planning Boundary

Waterbody Name	Size (mi.)	Source	Pollutant/Cause	Impairment (WDNR)	Observed Effect (EPA)	Listing Category	WDNR AU ID	County
Lower Fox River (DePere Dam to Middle Appleton Dam)	24.8	Contam. Sed.	PCBs	PCBs Contaminated Fish Tissue	PCBs in Fish Tissue	5A*	357301	Brown, Out.
Garners Creek	7.0	PS/NPS	Chloride	Chronic Aquatic Toxicity	Chronic Toxicity	5W**	10845	Cal., Out.
Unnamed Trib. to Garners Creek	4.7	NPS	Total Phosphorus	Degraded Biological Community	Biological Integrity	5W**	3993962	Cal., Out.
Dutchman Creek	1.9	PS/NPS	Ammonia (Unionized) - Toxin	Chronic Aquatic Toxicity	Chronic Toxicity	5A*	1854741	Out.
Unnamed Stream (to Mud Creek)	7.3	NPS	Total Phosphorus	Degraded Biological Community	Biological Integrity	5A*	8111273	Out.
Lower Fox River (Appleton Dam to L. Winnebago Outlet)	7.9	Contam. Sed.	PCBs	PCBs Contaminated Fish Tissue	PCBs in Fish Tissue	5A*	357364	Out., Winn.
Mud Creek	3.7	NPS	Chloride	Chronic Aquatic Toxicity, Acute Aquatic Toxicity	Chronic Toxicity, Toxicity	5A*	10846	Out., Winn.
Neenah Channel	101.6	Contam. Sed.	PCBs	PCBs Contaminated Fish Tissue	PCBs in Fish Tissue	5A*	5720096	Winn.
Neenah Slough	2.8	Contam. Sed.	PCBs	PCBs Contaminated Fish Tissue	PCBs in Fish Tissue	5A*	10848	Winn.
Neenah Slough	0.8	Contam. Sed.	PCBs	PCBs Contaminated Fish Tissue	PCBs in Fish Tissue	5A*	357915	Winn.
Neenah Slough	2.6	Contam. Sed.	PCBs	PCBs Contaminated Fish Tissue	PCBs in Fish Tissue	5A*	357955	Winn.

Source: DNR Water Condition List, 2022²⁶

*Category 5A: At least one designated use is not met or is threatened, and/or the anti-degradation policy is not supported, and one or more TMDLs are still needed.

**Category 5W: Water quality standards are not met; however, the development of a TMDL for the pollutant of concern is a low priority because the impaired water is included in a watershed area addressed by at least one of the following 9-Key Element watershed plans: adaptive management plan, adaptive management pilot project, lake management plan, or CWA Section 319-funded watershed plan.

²⁶ “Water Condition List”, Wisconsin DNR, <https://dnr.wisconsin.gov/topic/SurfaceWater/ConditionLists.html>

Basin Assessment

The Fox Valley spans portions of three major watershed basins: the Upper Fox, the Lower Fox, and the Wolf River. **Map 4** shows the major watershed basins across the State of Wisconsin. There are several watersheds within each major water basin. The Upper Fox River basin covers 2,090 square miles. The Lower Fox River basin covers 638 square miles. All drainage from the Lower Fox basin, including the Wolf River basin and Upper Fox River basin, flow in a northeast direction from Lake Winnebago to the bay of Green Bay, spanning 6,349 square miles. In 2012, a TMDL was approved for the Lower Fox River Basin and its tributaries.

The Wolf River basin includes the entire Wolf River and surrounding area, about 3,690 square miles in total, draining south to meet the Upper Fox River just north of the Lake Winnebago Pool Lakes. The predominant land uses are dairy, agriculture, and forestry.²⁷

The Upper Fox River, Lower Fox River, and Wolf River basins have approved TMDLs for total phosphorus (TP) and total suspended solids (TSS). As described in the following watershed analyses, there are several waterbodies within each basin that are Section 303(d) and TMDL listed. The major impaired waterbodies in the Fox Cities are listed in Table 1.

Total phosphorus (TP) is the measured amount of all forms of phosphorus, whether particulate or dissolved in the water sample. An excess of phosphorus in the waterbody increases the natural nutrients and accelerates aquatic plant growth. This process, called eutrophication, can become too extreme and increase the likelihood of algal blooms, oxygen deficient waterbodies, and degraded habitat.²⁸



Total suspended solids (TSS) are any material that is suspended in the water and captured in a water sample. Suspended solids decrease the light filtration through the water, which decreases photosynthetic activity, causes a decline in plant life, and causes low dissolved oxygen. Low dissolved oxygen and low water clarity also affect aquatic life and fish, reducing growth rates and larval development. Suspended solids such as bacteria, metals, nutrients, chemicals, silt, and sewage impact water quality and ecological habitat.²⁹


²⁷ “Wolf River Basin”, Wisconsin DNR, <https://dnr.wisconsin.gov/topic/Watersheds/basins/wolf>

²⁸ “Lower Fox River Basin TMDL”, Wisconsin DNR, <https://dnr.wisconsin.gov/topic/TMDLs/LowerFox/index.html>

²⁹ “Information on Solids”, USGS Water Quality Monitoring, <http://bcn.boulder.co.us/basin/data/NEW/info/TSS.html>



 2040 Fox Cities SSA Planning Area Boundary
 State Boundary

 0 15 30
 Scale in Miles

PREPARED JUNE 2023 BY:



Source:
 SSA data provided by ECWRPC, 2023. Base data provided by Regional Counties, 2023. Watersheds by WDNR, 2023.

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Nine Key Element Watershed Plans

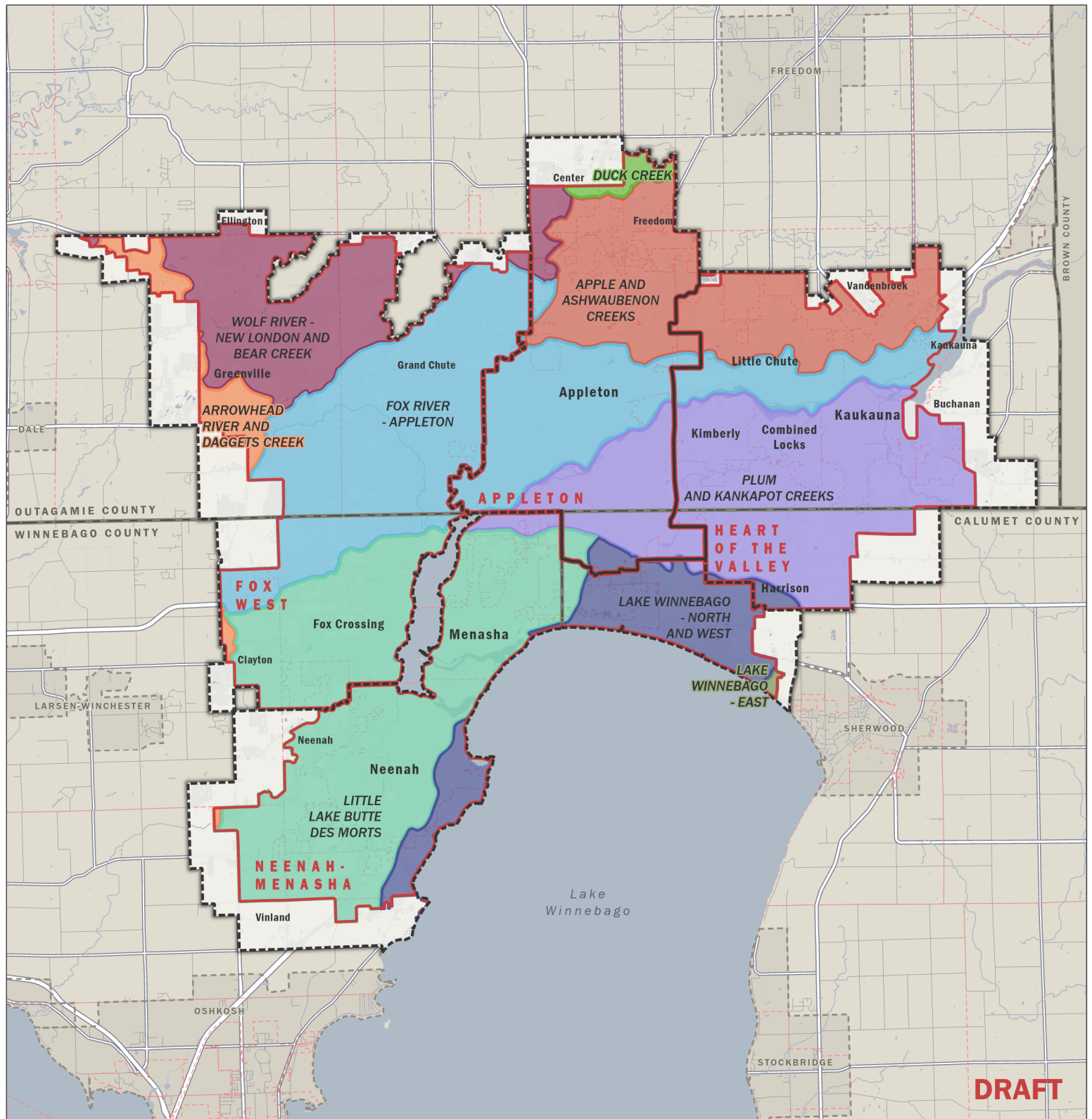
Wis. Statute NR 120.08 outlines the assessment, program implementation, and program evaluation guidelines for watershed plans. Watershed plans shall be prepared for all priority watersheds in Wisconsin.³⁰ Active Watershed Plans address nine key elements that are determined by the EPA to be critical for improving water quality. Some of the key elements include identifying the source of pollutants, describing nonpoint source management measures, educational outreach, creating an implementation schedule, setting criteria for measurable milestones, and water quality monitoring. Nine key element plans guide the development of TMDL Implementation plans, land and water resource management plans, and water protection plans to reach performance standards to meet water quality standards consistent with Wis. Statute NR 151. **Table 2** shows the ten watersheds that span the Fox Cities Planning Area. The five watersheds within the Lower Fox River Water Basin have an active watershed plan and approved TMDL. The table also shows the acres of each watershed within the four SSAs. **Map 5** displays the Watersheds within the sewer service areas.

Table 2. Watersheds and Water Basins Spanning the Fox Cities Sewer Service Areas.

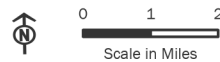
Water Basin	Approved TMDL (TMDL Status)	Watershed	Fox Cities SSA	Acres of SSA in the Watershed
Lower Fox River	2012 (Implementation)	Apple and Ashwaubenon Creeks	Appleton Fox West HOV	6,173 17 5,495
		Duck Creek	Appleton	572
		Fox River - Appleton	Appleton Fox West HOV	6,648 13,711 3,018
		Plum and Kankapot Creeks	Appleton HOV Neenah-Menasha	4,123 13,089 584
		Little Lake Butte des Morts	Appleton Fox West Neenah-Menasha	260 6,522 14,714
Upper Fox River	2020 (Approved)	Lake Winnebago - North and West	Appleton HOV Neenah-Menasha	366 341 5,774
		Lake Winnebago – East	Neenah-Menasha	110
		Lake Winnebago	Neenah-Menasha	34
Wolf River	2020 (Approved)	Arrowhead River and Daggets Creek	Fox West Neenah-Menasha	2,035 51
		Wolf River - New London and Bear Creek	Appleton Fox West	782 8,107

Source: ECWRPC, Wisconsin DNR Total Maximum Daily Loads data

³⁰ “Watershed Plans”, Wisconsin Administrative Code NR 120.08”



- Municipal Boundary
- County Boundary
- 2040 Fox Cities Sewer Service Area Boundary
- 2040 Fox Cities Planning Area Boundary
- Neighboring Planning Area Boundary



PREPARED JUNE 2023 BY:



Source:
SSA data provided by ECWRPC, 2023. Base data provided by Regional Counties, 2023. Watersheds by WDNR, 2023.

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Apple and Ashwaubenon Creeks Watershed

The Apple and Ashwaubenon Creeks Watershed is 113 square miles, spanning Outagamie and Brown Counties. Concerns affecting water quality are nonpoint source runoff pollutants from the agricultural and residential land use types primarily present in the watershed causing increased sediment and phosphorus loading. Apple Creek, Ashwaubenon Creek, Dutchman Creek, and the Fox River are all impaired waters in the watershed. Ashwaubenon and Dutchman Creeks are both outside the SSA planning boundaries. Apple Creek is located just north of the Appleton SSA planning boundary. It is listed for TP and sediment/TSS and was TMDL approved. The pollutants degrade aquatic habitat, impair turbidity, and affect dissolved oxygen levels and eutrophication.³¹

Duck Creek Watershed

The Duck Creek Watershed is 152 square miles, situated in Brown and Outagamie County. The dominant land type is agricultural, and nonpoint agricultural runoff is a large contributor to the low quality of water. Agricultural runoff is responsible for 94 percent of the sediment and 91 percent of the phosphorus loading. Management measures for implementing a plan to reduce the amount of sediment and phosphorus loading from upland fields include installing vegetative buffers, installing water and sediment control basins, increasing soil infiltration, manure management, and restoring wetlands to slow and store water to capture nutrients prior to entering the watershed.³²

Fox River – Appleton Watershed

The Fox River Watershed is approximately 39 miles flowing northeast through twelve dams from Lake Winnebago to the Bay of Green Bay. The Fox River has great significance historically. Originally, Native Americans used the river for travel, irrigation, fishing, and drinking. In the 1600s, European pioneers used the Fox River as a major exploration and fur trading route. In the 1800s, the pioneers began settling along the River and the paper mill industry took off. In the 1900s, urbanization and other industries were booming, including timber mills. With the rapid and intense growth of industry, municipalities, and business; the Fox River began to decline ecologically.

Urbanization increased runoff into the river. The river was no longer utilized as a healthy resource and instead became so polluted that there were severe impacts to the health of the aquatic flora and fauna and was closed to any recreational use.³³ Several paper mills, other industries, and housing still line the river today including two municipal and four industrial point source dischargers.

³¹ “Watershed – Apple and Ashwaubenon Creeks (LF02)”, Wisconsin DNR, <https://dnr.wi.gov/water/watershedDetail.aspx?key=924811>

³² Upper Duck Creek Nonpoint Source Watershed Implementation Plan”, Outagamie County Land Conservation Department, 2016

³³ “Lower Fox River Watershed (LF03)”, Wisconsin DNR, <https://dnr.wi.gov/water/waterDetail.aspx?key=357364>

Excess nutrient and sediment loading as well as contaminated sediments are the major Fox River impairments. At one point in time, sediment sampling found significant amounts of PCBs at various sites ranging from 400 pounds to over 6,000 pounds of PCBs.³⁴ The sediment contaminated PCB Superfund Site cleanup was completed in 2020 by a combination of dredging, capping, and sand covering activities. Long-term monitoring of fish tissue, surface water, and sediment will continue for decades. The EPA conducts review reports following cleanup efforts in five-year cycles.³⁵

The TP and TSS TMDL was approved for the Fox River and its tributaries in 2012. Implementation of the Watershed Plan includes several management measures based on a series of objectives. Some of these include: nutrient management planning for anyone adding fertilizer to their fields to reduce phosphorus and nutrients from agricultural fields, increasing the riparian buffer area to filter out sediment and nutrients, advancing existing conservation plans established along the Fox River, and restoring wetlands and native habitat.³⁶

One main named tributary draining to the Fox River in Appleton is Mud Creek; an 8-mile, very shallow stream with headwaters in urban areas. The Creek is listed on the State impaired water list for TSS pollution and approved TMDL. Due to the urban conditions surrounding the Creek, the watershed is ranked high for runoff impacts on streams and high runoff impacts on groundwater.³⁷

Plum and Kankapot Creek Watersheds and Garners Creek Subwatershed

The Plum and Kankapot Creek watershed is 38,712 acres, including 9 miles of the Kankapot Creek and 19 miles of the Plum Creek. The sub watersheds are predominantly agricultural crop lands; 73 percent for Plum Creek and 81 percent for Kankapot Creek. Impaired waters in this watershed include Kankapot Creek and Plum Creek. Kankapot Creek is nine miles long with a heavy clay soil bottom and low fish habitat due to poor water quality. Both Creeks are TMDL approved for TP and TSS. Nonpoint source pollutants enter the Creeks via rural or urban runoff, streambank modifications and destabilization, and discharge from municipal storm sewer systems (MS4).³⁸

³⁴ “Lower Fox River, East River Watershed (LF01)”, Wisconsin DNR, <https://dnr.wi.gov/water/waterDetail.aspx?WBIC=117900>

³⁵ “Superfund Site: Fox River NRDA/PCB Releases Green Bay, WI Cleanup Activities”, US EPA, <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=0507723#Status>

³⁶ “Lower Fox River Mainstem (City of Green Bay – Fox River & Garners Creek-Fox River) Nonpoint Source Watershed Implementation Plan”, 2019

³⁷ “Mud Creek, Fox River – Appleton Watershed (LF04)”, Wisconsin DNR, <https://dnr.wi.gov/water/waterDetail.aspx?key=10847>

³⁸ “Plum and Kankapot Creeks Watershed (LF03)”, Wisconsin DNR, <https://dnr.wi.gov/water/waterDetail.aspx?key=10844>

The Garners Creek subwatershed, at approximately 31.25 square miles, is within the Fox River basin and the Plum and Kankapot Creek watersheds. Sixty percent of the sub watershed land use is primarily urbanized, 18 percent is agricultural land, and the rest is open space, open water, wetlands, and forest. Due to heavy urbanization, the hydrology of the watershed has been modified greatly with stream altering, gradient changes, and increased impervious surfaces. The communities within the HOV SSA contribute significant amounts of drainage to the watershed. The Fox River bisects the sub watershed. Garners Creek is the only named stream within the watershed, however there are multiple un-named tributaries, which also drain into the Fox River. Both Garners Creek and an unnamed tributary are listed as impaired waters for TP, chloride, and TSS pollutants. There is a Targeted Watershed Assessment Project in place to evaluate the water quality, biological community, and habitat at several monitoring stations.³⁹

Figure 1 displays the Lower Fox River TMDL Implementation Status in 2020. The figure shows the progress of the TP and TSS reduction plan as a part of the TMDL. Several subwatersheds implementation was initiated in 2015 – 2018. Monitoring is ongoing.



















Lower Fox TMDL Agriculture Implementation Status - 2020				
Subwatershed	9 Key Element Plan Status	Implementation Status	TP Reduction Progress	TSS Reduction Progress
Plum	2015 - EPA Approved	Initiated 2015	 20%	 18%
Kankapot	2015 - EPA Approved	Initiated 2015	 12%	 13%
Upper East*	2016 - EPA Approved	Initiated 2017	 4%	 3%
Upper Duck*	2016 - EPA Approved	Initiated 2017	 17%	 45%
Apple	2017 - EPA Approved	Initiated 2018	 4%	 4%
Lower East*	2018 - EPA Approved		N/A	N/A
Lower Fox	2019 - EPA Approved		N/A	N/A
Garners	2019 - EPA Approved		N/A	N/A
Bower	2019 - EPA Approved		N/A	N/A
Ashwaubenon	2020 - EPA Approved		 1%	 3%
Dutchman	2020 - EPA Approved		 1%	 2%
Baird	2021 - Future Development		N/A	N/A
Middle Duck*	TBD		N/A	N/A
Lower Duck*			N/A	N/A
Lower Green Bay			 1%	 4%
Neenah Slough			 2%	 9%
Mud			N/A	N/A
Trout			N/A	N/A
* These subwatersheds lie within subbasins defined by the Lower Fox TMDL. The associated reduction progress for both the Duck and East subwatersheds relate to the entire area of the respective TMDL subbasin boundary.				

Figure 1. Lower Fox River TMDL Agriculture Implementation Status, 2020.

³⁹ “Public Review Draft: Garners Creek Targeted Watershed Assessment: A Water Quality Report to Restore Wisconsin Watersheds, 2022”, Wisconsin DNR

Little Lake Butte des Morts Watershed

The 44 square mile Little Lake Butte des Morts watershed has many unnamed tributaries which drain to the Fox River. The watershed flows from the outlet of Lake Winnebago to the impoundment behind the Appleton dam. The Neenah Slough is one named tributary which flows through the City of Neenah. This watershed covers most of the Neenah-Menasha SSA, with a majority of the land area in Winnebago County and a small portion in the northeast corner of Calumet County. Both the Fox West and Neenah-Menasha WWTFs are two of the 15 industrial point source dischargers into the Watershed. Stormwater runoff is the major nonpoint source pollutant, with the outlying areas of the urban land use development as agricultural. Major pollutants in this watershed are silt and nutrients which reduce fish habitat. Other pollutants include PCBs in the sediment.⁴⁰

The Neenah Slough, at 4.5 miles long, is the major tributary and impaired water in the Little Lake Butte des Morts Watershed. The Neenah Slough has characteristics of a stream, lake, and marsh. The north end is situated within the urbanized area of the City of Neenah. The south end is bordered by a nature preserve and agricultural land with increasing development pressures. Major sources of pollutants include industrial point source, MS4 discharges, and nonpoint sources. The Slough has low dissolved oxygen caused by elevated TP levels. Analyses found contaminated fish tissue impaired from PCBs. The Neenah Slough has an approved TP and TSS TMDL.⁴¹

Lake Winnebago - North and West Watershed

The Lake Winnebago North and West watershed is located along the shoreline of Lake Winnebago from the City of Oshkosh in Winnebago County to the Village of Harrison in Calumet County. This watershed is about 14,548 acres in total with over 50 percent of the area dominated by agriculture and 17 percent by urban land use. The ecological landscape is composed of glacial till plain materials deposited during the Wisconsin Ice Age. The largest body of water in this watershed is Lake Winnebago. It is a major resource for fish, aquatic flora and fauna, and recreation. It also serves as a drinking water supply for communities in the East Central Wisconsin region. Water quality concerns include nonpoint source pollutant runoff and point source pollutants from the major urban areas along the shore. The Lake is classified as impaired due to low dissolved oxygen (DO), eutrophication, turbidity, and excess algal growth. All of these can be attributed to pollutants including PCBs, total phosphorus, sediment and TSS, and mercury.⁴²

⁴⁰ “Watershed – Little Lake Butte des Morts (LF06)”, Wisconsin DNR, <https://dnr.wi.gov/water/watershedDetail.aspx?key=924908>

⁴¹ “Impaired Water – Neenah Slough”, Wisconsin DNR, <https://dnr.wi.gov/water/impairedDetail.aspx?key=357955>

⁴² “Watershed - Lake Winnebago – East, Wisconsin DNR, <https://dnr.wi.gov/water/waterDetail.aspx?key=358400>

Arrowhead River and Daggets Creek Watershed

At 135 square miles, the Arrowhead River and Daggets Creek Watershed is located mostly in Outagamie and Winnebago Counties with only a small percentage in Waupaca County. Water quality concerns in this watershed include low dissolved oxygen levels, excessive vegetation, and soil loss. Several large wetland areas are located in the watershed including the Rat River State Wildlife Area, Dale Swamp, Clark's Bay Marsh, and Arrowhead River Marsh.⁴³ The Rat River and Arrowhead River are both impaired in the watershed. The Rat River has a Section 303(d) Status from elevated water temperatures. It is also TMDL approved for TP impairing the dissolved oxygen levels and causing degradation of the biological community.⁴⁴

Wolf River – New London and Bear Creek Watershed

The Wolf River- New London and Bear Creek Watershed covers 145 square miles of west central Outagamie County. The northern portion of Bear Creek is impaired and TMDL approved for high phosphorus levels. The Wolf River has stable water quality and was delisted from the impaired waters list in 2018. There are three municipal point source dischargers and four industrial point source dischargers in the watershed.⁴⁵

Wisconsin Natural Heritage Inventory

The WDNR keeps a Natural Heritage Inventory (NHI) of species that may be rare or threatened.⁴⁶ A varied spectrum of flora and fauna increases the biological diversity in the State. Biodiversity has widespread benefits that affect the environment and human health. The NHI database lists species according to Township and Range. Table 3 below lists the species on the NHI that fall within the Fox Cities Sewer Service Planning Area Boundary according to township and range. Wisconsin has three broad status groups: endangered (END), threatened (THR), and special concern (SC). Under special concern, species could be a protected wild animal (SC/P), species with no current regulation laws (SC/N), species protected with laws regulating open and closed seasons (SC/H), or species protected under the Migratory Bird Act (SC/M).

⁴³ "Watershed – Arrowhead River and Daggets Creek (WR01), Wisconsin DNR, <https://dnr.wi.gov/water/watershedDetail.aspx?key=924876>

⁴⁴ <https://dnr.wi.gov/water/watershedImpaired.aspx?code=WR01>

⁴⁵ <https://dnr.wi.gov/water/watershedDetail.aspx?key=924776>

⁴⁶ "Natural Heritage Inventory Data", Wisconsin DNR, <https://dnr.wi.gov/topic/NHI/Data.asp>

Table 3. Species and Natural Features on the Natural Heritage Inventory in the Fox Cities.

<u>Scientific Name</u>	<u>Common Name</u>	<u>WI Status</u>	<u>Group</u>	<u>Township, Range, SSA *</u>
<u>Acipenser fulvescens</u>	Lake Sturgeon	SC/H	Fish	T21N, R17E - T20N, R17E
<u>Alasmidonta viridis</u>	Slippershell Mussel	THR	Mussel	T22N, R18E
<u>Asclepias ovalifolia</u>	Dwarf Milkweed	THR	Plant	T19N, R16E
<u>Bombus fervidus</u>	Yellow Bumble Bee	SC/N	Bee	T19N, R16E - T19N, R17E
<u>Carex formosa</u>	Handsome Sedge	THR	Plant	T20N, R16E - T20N, R17E
<u>Chlidonias niger</u>	Black Tern	END	Bird	T20N, R16E
<u>Chlosyne gorgone</u>	Gorgone Checker Spot	SC/N	Butterfly	T20N, R16E - T19N, R16E
<u>Cypripedium arietinum</u>	Ram's-head Lady's-slipper	THR	Plant	T20N, R17E
<u>Cypripedium candidum</u>	White Lady's-slipper	THR	Plant	T19N, R16E
<u>Eclipta prostrata</u>	Yerba-de-tajo	SC	Plant	T21N, R17E
<u>Eleocharis compressa var. compressa</u>	Flat-stemmed Spike-rush	SC	Plant	T19N, R16E
<u>Emergent marsh</u>	Emergent Marsh	NA	Community	T20N, R16E
<u>Emydoidea blandingii</u>	Blanding's Turtle	SC/P	Turtle	T21N, R17E
<u>Falco peregrinus</u>	Peregrine Falcon	END	Bird	T21N, R18E - T21N, R19E - T21N, R17E - T20N, R17E
<u>Floodplain forest</u>	Floodplain Forest	NA	Community	T20N, R18E
<u>Hydrophyllum appendiculatum</u>	Great Water-leaf	SC	Plant	T20N, R18E
<u>Migratory Bird Concentration Site</u>	Migratory Bird Concentration Site	SC	Other	T21N, R16E - T20N, R16E - T21N, R18E - T21N, R18E - T21N, R19E - T20N, R18E - T21N, R17E - T20N, R17E
<u>Platanthera leucophaea</u>	Eastern Prairie White Fringed Orchid	END	Plant	T20N, R16E - T19N, R16E
<u>Rallus elegans</u>	King Rail	SC/M	Bird	T20N, R16E
<u>Ruellia humilis</u>	Hairy Wild Petunia	END	Plant	T21N, R19E
<u>Southern dry-mesic forest</u>	Southern Dry-mesic Forest	NA	Community	T21N, R18E - T21N, R19E
<u>Southern sedge meadow</u>	Southern Sedge Meadow	NA	Community	T20N, R16E
<u>Sterna forsteri</u>	Forster's Tern	END	Bird	T20N, R16E
<u>Talus forest</u>	Talus Forest	NA	Community	T20N, R18E
<u>Thalictrum revolutum</u>	Waxleaf Meadowrue	SC	Plant	T20N, R16E - T19N, R16E
<u>Trillium nivale</u>	Snow Trillium	THR	Plant	T21N, R18E - T20N, R18E - T20N, R17E
<u>Valeriana edulis var. ciliata</u>	Hairy Valerian	SC	Plant	T19N, R16E
<u>Valeriana uliginosa</u>	Marsh Valerian	THR	Plant	T20N, R17E
<u>Wet-mesic prairie</u>	Wet-mesic Prairie	NA	Community	T20N, R16E - T19N, R16E - T19N, R17E

Source: Natural Heritage Inventory Data Working List, WNDNR

*T21N, R17E - Appleton & Fox West, T22N, R18E - Appleton, T21N, R16E - Fox West, T20N, R16E - Fox West & Neenah-Menasha, T19N, R16E - Neenah-Menasha, T19N, R17E - Neenah-Menasha, T21N, R18E - HOV, T21N, R19E - HOV, T20N, R18E - HOV & Appleton & Neenah-Menasha, T20N, R17E - Neenah-Menasha

Chapter 4: Goals and Objectives

Across the East Central Wisconsin Regional Planning Commission region, sewer service area plans are prepared within the context of the regional comprehensive land use plan, *New Directions for Growth and Development* (ECWRPC, 1978). The process used for the 1978 land use plan established goals, objectives and policies formulated in response to citizens' desires and needs brought forth in East Central's public participation program. Appropriate goals, objectives and policies were referenced as the groundwork for the establishment of all urban service area plans and boundaries.

As part of the updating process in 2022, the earlier set of goals, objectives, and policies have been refined to provide more specific guidance for sewer service area planning. Four overall goals have been identified. These goals and related objectives and policies pertain to growth management, urban service delivery, environmental resources and open space. Objectives and policies related to the goals point out the significant interrelationship between urban growth and land use, sanitary sewerage planning and the environment. Together, they provide a sound basis for determining a community's future development.

The intent of the 2040 Fox Cities Sewer Service Area Plan is to encourage efficient, orderly and planned land use development patterns which allow for logical, cost-effective sewered development that incorporates sound environmental management practices. The goals integrate four sub-area functional plans which have direct impacts on future land use. These functional areas are **Growth Management**, **Urban Service Delivery**, **Environmental Resources**, and **Open Space**. The Goals associated with each functional area are the following:

Functional Area Goals:

Growth Management: Encourage an orderly and planned pattern of community growth and development.

Urban Service Delivery: Promote urban services in an efficient, environmentally sound, and socially responsible manner.

Environmental Resources: Protect the environment and manage natural resources in an ecologically sound manner.

Open Space: Protect and preserve natural and cultural resources.

GROWTH MANAGEMENT

Goal: Encourage an orderly and planned pattern of community growth and development

OBJECTIVE 1: Allocated Growth. Promote balanced allocation of land areas to accommodate current and future urban development needs which contain centralized, compact, contiguous and compatible urban development patterns.

Policies:

1. The supply of land allocated for urban development should approximate the current and future needs as determined from population, density standards, and land use projections.
2. New urban development patterns should incorporate planned areas of mixed use and higher density neighborhoods that are clustered and compatible with adjacent uses for improved accessibility for residents such as work places, shopping centers, recreational facilities, and community facilities.
3. Vacant developable lands within existing urban areas should first be infilled, then development staged outward from the existing development limits.
4. Natural and man-made features, such as ridge lines, streams and major highways, should be considered in the expansion and staging of urban development.
5. The expansion of subdivision development, major commercial and industrial, and public land use activities should be adjacent to existing areas with the provision of necessary facilities and services or in areas designated for such development in adopted comprehensive plans.
6. Urban sprawl in the form of unplanned development which is non-contiguous, low density, scattered, and inefficiently served should be discouraged.

OBJECTIVE 2: Environmentally Sound Development. Promote urban development which protects environmentally sensitive areas and is compatible with the natural resource base.

Policies:

1. Urban development should be directed to suitable land and discouraged on unsuitable land, such as floodplains, wetlands, prime agricultural soils, areas of high bedrock and groundwater, steep slopes, prime wildlife habitat, unique scientific areas, and areas of historical or archeological significance.
2. The development of environmentally sensitive areas should be discouraged.
3. Adverse development impacts to surface water and groundwater should be prevented or mitigated.
4. Designs and plans for new development should preserve open spaces for public use, complement the existing landscape, and conserve energy and natural resources.
5. Land reclamation should be required following extractive operations or other uses which significantly alter the land surface.
6. Urban redevelopment activities should weigh environmental, health and safety factors against associated costs and benefits.

OBJECTIVE 3: Efficient Development. Promote efficient and cost-effective development in urban growth areas.

Policies:

1. Urban development should be encouraged at densities adequate to sustain reasonable urban service costs.
2. Urban development should occur in areas served by existing adequate public facilities and services.
3. A variety of types, prices and locations of housing should be provided to promote convenience, choice and affordability.
4. Major commercial and industrial areas should be provided with readily accessible major transportation systems.

OBJECTIVE 4: Rural Land Development. Preserve rural land uses by requiring planning which considers water and sanitary sewer adequacy.

Policies:

1. Agricultural and open space characteristics of rural areas should be preserved.
2. Rural development should be limited to land with suitable physical characteristics and soils supporting conventional on-site sewage treatment systems.
3. Rural subdivision development should be limited to areas which do not negatively impact agricultural or open space uses and the provision of public services.

OBJECTIVE 5: Compatibility with the Transportation Network. Encourage development in areas that are served by existing transportation infrastructure.

Policies:

1. Infill development and redevelopment projects should be promoted in order to avoid the need for extension of transportation infrastructure and service.
2. Design standards for infill should be given different consideration for transportation/ traffic requirements compared to "greenfield" development.
3. Development patterns and site designs that support multimodal transportation should be encouraged.

URBAN SERVICE DELIVERY

Goal: Promote urban services in an efficient, environmentally sound, and socially responsible manner.

OBJECTIVE 1: Economical Public Facilities. Provide efficient, economical, and equitable public facilities and services to urban development.

Policies:

1. The use of existing public facilities and services should be maximized in the allocation of future urban growth.
2. Designing of new and upgraded transportation and utility facilities with capacities sufficient to respond to existing demand levels and to the additional demand generated by planned development should be encouraged.
3. A full range of essential urban services and facilities should be provided to urban development areas.
4. The costs of providing urban services should be minimized through higher density development.
5. Major infrastructure extensions should be staged to coincide with community growth rates.
6. Utilities serving individual developments should be extended consistent with community water and wastewater system plans.
7. Provision of public facilities and services should be coordinated with the location and timing of new development.

OBJECTIVE 2: Cooperative Provision of Services. Provide services where efficiency, equity, and economies of scale can be obtained through cooperation and coordination.

Policies:

1. Overlapping urban service areas, facility and system capacities and service capabilities should be avoided.
2. The proliferation of major public infrastructure facilities should be discouraged.
3. Intermunicipal agreements should be promoted for the provision of joint service.
4. More uniform facility design and service standards should be encouraged for multiple jurisdiction development areas.

ENVIRONMENTAL RESOURCES

Goal: Protect the environment and manage natural resources in an ecologically sound manner.

OBJECTIVE 1: Water Quality Protection. Improve and protect surface and groundwater quality.

Policies:

1. The quality and supply of groundwater should be protected as the principal source of water supply and water conservation programs should be encouraged.
2. The use of natural drainage patterns and measures should be promoted to enhance water quality.
3. Wetlands should be preserved as an essential component of the hydrologic system.
4. The risk of groundwater contamination should be reduced in aquifer recharge areas.
5. Lakeshore and streambank erosion should be minimized.
6. Construction site erosion should be controlled and urban stormwater runoff reduced.
7. Non-point source pollution abatement programs should be supported.
8. The adverse water quality impacts of agricultural runoff should be minimized.

OBJECTIVE 2: Environmentally Sensitive Area Protection. Preserve and protect environmentally sensitive areas and promote the linkage of these areas into environmental corridors.

Policies:

1. The natural environment should be recognized as an integrated system of interacting and finite land, water, and air resources to protect the health and stability of this system.
2. Shoreland, floodplain, and wetland areas should be protected as essential components of the hydrologic system and their scenic and recreational value preserved.
3. The disturbance of environmentally sensitive areas by utilities and transportation facilities construction should be minimized.
4. Critical natural areas, including critical habitat areas for endangered and rare species, should be preserved and protected from development and other adverse impacts.
5. Adjacent land uses which adversely impact environmentally sensitive areas should be restricted or mitigated.
6. The interrelationship of adjacent landscape types should be recognized to avoid dividing the natural units or breaking important linkages.
7. Soil should be recognized as one of the basic and most important resources. Programs to preserve and improve productivity and wise use consistent with soil capability should be developed and promoted.
8. Responsible public use of private land should be encouraged.

OPEN SPACE

Goal: Protect and preserve natural and cultural resources.

OBJECTIVE 1: Preservation Areas. Preserve areas of unique natural, historical, and cultural significance or unusual beauty for public use and enjoyment.

Policies:

1. All significant preservation areas should be identified and mapped.
2. Unique areas should be protected by minimizing the impact of individual development proposals.

OBJECTIVE 2: Cost-Effective Recreation. Provide recreational opportunities in a cost-effective manner.

Policies:

1. Recreational facilities should be provided to address the level of activity participation, facility deficiencies, and aesthetic needs of the community.
2. Municipalities should be encouraged to establish capital funding and other parkland dedication methods to provide for the future recreational needs.
3. The development of a county park system should be encouraged to complement recreational opportunities available in local parks.
4. The use of existing recreational facilities should be optimized.
5. Duplicative recreational facilities and programs should be avoided.

OBJECTIVE 3: Attractive Communities. Make individual communities, and the region as a whole, a more attractive place to live, work, and play.

Policies:

1. Scenic areas should be preserved and landscaping and other site development requirements strengthened to promote community beautification.
2. Waterfront areas should be preserved and redeveloped to promote greater public recreational use.
3. Scenic easements to protect important viewsheds should be acquired.

Chapter 5: Planning Area Descriptions

Planning Area Overview

The first step in delineating sewer service areas is the outlining of broad planning areas which include all feasible options for where urban growth might occur within the 20-year planning period. The Planning Area is the area for which the data was collected and analyzed throughout the planning process. It is a longer-term indication of the ultimate service area for each wastewater treatment facility. Identifying the Planning Area (PA) focuses the sewer service study area on a defined geographic area and facilitates the planning effort. Understanding the growth and development trends affecting the surrounding communities is necessary for effectively planning for the future.

Adjustments to the Planning Area were developed after a thorough review of information pertaining to the existing and planned development patterns and the wastewater collection system, as well as through discussions with the municipal staff during the plan development process.

Future development may impact environmentally sensitive areas (ESAs). Care must be taken to ensure that best management practices are utilized prior to, and during construction. Development Plats may need to be adjusted to avoid impacting ESAs. ESAs are shown on **Map 6**. Additional information on the condition of the water resources and ESAs for each planning area are contained in Chapter 3 and Chapter 8.

Existing Land Use Classifications

A map was prepared in 2022 based off the Fox Cities 2021 existing land uses. The information is based on the ECWRPC's detailed existing land use inventory with corrections made from recently updated community comprehensive plans. The parcels in **Map 7** are categorized into 8 separate land use groups. Land use is not affected by parcel ownership, rather it provides a description of the current land function on the ground during the most recent inventory. It is a snapshot in time as of the September/October 2022, and will continue to change from year to year as development occurs.

ECWRPC's land use classes are described below:

Residential land is classified as land that is used primarily for human habitation. Residential land uses are divided into single family, two-family (duplex), multifamily, farmstead, and mobile home parks.

Commercial land uses represent the sale of good and services including: wholesale and retail (vehicle dealers, furniture, building equipment, grocery and liquor stores, gasoline stations, etc.), services (real estate, waste management, restaurants, etc.), and other related uses.

Industrial land uses represent a broad category of activities which involve the production of goods. Industrial uses include manufacturing (factory or mill operations), construction, warehousing operations, and trucking.

Institutional Facilities land is for public and private facilities dedicated to serving the public. These include schools, hospitals, government buildings, cemeteries, post offices, assemblies, fire stations, and municipal offices.

Utilities and communications are classified as any land use which aids in the generation, distribution, and storage of electric power, natural gas, and telecommunications. It also includes facilities associated with water treatment plants, wastewater treatment plants, landfills, and recycling facilities.

Transportation includes land uses that directly focus on moving people, goods, and services from one location to another. Transportation uses include highway and street rights of way, public transit facilities, bicycle and pedestrian facilities, and rail related facilities.

Water features consist of all surface water including lakes, streams, rivers, ponds, and intermittent waterways. Water features are subdivided into wetlands, and stream and wetland buffers.

Vacant, Developable land uses represent all woodlands, agriculture, and vacant land. Agricultural land is broadly classified as land that is used for crop production. Woodlands are forested areas which are characterized by a predominance of tree cover; including naturally occurring, and planted woodlands for forestry and or orchards. Vacant open land is not currently developed in a manner similar to the other land use categories described within this section.

Fox Cities Planning Area Existing Land Use

Table 4 displays the existing land use (2021) acres for each sewer service planning area boundary. The existing land use is also represented in **Map 7**. The table includes a column depicting the percent of the total acreage for each land use class. Fox West has the largest planning area of the Fox Cities at approximately 36,239 acres. The Appleton Planning Area (PA) is currently the smallest in the Fox Cities at approximately 20,193 acres.

The highest percentage of land use classification across the Neenah-Menasha (NM), Fox West, and Heart of the Valley (HOV) areas is vacant, developable and the second highest is single-family residential. The Appleton Planning Area's highest percentage of land use is single-family residential and the second highest is vacant, developable.

Transportation infrastructure consumes the third highest percent of the entire Fox Cities planning area across all four sewer service planning areas. The total 2040 Fox Cities Sewer Service Planning Area encompasses 110,170 acres. Approximately 11 percent of the total PA includes environmentally sensitive areas such as open water, wetlands, and stream/wetland buffer zones.

Table 4. Existing Land Use by Planning Area, 2021

Land Use	NM		Fox West		Appleton		HOV		Total Fox Cities	
	Acres	% of Total	Acres	% of Total	Acres	% of Total	Acres	% of Total	Acres	% of Total
Commercial	1,016	3.8%	2,331	6.4%	1,197	2.9%	1,011	3.8%	5,555	5.0%
Industrial	1,028	3.8%	1,639	4.5%	587	2.9%	862	3.2%	4,116	3.7%
Multi-Family Residential	485	1.8%	563	1.6%	494	2.4%	301	1.1%	1,843	1.7%
Public/ Institutional	1,352	5.0%	1,384	3.8%	1,874	9.3%	1,414	5.3%	6,024	5.5%
Single Family Residential	6,596	24.4%	6,610	18.2%	6,228	30.8%	6,053	22.6%	25,487	23.1%
Transportation	3,540	13.1%	5,507	15.2%	3,335	16.5%	3,254	12.2%	15,636	14.2%
Utilities/ WWTP	148	0.5%	80	0.2%	332	1.6%	423	1.6%	983	0.9%
Vacant, Developable	9,466	35.1%	13,738	37.9%	4,672	23.1%	10,473	39.2%	38,349	34.8%
ESAs:										
Water	387	1.4%	205	0.6%	385	1.9%	826	3.1%	1,803	1.6%
50 Ft Wetland Buffer	892	3.3%	1,087	3.0%	143	0.7%	169	0.6%	2,290	2.1%
75 Ft Stream Buffer	646	2.4%	1,392	3.8%	774	3.8%	1,631	6.1%	4,444	4.0%
Wetland	1,432	5.3%	1,703	4.7%	171	0.8%	333	1.2%	3,640	3.3%
Subtotal ESAs	3,357		4,388		1,474		2,959		12,177	
Total Acres	26,989		36,239		20,193		26,749		110,170	

Source: ECWRPC

Recent Growth

Prior to projecting future growth areas, recent historic growth was identified in the Fox Cities area based on County parcel data. ECWRPC mapped new parcels from the past three years (2019 to 2021) using parcel data categorized by property tax classification (See **Map 8**). There are many reasons a parcel is split or its property tax classification changes; a common cause is subdividing an agricultural parcel for development. It is important to note that property tax classification is distinct from the land use classification that is used throughout the Plan. For example, in this map, homes with one to three units are considered residential, and homes with four or more units are considered commercial. Per ECWRPC's land use classification standards, homes with one to two units are residential, and homes with three or more units are multi-family residential. Therefore, one should consider **Map 8** as general picture of where development has occurred on a broad scale.

By reviewing the past three-year growth areas (2019-2021), it is clear that development is approaching the outer limits of the Year 2030 SSA Boundaries. The need to expand the SSA boundaries to accommodate growth for the next 20 years is apparent. The following sections will describe the year 2040 planning areas for each SSA.

Planning Area Descriptions

NEENAH-MENASHA (NM) PLANNING AREA

The updated Neenah-Menasha Sewer Service Planning Area covers approximately 26,989 acres. The Planning Area is located in northeastern Winnebago County and northwestern Calumet County. As illustrated in **Map 1**, the PA is bounded to the north by the Fox West, Appleton, and Heart of the Valley Sewer Service Areas. Lake Winnebago bounds the PA on the southeast. The PA contains the Cities of Menasha and Neenah, the Villages of Fox Crossing and Harrison, portions of the City of Appleton, and portions of the Towns of Clayton, Neenah, and Vinland. The Town of Neenah Sanitary District #2 is also located in the PA.

Map 8 provides a good picture of where recent developments are occurring across the Fox Cities. In the Neenah-Menasha SSA, there have been some areas of infill development in the City of Menasha and the City of Neenah. However, there was also significant residential growth occurring in the Village of Harrison and the outskirts of the City of Neenah.

Environmentally Sensitive Areas

The major areas designated as environmentally sensitive areas (ESAs) include wetlands along U.S. Highway 10 in the City of Menasha and the Village of Harrison. Some of the wetlands are preserved in the 91-acre Heckrodt Wetland Reserve south of State Highway 114, and north of Lake Winnebago. There are several large areas of wetlands and shorelands along tributaries to the Neenah Slough and Little Lake Butte des Morts in the City of Neenah and the Town of Neenah. Wetlands and floodways of the Neenah Slough will impact development. Other areas designated as ESAs include pockets of wetlands and unnamed tributaries which lie in the eastern portion of the planning area in the Village of Harrison, north of State Highway 114 and west of State Park Road.

Neenah-Menasha Planning Area Adjustments

Several areas were proposed for inclusion in the PA during the update process to reflect the ability to provide service to these areas. Based on technical information for existing interceptor sewers and lift stations and input from municipal staff, the following areas have been proposed for inclusion in the PA:

- PA adjusted to follow full parcel boundaries since the previous boundary dissected multiple parcels, making development of the full parcel difficult.
- PA extended to the east in the Village of Harrison. Lift Station #6 in Harrison Utilities can service the property on the east side of County Road N.
- PA extended to the west of State Highway 76 in the Town of Vinland.

- There were approximately seven Amendments to the 2030 Neenah-Menasha SSA since it was adopted in 2006 (Appendix D).

FOX WEST PLANNING AREA

The updated Fox West SSA Planning Area covers approximately 36,239 acres and is located in the southwestern Outagamie and northern Winnebago Counties. As illustrated on **Map 1**, the updated boundary extends West from the City of Appleton and encompasses lands north and west of the Fox River out to State Highway 76 in the Town of Clayton and Julius Drive and North Road in the Village of Greenville. The boundary loosely follows along State Highway 15 in Greenville to the municipal boundary with the Town of Horton. The northern boundary extends generally to County Highway JJ in Outagamie County and reaches southward to Larsen Road in the Town of Neenah.

The PA spans two Counties, encompassing portions of the City of Appleton, the Towns of Ellington and Grand Chute, the Village of Greenville, and the Town of Grand Chute Sanitary District #2 in Outagamie County. Portions of the City of Neenah, the Towns of Clayton and Neenah, the Village of Fox Crossing, and the Clayton Sanitary District in Winnebago County are also included in the PA.

Map 8 shows significant development occurred in the Fox West SSA from 2019 through 2021. There were some concentrated pockets of residential development in the northern area of the Town of Grand Chute, out in the western sections of the Village of Greenville, and also in the Village of Fox Crossing.

Environmentally Sensitive Areas

There are several large ESA regions within the Fox West PA as seen in **Map 6**. There are many wetlands and stream courses abutting the northern portion of the planning area in the Wolf – River Bear Creek Watershed. A major portion of this wetland and tributary ecosystem is preserved as the Buboltz Nature Center. Bear Creek also cuts through the northwest portion of the SSA, north of JennerJohn Park and underneath State Highway 15. Unnamed tributaries to Mud Creek in the Fox-River – Appleton Watershed and the associated shorelands and wetlands may also impact development in the Town of Grand Chute and the Village of Fox Crossing. There is a relatively significant ESA area associated with Little Lake Butte des Morts shoreland and the Stroebe Island wetland complex found at the outlet of Mud Creek, which drains a majority of the land within the SSA.

Fox West Planning Area Adjustments

Several areas were proposed for inclusion in the 2006 PA during the update process.

- PA shifted eastward to Julius Drive and North Road in the Village of Greenville.
- PA expanded along State Highway 15 corridor to account for future development as the Wisconsin Department of Transportation is working on an upgrade and expansion, anticipated to be completed in 2023.
- PA extended in the north to County Highway JJ in the Town of Grand Chute to further align with the Town's Sanitary Sewer Master Plan.

- PA adjusted to follow full parcel boundaries since the previous boundary dissected multiple parcels, making development of the full parcel difficult.
- Westridge Golf Course area (approximately 160 acres) remaining Undefined Planning Area. A formal request was submitted by the Town of Clayton after the Informational Meetings in January, 2023 for the area to be included in the Fox West SSA. The City of Neenah objected to the request. Following a review of cost-effectiveness analyses submitted in March, 2023 by the City of Neenah and Fox Crossing Utilities, ECWRPC made a decision to keep the area Undefined. ECWRPC recommends the parties continue conversations regarding the best way to serve the area in the future.
- There were approximately 11 Amendments to the 2030 Fox West SSA (Appendix D).

APPLETON PLANNING AREA

The updated Appleton SSA Planning Area covers approximately 20,193 acres and is located in south-central Outagamie County and northwestern Calumet County. As illustrated on **Map 1**, the updated PA generally extends to from State Highway 47 and the Appleton City limits on the west to State Highway 441 on the east and south. It also includes lands northwards to Wege Road. The Appleton SSA is bounded to the west by the Fox West SSA, to the east by the Heart of the Valley SSA, and to the south by the Neenah-Menasha SSA. The PA encompasses the City of Appleton, the Towns of Center, Freedom, and Grand Chute. It also includes small portions of the Villages of Harrison and Little Chute in Outagamie County.

Map 8 shows that the Appleton SSA experienced some infill or redevelopment in the middle of the City. There has also been more residential growth occurring on the north end of the City near the Town of Freedom.

Environmentally Sensitive Areas

ESAs can be seen in **Map 6**. There are not any large areas of wetlands in the SSA. However, there are several streams, such as Apple Creek and a number of unnamed tributaries in the Apple and Ashwaubenon Creek Watershed which collect water from the surrounding land and drains into the Fox River. Small pockets of wetlands exist in the northern portion of the planning area around the tributaries and in the northwest corner near the Bubolz Nature Preserve.

Appleton Planning Area Adjustments

There were a few changes made to the 2006 PA boundary.

- PA adjusted in the northeast area to expand from E. Apple Creek Road eastward to French Road.
- PA adjusted to the northwest area to expand to Wege Road.
- In 2020, a portion of the Outagamie County Recycling & Solid Waste area was swapped from the Heart of the Valley PA to the Appleton PA in order for the Appleton WWTP to accept the leachate from the Northwest Landfill.
- There were approximately four Amendments to the 2030 Appleton SSA (Appendix D).

HEART OF THE VALLEY PLANNING AREA

The updated Heart of the Valley Planning Area covers approximately 26,749 acres and is located in the southeastern Outagamie and northern Calumet Counties. As illustrated on **Map 1**, the current boundary extends from the City of Appleton on the west to a line about one and a half miles west of the Brown County boarder to the east. It extends generally northward to CTH JJ and southward to just south of U.S. Highway 10 and Manitowoc Road. It contains the Villages of Combined Locks, Kimberly, and Little Chute, the City of Kaukauna, and portions of the Towns of Buchanan, Vandenbroek, Grand Chute and Kaukauna, and the Darboy Joint Sanitary District #1 in Outagamie County. Also included are a portion of the Village of Harrison and Darboy Joint Sanitary District #1 in Calumet County.

Map 8 shows the HOV SSA has also experienced a lot of development throughout the SSA. Some larger pockets of residential development can be seen on the outskirts in the City of Kaukauna, the Town of Buchanan, and the Village of Harrison.

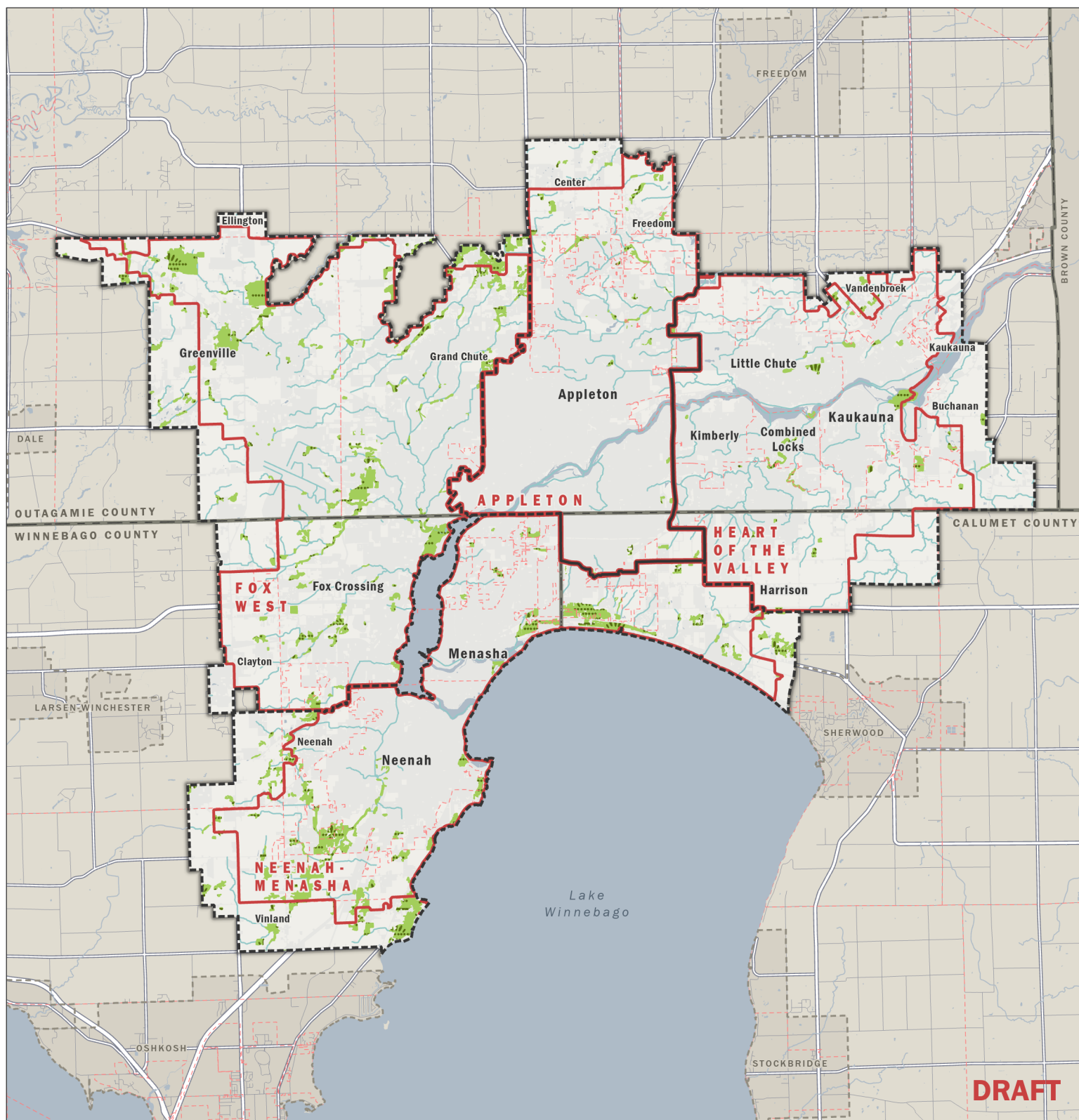
Environmentally Sensitive Areas

One large ESA in the SSA is the 1000 Islands Nature Conservancy in the City of Kaukauna. This area consists largely of riverine wetlands in the floodway of the Fox River. Other major areas classified as environmentally sensitive areas include shorelands, floodplains, and wetlands associated with the Fox River, Garner's Creek, Kankapot Creek, Apple Creek, and several other unnamed tributaries to the Fox River. Many of the streams with direct drainage to the Fox River consist of steep slopes and ravines, which are subject to severe erosion if disturbed by development activities. Many of the Riverine areas are adjacent to current and projected growth areas.



Heart of the Valley Planning Area Adjustments






There were few changes made to the 2006 PA boundary.

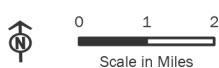
- The PA in the south was expanded from Manitowoc Road to U.S. Highway 10.
- The PA in the northeast was extended, bounded by Farrell Road to the east, Lau Road to the north, and Weyers Road to the west.
- There were approximately four Amendments to the 2030 HOV SSA (Appendix D).



Environmentally Sensitive Area

-  Wetland & 50 Foot Wetland Buffer
-  75 Foot Stream Buffer

-  Municipal Boundary
-  County Boundary
-  2040 Fox Cities Sewer Service Area Boundary
-  2040 Fox Cities Planning Area Boundary
-  Neighboring Planning Area Boundary

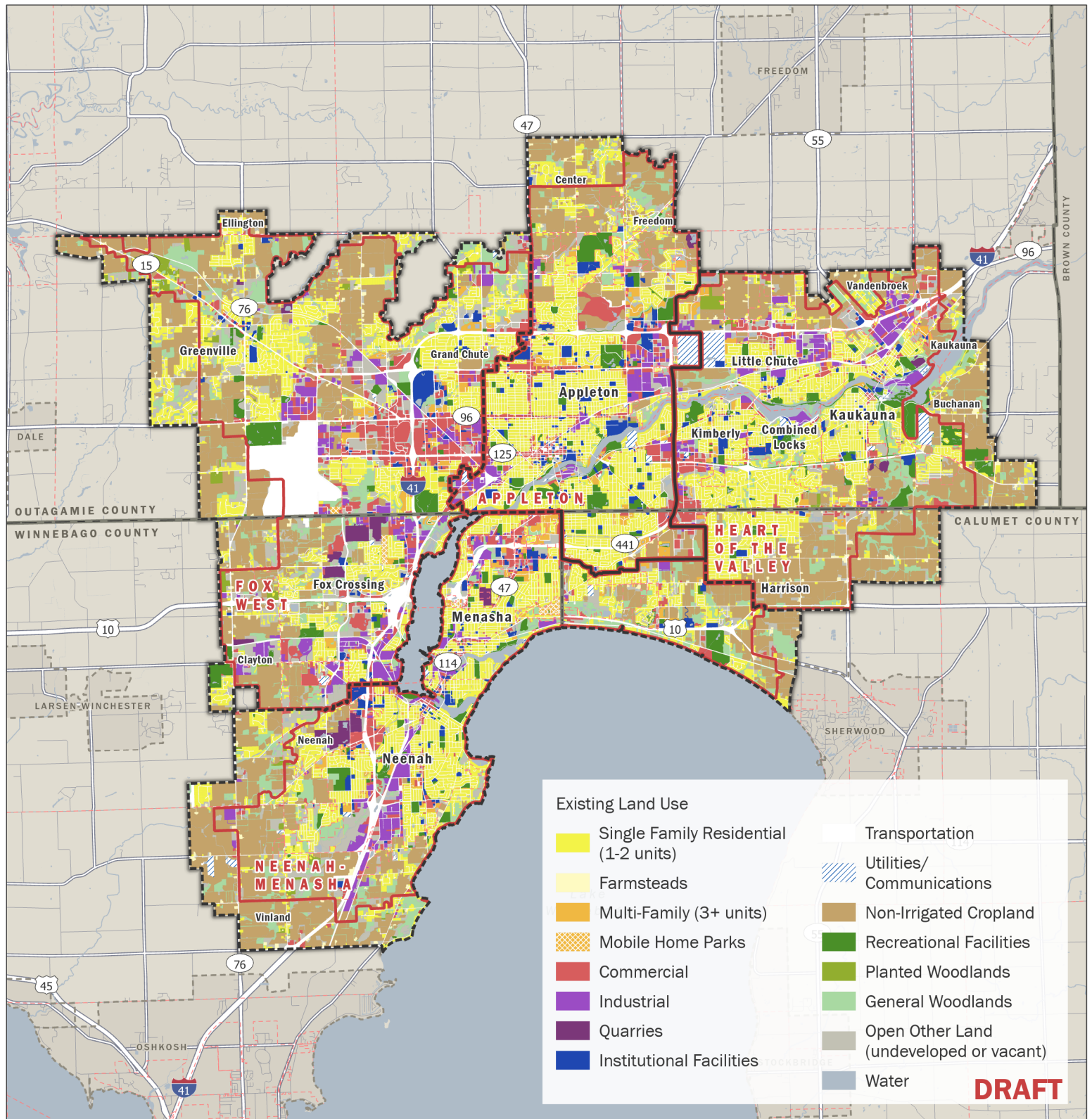


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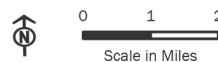


Source:
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- Municipal Boundary
- County Boundary
- 2040 Fox Cities Sewer Service Area Boundary
- 2040 Fox Cities Planning Area Boundary
- Neighboring Planning Area Boundary

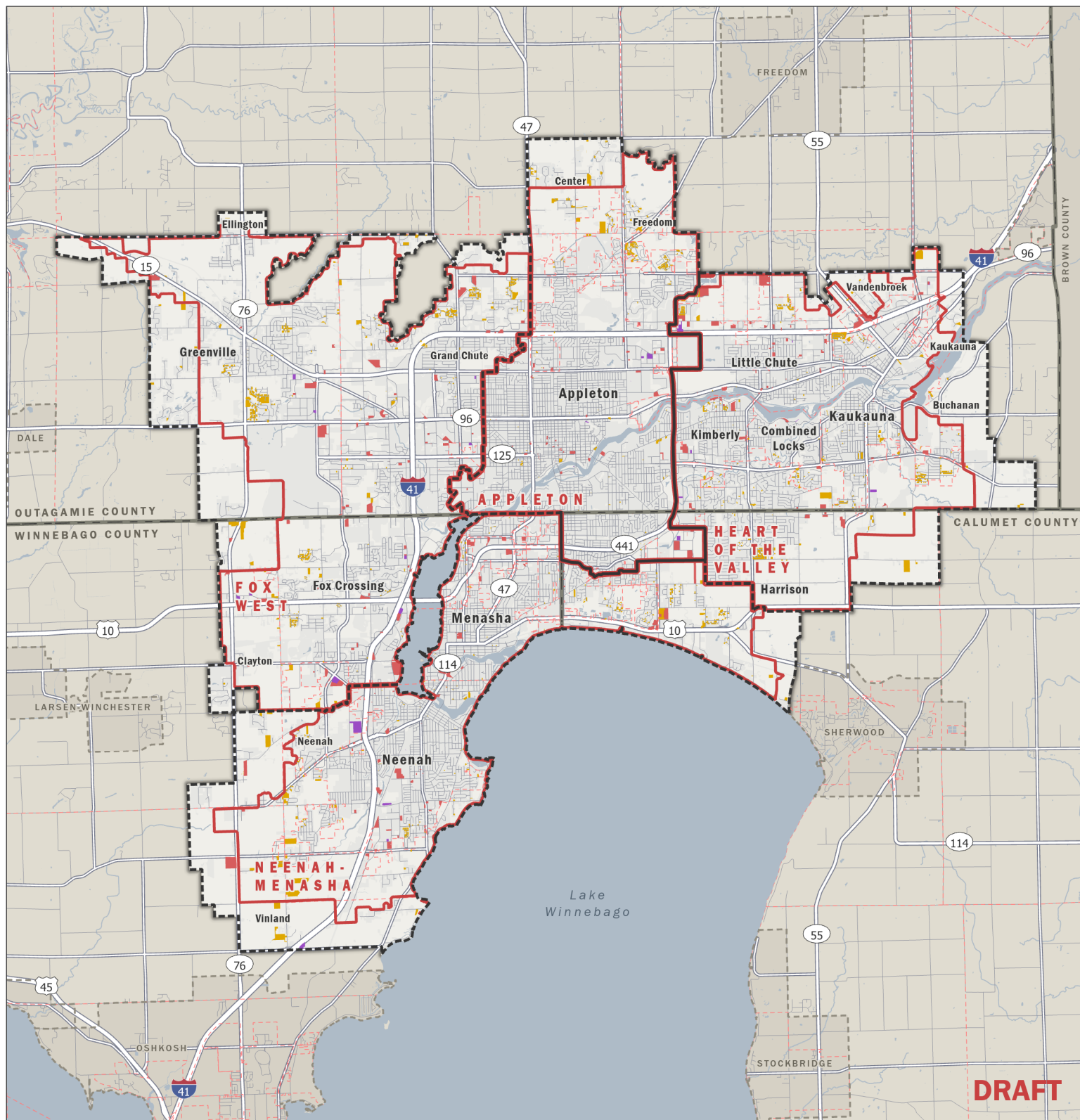


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New Parcels (2019-2021)

- New Residential Parcel
- New Commercial Parcel
- New Manufacturing Parcel

- Municipal Boundary
- County Boundary
- 2040 Fox Cities Sewer Service Area Boundary
- 2040 Fox Cities Planning Area Boundary
- Neighboring Planning Area Boundary



0 1 2
Scale in Miles

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Source:

Parcel data provided by WI State Cartographer's Office, 2022. SSA data provided by ECWRPC, 2023. Base data provided by Regional Counties, 2023.

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Chapter 6: Growth and Development

Fox Cities Current and Projected Population

The Fox Cities 2020 census population is approximately 261,405 people. From 2010 to 2020, the area grew by 30,073 people. Furthermore, the DOA predicts the population to increase by approximately 32,329 people from 2020 to 2040. At the time of the Fox Cities 2040 SSA Plan update (Fall 2022), updated DOA population projections have not been published. Therefore, the 2040 projections are based off the 2010 U.S. Census numbers (vintage 2013). Since the 2020 U.S. Census population numbers outpaced the DOA projected population for the year 2020 by approximately 2,419 people, it is possible that the 2040 projection (using 2020 U.S. Census data) will be higher than the current projection.

Due to the interconnected nature of the Fox Cities, some municipalities, such as the Village of Harrison, are situated within multiple sewer service areas. Therefore, population data in this chapter is provided for the entire Fox Cities area and is not divided by SSA. **Table 5** displays the 2020 census populations and projected Department of Administration (DOA) populations for all municipalities that lie wholly or partially within the Fox Cities SSA Planning Areas (Wisconsin Administrative Code NR 121.05(1)3.b).

Each SSA includes portions of rural townships near the periphery of the SSA. While there may not be sewer development currently in some of these areas, it is important to consider their population contributing to the overall growth in the Fox Cities SSA Planning Area Boundary. Additionally, the forthcoming DOA population projections are anticipated to show higher growth when utilizing the 2020 U.S. Census data. Therefore, it is helpful to have the township populations included in this discussion to reflect a more accurate population projection.

Fox Cities Household Projections

Table 6 shows the number of households and the persons per household across the Fox Cities. In 2010, there was a total of 93,494 households in the Fox Cities. The DOA's 2020 projection was 108,818 households. However, the actual total number of households from the 2020 census is 110,285. The actual 2020 census recorded 1,467 more households than the DOA's projection. The 2040 projection is 128,814 total number of households. This means a projected increase of 18,529 households from the 2020 census to the 2040 projection.

Table 6 also shows the persons per household across the entire Fox Cities. The average household size in 2010 was 2.47 and the average household size in 2020 was 2.37. The projected 2040 average household size is expected to be smaller with 2.28 people per household. The decline in persons per household from the 2010 census (2.47) to the 2020 census (2.37) is anticipated to continue.

Therefore, even if the population of the Fox Cities does not increase over the next 20 years, there could be a need for new housing construction due to the declining trend of persons per household.

Table 5. U.S. Census Populations and DOA Population Projections by Fox Cities Municipalities

	Census	Census	Projected				
Municipality	2010	2020	2020	2025	2030	2035	2040
C. Appleton (Calumet)	11,088	11,304	11,890	12,360	12,770	12,910	12,860
C. Appleton (Out)	60,045	62,899	60,307	61,845	62,997	63,118	62,300
C. Appleton (Winn)	1,490	1,441	1,616	1,750	1,874	1,972	2,056
C. Appleton TOTAL	72,623	75,644	73,813	75,955	77,641	78,000	77,216
C. Kaukauna	15,462	17,089	16,998	17,986	18,901	19,515	19,838
C. Menasha (Winn)	15,144	15,261	15,186	15,313	15,370	15,227	14,966
C. Menasha (Calumet)	2,209	3,007	2,840	3,185	3,525	3,800	4,000
C. Menasha TOTAL	17,353	18,268	18,026	18,498	18,895	19,027	18,966
C. Neenah	25,501	27,319	26,708	27,516	28,214	28,551	28,641
T. Buchanan	6,755	6,857	7,885	8,588	9,260	9,773	10,155
T. Center	3,402	3,622	3,625	3,765	3,900	3,960	3,975
T. Clayton	3,951	4,329	4,510	4,855	5,200	5,470	5,685
T. Ellington	2,758	3,174	3,060	3,225	3,380	3,485	3,535
T. Freedom	5,842	6,216	6,485	6,870	7,225	7,460	7,600
T. Grand Chute	20,919	23,831	23,721	25,412	26,997	28,138	28,869
T. Kaukauna	1,238	1,306	1,360	1,430	1,500	1,545	1,570
T. Neenah	3,237	3,702	3,803	4,103	4,392	4,626	4,811
T. Vandebroek	1,474	1,627	1,640	1,740	1,835	1,900	1,935
T. Vinland	1,765	1,769	1,755	1,755	1,750	1,720	1,680
V. Combined Locks	3,328	3,634	3,854	4,169	4,474	4,703	4,868
V. Fox Crossing	18,498	18,974	19,933	20,935	21,866	22,517	22,969
V. Greenville	10,309	12,687	12,400	13,593	14,735	15,636	16,307
V. Harrison	0	12,418	11,760	13,190	14,600	15,700	16,550
V. Kimberly	6,468	7,320	6,992	7,300	7,571	7,718	7,769
V. Little Chute	10,449	11,619	10,658	10,864	11,008	10,971	10,795
TOTAL FOX CITIES	231,332	261,405	258,986	271,749	283,344	290,415	293,734

Sources: Wisconsin Department of Administration Vintage 2013 and 2020 Projections & 2010, 2020 US Census

Table 6. Projected Households and Projected Persons per Household by Fox Cities Municipalities

Municipality	Census		Census		Projected							
	2010		2020		2025		2030		2035		2040	
	No. HH	P HH	No. HH	P HH	No. HH	PP HH	No. HH	PP HH	No. HH	PP HH	No. HH	PP HH
C. Appleton (Calumet)	4,225	2.62	4,719	2.40	5,015	2.46	5,291	2.41	5,451	2.37	5,504	2.34
C. Appleton (Out)	23,963	2.51	26,406	2.38	27,110	2.28	27,984	2.25	28,420	2.22	28,404	2.19
C. Appleton (Winn)	686	2.17	622	2.32	858	2.04	925	2.03	982	2.01	1,030	2.00
C. Appleton TOTAL	28,874	2.52	31,747	2.38	32,983	2.26	34,200	2.23	34,853	2.20	34,938	2.18
C. Kaukauna	6,270	2.47	7,057	2.42	7,750	2.32	8,253	2.29	8,637	2.26	8,891	2.23
C. Menasha (Winn)	6,612	2.29	7,187	2.12	6,908	2.22	6,980	2.20	6,974	2.18	6,892	2.17
C. Menasha (Calumet)	793	2.79	1,095	2.75	1,217	2.62	1,376	2.56	1,512	2.51	1,613	2.48
C. Menasha TOTAL	7,405	2.34	8,282	2.21	8,125	2.42	8,356	2.38	8,486	2.35	8,505	2.33
C. Neenah	10,694	2.38	12,164	2.25	11,935	2.31	12,321	2.29	12,573	2.27	12,682	2.26
T. Buchanan	2,393	2.82	2,648	2.59	3,216	2.67	3,514	2.64	3,759	2.60	3,955	2.57
T. Center	1,277	2.66	1,434	2.53	1,491	2.53	1,565	2.49	1,611	2.46	1,637	2.43
T. Clayton	1,438	2.75	1,606	2.70	1,808	2.69	1,949	2.67	2,068	2.65	2,161	2.63
T. Ellington	984	2.80	1,192	2.66	1,214	2.66	1,289	2.62	1,347	2.59	1,384	2.55
T. Freedom	2,124	2.75	2,292	2.71	2,635	2.61	2,808	2.57	2,939	2.54	3,032	2.51
T. Grand Chute	9,378	2.23	11,179	2.13	12,150	2.09	13,081	2.06	13,819	2.04	14,356	2.01
T. Kaukauna	435	2.85	486	2.69	530	2.70	564	2.66	588	2.63	605	2.60
T. Neenah	1,228	2.64	1,447	2.56	1,595	2.57	1,719	2.55	1,826	2.53	1,910	2.52
T. Vandenbroek	516	2.86	592	2.75	643	2.71	687	2.67	721	2.64	743	2.60
T. Vinland	721	2.45	786	2.25	733	2.39	736	2.38	730	2.36	717	2.34
V. Combined Locks	1,232	2.70	1,404	2.59	1,629	2.56	1,771	2.53	1,887	2.49	1,978	2.46
V. Fox Crossing	7,948	2.33	8,572	2.21	9,268	2.26	9,746	2.24	10,121	2.22	10,381	2.21
V. Greenville	3,631	2.84	4,574	2.77	5,072	2.68	5,571	2.64	5,992	2.61	6,328	2.58
V. Harrison	-	-	4,499	2.76	4,667	2.83	5,275	2.77	5,781	2.72	6,178	2.68
V. Kimberly	2,739	2.36	3,194	2.29	3,276	2.23	3,444	2.20	3,558	2.17	3,627	2.14
V. Little Chute	4,207	2.48	5,130	2.26	4,650	2.34	4,775	2.31	4,823	2.27	4,806	2.25
FOX CITIES Total No. HH & Persons per HH	93,494	2.47	110,285	2.37	115,370	2.36	121,624	2.33	126,119	2.30	128,814	2.28

Note: PHH = Persons per Household. PPHH = Projected Persons per Household

Source: 2010 Census, 2020 Census, WI Department of Administration Population and Household Projections, 2013 Vintage

Table 7. Number of Units by Structural Type, 2015-2020

Municipality	1 - Unit, Detached	1 - Unit, Attached	2 Units	3 or 4 Units	5 to 9 Units	10 to 19 Units	20 to 49 Units	50 or More Units	Mobile Home	Total Housing Units
C. Appleton (Calumet)	3,156	292	156	202	585	236	41	28	84	4,780
C. Appleton (Out)	17,124	1,557	2,204	603	1,071	1,066	684	1,087	26	25,422
C. Appleton (Winn)	98	66	44	37	94	149	23	139	0	650
Appleton TOTAL	20,378	1,915	2,404	842	1,750	1,451	748	1,254	110	30,852
C. Kaukauna	4,787	342	464	204	353	525	130	107	7	6,919
C. Menasha (Winn)	4,608	402	530	129	555	425	487	159	275	7,570
C. Menasha (Calumet)	984	21	0	0	26	30	20	16	0	1,097
C. Menasha TOTAL	5,592	423	530	129	581	455	507	175	275	8,667
C. Neenah	7,392	575	707	495	578	587	394	545	16	11,289
T. Buchanan	2,398	220	32	70	128	53	0	0	0	2,901
T. Center	1,448	0	0	0	0	0	0	0	64	1,512
T. Clayton	1,571	10	24	0	0	0	0	0	14	1,619
T. Ellington	1,065	45	10	24	0	0	0	0	18	1,162
T. Freedom	2,062	15	24	0	99	71	0	0	90	2,361
T. Grand Chute	5,358	847	257	130	1,757	1,236	790	479	21	10,875
T. Kaukauna	432	20	33	0	0	0	0	0	0	485
T. Neenah	1,256	0	0	0	0	0	35	0	0	1,291
T. Vandenbroek	499	15	0	0	0	0	3	0	0	517
T. Vinland	894	3	15	0	3	0	0	1	0	916
V. Combined Locks	1,182	133	56	0	70	0	0	0	0	1,441
V. Fox Crossing	5,361	278	328	80	1,308	832	337	258	389	9,171
V. Greenville	3,796	213	84	26	156	71	0	0	97	4,443
V. Harrison	3,866	188	55	71	68	45	0	38	12	4,343
V. Kimberly	1,826	484	188	117	113	31	108	132	0	2,999
V. Little Chute	3,032	519	338	98	211	603	155	105	195	5,256
TOTAL FOX CITIES	74,195	6,245	5,549	2,286	7,175	5,960	3,207	3,094	1,308	109,019

Sources: American Community Survey 2016-2020, B25024

Residential Splits

Table 7 shows the number of units by structural type drawn from the 2016-2020 American Community Survey (ACS) 5-year estimates. The 2020 structural type data was used to gather a more realistic comparison with the 2020 census data rather than compare the 2020 census with 2022 ACS data. Across the Fox Cities Planning Area, there were 81,748 single family (both attached and detached units and mobile homes), 5,549 duplexes, and 21,722 multi-family units (three or more units).

Table 8 shows the total number of single-family, duplex, and multi-family residential units in the Fox Cities. In addition, the table shows the “residential splits” by structural type for the Fox Cities. Simply put, residential splits are the percentage of each existing housing type in the Fox Cities. These are calculated by dividing the total number of units for each structural type by the total number of housing units. For example, there are 81,748 single-family units, and 109,019 total units across the Fox Cities. That means that single-family units account for approximately 75 percent of the Fox Cities residential units. This process is repeated for duplex units (approximately five percent of the total) and multi-family units (approximately 20 percent of the total).

The Fox Cities existing residential density by structural type is listed in **Table 9**. For the purposes of determining projected residential need, residential land use acreage is classified by single-family or multi-family in the SSA Plan based on existing ECWRPC data. The single-family acreage includes both single-family attached and detached units as well as duplexes and mobile homes. To calculate the density by land use type, the total number of single-family units was divided by the existing single-family residential acreage of 27,329 acres (see **Table 4**). This results in a density of 3.21 single-family units per acre. The duplex units per acre was calculated by multiplying the single-family density by two, since duplexes are not classified in the existing land use data. The multi-family housing density is 11.79 units per acre based on the existing 1,843 acres of multi-family residential acres in the planning area (see **Table 4**).

Table 8. Fox Cities Existing Residential Splits by Structural Type

	Single-Family		Duplex		Multi-Family	
	Total No.	% of Total	Total No.	% of Total	Total No.	% of Total
Fox Cities Total	81,748	75.0%	5,549	5.1%	21,722	19.9%

Sources: American Community Survey 2016-2020 B25024

Table 9. Fox Cities 2020 Existing Residential Density by Structural Type

	Units Per Acre		
	Single Family	Duplex*	Multi-Family
Fox Cities Total	3.21	6.42	11.79

Sources: American Community Survey 2016-2020 B25024 and the Existing Residential Acres Land Use Classification in the Fox Cities, ECWRPC

* SF multiplied by two; see description in text

Fox Cities Residential Acreage Needs/Consumption

ECWRPC uses a methodology in sewer service area planning to project future land consumption that is outlined in **Table 10**. The formula takes into consideration the existing residential density calculated in **Table 9**, and the DOA's projected number of households from 2020 to 2040 in **Table 6**. The projected number of additional households from 2020 to 2040 is 18,529. By multiplying the total additional units by the residential splits calculated in **Table 8**, the total number of households associated with each unit type is identified. The number of units are then multiplied by the residential density from **Table 9** to obtain projected land consumption information. ECWRPC then applies a 20 percent market factor to account for potential unanticipated growth. A 15 percent infrastructure factor is applied to account for infrastructure in new development such as roadways, sidewalks, and utilities

Single-family units will require the most acreage over the next 20 years to accommodate growth, with a projected need of 5,978 acres. Duplex and multi-family units combined will account for an additional 635 acres. Therefore, the total number of projected residential acres required to accommodate future growth across the Fox Cities is 6,613 acres. It is important to note that this methodology relies on current conditions and historical trends. Depending on future growth priorities and the types of housing actually built, the density and acreage allocations may be adjusted. In addition, these numbers are based on the DOA projections vintage 2013.

Table 10. Fox Cities SSA – Residential Acreage Projection Methodology

Methodology Formula:							
	32,329	2020 census to 2040 projected population increase					
	18,529	Increase # HH (2020 census to 2040 projected)					
1)	Total Increased Households (Dwelling Units) (Change 2020 Census to 2040 Projected) x Percentage Split of Unit Type = Projected Units by Type						
	18,529	x	75.0%	=	13,894	Single Family Units	
	18,529	x	5.1%	=	943	Duplex Units	
	18,529	x	19.9%	=	3,692	Multi-Family Units	
2)	Projected Units by Type / Development Densities = SSA Acreage Needs for Residential Uses (Baseline)						
	13,894	Single Family Units	/	3.21	units/acre	=	4,332
	943	Duplex Units	/	6.42	units/acre	=	147
	3,692	Multi-Family Units	/	11.79	units/acre	=	313
	Total Fox Cities Residential Acres Needed - Baseline (No Adjustments)						4,792
3)	Application of 20% Market Factor = Adjusted Gross Acreage Needs for Residential Uses						
	4,252	Acres Single Family Units	X	1.2	=	5,198	
	144	Acres Duplex Units	X	1.2	=	176	
	313	Acres Multi-Family Units	X	1.2	=	376	
Total Acres Needed with 20% Market Factor						5,750	
4)	Application of 15% Infrastructure Factor = Adjusted Gross Acreage for Residential Uses						
	5,102	Acres Single Family Units	X	0.15	=	780	
	173	Acres Duplex Units	X	0.15	=	26	
	376	Acres Multi-Family Units	X	0.15	=	56	
Total Acres Needed with 15% Infrastructure Factor						863	
5)	Total Acreage Needs for Residential Uses (Adjusted with 20% Market Factor and 15% Infrastructure)						
	Acres Single Family Units				=	5,978	
	Acres Duplex Units				=	203	
	Acres Multi-Family Units				=	432	
	Total Residential Acres Needed with Adjustments						6,613

Source: ECWRPC Methodology - Scenario using 2020 Census, 2040 DOA Population & Household Projections, Vintage 2013

Fox Cities Non-Residential Acreage Needs/Consumption

Commercial, Industrial, Public and Institutional land uses also require wastewater treatment. In the previous Fox Cities SSA 2030 Plan, the non-residential development forecasts were based upon employment densities and estimating future employment. For the purposes of the current Plan update, the methodology for determining the projected non-residential acreage consumption for the future Fox Cities was based off of historical land use data. **Table 11** shows the total acreage for the 2030 Fox Cities Planning Area for non-residential land uses approximately every five years, starting in the year 2000. The percent change from year to year is also included.

Commercial land use has seen a 6.4 percent average increase every five-years from 2000 to 2021. From the historical acreage in 2005 (used in the adopted SSA Plan in 2006), Commercial land has seen an approximate 22 percent increase in developed acres.

The percent growth for industrial land use had slowed down from 2000 to 2021. There was 6.2 percent growth in industrial acres from the year 2000 to 2005. However, there was only 1.7 percent growth in industrial acres from 2015 to 2021. Industrial growth in the Fox Cities may have slowed as many industries have closed, for example, paper mills along the Fox River.

Public/Institutional land use also had varied change across the five-year increments. Some of that variability is attributed to misclassified land areas. For example, public/institutional land should include recreational uses including conservancies. Over the years, the Thousand Island State Conservancy Area in the City of Kaukauna was sometimes classified as public/institutional land use and sometimes classified as general woodlands land use in the ECWRPC data set. This makes it difficult to accurately track the percent change in growth. However, the 2005 land use data utilized in the previous plan (adopted in 2006) classified public/institutional land correctly, as does the most recent 2021 data. As seen in **Table 11**, the acreage grew by 12.9 percent from 2005 to 2021. However, the average across all years was a 4.9 percent growth in public/institutional land acres.

Table 11. Historical Non-Residential Land Use Acreage in the Fox Cities Planning Area.

Land Use	2000 acreage	2000 to 2005 Δ	2005 acreage	2005 to 2010 Δ	2010 acreage	2010 to 2015 Δ	2015 acreage	2015 to 2021 Δ	2021 acreage	Average Δ	2005 to 2021 Δ
Commercial	4305.2	5.1%	4522.6	7.4%	4859.0	6.1%	5155.1	7.0%	5515.2	6.4%	21.9%
Industrial	3520.7	6.2%	3738.7	4.8%	3919.2	3.3%	4046.9	1.7%	4113.8	4.0%	10.0%
Public/ Institutional	5056.9	7.2%	5421.0	0.9%	5470.3	7.1%	5856.5	4.5%	6121.7	4.9%	12.9%
Total Average Percent Δ		6.1%		4.4%		5.5%		4.4%		5.1%	15.0%

Source: ECWRPC, Historical Land Use Data

Using the aforementioned historical growth patterns, ECWRPC projected future growth and land use consumption. **Table 12** depicts the projected acreage needed for non-residential land development by applying the average percent change in acreage in five-year increments. This method assumes that the type of growth that occurred over the past 21 years will be consistent for the next 20 years. Including a 20 percent market factor to account for unanticipated growth, the projected additional acres required for growth in the Fox Cities is 4,252 acres for non-residential development.

Table 12. Projected Non-Residential Acreage Applying Average Historical Change Rates

Land Use	Fox Cities Existing Acreage	Average 5-year Δ	Projected Acreage Needed				Additional Acres Needed in 2040
			5 years (2025)	10 years (2030)	15 years (2035)	20 years (2040)	
Commercial	5,515	6.4%	5,868	6,243	6,642	7,066	1,551
Industrial	4,114	4.0%	4,278	4,448	4,625	4,810	696
Public/ Institutional	6,122	4.9%	6,423	6,739	7,071	7,419	1,298
Total Non-Residential	15,751		16,569	17,430	18,338	19,295	3,545
Apply 20% Market Factor			19,882	20,916	22,006	23,155	4,254

Source: ECWRPC, Historical Land Use Data

Fox Cities Growth Allocation Areas and 2040 SSA

ECWRPC reached out to the communities across the Fox Cities to gather information on their priority development areas. Over the course of approximately two years starting at the end of 2020 through 2022, communities provided a map of the parcels they wanted to incorporate in the year 2040 SSA Map. Communities requested acreage according to their priority development areas based on their comprehensive plans, projected growth areas, and in some cases the service area of existing lift stations. Each community's requested growth areas were included in the final SSA map. ECWRPC highly encouraged communities to consider the areas for development in 5 to 10 years, not the full 20-year build-out.

Table 13 shows the complete list of requested land, or proposed allocation areas, based on the community's requests received in 2020-2022. In total, the communities across the Fox Cities requested approximately 12,980 acres of land. Of which, 8,915 acres are classified as vacant, developable. Some of those acres include environmentally sensitive areas such as wetlands, water, and buffer zones. Other acres are already developed with residential and non-residential growth, commercial and industrial development, or used by transportation and utilities. **Map 9** shows the Planning Area and Sewer Service Area boundary changes according to the community's requested growth areas. **Map 9.1** is a close up of the Neenah-Menasha SSA, **Map 9.2** shows the Fox West SSA, **Map 9.3** shows the Appleton SSA, and **Map 9.4** shows the HOV SSA allocation areas.

Therefore, in order to accommodate the projected growth over the next 20 plus years, it is anticipated that some vacant, developable land within the existing SSA will be developed. **Table 13** shows that there are approximately 8,915 acres of existing vacant, developable land in the new allocation area. The communities from each SSA collectively requested the following acreages of vacant, developable land to be added to the new SSA:

- 2,187** additional vacant, developable acres were requested for the 2040 **Neenah-Menasha SSA**.
- 3,615** additional vacant, developable acres were requested for the 2040 **Fox West SSA**.
- 762** additional vacant, developable acres were requested for the 2040 **Appleton SSA**.
- 2,350** additional vacant, developable acres were requested for the 2040 **Heart of the Valley SSA**.

Table 13. Existing Land Use by Proposed Allocation Area (Community Requested Growth Areas) (in acres)

Land Use Classification	Neenah-Menasha	Fox West	Appleton	HOV	Total
50 Foot Wetland Buffer	173.55	276.96	22.72	10.29	483.53
75 Foot Stream Buffer	69.36	156.57	57.77	171.95	455.65
Commercial	26.99	84.06	4.75	63.61	179.41
Industrial	45.15	10.68	27.89	0	83.72
Multi-Family Residential	0	0.46	0	0.30	0.76
Public/Institutional	21.72	25.32	11.66	25.17	83.88
Single Family Residential	188.79	428.16	151.86	179.75	948.56
Transportation	193.06	407.97	50.47	132.89	784.39
Utilities/WWTP	5.31	0	0	76.31	81.62
Vacant, Developable	2,187.44	3,614.71	762.17	2,350.19	8,914.51
Water	7.01	10.54	17.84	8.68	44.07
Wetland	296.83	570.71	35.89	17.04	920.47
Total Acres	3,215.20	5,586.15	1,143.03	3,036.19	12,980.57

Source: ECWRPC Land Use Data, Community Requested Growth Areas, 2021

One goal in the Fox Cities SSA Plan is to promote infill development near existing infrastructure (See Objectives #1 and #5 under the Growth Management Functional Goal in Chapter 4). Infill encourages cost-effective and environmentally sound development. With that in mind, the amount of existing vacant, developable land in each of the SSAs from the year 2030, 2006 adopted plan was also calculated and is displayed in **Table 14**. In total, there are 18,203 acres of existing vacant, developable land currently within the 2030 Fox Cities SSA. Each SSA had the following acreages of existing vacant, developable land:

- 3,336** acres of vacant, developable acres are currently within the 2030 **Neenah-Menasha SSA**.
- 6,798** acres of vacant, developable acres are currently within the 2030 **Fox West SSA**.
- 3,151** acres of vacant, developable acres are currently within the 2030 **Appleton SSA**.
- 4,918** acres of vacant, developable acres are currently within the 2030 **Heart of the Valley SSA**.

Table 14. Existing Land Use in Year 2030 SSA Boundary (in acres)

SSA Class	Neenah-Menasha	Fox West	Appleton	HOV	Total
50 Foot Wetland Buffer	459.95	676.98	110.15	134.85	1,381.92
75 Foot Stream Buffer	455.29	1,046.74	677.11	1,097.38	3,276.52
Commercial	922.50	2,224.16	1,194.83	939.73	5,281.23
Industrial	973.88	1,619.70	558.13	858.03	4,009.75
Multi-Family Residential	485.23	550.20	505.05	300.56	1,841.04
Public/Institutional	1,326.78	1,267.96	1,845.38	1,159.44	5,599.55
Single Family Residential	5,859.55	5,046.82	5,712.63	5,428.78	22,047.78
Transportation	3,072.78	4,642.82	3,199.06	2,917.30	13,831.97
Utilities/WWTP	85.14	73.34	332.20	346.24	836.91
Vacant, Developable	3,336.05	6,797.56	3,151.36	4,918.02	18,203.00
Water	358.63	171.01	358.45	525.30	1,413.39
Wetland	722.07	894.81	120.82	275.34	2,013.05
Total Acres	18,057.84	25,012.11	17,765.16	18,900.99	79,736.10

Source: ECWRPC Existing Land Use Data, 2030 Fox Cities SSA, circa 2006

Fox Cities Sewer Service Area Acreage Allocation Summary

Below is a summary of key information from the tables in this chapter. The formulas highlight the data that guided the acreage allocations for the new 2040 Fox Cities SSA.

6,613	Projected additional acres of residential land needed by 2040
+ 4,254	Projected additional acres of non-residential land needed by 2040

10,867	Total acres of land needed for residential and non-residential development
27,104	Total acres of vacant, developable land in the new 2040 SSA boundary
- 10,867	Total acres of land needed for residential and non-residential development

16,251	Excess acres of vacant, developable land after projecting development needs

The above sections walked through the methods for proposing land consumption by residential and non-residential development through the year 2040. In total, there are 10,867 acres of land that are expected to be consumed by new development. It is anticipated that some additional growth will likely occur on existing vacant, developable land that is already within the SSA. The communities in the Fox Cities requested acreage to be included in the 2040 boundary. The vacant, developable land they requested in total was 8,915 acres. In the current year 2030 SSA boundary, there were 18,203 existing acres of vacant, developable land.

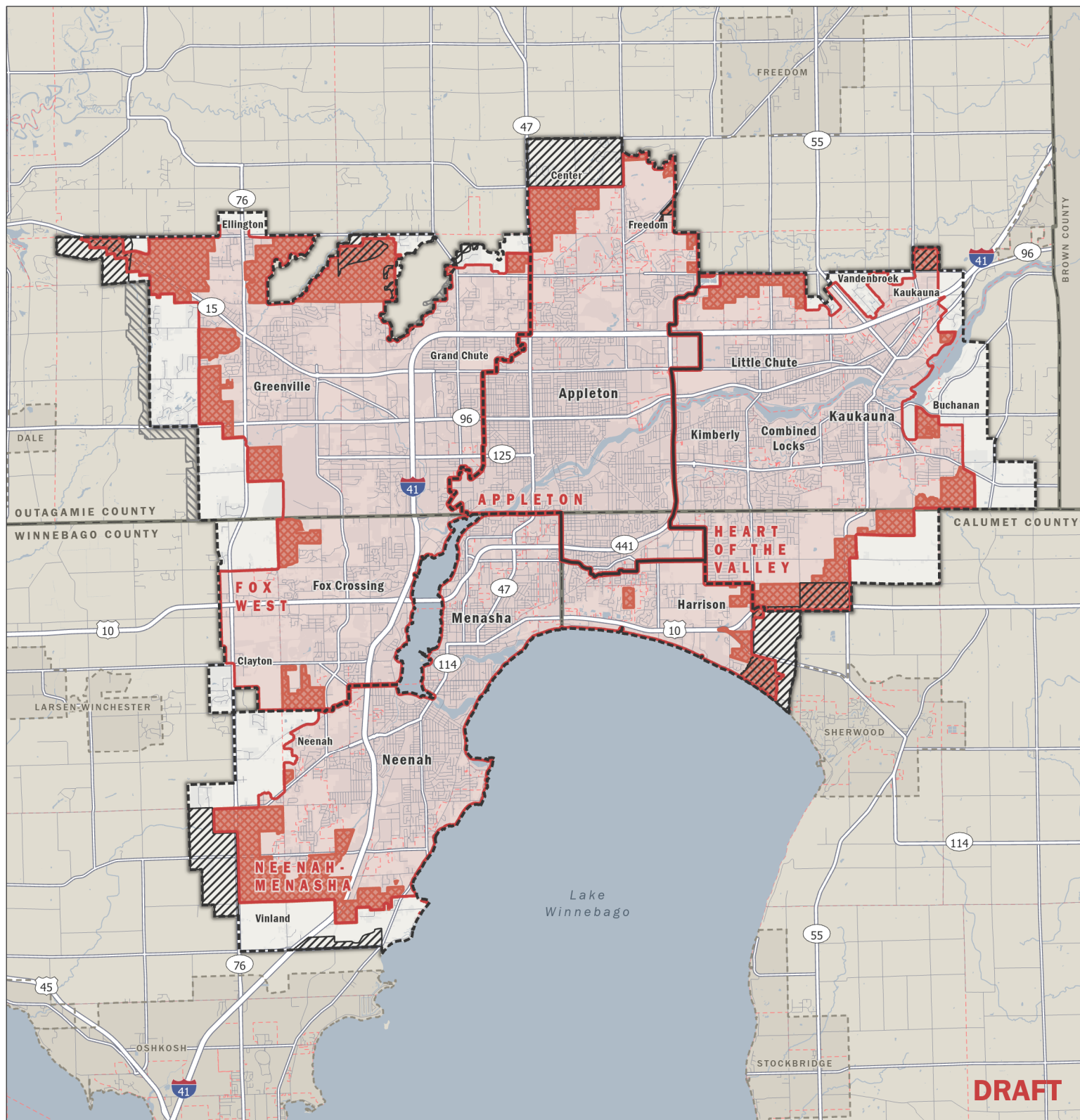
This means that overall, the 2040 SSA boundary will have an excess of 16,251 acres of vacant, developable land, after subtracting the projected residential and non-residential development. For this SSA Plan, the vacant, developable land use category includes woodlands, agriculture, and vacant land. It is important to keep excess developable acres included within the SSA since not every available parcel will be developed. For example, some types of vacant land may not be suitable for development due to its location, conditions, or willingness of owners to develop land. In addition, agriculture is expected to continue within the SSA boundary; not all crop production or farmlands will be developed in the next 20 years. Finally, excess acreage is also warranted due to the knowledge on the rates and locations of recent growth as well as the location of existing or planned infrastructure. In addition, there are inter-municipal boundary agreements which play an important role in the development of growth areas.

Table 15 displays the Year 2040 SSA land use acreage summary according to the new SSA boundaries.

Table 15. Year 2040 SSA Existing Land Use

Land Use	NM		Fox West		Appleton		HOV		Total Fox Cities	
	Acres	% of Total	Acres	% of Total	Acres	% of Total	Acres	% of Total	Acres	% of Total
Commercial	950	4.5%	2,312	7.6%	1,197	3.1%	1,004	4.6%	5,463	5.9%
Industrial	1,019	4.8%	1,630	5.4%	587	3.1%	858	3.9%	4,095	4.4%
Multi-Family Residential	485	2.3%	563	1.8%	494	2.6%	301	1.4%	1,843	2.0%
Public/ Institutional	1,349	6.3%	1,269	4.2%	1,865	9.9%	1,185	5.4%	5,669	6.1%
Single Family Residential	6,051	28.4%	5,446	17.9%	5,845	30.9%	5,610	25.6%	22,951	24.8%
Transportation	3,267	15.3%	5,027	16.5%	3,265	17.3%	3,051	13.9%	14,610	15.8%
Utilities/ WWTP	90	0.4%	73	0.2%	332	1.8%	423	1.9%	919	1.0%
Vacant, Developable	5,525	26.0%	10,380	34.1%	3,929	20.8%	7,270	33.1%	27,104	29.3%
ESAs:										
Water	371	1.7%	180	0.6%	376	2.0%	534	2.4%	1,461	1.6%
50 Foot Wetland Buffer	634	3.0%	927	3.0%	132	0.7%	145	0.7%	1,839	2.0%
75 Foot Stream Buffer	525	2.5%	1,201	3.9%	735	3.9%	1,269	5.8%	3,729	4.0%
Wetland	1,019	4.8%	1,436	4.7%	157	0.8%	292	1.3%	2,905	3.1%
Subtotal ESAs	2,548		3,744		1,401		2,241		9,934	
Total Acres	21,286		30,445		18,914		21,943		92,588	

Source: ECWRPC Existing Land Use Data, 2040 SSA Boundaries



2040 Fox Cities Allocations

- Sewer Service Area Addition
- Planning Area Addition
- Planning Area Removal

- Municipal Boundary
- County Boundary
- 2040 Fox Cities Sewer Service Area Boundary
- 2040 Fox Cities Planning Area Boundary
- Neighboring Planning Area Boundary



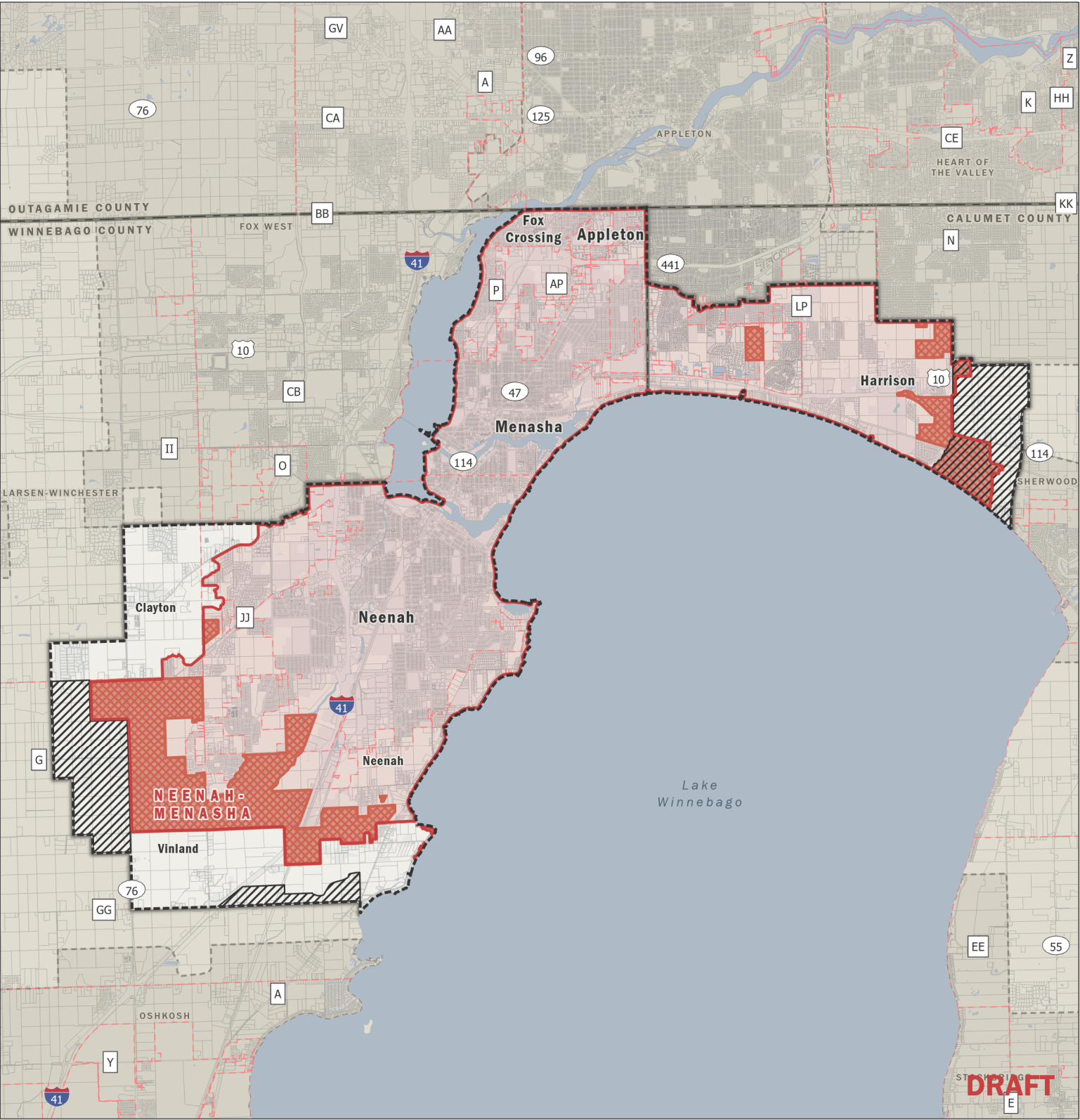
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Scale in Miles

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2040 Neenah-Menasha SSA Allocations

-  Sewer Service Area Addition
-  Planning Area Addition

-  Municipal Boundary
-  County Boundary
-  2040 Neenah-Menasha SSA Boundary
-  2040 Neenah-Menasha SSA Planning Area Boundary
-  Neighboring Planning Area Boundary

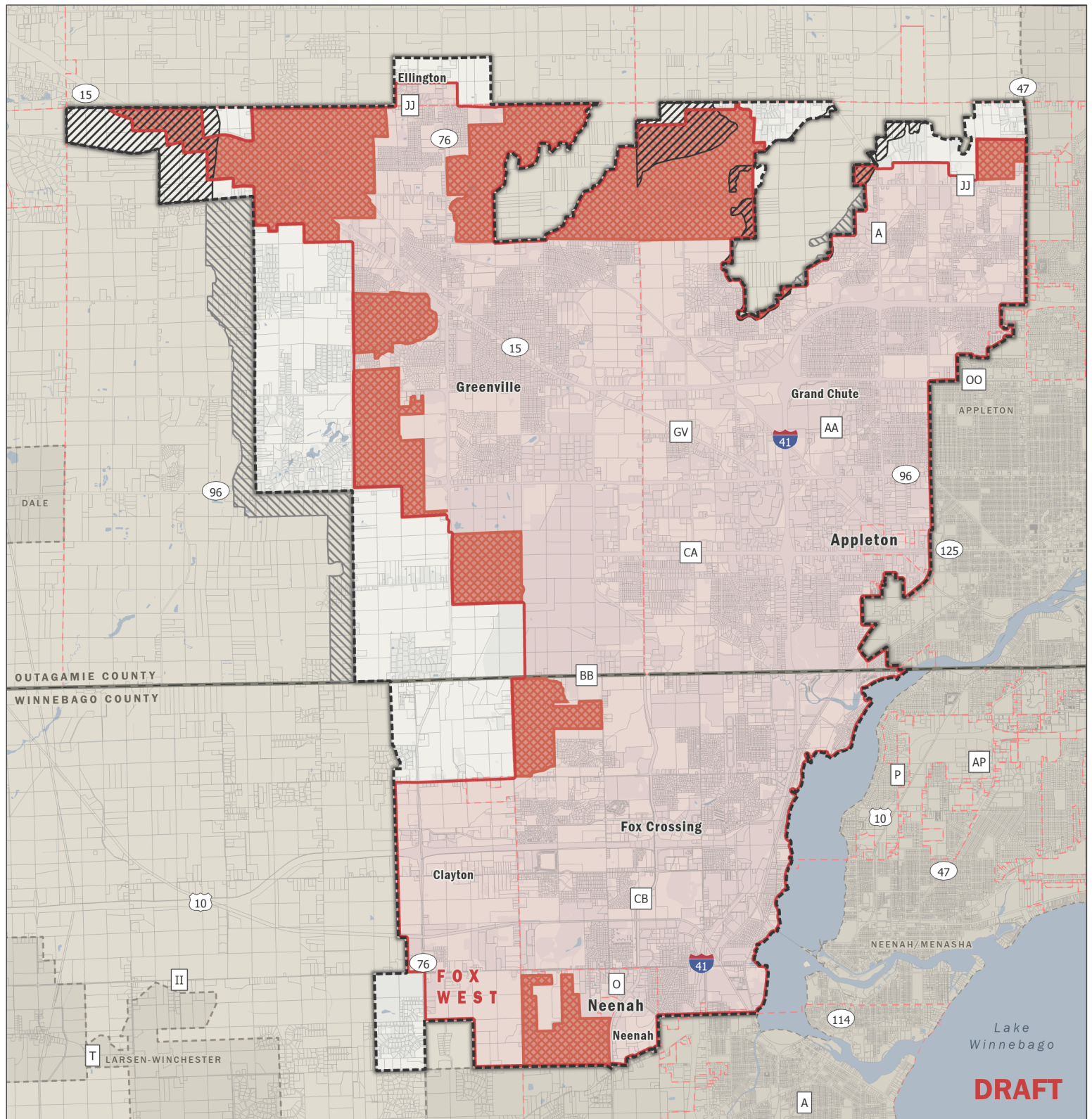


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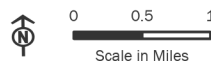
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2040 Fox West SSA Allocations

-  Sewer Service Area Addition
-  Planning Area Addition
-  Planning Area Removal

-  Municipal Boundary
-  County Boundary
-  2040 Fox West Sewer Service Area Boundary
-  2040 Fox West SSA Planning Area Boundary
-  Neighboring Planning Area Boundary

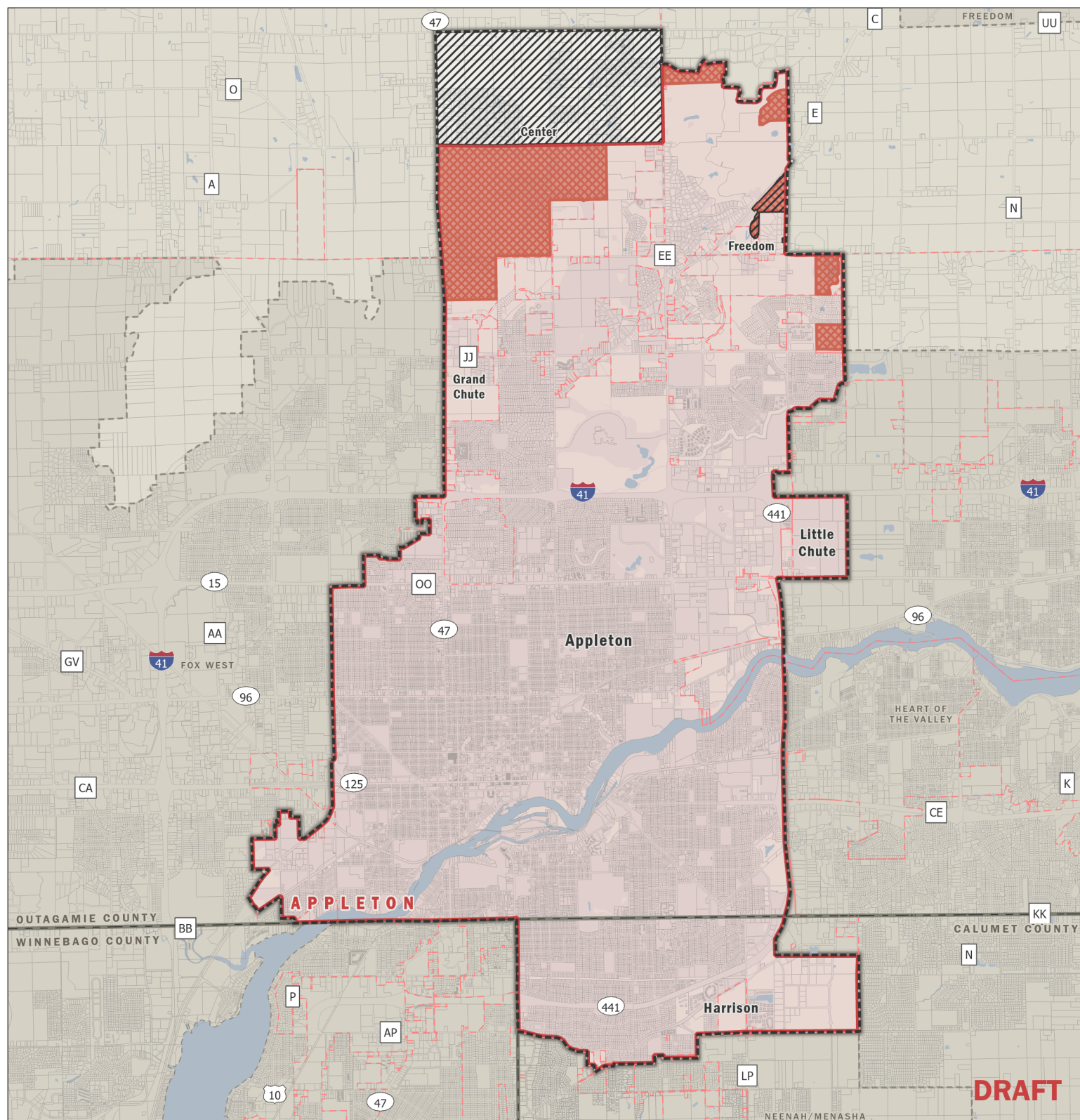


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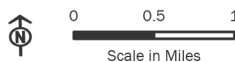
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2040 Appleton SSA Allocations

-  Sewer Service Area Addition
-  Planning Area Addition

-  Municipal Boundary
-  County Boundary
-  2040 Appleton Sewer Service Area Boundary
-  2040 Appleton SSA Planning Area Boundary
-  Neighboring Planning Area Boundary

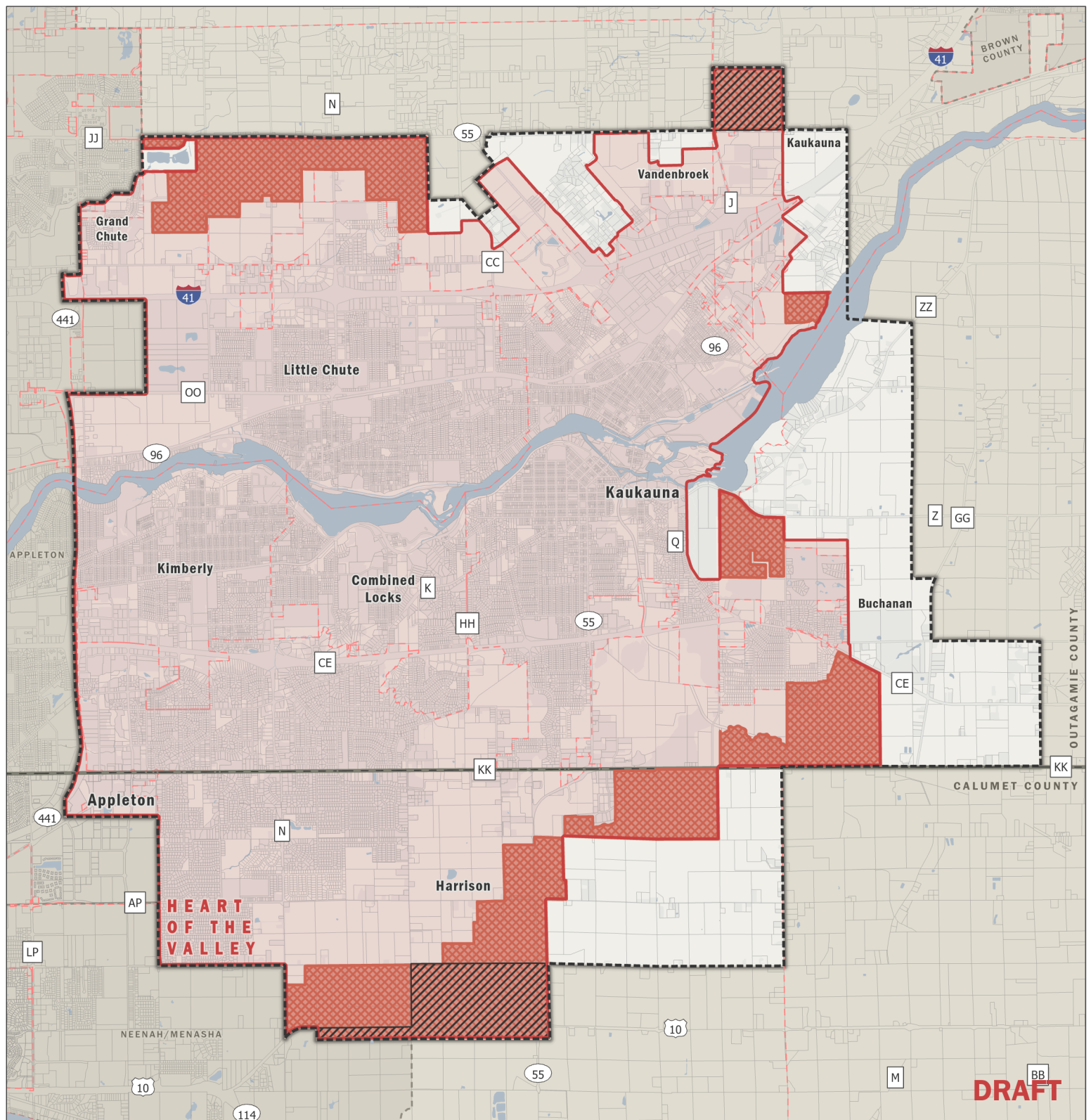


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Source:
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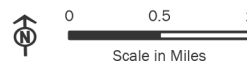
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2040 HOV SSA Allocations

-  Sewer Service Area Addition
-  Planning Area Addition

-  Municipal Boundary
-  County Boundary
-  2040 HOV Sewer Service Area Boundary
-  2040 HOV SSA Planning Area Boundary
-  Neighboring Planning Area Boundary



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Chapter 7: Wastewater Collection & Treatment Systems

Sanitary Sewer and Wastewater Treatment

A sewage collection system includes all sanitary sewers, interceptors, and equipment that convey wastewater, or sewage, from individual structures or private properties. A sewage treatment facility is defined as the structures, pipes, and other equipment that constitute the various treatment processes and treatment units employed to reduce pollutants in sewage.⁴⁷

There are four Waste Water Treatment Facilities (WWTF) in the Fox Cities Region, each of which correlates to an individual SSA. Public WWTFs can operate as a single municipality's system, a regional system (i.e. for multiple communities and/or sanitary districts), or as a metropolitan sewerage district (MSD). Public and private wastewater treatment facilities (WWTFs) support a majority of the region's development and are directly linked to the protection of the region's surface and groundwater quality, from point source pollution. In addition to municipal utilities, there are several sanitary districts within the four SSAs. **Map 10** displays the sanitary district boundaries.

The ability to treat wastewater and plan for its infrastructure needs are of key importance to both the future development of the region and the protection of its resources. The provision of, or access to, public sanitary sewer is a major factor in the location and timing of urban growth. Therefore, it is considered in the beginning planning process for new development. Every WWTF discharger is issued a Wisconsin Pollutant Discharge Elimination System (WPDES) permit. The facilities are required to meet the established minimum levels for various chemicals and pollutants where they discharge wastewater from an outfall pipe.⁴⁸ The Compliance Maintenance Annual Report (CMAR) is a self-evaluation tool issued under Chapter NR 208, Wis. Adm. Code.⁴⁹ The CMAR measures the wastewater treatment facility's performance, assesses whether it complies with the WPDES permit, and evaluates if there are any deficiencies in the operations. The WWTF owners submit the CMAR annually to the DNR.⁵⁰

Private On-Site Wastewater Treatment Systems (POWTS)

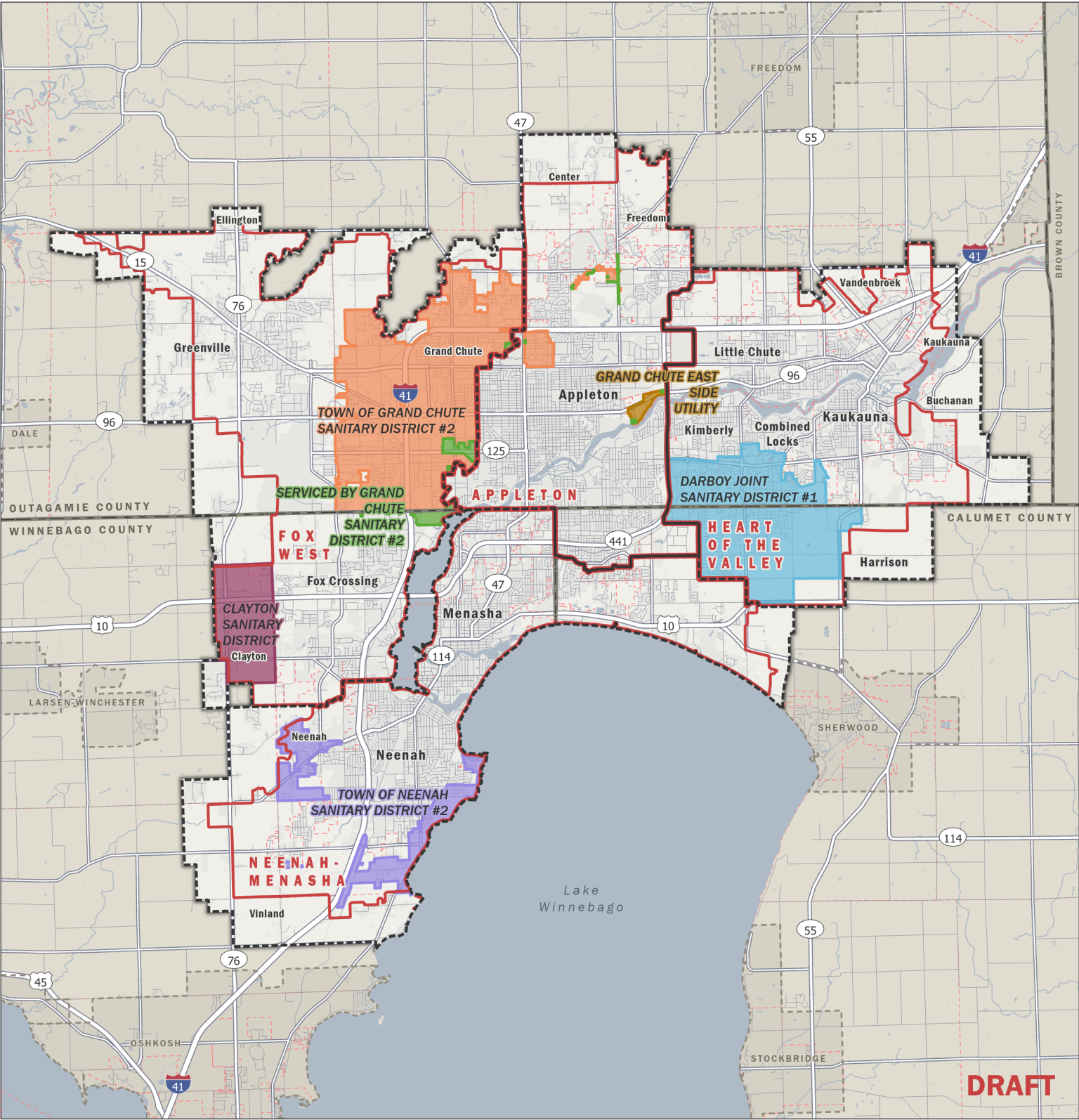
Private Onsite Wastewater Treatment Systems (POWTS) are wastewater systems for the underground disposal of wastewater. POWTS are regulated primarily by the Wisconsin Department of Safety and Professional Services (DSPS), but will also be reviewed by the WDNR for large systems or industrial wastewater. Depending on the type of POWTS, such as in-ground, at-grade, mound, or holding tank, there are specific guidelines. The WDNR requires all industrial or mixed (residential and industrial) wastewater systems to receive a discharge permit from the WPDES permit program.

⁴⁷ "Sewerage Systems", Wisconsin Administrative Code NR 110

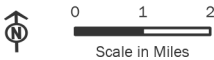
⁴⁸ "Regulation of Wastewater Discharges", Wisconsin DNR, <https://dnr.wisconsin.gov/topic/Wastewater/Regulations.html>

⁴⁹ "Wastewater State Statutes and Codes", Wisconsin DNR, 2022, <https://dnr.wisconsin.gov/topic/Wastewater/WastewaterRules.html>

⁵⁰ "Compliance Maintenance Annual Report (CMAR), Wisconsin DNR, 2022



- Municipal Boundary
- County Boundary
- 2040 Fox Cities Sewer Service Area Boundary
- 2040 Fox Cities Planning Area Boundary
- Neighboring Planning Area Boundary



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Fox Cities Wastewater Collection Systems

There are currently four wastewater collection and treatment systems in the Fox Cities. A description of facilities for each SSA is provided below. **Table 16** displays the monthly permit limits and average levels for total suspended solids (TSS) and biochemical oxygen demand (BOD) for each wastewater treatment facility. All of the WWTFs are meeting the permit effluent limit into the receiving water. **Table 17** compares data across all wastewater treatment facilities such as the population they are serving, design and average flow, treatment type, and sludge treatment and disposal.

Table 16. Monthly Permit Limits and Average Levels for TSS and BOD by WWTF.

	Neenah-Menasha Sewerage Commission		Fox West Regional Sewerage Commission		Appleton Wastewater Treatment Plant		Heart of the Valley Metropolitan Sewerage District	
	Permit Effluent Limit	Average Effluent Level	Permit Effluent Limit	Average Effluent Level	Permit Effluent Limit	Average Effluent Level	Permit Effluent Limit	Average Effluent Level
BOD* (mg/L)	30	4.67	25	<2	25	5	30	30
TSS** (mg/L)	30	5.58	30	3.9	30	3	30	30

Source: Wastewater Treatment Facility 2021 Compliance Maintenance Annual Reports, Fox West Regional Sewerage Commission, Appleton Wastewater Treatment Plant, Neenah-Menasha Sewerage Commission, Heart of the Valley Metropolitan Sewerage District

Table 17. Fox Cities Wastewater Treatment Facility Plan Data for Each Sewer Service Area.

	Neenah-Menasha Sewerage Commission	Fox West Reginal Sewerage Commission	Appleton Wastewater Treatment Plant	Heart of the Valley Metropolitan Sewerage District
Original Date Constructed	1937	1983	1935	1939
Last Major Upgrade	2013	2011	1994	2007
Most Recent Amendments	Upcoming Tertiary Filters and Upgrade to UV Disinfection	Facilities Plan Update process began in 2019	2022 Appleton Biosolids Storage Building Addition	Effluent Filtration Amendment
WPDES Permit Number	WI-0026085-09-0	WI-0024686-08-0	WI-0023221-08-0	WI-0031232-09-1
Expiration Date	6/30/2022	6/30/2022	3/31/2022	12/31/2023
Receiving Water	Fox River	Little Lake Butte des Morts	Fox River	Fox River
Design Flow (mgd)	13	8.2	15.5	8.5
Average Flow (mgd)	9.6	5.5	10.6	5.5
BOD Design Loadings (lbs./day)	24,573	13,700	40,900	14,651
BOD Average Loadings (lbs./day)	25,876	10,280	22,264	13,997
Treatment Type	Conventional Activated Sludge	Activated Sludge	Secondary Treatment - Activated Sludge Single Staging Nitrifying	Chemical/ Biological
Sludge Treatment	Temperature Phase Anaerobic Digestion	Auto Thermophilic Aerobic Digestion (ATAD)	Anaerobic Digestion	Aerobic Thermal Treatment
Sludge Disposal	Land Application	Land Application	Land Application and Biosolids Composting	Land Application / Injection

Source: Wastewater Treatment Facility 2021 Compliance Maintenance Annual Reports, Fox West Regional Sewerage Commission, Appleton Wastewater Treatment Plant, Neenah-Menasha Sewerage Commission, Heart of the Valley Metropolitan Sewerage District

Wastewater Flow Projections

Projected wastewater treatment plan flows and loadings for 2040 were calculated using existing flows, existing BOD loadings, and population projections for each WWTF. **Table 18** displays the estimated sewered population for each SSA. The estimates were calculated with the 2022 ESRI Business Analyst data using the 2030 SSA boundaries. **Table 19** displays the residential wastewater flow and BOD additional loadings for each SSA. The additional loadings are then applied to the existing average flows in **Table 20**. There is available flow capacity at each WWTF after subtracting the projected peak flow in 2040 from the existing design flow. Therefore, it is expected that the current WWTF in each SSA will likely be able to handle the additional flow from the projected residential growth in the year 2040.

Table 21 shows the projected BOD loadings for each WWTF after the proposed addition to the sewer service area. There is adequate available capacity at the Appleton WWTP after the projected BOD loadings. However, the total BOD loadings are approaching the current plant capacity for the Fox West WWTP, and they exceed the Neenah-Menasha and HOV WWTF BOD design capacity.

The projected sewered population is displayed in **Table 19**. This was calculated by applying an additional 12 percent increase, reflecting the average rate increase using the DOA's municipal population projections (from Table 5). The projected sewered population is different than the projected population described in Chapter 5. The Growth Chapter 5 identified the broader population increase across the entire planning area and development pressures. In contrast, this Chapter has a more focused view of the individual WWTF service area and capacity. This means that the projected sewered population is less than the projected population of the planning area. As with all projections, it is assumed that the conditions of the past will continue. It does not take in consideration a significant change in the rate of growth or future WWTF upgrades. Many conditions can change in the future which could adjust the trajectory of the projections outlined below.

Representatives from the Neenah-Menasha, Fox West, and Heart of the Valley WWTFs have all indicated that they are considering a Facilities Plan update in the near future. This SSA Plan recommends that the aforementioned parties continue in their efforts to undergo Facilities Plan updates to re-evaluate the capacities of the three WWTFs and consider opportunities for growth. The WWTFs may not be able to accommodate the additional population if growth continues at the current rate. WWTFs and the member communities will need to discuss Facilities Planning in the near future to accommodate the population growth. A detailed review of the WWTFs and residential wastewater flow is described in the sections below.

Table 18. Estimated Sewered Population of Each Sewer Service Area

Sewer Service Area by WWTF	Estimated Population, ESRI Business Analyst, 2022
Neenah-Menasha	62,021
Fox West	39,915
Appleton	77,333
Heart of the Valley	52,491

Table 19. Projected Residential Wastewater Flow and BOD Additional Loadings

SSA	2022 Estimated Pop. *	2040 Projected Pop. **	Projected Pop. Increase (2022 - 2040)	Projected Additional Flows (80 gpd/capita) ^F		Projected Additional Peak Flows (4.0 Factor) ^P		Additional BOD (0.22 lbs/day per capita) ^B
				gpd	mgd	lbs/day	mgd	
Neenah-Menasha	62,021	69,691	7,670	613,611	0.61	2,454,444	2.45	1,687
Fox West	39,915	44,851	4,936	394,903	0.39	1,579,612	1.58	1,086
Appleton	77,333	86,897	9,564	765,102	0.77	3,060,407	3.06	2,104
HOV	52,491	58,983	6,492	519,325	0.52	2,077,300	2.08	1,428

* See Table 18

**Average percent change across all SSAs from 2020 census to DOA 2040 Population Projections (12.367%)

^F Wisconsin Admin. Code NR 110.13(1)(b)3^P Wisconsin Admin. Code NR 110.13(1)(c)1^B Wisconsin Admin. Code NR 110.15(4)(b)2**Table 20. Projected Wastewater Flows and Available WWTF Capacity**

SSA	Existing Design Flow (mgd)	Existing Average Flow (mgd)	Projected Average Flow in 2040 *	Projected Peak Flow in 2040 **	Available Capacity after Projected Population with Average Flow Rates (mgd)
Neenah-Menasha	13	9.6	10.21	12.05	2.79
Fox West	8.2	5.5	5.89	7.08	2.31
Appleton	15.5	10.6	11.37	13.66	4.13
Heart of the Valley	8.5	5.5	6.02	7.58	2.48

Sources: WWTP 2021 Compliance Maintenance Annual Report, ECWRPC Projections

*Projected average flow = existing average flow + projected additional flows (from Table 21)

** Projected peak flow = existing average flow + projected peak flow (from Table 21)

Table 21. Projected BOD Loadings and Available WWTF Capacity

SSA	Existing BOD Design Loadings (lbs/day)	Existing BOD Average Loadings (lbs/day)	Projected BOD Loadings (lbs/day) *	Available Capacity after Projected BOD Loadings (lbs/day)
Neenah-Menasha	24,573	25,876	27,563	-2,990
Fox West	13,700	10,280	11,366	2,334
Appleton	40,900	22,264	24,368	16,532
Heart of the Valley	14,651	13,997	15,425	-774

Sources: WWTP 2021 Compliance Maintenance Annual Report, ECWRPC Projections

* Projected BOD loadings = existing BOD average loadings (Table 23) + projected additional BOD (Table 21)

Neenah-Menasha Sewerage Commission

The Neenah-Menasha Sewerage Commission (NMSC) was jointly created in 1982 by the municipalities and the sanitary districts within the sewer service area pursuant to Section 66.0301, Wisconsin Adm. Code. With upgrades to the facility in 1987, 2000, and 2013, it is able to serve as a regional facility for the City of Neenah, the City of Menasha, the Village of Fox Crossing (east side), Harrison Utilities, and the Town of Neenah Sanitary District #2. The WWTF is located at 101 Garfield Avenue in the City of Menasha at the mouth of the Menasha Channel.⁵¹



In compliance with the WPDES Permit, the treated effluent discharges into the Fox River. A 60-inch interceptor from the City of Neenah and a 48-inch interceptor from the City of Menasha carry the flow into the plant. The Commission owns 1.26 miles of a jointly used interceptor. The lift stations and individual collection systems are owned and maintained by their respective member communities. The wastewater flow follows through screening, grit removal units, primary clarifiers, an aeration system, the final clarifier splitter box, and the chlorine contact tank. The Facility is currently working with local high strength industries to reduce their loadings. In addition, the facility is in the beginning stages of considering some upgrades in the future in order to expand capacity.

The current Neenah-Menasha WWTF is designed for an average monthly flow of 13.0 mgd, and the existing flows average 9.6 mgd, leaving a design capacity of 3.4 mgd. Based upon ECWRPC's projection analysis in **Tables 20 and 21**, the average flows are expected to increase by 0.61 mgd with peak flows expected to increase by 2.45 mgd. This leaves an available capacity of 2.79 mgd after the 2040 projected increase. Therefore, the existing WWTF should be able to adequately accommodate the expected flow from residential development. However, the BOD loadings associated with residential development are expected to reach 26,988 lbs/day. This is approximately 2,990 lbs/day over the BOD design capacity of 24,573 lbs/day. In addition to residential connections, the WWTF has other commercial and industrial users. In particular, the WWTF has one Contracting Industrial User which used approximately 20 percent of the plant in the year 2020.

⁵¹ "The Commission", Neenah-Menasha Sewerage Commission, 2022, <https://www.nmscwwtp.com/commission/>



Photo Credit: ECWRPC

Fox West Regional Sewerage Commission

Originally formed in 1981, the Fox West Regional Sewerage Commission provided wastewater treatment services for the Town of Grand Chute Sanitary District #2, The West Side Menasha Utility District, the Village of Greenville, and portions of the Town of Neenah, in a regional capacity.⁵² The Facility was re-named from “Grand Chute-Menasha West” to “Fox West” when Town of Menasha incorporated into the Village of Fox Crossing. The facility, located at 1965 W. Butte des Morts Rd. in the Village of Fox Crossing and was built in 1983. It now serves the Village of Greenville Utilities, the Town of Grand Chute Sanitary District #2, the Village of Fox Crossing (west side), and the Town of Clayton. Treated effluent discharges into Little Lake Butte des Morts.

The WWTF was originally designed in 1983 and was expanded in 1994. In 2011, the plant went through another expansion to meet the effluent ammonia standards and handle additional flow. Wastewater inflow to the plant enters via a 42-inch interceptor along W. Butte des Morts Beach Road approximately 5,467 feet long, and moves through grit removal units and primary clarifiers with sludge collectors. The waste activated sludge is directed to be co-thickened with primary sludge. It then moves through an activated sludge system, Autothermal Thermophilic Aerobic Digestive (ATAD) complex, and a UV disinfection system. The sludge is stored for 180-days in a Sludge Storage Building constructed in 1987. After proper storage, the dewatered sludge is then

⁵² Grand Chute-Menasha West Wastewater Treatment Facility, Facility Plan, March 3, 2008, prepared by CH2MHILL and McMahon Associates

trucked off-site and land applied on agricultural fields nearby.⁵³ An update to the Facilities Plan began in 2019 and is ongoing as they await new WI DOA population projections based off the 2020 U.S. Census and the 2040 Fox Cities SSA Plan.

The Fox West WWTP has a design capacity of 8.2 mgd, with existing average flows of 5.5 mgd. According to the projected analysis in **Tables 20 and 21**, the projected average flows are anticipated to increase by 0.39 mgd with peak flows of 1.58 mgd. Therefore, the total projected average flow in 2040 is 5.89 gpd, leaving an available capacity of 2.31 mgd. The WWTP should adequately accommodate the estimated projected wastewater flow. The BOD loadings associated with the projected residential population are estimated to increase by approximately 1,000 lbs/day, leaving approximately 2,300 lbs/day of available BOD loading capacity in the year 2040.

⁵³ Grand Chute-Menasha West Wastewater Treatment Facility, Facility Plan, March 3, 2008, prepared by CH2MHILL and McMahon Associates



Photo Credit: AWWTP

Appleton Wastewater Treatment Plant

The Appleton Wastewater Treatment Plant (AWWTP) was constructed in 1937 and underwent the most recent major upgrade in 1994. The AWWTP operates a Biosolids Management Program which utilizes 100 percent of the biosolids produced for agricultural land application. The program is mutually beneficial for farmers, providing a cost-friendly nutrient-rich organic alternative to chemical fertilizers, and the AWWTP, providing an outlet for the biosolids produced. The AWWTP has two egg-shaped anaerobic digesters on-site.⁵⁴ The collection system includes interceptors running along the north bank and the south bank of the Fox River leading to the treatment plant at 2006 Newberry Street in Appleton.

In June of 2022, the DNR approved the most recent Facility Plan amendment which will expand the biosolids storage capacity at the existing site. Expanding the Biosolids Storage Building (BSB) will provide additional storage volume for biosolids providing 180 days of storage for the projected sludge production volumes in the year 2040. The upgrade will expand the existing 1983 building and will build an addition on the existing building. It is anticipated that the current use of the biosolids storage pad at the Outagamie County Landfill will cease in the future, thus requiring extra storage capacity on site.

⁵⁴ Appleton Wastewater Treatment Plan Biosolids Management Program, 2022,
<https://www.appleton.org/home/showpublisheddocument/1852/636263926584670000>

The Appleton WWTP has the largest design capacity of the four Fox Cities WWTFs with a design flow of 15.5 mgd. The existing average flow is 10.6 mgd, and with a projected additional flow of 0.77 mgd, the projected average flow rate will be only 11.37 mgd in 2040 based on residential development projections. **Table 20 and 21** indicates that the Appleton WWTP does not appear to have any issues with available wastewater flow and BOD loading capacity for the next 20 years. The BOD loadings are projected to be approximately 24,400 lbs/days. With a BOD design capacity of 40,900 lbs/day, there is plenty of capacity remaining for the future. The Plant has seen a reduction in industry users in the SSA, most recently with the closing of Neenah Papers. Other industries have reduced flow and conventional pollutants. The Plant receives hauled waste from landfill leachate and cheese processing companies directly into the anaerobic digesters for processing and gas production.



Photo Credit: HOVMSD

Heart of the Valley Metropolitan Sewerage District

The Heart of the Valley Metropolitan Sewerage District (HOVMSD) was established in 1974. The Sewerage Commission serves the Villages of Little Chute, Kimberly, and Combined Locks, the City of Kaukauna, and the Darboy Sanitary District (agreement entered in 1993).⁵⁵ The Darboy Sanitary District serves multiple municipalities including the Town of Buchanan. The HOVMSD also accepts other surrounding communities septic and holding tank waste from permitted haulers. A network of interceptors carry flow into the WWTF via pipes along the Fox River and at three locations where the pipes cross under the Fox River. The District's interceptor ranges from 24-inch diameter and 48-inch diameter and is 5.5 miles long.

The Influent is pumped through a Pista Grit Chamber, an Actiflo Ballasted Sedimentation System, a Biostyr Biological Aerated Filtered (BAF) System, and a chlorine contact tank. Sludge is moved through a gravity thickener tank and ATAD Reactor systems prior to being trucked off site for land application as Class A Biosolids.⁵⁶ Treated effluent discharges into the Fox River.

⁵⁵ Interceptor Sewer System & Wastewater Treatment Plant Facilities Plan, January 15, 2004, prepared by McMahon Associates

⁵⁶ "About Us", Heart of the Valley Metropolitan Sewerage District, 2022, <https://hvmsd.org/about-us/operations/>

The HOVMSD has an existing design capacity for 8.5 mgd. The projected additional flows from residential development are estimated to be 0.52 mgd. **Tables 20 and 21** indicate show the WWTF has approximately 2.48 mgd available for wastewater flow after the projected increase. However, the BOD loadings are projected to be approximately 770 lbs/day over the existing BOD design loading of approximately 12,700 lbs/day. This considers the residential projections. The HOVMSD also has industrial and commercial users including four connected landfills. The HOVMSD has been working with the landfills to reduce organic loadings. Two of the four landfills have been capped and closed down for years so those loads have gradually dropped over time. As other wet industries expand, the Sewerage District works with them through the pretreatment program to encourage load reductions.

Current Projects

The 5.5-mile Interceptor system moving downstream along the Fox River was originally built in 1977. The concrete pipes are currently corroding due to significantly increased acid levels over the past 5-years. To curb further deterioration, an interceptor system rehabilitation project to line the inside of the pipe is scheduled for construction in 2023.⁵⁷ In addition, the HOVMSD is undergoing an effluent disk filtration project in the existing building to be permit compliant with the WPDES TMDL limits. The HOVMSD is approaching the design rated capacity for BOD and ammonia. Following new ultrasonic flowmeter replacements in 2020, they found the effluent is permit compliant for loadings higher than what it has been currently rated for both BOD and ammonia. Due to this the District conducted stress tests to evaluate the facilities loadings and rated capacities in 2022. The DNR will need to grant approval to modify capacity ratings if the District were to apply for a rerating.⁵⁸

⁵⁷ “Interceptor Rehabilitation Project”, Heart of the Valley Metropolitan Sewerage District, 2022, <https://hvmsd.org/interceptor-rehabilitation-project/>

⁵⁸ Heart of the Valley Metro Sewerage District Compliance Maintenance Annual Report, 2021

Chapter 8: Environmentally Sensitive Areas

Introduction

Environmentally sensitive areas (ESAs) are geographic areas to be excluded, “from the sewer service area because of the potential for adverse impacts to the quality of the waters of the state from both point and nonpoint 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 physical constraints.” (Wis. Adm. Code NR 121.05(1)(g)(2)(c)).

The purpose of designating environmentally sensitive areas is to protect and maintain Wisconsin’s water quality and resource health. ESAs perform a variety of important environmental functions including stormwater drainage, flood water storage, pollutant entrapment, and the provision of wildlife habitat. They also provide desirable green space to enhance urban and rural aesthetics and recreation.

The ESAs for the Fox Cities SSA Plan are listed in **Table 22** and **Figure 3**. ESAs consist of all lakes and streams and adjacent shoreland buffer areas. They also include wetlands that are delineated on the State of Wisconsin Wetland Inventory Maps, and floodways that are delineated on the official Federal Emergency Management Administration Flood Boundary and Floodway Maps. **Map 6** displays the mapped ESAs for the Fox Cities SSA.

In addition to the designations of environmentally sensitive areas, other areas with natural characteristics that could impact environmental quality or development potential have been identified. These areas have been termed areas with limiting environmental conditions. This includes areas with seasonal high groundwater (within one foot of the surface), floodplain areas, lands with shallow bedrock (within five feet of the surface), and areas with steep slopes (12 percent or greater). Unlike environmentally sensitive areas, development is not excluded from land with limiting environmental conditions. Limiting environmental conditions are considered a second priority protection area. The primary purpose of identifying these areas is to alert communities and potential developers of environmental conditions which should be considered prior to the development of such an area.

The following section will further define environmentally sensitive areas and limiting environmental condition.

Wetlands

A wetland is defined by the Wis. Admin. Code NR 103.02(5) as “an area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions.”⁵⁹ They are based upon soils, topography, climate patterns, hydrology, and development. Wetlands create a buffer between surface waters and the built environment or other natural landscapes. They provide environmental services such as flood protection, stormwater control, and carbon sinks. Wetlands are capable of storing large volumes of water, which slows the rate of flow and helps prevent shoreline erosion, specifically during large rain events. They also absorb excess nutrients as water is slowly released into open water bodies. Since wetlands are able to accumulate enormous amounts of carbon, they also serve an important role in climate regulation. Removal of wetlands impacts a variety of ecological factors including groundwater recharge, flood water storage, retention of sediments, and minimizing nonpoint source pollution.

Floodplains

A floodplain is the land that is covered by floodwater during a regional 100-year flood and includes the floodway (channel of a river or stream) and the flood fringe (region of land outside the floodway which is covered by flood water during the 100-year regional flood).⁶⁰ The term “100-year flood” references a flood that has a 1 percent chance of occurring in any given year. **Figure 2** shows the characteristics of a floodplain. Chapter NR 116 of the Wis. Adm. Code provides standards for development in the floodplains using the Flood Insurance Rate Map (FIRM) and the Federal Emergency Management Agency as guidance. Limiting development in the floodplain zone ensures that human life and health are protected. Mitigation efforts are put in place to reduce the chance of a disaster and emergency situations, building more flood-resilient communities.

Funding assistance is available through the WI Municipal Flood Control Grant Program, WI Emergency Management, and Hazard Mitigation Grants.⁶¹

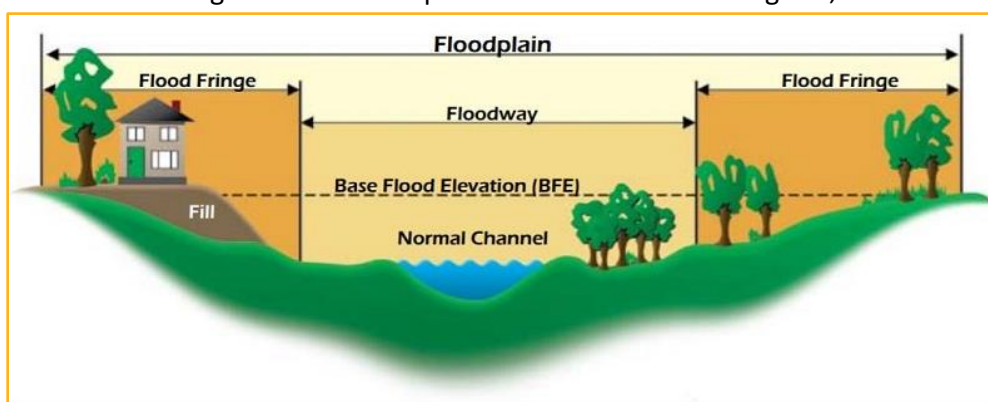


Figure 2. Characteristics of a Floodplain

Source: FEMA, *National Flood Insurance Program Guidebook*, 2009

⁵⁹ Wisconsin Administrative Code NR 103.02(5)

⁶⁰ “Wisconsin’s Floodplain Management Program”, Wisconsin Administration Code NR 116

⁶¹ “Floodplain Management and Mapping”, Wisconsin DNR, 2022, WDNR Website, Floodplains, <https://dnr.wisconsin.gov/topic/FloodPlains>

Shoreland Buffer Zone

Shorelands, also known as riparian buffers, are narrow strips of land adjacent to bodies of water such as lakes, rivers, and streams. Shorelands are important areas for filtering excess nutrients and sediment prior to runoff entering the stream or lake channel (such as runoff after a storm). They have additional benefits when coinciding with wetlands to slow the velocity of water and reduce the volume of runoff. They also help with bank stabilization and act as a water purifier. Shorelands provide habitats for wildlife and fish and add recreational and scenic value to humans, too.⁶²

Steep Slopes and Soil Erodibility

All soils can be classified into three types: Clay, Sand, and Silt. Each type has distinct properties such as the size and shape of the individual particle. Soil is generally found in nature as a combination of soil types. The percent composition of the soil affects properties such as its ability to be cohesive or to crumble and its ability to hold water and nutrients.

The composition of the soil also affects soil erodibility; the susceptibility of soil to erode by runoff and precipitation. The steepness of the slope is also a determining factor in soil erodibility. Soil particles are more prone to runoff as the slope becomes steeper. If the steep slope is located near a waterbody, it could be a contributing factor to nonpoint source pollution. Soil and the nutrients and/or pollutants that are held between the soil particulates running off steep slopes can negatively impact water quality.

Endangered Resources, Natural Areas, and Special Resource Interests

Areas of special and natural resource interests is defined by Wis. Admin. Code NR 103.02(1) as “areas recognized by the state or federal government as possessing special ecological, cultural, aesthetic, educational, recreational or scientific qualities.” There are no State Natural Areas located in the Fox Cities SSA, which would be protected by law from any use that is inconsistent to their natural values, per s. 23.28, Wis. Stats. If endangered resources are indicated in the Natural Heritage Inventory Public Portal, the developer or municipality may seek an Endangered Resources Preliminary Assessment to accurately assess the project location.⁶³

Physical features which may have a significant local or statewide importance may include rare woodlands or species habitats (such as on the Wisconsin’s Natural Heritage Inventory)⁶⁴, historical or archeological sites on the national register, certain significant groundwater recharge areas, or other area that represents an integral part of the stream drainage area. The presence of these areas should be considered prior to development.

⁶² “Lower Fox River Mainstem (City of Green Bay-Fox River & Garners Creek-Fox River) Nonpoint Source Watershed Implementation Plan, Brown County Land & Water Conservation Department, Outagamie County Land Conservation Department, and Calumet County Land & Water Conservation Department, 2019

⁶³ “Natural Heritage Inventory”, Wisconsin DNR, 2022, <https://dnr.wisconsin.gov/topic/NHI>

⁶⁴ “Natural Heritage Inventory Database, Wisconsin DNR

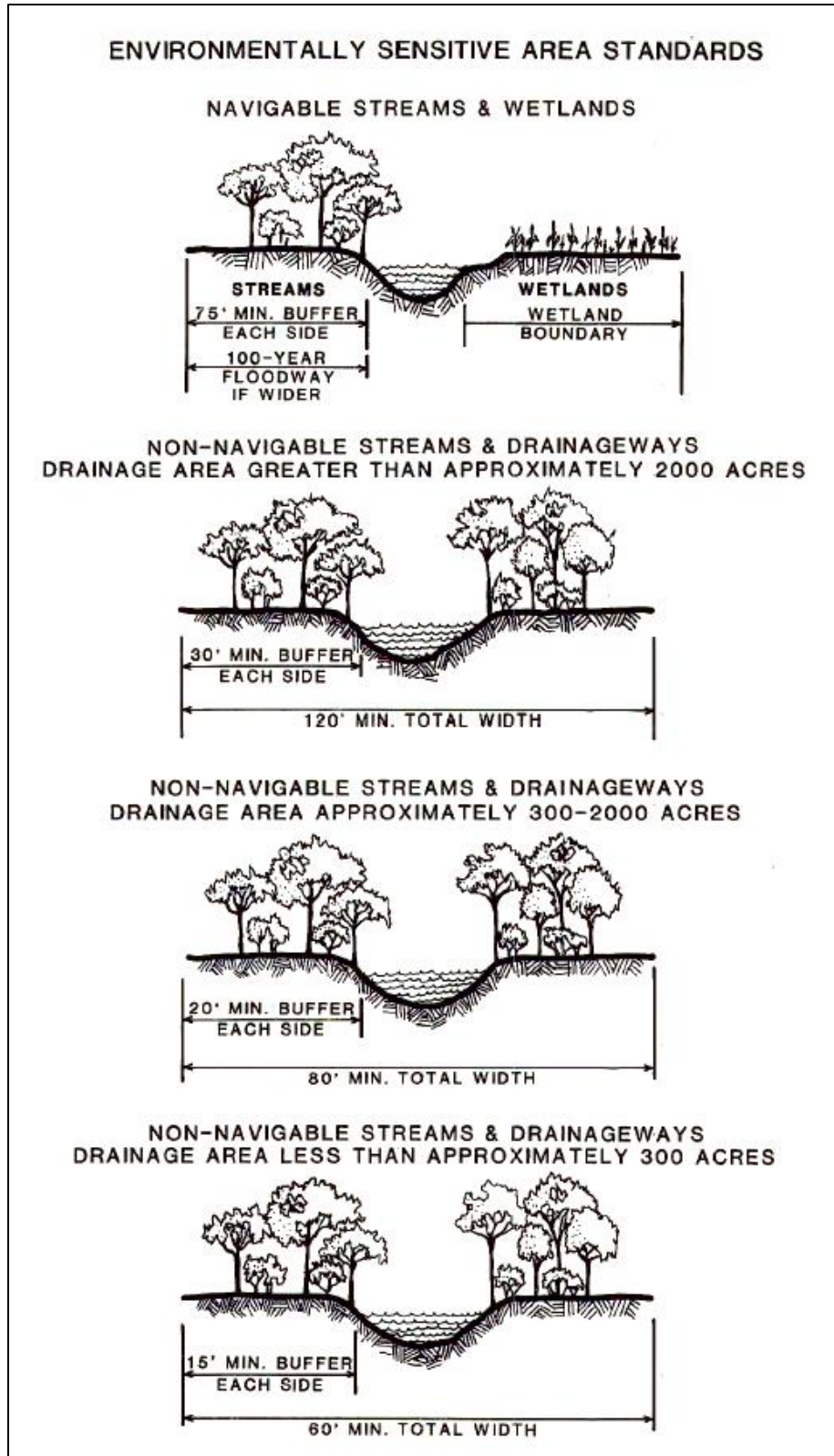


Figure 3. Environmentally Sensitive Areas

Table 22. Environmental Features

Environmental Features	Descriptions & Setback Requirements	
Environmentally Sensitive Areas		
Wetlands	All wetlands identified on the DNR’s Surface Water Data Viewer	Greater than 2 acres = the wetland itself + a 50-ft buffer Less than 2 acres = the wetland itself with no buffer
Floodplains – Floodway	Floodway defined on FEMA and DNR-approved floodway maps and flood studies	
Navigable Waterway and Shoreland *	Including rivers and streams + 75-ft shoreland buffer from the overall high-water mark	
Limiting Environmental Conditions		
Non-Navigable Waterway and Shoreland **	See ESA Figure 3	
Steep Slopes & High Erodible Soils	Any slope or gradient equal to or greater than 12 percent	
Seasonal High Groundwater	Within one foot of the surface	
Shallow Bedrock	Within five feet of the surface	
Other Significant Features	Other site-specific sensitive resources may be considered ESAs on a case-by-case basis depending on type and proximity to development.	

Note: Site inspections take precedence over the sewer service area map of environmentally sensitive areas

* Based on DNR determination of perennial/navigable

** Based on DNR determination of intermittent/non-navigable

Chapter 9: Plan Implementation and Recommendations

Although sewer service area planning was initiated at the state and federal levels, successful implementation of each plan rests the local level. Local jurisdictions for wastewater treatment and collection should do the following to advance the Fox Cities SSA Plan:

1. Adopt the Fox Cities SSA Plan;
2. Review and update development policies and regulations in light of the sewer service plan and recommendations;
3. Encourage general purpose units of government to submit preliminary land subdivision plats which are proposed to be sewered to the ECWRPC for review for consistency with sewer service area plans for the area;
4. Submit sanitary sewer extension requests to the ECWRPC to review proposed extensions for consistency with sewer service area plans prior to being submitted to the WDNR for approval;
5. Submit wastewater facilities plans and plan amendments to the ECWRPC for review for consistency with the sewer service area plans prior to submittal to the WDNR for approval (NR 110, Wis. Admin. Code);
6. Carry out their management responsibilities for treatment facilities and collection systems as specified by state and federal requirements;
7. Review and address issues and recommendations identified in the Lower Fox River Basin Integrated Management Plan;
8. Continue to address issues and regulatory methods for the management of on-site system development within the Planning Area to better recognize the existing investment in sewer infrastructure;
9. Complete and/or update as necessary, local and county comprehensive plans, and incorporate information as necessary from the 2040 SSA Plan;
10. All communities should regularly monitor growth and its related sewerage flows to lessen the risk of future overflows and better determine the timing for wastewater treatment system upgrades.
11. Wastewater Treatment Facilities should continue their efforts to monitor the need for a Facilities Plan update to re-evaluate their capacity and consider opportunities for growth.

In addition to implementing sewer service area plans, local units of government may exercise other authority conferred upon them to preserve and protect water quality. Local units may use this authority to plan and manage land use and development through subdivision, zoning, and other development ordinances.

Criteria should be written into existing ordinances or new ordinances and be adopted which promote orderly development and address water quality concerns. Additional actions by local units of government which are recommended for water quality protection include the adoption of construction site erosion and stormwater management ordinances, the use of Best Management Practices throughout construction (s. 281.65 (2)(a), Wisconsin Statutes), and the preservation of greenways along existing drainage corridors.

Chapter 10: Sewer Service Area Planning Process

A sewer service area is a geographic area which is currently served or anticipated to be served with sanitary sewers within a 20-year planning period. During the 2040 Fox Cities SSA Plan update process, ECWRPC emphasized that communities request areas they identified as 5-10 year growth areas, not a full 20-year build out. Sewer service areas were first delineated for the East Central Region in 1978 in the plan *New Directions for Growth and Development*. In the initial plan, a generalized methodology was used for the estimation and allocation of growth which led to the identification of service area boundaries. State and federal guidelines, as well as regional policies, were utilized in the planning process. Since the initial delineation of service areas, the planning and management process has become more complex and multi-faceted, thus greater detail in the explanation of the updating process is required.

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

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

1. Identification of Planning Area Limits

The first step in delineating sewer service areas is the outlining of broad planning areas which include all feasible options for where urban growth might occur within the 20-year planning period. Planning area boundaries generally include all areas within existing city, village and sanitary district limits. Undeveloped lands surrounding these entities are also included based on the potential ability to provide sewer service in the long-term future according to the existing/planned wastewater treatment and collection system. Additionally, clusters of nearby, existing development may be included if sewer may be warranted in the future due to failing on-site systems. Planning areas also serve as the study areas for wastewater facilities planning efforts.

2. Delineation of Environmentally Sensitive Areas

The purpose of delineating environmentally sensitive areas is to protect and maintain Wisconsin's water quality and resource health. ESAs perform a variety of important environmental functions including stormwater drainage, flood water storage, pollutant entrapment, and the provision of wildlife habitat. They can also provide desirable green space to enhance urban and rural aesthetics and recreation. More information can be found in the Environmentally Sensitive Areas chapter.

Although the delineation of ESAs is intended to provide adequate long term and uniform environmental protection for all sewer service areas within the East Central region, ESAs may be reclassified in two ways to respond to specific local development proposals.

First, the ESA classification can be removed if the conditions outlined in the Sewer Service Area Amendment Process are met. This re-designation is considered a major change. Second, the ESA classification may be modified by a minor change. Refinements and minor changes are generally of two types.

The first type of minor change involves changes resulting from revised, improved, or more detailed background resource information to include:

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

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

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

3. Identification and Quantification of Existing Conditions

Complementing the information placed upon the digital maps, additional data is collected on existing population, numbers of dwelling units, mixes and densities of residential development, existing land uses, and historical land use change for industrial, commercial, and public institutional development.

Much of this information is available from the Department of Administration including population and household projection data. Other information is gathered from state and local sources. The East Central Wisconsin Regional Planning Commission creates and maintains land use acreage data.

4. Refinement of Goals, Objectives and Policies

The conceptual and philosophical bases for sewer service area planning are the goals, objectives, and policies included in the SSA Plan. As stated earlier, the sewer service area planning process has become much more complex since it was first initiated. In response to changing conditions, major refinements were made to the original 1990 goals, objectives, and policies over the years. This effort was accomplished early in the planning process in order to give direction to decisions involving the amount of growth in a given service area, especially the allocation and location of future growth.

5. Forecast of Urban Growth

The forecasting of urban growth and development within the East Central region involves the two primary analytical processes of population projections and allocation of land use acreage. These processes quantify and identify locations for new growth utilizing the sewer service area policies and various planning and development standards further elaborated below:

a. Population Projections

Population projections are the key factor in forecasting urban growth. ECWRPC sources projections from the 2010-2040 Department of Administration (DOA) population projections by five-year increments for individual counties. DOA utilizes the cohort component method of population projection. These are the official state projections, consistent with U.S. Bureau of Census and State of Wisconsin projections. The DOA county projections are required to be used as control totals in accordance with Wis. Admin. Code NR-121 for the development of sewer service area plans.

b. Residential Development

In addition to population projections, average household size and housing densities are required to determine residential land needs. Household formation rates are estimated and translated into household size. The average household size thus represents an average dwelling unit which can be compared to population projections for estimating future dwelling units.

Once household size is established using the Department of Administration (DOA) projections, residential development densities and the mixture of single-family/multifamily uses is determined. The number of units by structural type is drawn from the 2016-2020 American Community Survey (ACS) 5-year estimates to establish a mix of residential types.

The projected increase in households (dwelling units) are multiplied by the residential splits to obtain estimated residential units by type. Residential splits are determined by dividing the total number of units for each structural type by the total number of housing units. The projected units by type are then divided by the residential density, determined by dividing the number of units by existing single-family or multifamily land use units, to get the projected acreage needs for residential users by unit type.

A market factor and infrastructure factor are then applied to account for transportation needs and potential growth beyond the DOA projections. The resultant acreage is allocated as residential growth for land areas within each planning area.

c. Non-Residential Development

ECWRPC developed a new method for the Fox Cities 2040 SSA Plan to forecast non-residential development using historical commercial, industrial, and public/institutional land use. The methodology estimates the need for new commercial, industrial, and public institutional land use based on historical change rates. The existing acreage for non-residential land classifications is calculated from ECWRPC land use data. The percent change in growth is calculated in approximately 5-year increments for the past 20 years. The percent change is then averaged for all 5-year increments. The average historical 5-year percent change is then applied to the existing land use and projected for the next 20-years. The resultant acreage is allocated as non-residential growth for land areas within each planning area.

d. Growth Allocation

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

A major product of the allocation process is the mapping of growth areas in collaboration with local jurisdictions. The following criteria and standards are utilized in the designation of growth areas:

1. All areas within a planning area which are currently served with public sanitary sewers shall be designated sewer service areas. Areas along existing and proposed (WDNR approved) sewer collector or interceptor lines (force mains excluded) shall be designated sewer service areas.
2. Unsewered areas of development within close proximity to existing sanitary sewer lines where the cost-effectiveness of the extension of sewers is not questionable shall be included in the service area.
3. Areas of existing development with approved wastewater facility plans shall be designated sewer service areas.
4. The acreage allocations of future development areas shall incorporate residential, commercial, industrial, and institutional growth projections. Once final acreage is determined, a 20 percent "market factor" of developable acreage shall be added to adjust for land development flexibility. A 15 percent infrastructure factor shall be added to adjust for transportation and stormwater collection needs in new development areas.
5. Environmentally sensitive areas shall be excluded from the sewer service area.
6. Holding tank service areas shall be designated for existing large holding tanks defined in NR113 and for areas of existing development where no cost-effective alternative to the installation of a large

holding tank is available. The cost-effective analysis is to be prepared by the owner. All large and individual holding tank wastes are disposed of in accordance with NR113.

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

1. Urban development patterns should incorporate planned areas of mixed use and density that are clustered and compatible with adjacent uses.
2. The allocation of future urban development should maximize the use of existing urban facilities and services.
3. Future urban development should be encouraged to infill vacant developable lands within communities and then staged outward adjacent to existing development limits.
4. Future commercial and industrial development should expand upon existing areas and be readily accessible to major transportation systems.
5. The boundaries of urban development should consider natural and constructed features such as ridge lines, streams, and major highways.
6. Residential land use patterns should maximize their accessibility to public and private supporting facilities.
7. Urban development should be directed to land suitable for development and discouraged on unsuitable land such as floodplains, areas of high bedrock, and areas of high groundwater.
8. Environmentally sensitive areas shall be excluded from the sewer service area to protect water quality.
9. Future urban development should pose no significant adverse impacts to surface or groundwater.
10. Urban development should be located in areas which can be conveniently and economically served by public facilities.
11. The allocations should be consistent with adopted local comprehensive plans within the planning area.

Early in the service area planning process, a policy decision was made that the total allocated growth acreage for individual sewer service areas as delineated in the 1995 adopted plans and subsequent amendments, would not be reduced in quantity. This policy was applied to all sewer service areas which have a sewerage system or which have WDNR approved wastewater facilities plans for a sewerage system. The impact of this policy is that the areas available for future growth in various sewer service areas sometimes are greater than the updated forecast growth which is to be allocated. The result of this policy is that there are fewer service areas where the existing service area boundaries need to be expanded.

6. PUBLIC AND COMMUNITY PARTICIPATION

Citizen participation during the update of the service area plans has been and is encouraged throughout the process. General public participation is sought from communities and counties during the plan update process through individual meetings with the entities. Public information meetings are held once draft maps and chapters are completed. The purpose of sewer service area planning, the planning process, existing conditions of the service area and growth forecasts are explained. As a follow-up to these meetings (in smaller communities these meetings are combined), additional meetings are held for communities within each sewer service area to address specific issues. The designated service area boundaries are reviewed as part of these meetings. A final public hearing is noticed and held as part of the Community Facilities Committee meeting and approval.

7. ADOPTION AND PUBLICATION OF FINAL PLANS

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

Chapter 11: Sewer Service Area Amendments

SECTION I: PLAN AMENDMENT PROCEDURES

The East Central Wisconsin Regional Planning Commission (ECWRPC) has adopted "An Amendment Policy and Procedure for Sewer Service Areas" to enable communities the opportunity to request modification of local sewer service area plans in response to unanticipated growth and change. ECWRPC amendment procedures provide a uniform approach for revising sewer service area boundaries and/or related changes. ECWRPC is responsible for ensuring sewer service plans are updated on a continual basis. However, conditions may arise that require an amendment or modification of the sewer service area plan.

East Central Review

ECWRPC's Community Facilities Committee will review all proposed amendments. During this local review, ECWRPC staff will create an amendment evaluation report, addressing the proposal's consistency with agency criteria, policies, and procedures. ECWRPC will review consistency with population and forecasted projections, environmentally sensitive area delineations, protection of local and regional water quality, overall community planning goals and objectives, intergovernmental notice and communication, and other standard procedures for amendment requests.

Public Input

ECWRPC will hold a publicly-noticed open meeting during which comments and recommendations from local units of government, agencies, and the public may be heard. The applicant may be requested to appear at the Community Facilities Committee meeting if the amendment involves a complicated or large-scale request. The Community Facilities Committee shall recommend approval or disapproval of the amendment to the Wisconsin Department of Natural Resources (WDNR). Approved projects will be transmitted to the WDNR using standard procedures to ensure a timely final review and administrative decision regarding the proposed amendment to the State's Areawide Water Quality Plan. Amendments disapproved or denied by the ECWRPC may be further evaluated at the state level through a direct submittal to the WDNR's Areawide Water Quality Planning Program and the Secretary of the WDNR.

WDNR Review

The WDNR has 90 days from ECWRPC's initial receipt of a complete submittal to provide an administrative decision on the proposal. DNR will review the proposal with respect to ECWRPC's policies and procedures as well as the state's requirements for the protection of water quality. The WDNR will issue an administrative decision regarding the amendment and transmit its decision to ECWRPC for notification to the applicant and other affected parties. If the proposal is approved, the amendment will become an official update to the local water quality management plan for the area of interest, as well as an update to Wisconsin's Areawide Water Quality Management Plan. The WDNR requests US EPA certification of all updates and amendments through a transmittal letter at the end of the calendar year.

WDNR Administrative Decision

A sewer service area amendment may be approved by WDNR with conditions or without conditions, which will be stated in the administrative decision letter. Conditions of approval must be met prior to ECWRPC issuing a letter of Water Quality Conformance for project plans and specifications review related to the project area. The WDNR may also issue a denial of an SSA Plan Amendment. Whether the amendment is approved, approved with conditions, or denied, state regulations provide two further avenues for applicants to seek further review.

Statewide AWQM Plan Amendment

Approved amendments become formal updates to the state's Areawide Water Quality Management (AWQM) Plan, the local SSA Plan and related basin Water Quality Management Plan (e.g., Upper Fox River Basin WQM Plan). Approvals are sent to the US Environmental Protection Agency for certification under the requirements of the Clean Water Act of 1987 (Public Law 92-500 as amended by Public Law 95-217) and outlined in the federal regulations 40 CFR, Part 35. DNR's review is an integrated analysis action under NR 150.20 (2) (a) 3, Wis. Adm. Code. Through DNR's review, the Department has complied with Ch. NR 150, Wis. Adm. Code, and with 1.11, Stats. An approval of a sewer service area amendment does not constitute approval of any other required local, state, or federal permit for sewer construction or associated land development activities.

Appeal Rights

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

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

- A. The hardship to the community is significant and widespread owing to substantial pre-existing financial or legal commitments for sanitary sewer service.
- B. The major objectives of the sewer service area plans can be met.
- C. The appeal shall be submitted to the Chair of the ECWRPC for action at a regularly scheduled meeting of the Commission. Further appeals may be submitted to the WDNR.

SECTION II: AMENDMENT POLICIES AND CRITERIA

The following section details methods by which the SSA Plan may be amended.

- A. **Acreage Swap.** Sewer service area boundaries may be modified provided no increase in the total acreage of the specific sewer service area occurs.
1. The newly added area shall have Environmentally Sensitive Areas (ESAs) delineated prior to the amendment approval. Areas that are outside the SSA but adjacent to a proposed amendment area should also have environmentally sensitive areas identified. The land comprised of an ESA will not require a swap for and equal amount of acreage.
 2. Amendment areas shall have a common boundary with the current sewer service area and shall not create a void within the service area.
 3. Acreage swaps may occur on a regional basis within the same sewer service area. (i.e., added and deleted acreage does not have to be within the same community).
 4. Amendment areas shall, to the extent possible, utilize consistent land use areas on an acre for acre basis, based on the community's locally adopted comprehensive plan. Should the community not have enough of a particular type of land designated in its locally adopted Comprehensive Plan to allow for a swap, the community should consider utilizing the "regional swap" policy. Any community affected by a "regional swap" shall be notified and given an opportunity to comment prior to Commission approval of the amendment.
 5. All property owners in areas proposed to be deleted (swapped) are required to be notified of this request by the unit of government seeking the amendment. Property owners must confirm approval of the proposed swap. Any landowner potentially affected by the removal of property from the SSA shall be notified by the requesting entity at least 14 days prior to the scheduled Environmental Management Committee meeting at which the amendment will be addressed. Failure to do so will result in the tabling of the amendment request until the next regularly scheduled meeting (policy amendment approved by WDNR on 08/26/04). Documentation of notification is required.
- B. **Existing Non-sewered Urban Development.** Sewer service area boundaries may be swapped on an acre for acre basis (vacant, developable lands only) provided a documented need for a sanitary sewer collection system exists for areas of existing urban development.
1. Newly added areas will have Environmentally Sensitive Areas (ESAs) delineated prior to the amendment approval. The land comprised of an ESA will not require a swap for and equal amount of acreage.

2. Acreage swaps may occur on a regional basis within the same sewer service area (i.e., added and deleted acreage does not have to be within the same community).
3. Amendment areas shall, to the extent possible, utilize consistent land use areas on an acre for acre basis, based on the community's locally adopted and Comprehensive Plan (for Urbanized Area communities). Should the community not have enough of a particular type of land designated in its locally adopted Comprehensive Plan to allow for a swap, the community should consider utilizing the "regional swap" policy. Any community affected by a "regional swap" shall be notified and given an opportunity to comment prior to Commission approval of the amendment.
4. All property owners in areas proposed to be deleted (swapped) are required to be notified of this request by the unit of government seeking the amendment. Property owners must confirm approval of the proposed swap. Any landowner potentially affected by the removal of property from the SSA shall be notified by the requesting entity at least 14 days prior to the scheduled Environmental Management Committee meeting at which the amendment will be addressed. Failure to do so will result in the tabling of the amendment request until the next regularly scheduled meeting (policy amendment approved by WDNR on 08/26/04). Documentation of notification is required.
5. Amendments for Transportation Urbanized Area communities will require that additional information be submitted and criteria be met as follows:
 - a) Documentation that the community's locally adopted Comprehensive Plan illustrates the area as a future urban growth area which will be provided a full range of services.
 - b) A determination of the cost-effectiveness of providing public sanitary sewer versus on-site system replacement. This determination should be consistent with NR-110 requirements.
 - c) Documentation that at approximately 30% of the existing on-site systems within the proposed amendment area be considered failing based on the physical condition of the on-site system itself and / or the physical characteristics of the subject site (indirect need).

Documentation for c) above can be in the form of: copies of County or State orders for on-site system replacement; copies of existing on-site system inspection reports; letters from the County Sanitarian indicating that the systems are failing or have the potential to fail; or documentation of recent private well tests which show bacterial contamination likely resulting from on-site system failure.

- C. **Unique Facility.** Sewer service area boundaries may be expanded (overall increase in net developable acreage) provided a documented need for sanitary sewers to serve a proposed unique facility or development exists.
1. Amendment must meet the definition for a “Unique Facility”: A proposed facility that, regardless of location, is considered to be “unanticipated”; and is of “regional importance”. “Unanticipated” is defined as not being illustrated in a local community’s or county’s Comprehensive Plan, and was not anticipated or projected in the Sewer Service Area Plan during the previous update. “Regional importance” is defined as facility which, if constructed, will provide a widespread benefit to multiple local governmental jurisdictions within the Sewer Service Area.
 2. The applicant must also submit additional information which illustrates that all impacts, including secondary land use impacts, and their effects on water quality, transportation, and public service provision be addressed prior to the Commission recommending approval of the amendment. Such amendment requests must also be consistent with locally adopted Comprehensive Plans. Amendments under this policy may be approved conditionally by the Commission so that other necessary approvals can occur concurrently.
- D. **Accelerated Growth.** Sewer service areas may be expanded (overall increase in net developable acreage) to provide the flexibility to accommodate unanticipated short-term development based upon accelerated growth which exceeds the forecasted total service area growth rate in the plan. The requesting entity shall have the community(ies) certify that the proposed amendment area is required for reasonable community growth and is consistent with locally adopted land use plans.
1. Amendment shall have a common boundary with the current sewer service area and shall not create a void within the service area.
 2. Plan Commission or Board action approving the amendment application is required.
- E. **Environmentally Sensitive Areas.** Sewer service area boundaries may be modified by the re-designation of previously identified environmentally sensitive areas consistent with all the following standards:
1. The environmentally sensitive area is immediately adjacent to an existing sewer service area.
 2. Appropriate local, state and federal environmental permits are granted for the proposed development prior to the final approval of the amendment request.
 3. Major re-designations shall pose no significant adverse water quality impacts. Major re-designations include:

- a. Removal of any mapped wetland area for sewer development unless resulting from an activity exempted by state administrative rules governing wetland protection [NR 117.05(2)] or state approved rezoning of wetlands.
 - b. Any change which would reduce a delineated floodway of any navigable stream or river, or which would remove any area below the ordinary high-water mark of a navigable stream, pond or lake.
 - c. Any change resulting in the total removal or in the continuity of any corridor segment including floodways, wetlands, shoreland buffer strips or steep slopes adjacent to water bodies. The water quality benefit that was associated with the portion of the corridor removed must be provided for in the development.
4. The re-designated acreage will be added to the Sewer Service Area's total acreage.
- F. **Mapping Error.** Sewer service area boundaries may be modified or expanded to correct an error in the maps, data, projections or allocations of the adopted Sewer Service Area Plan.
- G. **Transporting Sewers.** Requests for amendments pertaining strictly to the addition of 'transporting sewers' (i.e. interceptors and forcemains which do not directly service new development).

SECTION III: AMENDMENT SUBMITTAL REQUIREMENTS

Proposed sewer service area amendment applications must include all of the following to be considered:

1. ECWRPC Amendment Request Payment Review Form and Fee.
2. Letter of intent from the applicant seeking an amendment to the sewer service area. Requests for sewer service area amendments must be sponsored by the unit of government planning to provide services or responsible for the collection of wastewater to ensure that the designated local management agencies in charge of pollution prevention (both point- and non-point source) are in support of the expansion. Where service is to be provided by a separate sanitary or sewerage district, they must also demonstrate support of the amendment.
3. A map of the proposed amendment location and applicable information (i.e. political boundaries, SSA and Planning Area boundaries). Amendments must be contained within an approved SSA Planning Area. This boundary can be reviewed and considered for modification as a separate process if necessary.
4. A description of the type and size of existing development and/or the type of future development expected to occur.
5. Intergovernmental Cooperation and Coordination Analysis
 - a. Requesting units of government must notify affected units of government of their intent to expand/amend the service area.
6. The environmental impacts of the proposed amendment shall be assessed in accordance with the criteria established in the Wisconsin Department of Natural Resources environmental assessment checklist. East Central may also prescribe safeguards or impose additional conditions deemed necessary to protect the water quality in the area.
7. Supporting documentation as required for each of the Amendment Policies under Section I.
8. Estimates of existing and anticipated population, wastewater generation and means of collection from the area.
9. Documented ability of the treatment facility to treat the anticipated wastewater.
10. Methods of stormwater management and regulation for the added service area and surrounding areas which may be impacted.
11. ECWRPC may require a cost-effectiveness analysis, conducted in accordance with NR 121 and NR 110, to be submitted from the applicant and/or interested parties. Submit cost-effectiveness information compared to other alternatives.
12. Any additional information and documentation that may be requested by the ECWRPC or WDNR in order to aid in the evaluation of the proposed sewer service area amendment.

SECTION IV: DESIGNATED MANAGEMENT AREAS

In the Fox Cities 2030 SSA Plan, designated management areas (DMAs) were defined as the legal entities responsible for the collection or treatment of wastewater. Like ECWRPC, Brown County is also a contracted agency with the WDNR. As such, the ECWRPC and Brown County WQM programs are working towards a more unified, regional approach to sewer service area planning. Therefore, the following section regarding DMAs and conflicts between communities has been adapted from the 2040 Brown County Urban Service Area Water Quality Plan.

The establishment of sewer services areas is defined by municipalities and can be used by municipalities with sanitary districts, also referred to as designated management areas (DMA). Although acreage may have been allocated to a municipality, based on its population and development needs, establishing additional sewer service area can only be accomplished if the area is also in a sanitary district. If a municipality no longer has a designated sanitary district, as is the case in some instances, then sewer service area can be added if it is also demonstrated that the related WWTP has capacity to accommodate the added sewer service area.

Should conflicts arise between communities regarding sewer service area planning issues, every attempt will be undertaken by the ECWRPC to encourage and support the efforts of the affected local units of government to first resolve the situation by themselves. Unique situations and unanticipated conflicts between communities regarding sewer service area planning issues shall be resolved by the ECWRPC and the Wisconsin Department of Natural Resources in accordance with all applicable laws and regulations and the goals, objectives, and policies of this plan. Conflicts are best resolved with the full support and concurrence of all affected local units of government, not just by the review and approval of both the ECWRPC and the Wisconsin Department of Natural Resources.

Of particular concern in this regard is the possibility that communities may wish to expand their sewer service area to the same location as another adjacent community. In that scenario, the ECWRPC would recommend that the conflicts be immediately resolved by the affected communities using boundary, shared services, or other similar intergovernmental agreements. During that process, the subject area would not be included within any SSA.

If at least one of the affected communities states that such an agreement would not be feasible, the ECWRPC would first undertake a preliminary review of the status of facility planning and designated management area status within the subject area to determine if a sewer service area boundary determination could be made.

- Should the subject area be located within a city, village, sanitary district, or utility district and all other applicable state and county rules and regulations be met, including the goals, objectives, and policies of the approved SSA Plan, the requested sewer service area would be allocated to the city, village, sanitary district, or utility district within which the subject area resides. The subject city, village, sanitary district, or utility district could then proceed with a sewer service area amendment. If a management area overlaps with another municipality/management area, the jurisdiction issue should be resolved between the parties before a 208 water quality conformance review can be completed and issued for a proposed extension.

- Should the subject area be located within an approved sewer service area and all other applicable state and county rules and regulations be met, including the goals, objectives, and policies of the approved SSA Plan, the requested sewer service area would remain allocated to the community which had originally identified and received approval of the sewer service area. No amendment would be necessary unless the area is annexed by a different city, village, sanitary district, or utility district. If the area would be annexed by a different city or village, a SSA amendment would need to be completed to transfer the area between communities.
- In most other instances, the ECWRPC would request that the affected communities enter a formal negotiation/mediation process for settlement of the contested issues.
- Should the subject area be in a sanitary district or utility district and outside of the existing municipal boundary of the requesting municipality and the sanitary district or utility district in which the subject area resides objects to the SSA amendment request, the SSA request would not be reviewed by the ECWRPC until the requesting municipality obtains jurisdiction of the subject area either through annexation or inter-municipal agreement.

The extent of the subject area for negotiation purposes would be determined by the affected sewer service area and acreage allocations for each municipality.

If at least one of the affected communities states that a boundary, shared services, or other similar intergovernmental agreement cannot be reached after attempting a formal and documented negotiation/mediation process, and at least one of the parties continues to proceed with an SSA amendment request, the ECWRPC would proceed with the sewer service area amendment review. In that event, the ECWRPC would have the option to recommend denial of the SSA amendment request until the affected communities reached an agreement. This recommendation would then be forwarded to the Wisconsin Department of Natural Resources for review and consideration.





The ECWRPC would also have the option to resolve the dispute based upon guidance contained within approved facility plans, Wisconsin Administrative Code NR 121 and the goals, objectives, and policies contained within this plan. Emphasis would be placed on cost-effectiveness and environmental protection based on which proposal better achieves both. The affected municipalities would be encouraged to provide information that includes an evaluation of alternatives that demonstrate how the municipality could extend sewer service to the subject area, when the service would be provided, the cost of sewer service, and any environmental impacts. The ECWRPC would then forward a recommendation based upon this information to the Wisconsin Department of Natural Resources for review and consideration.

This plan delineates the sewer service areas of the Fox Cities and its immediate surrounding areas and recognizes that areas may change over time for different reasons. To accommodate reasonable and justifiable changes, this plan identifies policies, procedures, and criteria to be followed in addressing such changes as explained above in Sections I through III of Chapter 11.

Appendix A: WDNR Approval Letter

Appendix B: Resolution for Adoption

Appendix C: Public Notice

 A GANNETT COMPANY	
<p>STATE OF WISCONSIN BROWN COUNTY</p> <p>EAST CENTRAL WI PLANNING COMM</p> <p>400 AHNAIP ST STE 100</p> <p>MENASHA WI 549523388</p> <p>I, being duly sworn, doth depose and say I am an authorized representative of the Appleton Post Crescent, a newspaper published at Appleton, Wisconsin and that an advertisement of which the annexed is a true copy, taken from said paper, which was published therein on:</p> <p>Account Number: GWM-N5251 Order Number: 0005693507 Total Ad Cost: \$37.63 Published Dates: 05/07/2023</p> <p> _____ Legal Clerk</p> <p>State of Wisconsin County of Brown Subscribed and sworn to before on May 7, 2023</p> <p> _____ Notary Public State of Wisconsin, County of Brown</p> <p><u>4-6-22</u> My Commission Expires</p> <p># of Affidavits 1 This is not an invoice</p> <div style="border: 1px solid black; padding: 5px; text-align: center; width: fit-content; margin: 0 auto;"><p>DENISE ROBERTS Notary Public State of Wisconsin</p></div>	<p>NOTICE OF PUBLIC COMMENT and PUBLIC HEARING FOX CITIES 2040 SEWER SERVICE AREA PLAN UPDATE</p> <p>The East Central Wisconsin Regional Planning Commission (ECWRPC), as a contracted agency of the Wisconsin Department of Natural Resources (WDNR), is the Area-wide Coordinating Agency under Wisconsin's Area-wide Water Quality Management Planning Program, and is therefore responsible for preparing, maintaining, and updating Sewer Service Area Plans within the designated area. The ECWRPC is preparing to approve the Draft Fox Cities 2040 Sewer Service Area (SSA) Plan. The Fox Cities 2040 SSA Plan updates and supersedes the Fox Cities 2030 SSA Plan, approved by the WDNR on February 13, 2006. The ECWRPC will hold a Public Hearing at 10:00 a.m. at the ECWRPC main office, 400 Ahnaip Street, Suite 100, Menasha, WI 54952, on June 14, 2023 during the regularly scheduled Environmental Management Committee Meeting. The Public Hearing is being held pursuant to Wisconsin Administrative Code NR 121.07(1)(b). Comments regarding the Draft Fox Cities 2040 SSA Plan will be accepted until June 5, 2023. The Draft Fox Cities 2040 SSA Plan and maps can be found here: https://www.ecwrpc.org/public-review/ or contact ECWRPC at (920) 751-4770. Run: May 7, 2023 WNAKLP</p>
<div style="display: flex; justify-content: space-between; align-items: center;"><div style="width: 40%;"><p>GANNETT WI MEDIA 435 EAST WALNUT ST. PO BOX 23430 GREEN BAY, WI 54305-3430</p></div><div style="width: 20%; text-align: center;"><p>GANNETT Wisconsin Media <small>Delivering Customers. Driving Results.</small></p></div><div style="width: 35%; text-align: right;"> By _____ EAST CENTRAL WI PLANNING COMM</div></div>	

Appendix D: Committee Meeting Minutes

Appendix E: Sewer Service Area Amendments 2006-2022

Table 23. Neenah-Menasha SSA Amendments since the 2030 SSA Plan, adopted in 2006.

CFC DATE	ENTITY	TRACKING NUMBER	SSA POLICY	DESCRIPTION	WDNR APPROVAL
4/27/2006	C. Menasha	124	N/A – Hold Status Removal [Acres Added: 19.80]	“Temporary Hold” Status Removal – Lake Park Heights Development	
In-House Approval	T. Neenah S.D. #2	138	I, A (Swap) [5.1 acres]	Osero Property Development	5/27/2009
1/13/2016	Waverly SD/ V. Harrison	148	I, B (Existing Development) [Acres Added: 111.6]	Zirbel Drive Subdivision	3/28/2016
4/27/2018	V. Harrison	156	DMA Status Transfer	DMA status transferred from Waverly SD to the Village of Harrison due to annexation	
12/4/2018	C. Neenah	157	I, A (Swap) & I, F (Mapping Error) [190 acres]	Woodenshoe Expansion Area - Integrity Acres Subdivision	3/20/2019
4/26/2019	V. Harrison	159	I, A (Swap) & I, C Unique Facility [15.75 acres]	Creekside Estates Development	5/24/2019
6/8/2022	V. Harrison	171	I, A (Swap) [Acres Added: 62.81, Acres Removed: 71.99]	Dietz Property Development	6/6/2022

Table 24. Fox West SSA Amendments since the 2030 SSA Plan, adopted 2006.

CFC DATE	ENTITY	TRACKING NUMBER	SSA POLICY	DESCRIPTION	WDNR APPROVAL
5/10/2006	T. Greenville S.D.	125	I, A (Swap) [Acres Added: 40.40, Acres Removed: 29.0]	Moonlight Meadows	7/18/2006
9/13/2006	T. Greenville S.D.	127	I, F (Sewer Easement)	Interceptor Route	10/4/2006
5/14/2008	Menasha Utility District	135	SSA Hold Status Removal [Acres Added: 356]	This amendment requires CFC action only; no WDNR	
1/28/2009	T. Greenville S.D.	139	Fast Track Sewer Easement [Acres Added: 2.5]	Interceptor Route	1/28/2009
6/12/2013	T. Greenville SD	146	I, C (Unique Facility) [Acres Added: 44.8]	Greenville Elementary School	7/16/2013
4/27/2018	T. Greenville	155	I, C (Unique Facility)	Water treatment structure and sewer infrastructure to complete an interceptor project	6/28/2018
3/13/2019	V. Fox Crossing	158	I, A (Swap) [Acres Added: 74.9, Acres Removed: 73.9]	East Shady Lane Amendment brings in acreage that has been annexed into the Village	9/20/2019
3/11/2020	V. Fox Crossing	164	Clayton SSA Service [Acres Added: 2,001]	T. Clayton Sanitary agreement with the V. of Fox Crossing to service the Clayton SD with public sewer	4/14/2020
5/11/2021	V. Fox Crossing	167	I, C (Unique Facility) [Acres Added: 78.6]	Neenah Joint School District - Neenah High School Development	6/10/2021
In-house approval	V. Greenville	170	I, F (Sewer Easement)	Interceptor Route	4/14/2022
3/8/2023	V. Greenville	177	I,D (Reasonable Community Growth) [Acres Added: 80]	Appleton International Airport Business Expansion	5/2/2023

Table 25. Appleton SSA Amendments since the 2030 SSA Plan, adopted 2006.

CFC DATE	ENTITY	TRACKING NUMBER	SSA POLICY	DESCRIPTION	WDNR APPROVAL
3/9/2016	C. Appleton	149	I, F (Mapping Error) [Acres Added: 5.6]	Changes the planning and sewer service areas from Grand Chute to Appleton	4/29/2016
9/11/2019	C. Appleton	161	I, A (Swap) [130 acres]	North Edgewood Estates Development - Phase II	10/31/2019
1/8/2020	Outagamie County	162	SSA Change [Added: 297.8, Removed : 271]	Outagamie Co. Northeast Landfill (Swap acres from the HOV SSA to Appleton SSA)	12/11/2020
3/11/2020	C. Appleton	165	I, A (Swap) [Added: 37.87, Removed: 38]	Apple Hill Farms LLC - Purdy Farm Development.	6/9/2020

Table 26. Heart of the Valley SSA Amendments since the 2030 SSA Plan, adopted 2006.

CFC DATE	ENTITY	TRACKING NUMBER	SSA POLICY	DESCRIPTION	WDNR APPROVAL
1/9/2008	C. Kaukauna	130	I, C (Unique Facility) [Acres Added: 5.1]	Thilmany Red Hills Landfill	
7/9/2008	Darboy S.D.	136	I, B (Swap) [27 acres]	Existing Commercial Business and Future Commercial Development	10/2/2008
5/11/2021	C. Kaukauna	169	I, A (Swap) [Acres Added: 21.29 Acres Removed: 29.06]	Country Side Estates Development	6/10/2021
8/23/2022	C. Kaukauna	174	I, A (Swap) [Acres Added: 30, Acres Removed: 40]	Blue Stem Meadows 3 & 4 Subdivision Development	11/28/2022

Appendix F: Meeting Log

Table 27. Formal Meeting Log with the Communities, WWTFs, and Commission.

Date	Participants	Topic	Location
12/8/2021	City of Neenah	Introductions with ECWRPC and Municipal Staff, Introduction to Sewer Service Area Planning, and providing an update on Fox Cities 2040 SSA Plan	C. Neenah
1/5/2022	Town of Neenah		Phone
1/20/2022	Town of Grand Chute		T. of Grand Chute
1/21/2022	City of Kaukauna		C. of Kaukauna
1/26/2022	City of Appleton		Virtual
1/27/2022	Village of Little Chute		V. of Little Chute
1/31/2022	City of Menasha		Virtual
2/8/2022	Village of Fox Crossing		V. of Fox Crossing
2/8/2022	Village of Greenville		V. of Greenville
2/10/2022	Town of Buchanan		T. of Buchanan
2/10/2022	Village of Kimberly		V. of Kimberly
2/14/2022	Village of Harrison		V. of Harrison
2/28/2022	WWTF - HOVMSD		HOVMSD
3/3/2022	WWTF - Fox West		FOX West
3/16/2022	WWTF - Appleton		Appleton WWTP
1/11/2023	Community Facilities Committee (CFC)	Provided an update on Fox Cities 2040 SSA Plan status and timeline	Virtual – Open to Public
1/12/2023	T. Neenah, T. Neenah SD, C. Neenah, V. Fox Crossing	N. Grimes Area SSA Amendment & Fox West/Neenah-Menasha SSA Boundary Discussion	ECWRPC Office, Menasha, WI
1/19/2023	Appleton SSA	SSA Informational Meetings: Presentation on SSA Planning and update on the Fox Cities 2040 SSA Plan, Open discussion on draft Plan and Maps - Open to all Community and WWTP Staff/Stakeholders in the Fox Cities - See Sign-in Sheets below	C. of Appleton
1/23/2023	Fox West SSA		V. of Fox Crossing
1/26/2023	Neenah-Menasha SSA		ECWRPC Office
1/31/2023	Heart of the Valley SSA		C. of Kaukauna
3/8/2023	CFC	Provided update on Fox Cities 2040 SSA Plan with draft chapters and maps	Virtual – Open to Public
6/14/2023	Environmental Management Committee (Formerly CFC)	Public Hearing and Proposed Resolution	ECWRPC Office, Menasha, WI
7/28/2023	Quarterly ECWRPC Commission Meeting	Resolution for Approval of Fox Cities 2040 SSA Plan	Enter Location

**Fox Cities 2040 Sewer Service Area Plan Update
Informational Meeting – Appleton SSA
Thursday, January 19, 2023**

Name	Municipality/Organization	Email
Mark Lahay	City of Appleton	mark.lahay@appleton.org
DAVE KRESS	CITY OF APPLETON	DAVID.KRESS@APPLETON.ORG
Kala Homan	City of Appleton	kala.homan@appleton.org
Ross Buetow	" " "	ross.buetow@appleton.org

**Fox Cities 2040 Sewer Service Area Plan Update
Informational Meeting – Fox West SSA
Monday, January 23, 2023**

Name	Municipality/Organization	Email
Kasey Wisnefski	Town of Clayton	administrator@townofclayton.net
Lindsey Kemnitz	Town of Grand Chute	Lindsey.Kemnitz@grandchutewi.gov
Katie Schwartz	" "	Katie.Schwartz@grandchutewi.gov
Travis Parisi	Village of Greenville	tparish@greenvillewi.gov
Michael Brown	Village of Greenville	mbrown@greenvillewi.gov
Dale Haggquist	Village of Fox Crossing	dhaggquist@foxcrossingwi.gov
Brandon Kaufman	Fox West WWTP	bkaufman@fmc-us.com
George DeLaurio	Fox Crossing	G.DELAURIO@FOXCRUSINGWI.GOV
David Tracey	Fox Crossing Utilities	dtracey@foxcrossingwi.gov

**Fox Cities 2040 Sewer Service Area Plan Update
Informational Meeting – Neenah-Menasha SSA
Thursday, January 26, 2023**

Name	Municipality/Organization	Email
Paul Much	NMSC	pmuch@mco-us.com
Geary Gordon	CITY OF MENASHA	CGORDON@CI.MENASHA.WI.US
Ellen Skerke	Town of Neenah / S&Z	ESkerke@townofneenahwi.gov
Chris Chase	Neenah	chase@ci.neenah.wi.us
Mark Mommaerts	V. Harrison	mmommaerts@harrison-wi.org
Dale Haggquist	V of Fox Crossing	
David Tracey	V of Fox Crossing	dtracey@foxcrossingwi.gov

**Fox Cities 2040 Sewer Service Area Plan Update
Informational Meeting – HOV SSA
Tuesday, January 31, 2023**

Name	Municipality/Organization	Email
Joh W Neumeier	KAUKAUNA	neumeier@KAUKAUNA-WI.ORG
George A. Schmidt	DARBAY SANITARY	DSCHMIDT@DARBAY.SANITARY.ORG
BRUCE CORNING	DARBAY SANITARY	BOCORNING-2020@GMAIL.COM
Pat Hennessey	Darbey Sanitary	phennessey@DarbySanitary.com
Bruce Siebers	HOVMSD	Bmsiebers@gmail.com
DAVID CASPER	HOVMSD	drcasper@gmail.com
KENT TAYLOR	VILLAGE OF LITTLE CHUTE	Kent@Littlechutewi.org
Brian Helming	HOVMSD	brian.helming@hovmsd.org
Chad Giackingo	" "	Chad.giackingo@hovmsd.org
Mark Mommaerts	V. Harrison	mmommaerts@harrison-wi.org
Keith Weyenberg	Combined Locks	weyenbergk@combinedlocks.org
Ryan Swick	Combined Locks	Swickr@combinedlocks.org

Figure 4. Sign-up Sheets for In Person January SSA Informational Meetings.

Appendix G: Public Comment Period & Supporting Documentation

Public Comments Received & Supporting Documentation:

- Mapping Correction: On May 15th, 2023, the Town of Grand Chute requested minor mapping corrections via email along the Fox West SSA & Neenah-Menasha SSA boundary west of STH 47 to align with their Sanitary District #2 boundary. Several parcels in the Appleton SSA boundary are actually served by the Town of Grand Chute Sanitary District #2. The mapping update corrects the existing land use maps and acreages for the Fox West SSA and Appleton SSA in Table 4 on page 39 and Table 15 on page 58. The City of Appleton was notified of the mapping error on May 22nd, 2023 and May 25th, 2023. No response was received from the City of Appleton.
- Mapping Correction: The Greenville Sanitary District was dissolved after the Village of Greenville incorporated in January 2021. The Greenville Sanitary District was removed from Map 10.
- The ECWRPC conducted an evaluation of the City of Neenah and the Town of Clayton/Fox Crossing Utilities Cost-Effectiveness Analyses to serve the proposed Westridge Golf Course area. ECWRPC's final five-page evaluation on May 3, 2023 is included on the following pages as supporting documentation for the final Fox West & Neenah-Menasha Planning Area and SSA Boundaries.
- On June 5th, 2023, Lawrie Kobza from Boardman & Clark LLP submitted a document via email with comments on behalf of the Town of Clayton and Clayton Sanitary District No. 1. The 103-page document is included on the following pages.

TO: City of Neenah, Fox Crossing Utilities, Town of Clayton

FROM: Wilhelmina Paustian, Senior Planner & Melissa Kraemer Badtke, Executive Director

DATE: May 3, 2023

RE: Cost-Effective Analyses Evaluation for the Westridge Golf Course Area in the Town of Clayton for inclusion in the Fox West Sewer Service Area during the Fox Cities 2040 SSA Plan Update

The City of Neenah and Fox Crossing Utilities submitted cost-effectiveness analyses for servicing the Westridge Golf Course Area (Section 24) in the Town of Clayton. The City of Neenah provided an analysis for servicing the area through the City of Neenah for treatment at the Neenah-Menasha Sewerage Commission Wastewater Treatment Plant (WWTP). McMahon Associates, Inc. prepared an analysis for Fox Crossing Utilities and the Town of Clayton with alternative sanitary service by Fox Crossing Utilities for treatment at the Fox West Wastewater Treatment Plant. The East Central Wisconsin Regional Planning Commission (ECWRPC) Staff have prepared an overview of the timeline, description of the area, and evaluation of the cost-effectiveness analyses below for your review.

Description of the Area

The study area is located in the Town of Clayton, in the northeast corner of the intersection of Larsen Road and State Highway 76. It is approximately 160 acres which includes the Westridge Golf Course, James H. Salm Life Estate, and 16 single-family parcels known as the Westridge Estates subdivision. There is no current plan for development of the Study Area at this time.

The area is part of a larger area in the Fox Cities 2030 SSA Plan designated as an Undefined Planning Area. The following is an excerpt from the 2030 SSA Plan found on page 20 describing the area:

“An area located between STH 76 and Clayton Avenue, south of County Road II in the Town of Clayton: This area could potentially be served through either the Town of Menasha Utility District’s 18-inch North Road interceptor sewer, or through the City of Neenah’s 21-inch Breezewood Lane interceptor sewer. It appears that from either direction, no lift station would be necessary, however; the pace of growth and downstream capacity may be factors which dictate the direction of future flows from this area.”

Timeline

All communities within the Fox Cities Sewer Service Area (SSA) were notified via email in 2021 and 2022 with draft maps for the Fox Cities 2040 SSA Plan update. In January 2023, the Commission hosted Informational meetings for each SSA where communities were presented with information on SSA Planning and an update on the draft maps and chapters. Communities were sent the draft maps and several chapters in December 2022. Following the Fox West SSA Informational Meeting in January 23, 2023, the Town of Clayton requested via email (January 24, 2023) that the Westridge Golf Course area (Section 24 of the Town) be brought into the Fox West SSA during the Fox Cities 2040 SSA Plan update process.

On January 30, 2023, the City of Neenah sent an email objecting to the Town's request. The ECWRPC encouraged both communities to discuss the matter separately and come to a resolution. Following no feedback from the communities, ECWRPC sent an email on February 27th, 2023 requesting that entities who are interested in potentially serving the Westridge Golf Course submit a cost-effectiveness analysis of the alternatives in accordance with NR 121.03(5) and NR 110.08(6) of the Wisconsin State Statutes. The email was sent to representatives from the City of Neenah, Town of Clayton, Town of Neenah, and Village of Fox Crossing. On March 31, 2023, the Commission received one Cost-Effectiveness Analysis from the City of Neenah, and one from McMahon Associates, Inc. for the Town of Clayton and Fox Crossing Utilities.

SSA Amendment – Track 164 (Inclusion of Undefined Planning Area in Fox West SSA)

On February 7, 2020, the Town of Clayton submitted a SSA Amendment Request to include approximately 2,000 acres into the Fox West SSA. The reason for this request was due in large part to the DNR's Stipulation and Final Order what was entered into by the DNR and the Town of Clayton Sanitary District in February 2019. About the same time, the Village of Fox Crossing brought a lawsuit challenging the DNR's approval of the Sanitary District's wastewater collection and short-term storage and trucking loading system. Following the lawsuit, the Town of Clayton, the Town of Clayton Sanitary District No. 1, the Village of Fox Crossing, and the Fox West Sewerage Commission began discussing a mutually beneficial resolution. It appears that the City of Neenah was not involved in the discussions at the time.

The Commission's Community Facility Committee approved the SSA Amendment (Track 164) on March 11, 2020 and Commission staff submitted the Amendment application to the Wisconsin Department of Natural Resources on March 16, 2020 for their final review and administrative decision. On April 14, 2020, the WDNR issued an approval of Track 164.

In reviewing these historical documents in February of 2023, current Commission staff asked the Village of Fox Crossing why a portion of the "Undefined Planning Area", mainly the northeast three quarters from County Road II to the north, State Highway 76 to the west, and Clayton Avenue to the east, was included in the Amendment but the Westridge Golf Course Area was not. There was not a clear explanation as to why this area was not included in the SSA Amendment request.

Environmentally Sensitive Areas

The Study Area is within the Little Lake Butte des Morts Watershed within the Upper Fox River Water Basin. There are many water features and wetlands incorporated into the Golf Course with the purpose of drainage and recreational golfing benefits. Wetlands, floodplains, and streams are classified as an Environmentally Sensitive Area in the Fox Cities 2030 SSA Plan. There is no current development plan for the Study Area, therefore direct impacts to water quality are not known at this time.

Cost-Effectiveness Analyses Options for Sanitary Service

Fox Crossing Utilities provided three options for providing sanitary sewer service to the Westridge Golf Course area. The following is a brief summary of the options. More details can be found in McMahon Associates, Inc. "Sanitary Sewer Service Engineering Evaluation":

Option A – Winchester Road (CTH II) Interceptor:

Extend sewer west down Winchester Road (beyond new Neenah High School), south to a proposed new subdivision (Liebhauser Plat), continuing to Larsen Road, and west along Larsen Road to Golf Course Road. Most cost-effective option and most expeditious time frame if service is needed, assuming Liebhauser Plat is approved and moves forward. (Probable Cost = \$1,759,000)

Option B – CTH CB/Larsen Road Interceptor:

Extend sewer to connect the south half of the High School campus to the CTH CB interceptor for gravity sewer service, south along future Rocket Way to Larsen Road, and west along Larsen Road to Golf Course Road. The section of interceptor through the Neenah High School site was installed in 2021/2022 to avoid expensive restoration costs if completed at later date. (Probable Cost = \$2,572,000)

Option C – City of Neenah Sanitary Service:

City of Neenah has 8-inch pipe located at the intersection of Rock Ledge Land and Tullar Road. Extend sewer along Oakridge Lane to Larsen Road to Golf Course Drive. (Probable Cost = \$3,461,000)

The City of Neenah provided a cost analysis for the City's preferred option for serving the Westridge Golf Course area. City connects to the conveyance system at the intersection of Dell Court and Buttonbush Way. Extend sewer from Buttonbush Way east to the Town line easement, north along the Town line easement to Larsen Road, and west along Larsen Road to Golf Course Drive. (Probable Cost = \$2,340,256) The City also stated that with orderly progression of development, the probable cost would actually be \$147,000. This is based off the current City oversized sanitary sewer charge of \$1,000 per developable acre.

Wastewater Treatment Plant Capacity

In the Fox Crossing Utilities analysis, they state that the Fox West Wastewater Treatment Plant (WWTP) is currently at less than 70 percent of it's capacity and has the ability to serve the study area, while the Neenah-Menasha WWTP is currently at capacity due to BOD loadings. Alternatively, the City of Neenah states in their letter that the Neenah-Menasha WWTP has the capacity to treat sewage from the area.

According to the Wastewater Treatment Facility analysis conducted by the Commission and included in Chapter 7 of the draft Fox Cities 2040 SSA Plan, the Neenah-Menasha Sewerage Treatment Plant appears to be reaching their capacity due to BOD loadings more quickly than the Fox West WWTP. However, the Neenah-Menasha WWTP has indicated that they are planning to undergo a Facility Plan update in the near future. By the time the Westridge Golf Course has a developer in place, conditions at both WWTPs may look drastically different.

Wastewater Conveyance

One option for service included in Fox Crossing Utilities cost-effectiveness analysis is to extend the Winchester Road Interceptor (Option A), which is planned to continue down Winchester Road/County Road II as part of a subdivision development project in the Town of Clayton (Liebhauser Plat), adjacent to the Golf Course.

Option B provided by Fox Crossing Utilities extends the existing interceptor on CTH CB and allow the south half of the Neenah High School Campus to be connected for gravity sewer service in addition to potential hook-ups for undeveloped land adjacent to the High School Campus.

Option C provided by Fox Crossing Utilities is an alternative method for the City of Neenah to service the area. Their alternative is an extension from the sewer located at the intersection of Rock Ledge Lane and Tullar Road. They state that since this is an 8-inch pipe, it would likely require upsizing downstream.

The City of Neenah provided one preferred option in their analysis. They state they would provide service to the area by connecting to the City's conveyance system at the intersection of Dell Court and Buttonbush Way. The City stated that with orderly development, the sanitary sewer cost to a prospective Westridge development would be the immediate facility installation cost plus the oversize sewer fee issued by the City.

ECWRPC Remarks

The Village of Fox Crossing and Town of Clayton included a discussion that the gravity sewer extended on Larsen Road, west of Clayton Avenue would allow for service of the existing Breaker Ridge Subdivision and a future phase of Breaker Ridge at the southwest corner of Larsen Road and Clayton Avenue. This area is currently within the Neenah-Menasha Planning Area Boundary.

The original request by the Town of Clayton via email was for the Westridge Golf Course to be included in the Fox West SSA. However, the Fox Crossing Utilities Analysis mentions the Breaker Ridge Subdivision/areas south of Larsen Road in their analysis. The area south of Larsen Road cannot be served by the Fox West Regional Wastewater Treatment Plant without an amendment to the Fox Cities SSA Plan to swap that area from the Neenah-Menasha Planning Area to the Fox West Planning Area.

Also included in Fox Crossing Utilities Analysis was a discussion on the annexation impacts of bringing the Study area into the Fox West SSA. The following is an excerpt from the WDNR's website on Sewer Service Area Planning:

"Sewer service area planning plays an important role in keeping Wisconsin's water safe for drinking, recreation and diverse aquatic life. Sewer service area planning is not intended to restrict a community's growth, obligate wastewater treatment plants to provide sewer throughout the planning boundary or affect community annexation policy. Planning accommodates future growth, while at the same time consolidating wetland, shoreland and floodplain protection programs within a community-based plan for sewer development."

The Fox Cities SSA Plan is consistent with the WDNR program guidelines as posted on their website. The Fox Cities SSA Plan is a 20-year planning document meant to identify cost-effective and environmentally sound Sewer Service Areas. The Plan is not intended to affect community annexation policy.

Overview

According to the two Cost-Effectiveness Analyses, it appears that there are feasible options for either the City of Neenah or Fox Crossing Utilities to potentially serve the Westridge Golf Course area via gravity sewer. At this time, there is no immediate plan for development of the Westridge Golf Course site. It appears that Fox Crossing Utilities has planned development near the area in the more immediate future than the City of Neenah. However, the proposed Liebhauser Plat is still moving through the Town of Clayton approval process and has not been approved by the Wisconsin Department of Administration.

In addition, the Neenah High School is still under construction and will be completed for the 2023-2024 School Year. While this may be a driver for future development, it may be too soon to determine. The pace of growth and downstream capacity at the time of the Westridge Golf Course and nearby development will be important factors that will direct the future wastewater flows.

The Commission recommends that the Westridge Golf Course Study Area remain as an Undefined Planning Area in the Fox Cities 2040 SSA Plan update. In addition, it is recommended that the City of Neenah, the Town of Clayton, the Town of Neenah, the Town of Neenah Sanitary District, and the Village of Fox Crossing work together to come up with the best solution for serving the Westridge Golf Course Study Area and develop long-term goals for addressing regional wastewater collection and conveyance efficiency in the area. Once the parties have reached a consensus, a SSA Plan Amendment request would need to be brought to the Commission.

June 5, 2023

VIA EMAIL wpaustian@ecwrpc.org

Ms. Wilhelmina Paustian
East Central Regional Planning Commission
400 Ahnaip Street, Suite 100
Menasha, WI 54952

RE: Comments on Fox Cities 2040 Sewer Service Area Plan Update Draft

Dear Ms. Paustian:

These comments are submitted on behalf of the Town of Clayton and Clayton Sanitary District No.1. (hereafter "Clayton").

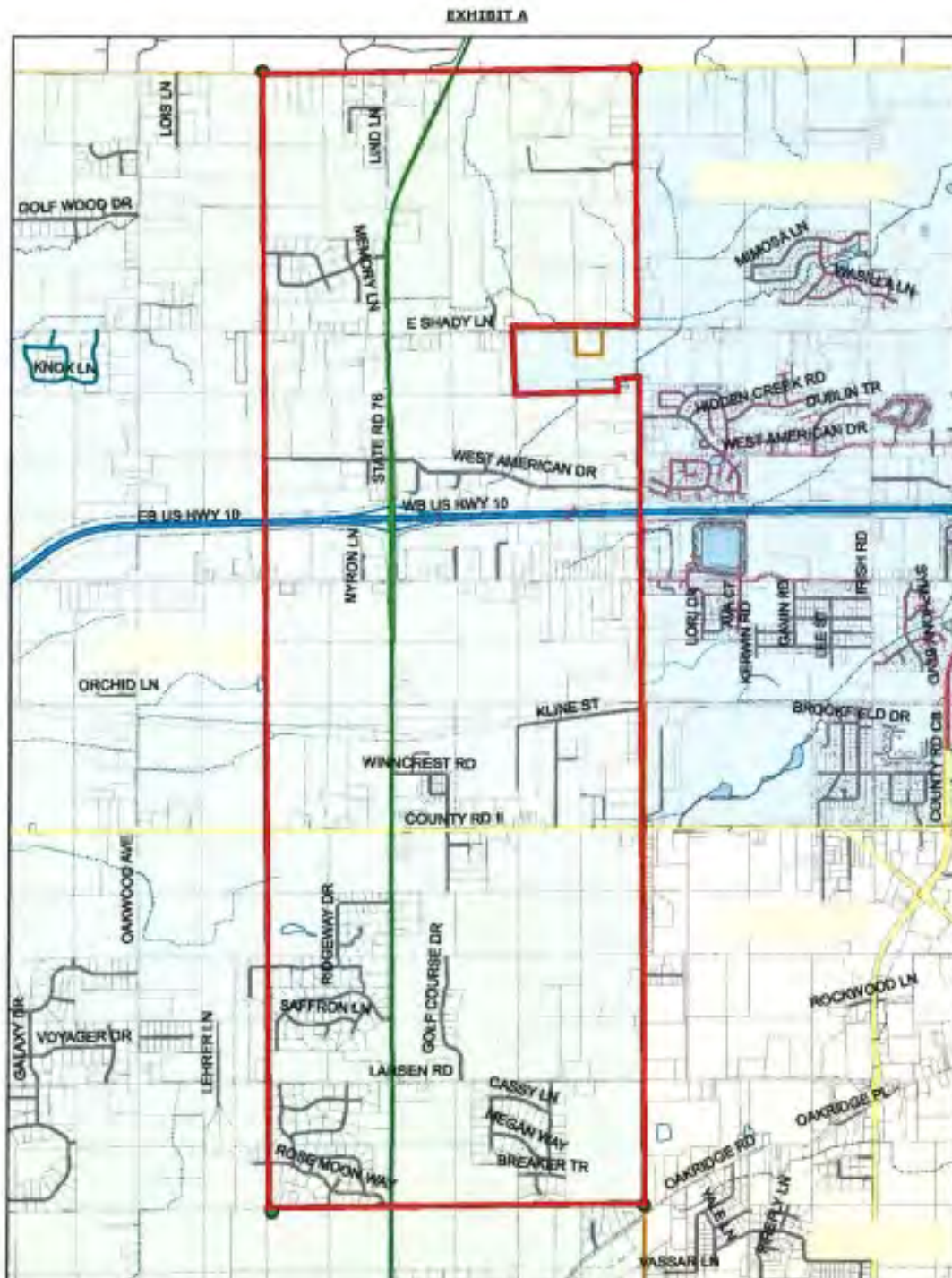
East Central Wisconsin Regional Planning Commission (ECWRPC), as a contracted agency of the Wisconsin Department of Natural Resources (DNR), has prepared a draft of the Fox Cities 2040 Sewer Service Area Plan Update. According to ECWRPC's May 4, 2023 Notice, the ECWRPC is preparing to approve the Draft Fox Cities 2040 Sewer Service Area (SSA) Plan. Comments regarding the draft plan must be submitted by June 5, 2023.

The Fox Cities 2040 Sewer Service Area Plan update includes a written report and four different sewer service area maps. These comments address the draft update and the Fox West Sewer Service Area Map – specifically Map 9.2, the Fox West Sewer Service Area – 2040 Allocation Areas.

Map 9.2 is inaccurate because it fails to show an addition to the Fox West Planning Area that was previously requested by the Town of Clayton on February 7, 2020, approved by ECWRPC on March 11, 2020, and approved by the DNR on April 14, 2020.

CLAYTON'S PRIOR AMENDMENT REQUEST

On February 7, 2020, Clayton submitted an amendment request to ECWRPC. Clayton's request is attached to this comment letter as Attachment A. Clayton requested that the Fox West Sewerage Commission's Sewer Service Area be expanded to include the portion of the Town of Clayton shown on Exhibit A, attached to the request. The requested Exhibit A area is copied below.



Clayton's request to expand the Fox West Sewerage Commission's Sewer Service Area to cover the area shown on Exhibit A resulted from a negotiated resolution of litigation between Clayton, Fox Crossing, and the Fox West Regional Sewerage Commission. In its February 7, 2020 request, Clayton described the facts underlying its request as follows:

Prior DNR Approval of Sanitary District Collection System. On February 11, 2019, the Wisconsin Department of Natural Resources approved plans and specifications for a wastewater collection and short-term storage, and truck loading system in the Town of Clayton. The plans and specifications for this system were approved subject to certain conditions. One of those conditions was that the Sanitary District meet all the applicable terms and conditions set forth in a Stipulation and Final Order that was previously entered into by the DNR and the Sanitary District. Exhibit B includes a copy of the DNR's approval and the Stipulation. A hard copy of the plans and specifications that received DNR approval is available upon request.

Long-Term Plan for a Physical Connection between Sanitary District Collection System and a POTW. One of the terms included in the Stipulation was that within two years after beginning operation of the short-term storage and truck loading system, the Sanitary District had to submit a long-term facilities plan to the DNR that ensured a physical connection between the Sanitary District's collection system and a POTW. The Stipulation required that the Sanitary District evaluate, at a minimum, a connection to Grand Chute-Menasha West (now Fox West), Neenah-Menasha, Appleton, New London and Winneconne.

In order to move forward in an efficient and cost-effective manner, the Town and Sanitary District sought to reach an agreement with an existing POTW before building the system that had already received DNR approval. The Town and Sanitary District was able to reach an agreement with the City of Appleton to connect to Appleton's POTW. Appleton, the Town and the Sanitary District then began to seek the approvals needed to allow for this physical connection.

Legal Challenge to Sanitary District's Plans. About the same time, the Village of Fox Crossing brought a lawsuit challenging the DNR's approval of the Sanitary District's wastewater collection and short-term storage, and truck loading system. The Fox West Regional Sewerage Commission intervened in that lawsuit stating that its sewage plant was built and right-sized to serve all subject areas of the Town and that it had a reasonable expectation that its plant would serve all subject areas of Clayton and be able to recover a proportionate share of its investment from future customers in Clayton.

Negotiation of Regionally Acceptable Resolution. After the litigation was filed, the Town of Clayton, the Town of Clayton Sanitary District No. 1, the Village of Fox Crossing, and the Fox West Sewerage Commission began discussing whether a mutually beneficial resolution of the issues between them could be reached. Ultimately, the Town of Clayton and the Town of Clayton Sanitary District No. 1 entered into four different intergovernmental agreements with the Fox West Sewerage Commission and the Village of Fox Crossing. These agreements were not easily reached. However, after much negotiation and many compromises, the parties came to the resolution reflected in these agreements. Taken in combination, these agreements resolve existing legal disputes, allow the Town to provide water and sewer in areas of planned and future growth, use existing utility infrastructure built by the Village of Fox Crossing and the members of the Fox West Sewerage Commission, require the Town to reimburse the Village of Fox Crossing and the members of the Fox West Sewerage Commission for the infrastructure capacity that will be used by the Sanitary District, and include a ten-year moratorium on annexations from the Town to the Village.

One of the four agreements – and the agreement most relevant to this request – is the Fox West Sewerage Commission Joinder Agreement. This Agreement provides the terms under which the Town of Clayton and the Town of Clayton Sanitary District No. 1 will join and become a member of the Fox West Sewerage Commission. The Joinder Agreement specifically provides at Paragraph 4:

*That the Commission and Clayton further understand and agree that upon execution of this Contract by Clayton and acceptance by the Commission, and upon the written consent of all heretofore contracting municipalities, Clayton shall be deemed a party to the existing Ordinance-Contract, to the same extent as an original party thereto, **and the Exhibit A property shall be deemed to reflect additional property included in the Commission's Service Region.***

This Agreement has been approved by the Fox West Sewerage Commission, the Town of Clayton and the Town of Clayton Sanitary District No. 1. It will also soon be individually approved by all existing members of the Fox West Sewerage Commission – the Village of Fox Crossing, the Town of Grand Chute, the Town of Grand Chute Sanitary District No. 2, the Town of Greenville and the Town of Greenville Sanitary District.

Another agreement is the Agreement for the Conveyance of Wastewater Between the Town of Clayton, Town of Clayton Sanitary District No. 1 and the Village of Fox Crossing. In this agreement, the Village of Fox Crossing agrees to

convey the wastewater from the Exhibit A area to the Fox West Regional Wastewater Treatment Plant. In consideration of this agreement to convey the Sanitary District's wastewater, the Town has agreed to make a payment of \$5.75 million to Fox Crossing.

A third agreement is the Agreement for the Provision of Water Service Between the Town of Clayton and the Village of Fox Crossing. This agreement provides the terms under which the Village will provide water service to the Exhibit A area. Although not directly relevant to this Sewer Service Area Amendment Request, this third agreement confirms the parties' intent that utility services be available in the Exhibit A area.

The fourth agreement is the Intermunicipal Agreement Between the Town of Clayton and the Village of Fox Crossing. This agreement resolves litigation between the Town and Village over a prior annexation, establishes a ten-year moratorium on annexations from the Town to the Village, and requires the Town to make a substantial Comprehensive Imbursement payment to the Village as "consideration for utility service and boundary settlement." The Town of Clayton anticipates that it will recover this investment by the increased development that will occur in the sewer service area shown in Exhibit A. This Intermunicipal Agreement is contingent upon the continuing validity of the other three agreements described above.

In order to achieve the negotiated solution reflected in these agreements, the Fox West Sewerage Commission's Sewer Service Area must be expanded to include the portion of the Town of Clayton shown on Exhibit A. The availability of utility service to the area shown in Exhibit A is a key provision in all four agreements. The signatories to these agreements all understood and expected that the Fox West Sewerage Commission's Sewer Service Area would be expanded to include this area of both existing development and planned future development within the Town of Clayton. The substantial payment that the Town has agreed to make to the Village and the Fox West Sewerage Commission is based upon the expectation that this area will now have access to utility service as it develops without the need for annexation. Growth within Exhibit A is consistent with the Town of Clayton's Comprehensive Plan.

Based upon the unique facts and circumstances discussed above, the Town of Clayton and the Town of Clayton Sanitary District No. 1 request that the ECWRPC approve the expansion of the Fox West Sewerage Commission's Service Area to include the portion of the Town of Clayton shown on Exhibit A.

It was clear that Clayton's February 7, 2020 request was asking that the Fox West Sewerage Commission's Sewer Service Area be expanded to include the area shown on Exhibit A. The availability of utility service to the area shown in Exhibit A was a key provision in the four agreements entered into to resolve the legal disputes between Clayton, Fox Crossing and the Fox West Sewerage Commission. The substantial payment that Clayton agreed to make to Fox Crossing and the Fox West Sewerage Commission was based upon the expectation that the Exhibit A area would have access to utility service from the Fox West Sewerage Commission.

ECWRPC'S REVIEW AND APPROVAL OF CLAYTON'S PRIOR AMENDMENT REQUEST

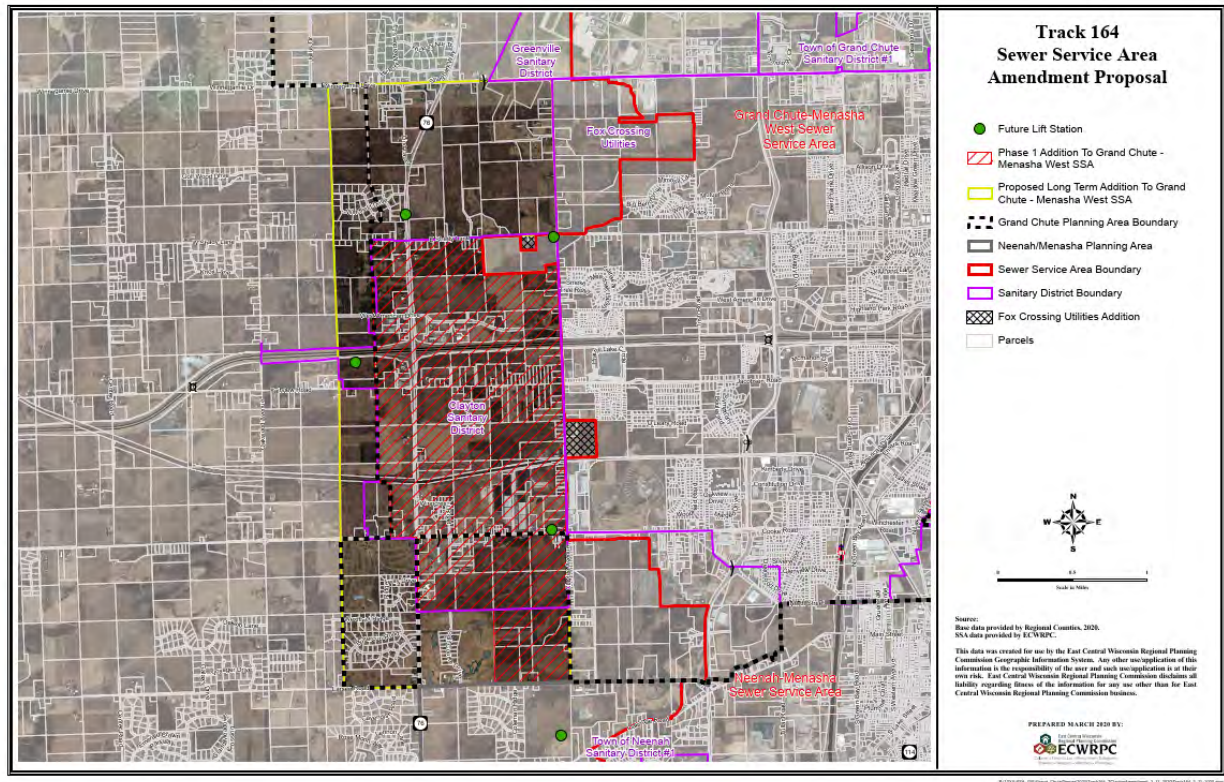
ECWRPC Staff prepared a February 26 memo recommending approval of Clayton's amendment request. The memo stated, "[b]ased on the review of this amendment submittal and our discussions with Town representatives, staff would recommend approval of this sewer amendment request. The information supplied by the applicant has been thorough and complete with regard to amendment criteria."

ECWRPC's Staff memo described the amendment request as follows:

The Town of Clayton, the Town of Clayton Sanitary District #1, the Village of Fox Crossing, and the Fox West Sewerage Commission have collaborated to reach an acceptable regional resolution to provide sanitary sewer service to the Town of Clayton Sanitary District #1. The Town of Clayton and the Town of Clayton Sanitary District #1 have entered into four different intergovernmental agreements with the Fox West Sewerage Commission and the Village of Fox Crossing. The Fox West Sewerage Commission Agreement provides terms under which the Town of Clayton and the Town of Clayton Sanitary District #1 will join and become a member of the Fox West Sewerage Commission. The Agreement for Conveyance of Wastewater Between the Town of Clayton, Town of Clayton Sanitary District #1, and the Village of Fox Crossing agrees to convey wastewater from the Clayton Sanitary District #1 to the Fox West Regional Wastewater Treatment Plant.

The proposed SSA boundary amendment is split into two phases. Phase one encompass approximately 2,102 acres. Phase two brings in the remaining portion of Clayton's Sanitary District adding approximately 1,833 acres.

ECWRPC Staff prepared two maps that were provided with the memo. The maps (with one exception that was later corrected) included Clayton's requested Exhibit A area in either the Phase 1 Addition to Grand Chute-Menasha West SSA or the Proposed Long Term Addition to Grand Chute-Menasha SSA. The corrected map, labeled Track 164 Sewer Service Area Amendment Proposal" is pasted below.



The ECWRPC Community Facilities Committee approved Clayton's amendment request at its March 11, 2020 meeting. The Minutes for the ECWRPC Community Facilities Meeting state: "Mr. Verboomen provided details of this unique request and highlighted the agreements between the Town of Clayton and the Village of Fox Crossing. Mr. Verboomen pointed out a mapping error on the maps that had been in the meeting packet and passed out the corrected amendment request map. Mr. Hornung made a motion to approve Track 164 as presented. The Motion was seconded by Mr. Lowey. Motion Carried."

DNR'S REVIEW AND APPROVAL OF CLAYTON'S PRIOR AMENDMENT REQUEST

On March 16, 2020, ECWRPC sent the amendment request, a location map, staff recommendations, community support documentation and a draft summary of proceedings for the amendment on to DNR. ECWRPC's cover letter stated that this letter submits the 2030 Grand Chute Menasha West Sewer Service Area amendment request which was approved by the East Central Wisconsin Regional Planning Commission on March 11, 2020.

The cover letter further stated that:

The Town of Clayton, the Town of Clayton Sanitary District #1, the Village of Fox Crossing, and the Fox West Sewerage Commission have collaborated to reach an acceptable regional resolution to provide sanitary sewer service to the Town of Clayton Sanitary District #1. The Town of Clayton and the Town of Clayton Sanitary District #1 have entered into four different intergovernmental agreements with the Fox West Sewerage Commission and the Village of Fox Crossing. The Fox West Sewerage Commission Agreement provides terms under which the Town of Clayton and the Town of Clayton Sanitary District #1 will join and become a member of the Fox West Sewerage Commission. The Agreement for Conveyance of Wastewater Between the Town of Clayton, Town of Clayton Sanitary District #1, and the Village of Fox Crossing agrees to convey wastewater from the Clayton Sanitary District #1 to the Fox West Regional Wastewater Treatment Plant.

On April 14, 2020, the DNR issued its approval letter stating that the DNR has completed its review and approves the 2030 Grand Chute-Menasha West Sewer Service Area Amendment Request that was also approved by ECWRPC.

PRIOR APPROVAL MUST BE REFLECTED IN PLAN UPDATE

In Clayton's amendment request and in ECWRPC's Track 164 map, the entire area of Exhibit A is included in either the Phase I Addition to Grand Chute-Menasha West SSA or the Proposed Long Term Addition to Grand Chute-Menasha SSA. This request was approved by ECWRPC and the DNR.

In accordance with this approval, the Phase I Addition to Grand Chute-Menasha West SSA was added to the Fox West Sewer Service Area. The area identified as the Proposed Long Term Addition to Grand Chute-Menasha SSA, however, has not been added to the Fox West Planning Area as it should have been.

In Clayton's amendment request, it was clear that Clayton asked that the Fox West Sewerage Commission's Sewer Service Area be expanded to include the entire area shown on Exhibit A. As discussed above, the availability of utility service to the entire area shown in Exhibit A was a key provision in the four agreements entered into to resolve the legal disputes between Clayton, Fox Crossing and the Fox West Sewerage Commission. The substantial payment that Clayton agreed to make to Fox Crossing and the Fox West Sewerage Commission was based upon the expectation that the Exhibit A area would have access to utility service from the Fox West Sewerage Commission.

ECWRPC's Track 164 map broke down Clayton's request into a Phase 1 Addition to the Grand Chute-Menasha West Sewer Service Area and a Proposed Long Term Addition to the Grand Chute-Menasha West SSA. The Phase 1 Addition was to expand the sewer service area. The Proposed Long Term Addition did not immediately expand the sewer service area but it must be treated as expanding the Grand Chute-Menasha West planning area. Treating it otherwise would have meant that Clayton's amendment request regarding Exhibit A was actually being denied with respect to the Proposed Long Term Addition. Neither the ECWRPC nor the DNR indicated that any portion of Clayton's amendment request was being denied.

Based on Clayton's prior amendment request and the ECWRPC's and DNR's approval of that request, the area identified as the Proposed Long Term Addition on ECWRPC's Track 164 map must be included in the Fox West Planning Area. Map 9.2 in the draft update must be revised to reflect the approval previously granted. In addition, the text on pages 41-42 of the Plan Update regarding Fox West Planning Area Adjustments must be revised to reflect the approval previously granted.

The Plan Update discusses the Westridge Golf Course area (approximately 160 acres) on page 42. The Westridge Golf Course area is included in the Exhibit A area covered by Clayton's prior amendment request. As such, it must be included in the Fox West Planning Area, just like the rest of the area identified as the Proposed Long Term Addition on ECWRPC's Track 164 map.

The Westridge Golf Course area, like the rest of the Exhibit A area, was the subject of extensive negotiations between Clayton, Fox Crossing and the Fox West Sewerage Commission. Agreements were reached and payments were made to allow this entire area to receive service from the Fox West Sewerage Commission. Clayton's 2020 amendment request was based on these agreements. If Neenah objected to Clayton's amendment request regarding any part of the Exhibit A area – including the Westridge Golf Course area – the time for it to raise its objections was back in 2020.

In conclusion, Clayton objects to Map 9.2 and the delineation of Fox West's Planning Area in the Plan Update. As discussed in detail above, Clayton's 2020 amendment request asked that the entire Exhibit A area be added to the Fox West SSA. That request was granted and therefore the Exhibit A area must be included in Fox West's SSA (as was done with the Phase I area) or Fox West's Planning Area (as should be done with the Proposed Long Term Addition area).

MS. WILHELMINA PAUSTIAN
JUNE 5, 2023
PAGE 10

If you have any questions about these comments, please do not hesitate to contact me.

Sincerely,

BOARDMAN & CLARK LLP

A handwritten signature in blue ink, appearing to read "Lawrie Kobza", is written over a light blue rectangular background.

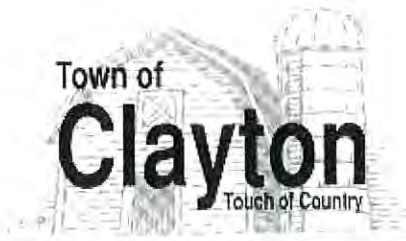
Lawrie J. Kobza

Attachment A - Clayton's Amendment Request

cc: Russ Geise, Town Board Chair
Kelly Wisnefske, Town Administrator
(via email only)

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ATTACHMENT A



8348 County Road T – Larsen, WI 54947

Phone – 920-836-2007

Fax – 920-836-2026

Email – administrator@townofclayton.net

Web Page – <http://www.townofclayton.net>

February 7, 2020

Via Email

tverboomen@ecwrpc.org

Mr. Todd Verboomen
Associate Planner
East Central Wisconsin Regional Planning Commission
400 Ahnaip Street, Suite 100
Menasha, WI 54952

RE: Sewer Service Area Amendment Request

Dear Mr. Verboomen:

The Town of Clayton and Town of Clayton Sanitary District No. 1 submit this request to expand the Fox West Sewerage Commission's Sewer Service Area to include the portion of the Town of Clayton shown on the attached Exhibit A. **The Town and Sanitary District ask that this request be considered at the March 11, 2020 meeting of the ECWRPC's Community Facilities Committee.**

This request is made pursuant to Policy C of the ECWRPC Sewer Service Area Amendment & Update Process, August 2004. This request and the facts underlying it meets the uniqueness requirement of Policy C as described below.

Prior DNR Approval of Sanitary District Collection System. On February 11, 2019, the Wisconsin Department of Natural Resources approved plans and specifications for a wastewater collection and short-term storage, and truck loading system in the Town of Clayton. The plans and specifications for this system were approved subject to certain conditions. One of those conditions was that the Sanitary District meet all the applicable terms and conditions set forth in a Stipulation and Final Order that was previously entered into by the DNR and the Sanitary District. Exhibit B includes a copy of the DNR's approval and the Stipulation. A hard copy of the plans and specifications that received DNR approval is available upon request.

Long-Term Plan for a Physical Connection between Sanitary District Collection System and a POTW. One of the terms included in the Stipulation was that within two years after beginning operation of the short-term storage and truck loading system, the Sanitary District had to submit a long-term facilities plan to the DNR that ensured a physical connection between the Sanitary District's collection system and a POTW. The Stipulation required that the Sanitary District evaluate, at a minimum, a connection to Grand Chute-Menasha West (now Fox West), Neenah-Menasha, Appleton, New London and Winneconne.

In order to move forward in an efficient and cost-effective manner, the Town and Sanitary District sought to reach an agreement with an existing POTW before building the system that had already received DNR approval. The Town and Sanitary District was able to reach an agreement with the City of Appleton to connect to Appleton's POTW. Appleton, the Town and the Sanitary District then began to seek the approvals needed

to allow for this physical connection.

Legal Challenge to Sanitary District's Plans. About the same time, the Village of Fox Crossing brought a lawsuit challenging the DNR's approval of the Sanitary District's wastewater collection and short-term storage, and truck loading system. The Fox West Regional Sewerage Commission intervened in that lawsuit stating that its sewage plant was built and right-sized to serve all subject areas of the Town and that it had a reasonable expectation that its plant would serve all subject areas of Clayton and be able to recover a proportionate share of its investment from future customers in Clayton.

Negotiation of Regionally Acceptable Resolution. After the litigation was filed, the Town of Clayton, the Town of Clayton Sanitary District No. 1, the Village of Fox Crossing, and the Fox West Sewerage Commission began discussing whether a mutually beneficial resolution of the issues between them could be reached. Ultimately, the Town of Clayton and the Town of Clayton Sanitary District No. 1 entered into four different intergovernmental agreements with the Fox West Sewerage Commission and the Village of Fox Crossing. These agreements were not easily reached. However, after much negotiation and many compromises, the parties came to the resolution reflected in these agreements. Taken in combination, these agreements resolve existing legal disputes, allow the Town to provide water and sewer in areas of planned and future growth, use existing utility infrastructure built by the Village of Fox Crossing and the members of the Fox West Sewerage Commission, require the Town to reimburse the Village of Fox Crossing and the members of the Fox West Sewerage Commission for the infrastructure capacity that will be used by the Sanitary District, and include a ten-year moratorium on annexations from the Town to the Village.

One of the four agreements – and the agreement most relevant to this request -- is the Fox West Sewerage Commission Joinder Agreement. This Agreement provides the terms under which the Town of Clayton and the Town of Clayton Sanitary District No. 1 will join and become a member of the Fox West Sewerage Commission. The Joinder Agreement specifically provides at Paragraph 4:

*That the Commission and Clayton further understand and agree that upon execution of this Contract by Clayton and acceptance by the Commission, and upon the written consent of all heretofore contracting municipalities, Clayton shall be deemed a party to the existing Ordinance-Contract, to the same extent as an original party thereto, **and the Exhibit A property shall be deemed to reflect additional property included in the Commission's Service Region.***

This Agreement has been approved by the Fox West Sewerage Commission, the Town of Clayton and the Town of Clayton Sanitary District No. 1. It will also soon be individually approved by all existing members of the Fox West Sewerage Commission -- the Village of Fox Crossing, the Town of Grand Chute, the Town of Grand Chute Sanitary District No. 2, the Town of Greenville and the Town of Greenville Sanitary District.

Another agreement is the Agreement for the Conveyance of Wastewater Between the Town of Clayton, Town of Clayton Sanitary District No. 1 and the Village of Fox Crossing. In this agreement, the Village of Fox Crossing agrees to convey the wastewater from the Exhibit A area to the Fox West Regional Wastewater Treatment Plant. In consideration of this agreement to convey the Sanitary District's wastewater, the Town has agreed to make a payment of \$5.75 million to Fox Crossing.

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The fourth agreement is the Intermunicipal Agreement Between the Town of Clayton and the Village of Fox Crossing. This agreement resolves litigation between the Town and Village over a prior annexation, establishes a ten-year moratorium on annexations from the Town to the Village, and requires the Town to make a

substantial Comprehensive Imbursement payment to the Village as "consideration for utility service and boundary settlement." The Town of Clayton anticipates that it will recover this investment by the increased development that will occur in the sewer service area shown in Exhibit A. This Intermunicipal Agreement is contingent upon the continuing validity of the other three agreements described above.

In order to achieve the negotiated solution reflected in these agreements, the Fox West Sewerage Commission's Sewer Service Area must be expanded to include the portion of the Town of Clayton shown on Exhibit A. The availability of utility service to the area shown in Exhibit A is a key provision in all four agreements. The signatories to these agreements all understood and expected that the Fox West Sewerage Commission's Sewer Service Area would be expanded to include this area of both existing development and planned future development within the Town of Clayton. The substantial payment that the Town has agreed to make to the Village and the Fox West Sewerage Commission is based upon the expectation that this area will now have access to utility service as it develops without the need for annexation. Growth within Exhibit A is consistent with the Town of Clayton's Comprehensive Plan.

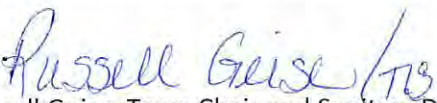
Based upon the unique facts and circumstances discussed above, the Town of Clayton and the Town of Clayton Sanitary District No. 1 request that the ECWRPC approve the expansion of the Fox West Sewerage Commission's Service Area to include the portion of the Town of Clayton shown on Exhibit A.

Please feel free to contact Attorney Lawrie Kobza, at 608-283-1788 or lkobza@boardmanclark.com, should you have any questions regarding this request.

Thank you for your prompt consideration.

Sincerely,

Town of Clayton and Town of Clayton Sanitary District No. 1

By: 

Russell Geise, Town Chair and Sanitary District Commission President

cc: James Kirk, Fox West Sewerage District Commission (via email)
Dale Youngquist, Village of Fox Crossing President (via email)
David Schowalter, Town of Grand Chute Chair and Town of Grand Chute Sanitary District No. 2 President (via email)
Jack Anderson, Town of Greenville Chair and Town of Greenville Sanitary District President (via email)
Attorney Lorraine Stoltzfus, DOJ (via email)
Attorney Andrew Simek, DNR (via email)
Attorney Lawrie Kobza (via email)
Attorney Andrew Rossmeissl (via email)
Tori Straw, Town Administrator (via email)
Dennis Steigenberger, Cedar Corporation (via email)

Attachments:

Exhibit A: Sewer Service Amendment Area (as defined by the red border)
Exhibit B-1: Stipulation and Final Order dated May 17, 2018
Exhibit B-2: DNR Approval Letter dated February 11, 2019
Exhibit C: Fox West Sewerage Joinder Agreement
Exhibit D: Agreement for the Conveyance of Wastewater
Exhibit E: Agreement for the Provision of Water Service
Exhibit F: Intermunicipal Agreement Between Town of Clayton and the Village of Fox Crossing

EXHIBIT A

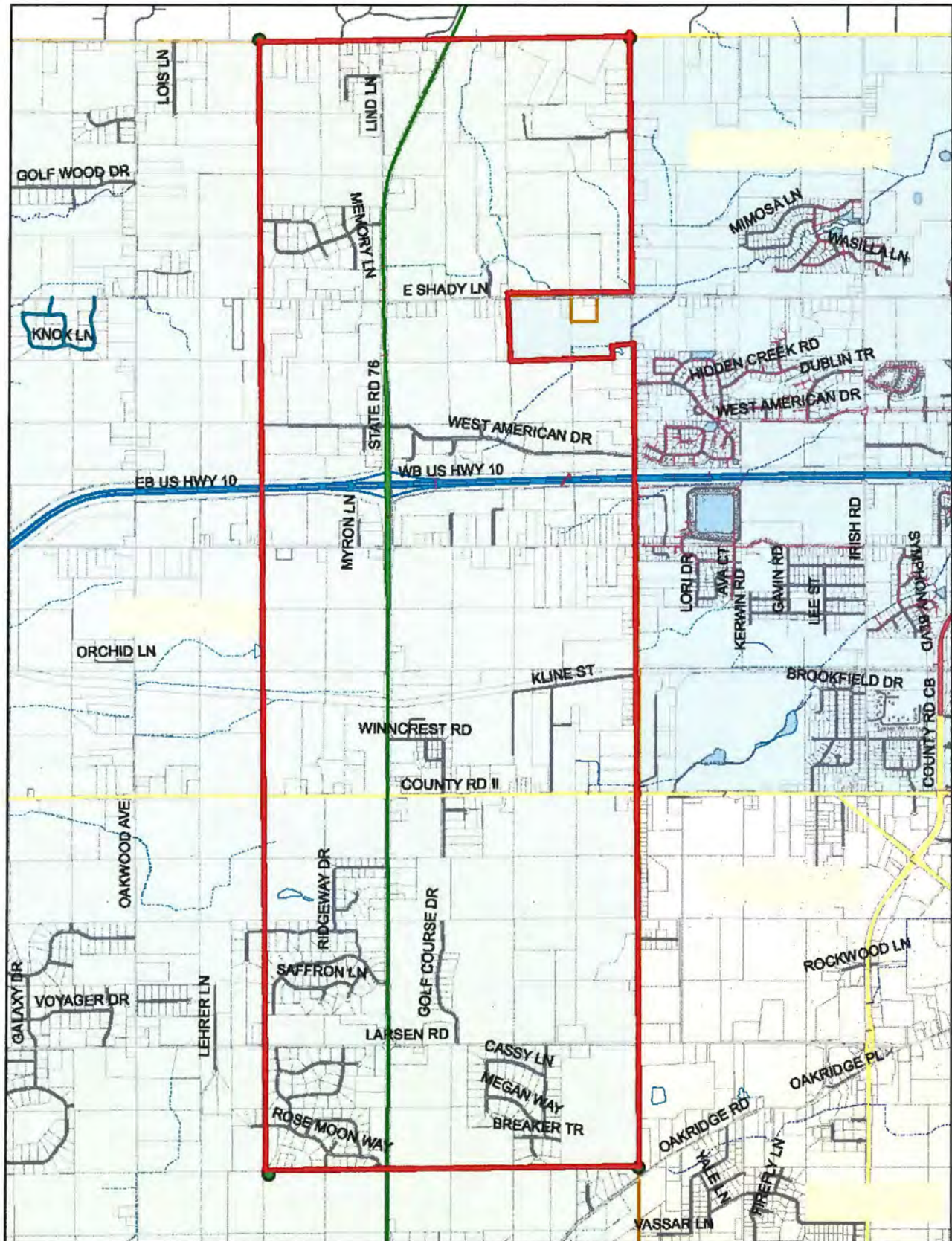


EXHIBIT B-1

STATE OF WISCONSIN CIRCUIT COURT WINNEBAGO COUNTY
BRANCH 4

TOWN OF CLAYTON
SANITARY DISTRICT NO. 1,

Petitioner,

v.

Case No. 17-CV-0381
Administrative Agency Review: 30607

WISCONSIN DEPARTMENT OF
NATURAL RESOURCES,

Respondent.

STIPULATION AND FINAL ORDER

The petitioner Town of Clayton Sanitary District No. 1 (District) filed this action requesting judicial review of an April 7, 2017 administrative decision by the respondent Wisconsin Department of Natural Resources (DNR) that rejected the District's plans and specifications for sanitary sewers, a lift station, and a wastewater storage tank that were submitted to the DNR on January 17, 2017. The parties wish to settle this matter by agreement and avoid further litigation, and therefore stipulate and agree that this matter shall be settled on the following terms and conditions:

1. The District will submit revised plans and specifications for its

proposed collection system, lift station, wastewater storage tank, and trucking of wastewater to the Hortonville Wastewater Treatment Plant to update the District's January 17, 2017 submittal. The District will submit these revised plans and specifications no later than six months after the date that the Court enters the Final Order in this matter.

2. The District agrees that the revised plans and specifications will include the following:

a. The tanks shall have a minimum distance of separation of four feet from the seasonal high groundwater mark. If the District cannot locate the tanks on a suitable site that meets this requirement, then any variance to this requirement would require installation of groundwater monitoring wells, located in accordance with Wis. Admin. Code § NR 110.25(5)(b), and monitoring of chlorides and bacteria and nitrogen species to ensure there is no leaking from the tanks. If monitoring is required, it shall be conducted every six to seven weeks until eight representative samples are collected, and quarterly thereafter, in accordance with Wis. Admin. Code § NR 206.10(4)(b).

b. The tank(s) and appurtenances shall be located no closer than 1,000 feet from commercial establishments and buildings occupied or intended for residential use and from land which is actively being developed for commercial or residential use. This distance may be reduced to 500 feet if

the DNR determines proposed odor control appurtenances will sufficiently reduce nuisances caused by raw sewage pumping.

c. The tanks shall have telemetry notification to the operator-in-charge and audible alarms for high-water levels in the tanks. The collection and tanks sewerage system shall be managed by a certified wastewater operator. At minimum, the operator-in-charge shall be certified at the basic level.

d. The system's storage tank capacity shall be at least 700,000 gallons spread between at least two tanks. Alternatively, the District could place its storage tank into a lined emergency overflow lagoon capable of holding at least 700,000 gallons with three feet freeboard, but this would be approved only if the District demonstrated that it is not possible to have storage tank capacity of 700,000 gallons, and the lagoon is synthetically lined. If a secondary containment lagoon is proposed, the lagoon shall meet applicable standards specified in Wis. Admin. Code § NR 110.24. If more than an average volume of 13.3% of the existing total tank capacity over any 3-day period is received, the District shall construct (an) additional tank(s) with a minimum of 300,000 gallon capacity that shall be fully operational within six months of that day. The compliance deadline of six months may be extended at the sole determination of the DNR. This requirement of additional capacity shall be

rescinded if a physical connection to a Publicly Owned Treatment Works (POTW) is established prior to the compliance deadline.

e. Two pumps, each capable of pumping the full load-out requirement from either storage tank, shall be installed at the tank site. Pumps shall meet the reliability standards required of lift stations in Wis. Admin. Code § NR 110.14.

f. The pump house shall be ventilated to meet the dry well ventilation standard of 20 air changes per hour if intermittent, or six air changes per hour if continuous.

g. The District will pump and haul the contents of the storage tanks on a daily basis such that, at some point during each day, there is a maximum residual wastewater volume in the storage tanks corresponding to the lesser of one-foot depth or 5% of the total tank volume. The District shall notify the DNR within 24 hours if extenuating circumstances prevent them from meeting this condition.

h. The District will apply for coverage under the Satellite Sewage Collection Systems General Permit, and the DNR will extend coverage under that general permit. The District agrees that the permit will allow collection of discharge data and provide a formal avenue for compliance monitoring and enforcement in the case of any spills or overflows. The District agrees that the DNR may conduct compliance inspections on a periodic basis

to ascertain compliance with the permit requirements. By no later than the twenty-first day of each month, the District will submit to the DNR records indicating daily total flow received to the tanks and daily total volumes hauled to the treating POTW(s), for the previous month.

i. The District will notify the DNR within 24 hours if the tanks exceed 50% of their total combined capacity.

j. The submittal of plans and specifications for the District's collection system and short-term storage system shall include the following impact reviews and/or permits for all construction proposed in the plans and specifications. All proposed construction shall conform to the requirements therein.

i. An Endangered Resources Review conducted by the District, to prevent the take of wild animals, as prohibited in Wis. Stat. § 29.604(4)(a).

ii. A Cultural Resources Review, conducted by the District, with comment and/or permits issued by the State Historical Society of Wisconsin as required, to fulfill the requirements of Wis. Stat. § 44.40.

iii. Delineation of all impacted or site-adjacent wetlands and any State or Federal wetlands fill permits required under Wis. Stat. § 281.36 and Section 404 of the Clean Water Act.

iv. A review of any possible infringement on floodplains and any local or county zoning permits required for construction within the floodplain in accordance with Wis. Admin. Code § NR 116.05. The tanks and appurtenances shall be located in accordance with Wis. Admin. Code § NR 110.15(3)(a). For the purposes of this requirement, the tanks and appurtenances shall be considered a sewage treatment facility.

k. The District will submit biannual (once every six months) updates on its progress toward securing a contract for a physical connection to a neighboring POTW, with the first update to be submitted six months after the DNR approves the revised plans and specifications for the collection system and short-term storage system.

3. The DNR will review the revised plans and specifications for the collection system and short-term storage system and issue a decision within 90 days of receipt of the revised plans and specifications. This deadline may be extended upon mutual agreement in writing by the District and the DNR. The DNR agrees that it will not disapprove the revised plans and specifications for the collection system and short-term storage system if the plans and specifications meet all the requirements of this stipulation. The District agrees that the DNR may impose additional conditions in the approval necessary for compliance with applicable design code requirements. The parties agree that

Wis. Admin. Code §§ 110.06(3) and 110.08(4) are not design code requirements for the purpose of this paragraph.

4. The District agrees that DNR approval of the revised plans and specifications for the collection system and short-term storage system will require the District to obtain, prior to beginning system operations, signed agreements with two surrounding POTWs, confirming their willingness to accept the entirety of Clayton's hauled sewage, even in storm conditions. These POTWs must, at the DNR's determination, have sufficient capacity to treat the wastewater to be hauled from the District. The District must submit to the DNR for approval documentation of the executed agreements and an evaluation of each receiving facility's ability to receive the District's wastewater. This must include, at minimum, consideration of hydraulic, Biochemical Oxygen Demand (BOD), Total Kjeldahl Nitrogen (TKN), and total phosphorus loading.

5. The District agrees that DNR approval of the revised plans and specifications for the collection system and short-term storage system will require the District to obtain, prior to beginning system operations, signed agreements with two contract haulers to transport wastewater, or to show ownership of its own trucks and employment of truck drivers/operators in sufficient quantity to manage the expected volume of waste. The District must submit to the DNR for approval documentation of the executed agreements.

6. The District understands and agrees that it shall not begin operation of its collection system and short-term storage system until the DNR verifies that the conditions described above and set forth in the final DNR approval are fulfilled.

7. The District understands and agrees that approval of the plans and specifications to be submitted pursuant to this stipulation shall permit operation of the District's collection system and short-term storage system for an absolute maximum of five years of operation, or alternatively, shall permit operation until absolutely no later than seven years after the date of the DNR's approval, whichever of those two dates arrives first. The District agrees that on that date described above, whichever one arrives first, the DNR's approval will lapse, and the District may no longer operate its collection system and short-term storage system as of that date.

8. By no later than two years after the date that operation of the collection system and short-term storage system commences, the District will submit a long-term facilities plan that complies with all requirements of Wis. Admin. Code §§ NR 110.08 and 110.09. The facilities plan will include a cost-effectiveness analysis. The cost-effectiveness analysis shall evaluate alternatives that ensure a physical connection with existing POTWs, and may evaluate the District's construction of a new plant. The District will, at a minimum, evaluate connections to the following existing POTWs: Grand

Chute-Menasha West, Neenah-Menasha, Appleton, New London and Winneconne. The parties agree that, for the purpose of this stipulation only, an alternative that requires a boundary agreement or the annexation of land within the Town to an adjacent incorporated municipality is not an implementable solution unless the District agrees to the boundary agreement or annexation.

9. Along with the long-term facilities plan, the District will submit a sec. 208 conformance letter under Wis. Admin. Code § NR 110.08(4). The District understands and agrees that there will need to be either a new Sewer Service Area developed and approved as part of an areawide water quality management plan under Wis. Admin. Code ch. NR 121, or an amendment to an existing one, before a sec. 208 conformance letter can be submitted. The DNR will assist the District as needed to help to establish a new Sewer Service Area or an amendment to an existing one, and to obtain a sec. 208 conformance determination, so that the District is able to implement the cost-effective alternative identified in the District's long-term facilities plan prepared in accordance with Paragraph 8.

10. The District will comply with the following timeline:

a. The District will submit plans and specifications to either physically connect to an existing POTW or to construct a new wastewater

treatment facility within 90 days of DNR approval of the long-term facilities plan.

b. The District will advertise for bids for the construction of either the physical connection to an existing POTW or the new wastewater treatment facility within 120 days of DNR approval of the plans and specifications.

c. The District will complete construction of either the physical connection to an existing POTW or the new wastewater treatment facility within two years of DNR approval of the plans and specifications.

d. The District understands and agrees that either a physical connection to an existing POTW or the construction of a new wastewater treatment facility must be proposed and completed in accordance with the dates set forth in this paragraph; and if the District fails to do so, approval for use of the collection system and storage tanks will be revoked forthwith. Should the physical connection to an existing POTW or the construction of a new wastewater treatment facility not be completed by the dates specified in this stipulation, the District understands and agrees that it may not continue operation of its system, and the District will promptly do whatever is necessary in order to properly and legally process its wastewater.

11. The parties agree that this stipulation does not make any determination, either express or implied, on the substantive merits of the

petition. The parties agree that the provisions of this stipulation are applicable only to resolution of this lawsuit, due to the history and specific circumstances of this situation. The provisions in this stipulation do not create any precedent whatsoever for any other situation in Wisconsin.

12. The Petition for Judicial Review shall be dismissed pursuant to the terms of this stipulation and order.

13. The provisions of this stipulation and order shall apply to and be binding upon the parties and their agents, servants, employees, trustees, successors and assigns.

14. A final order on these terms may be entered without further notice or proceedings.

15. The Order is a final and appealable Order. However, the parties hereby waive their right to appeal the Order.

16. The parties may mutually agree to revise or amend the terms of this stipulation without obtaining the consent of the court.

Dated this 17th day of May, 2018.

BOARDMAN & CLARK LLP

/s/ Richard L. Bolton

Lawrie J. Kobza
Wisconsin State Bar No. 1009282
lkobza@boardmanclark.com
Richard L. Bolton
Wisconsin State Bar No. 1012552
1 S. Pinckney St., Ste. 410
P.O. Box 927
Madison, WI 53701-0927
(608) 257-9521
Attorneys for Petitioner

Dated this 17th day of May, 2018.

BRAD D. SCHIMEL
Wisconsin Attorney General

Electronically signed by Lorraine C. Stoltzfus

LORRAINE C. STOLTZFUS
Assistant Attorney General
State Bar #1003676

Attorneys for Respondent Wisconsin
Department of Natural Resources

Wisconsin Department of Justice
Post Office Box 7857
Madison, Wisconsin 53707-7857
(608) 266-9226
(608) 267-2778 (Fax)
stoltzfuslc@doj.state.wi.us



February 11, 2019

Project Number: S-2018-0760

Richard Johnston, Administrator/Clerk
Town of Clayton Sanitary District No. 1
8348 County Road T
Larsen, WI 54947

Subject: Approval of wastewater collection system, storage, and truck loading system

Dear Mr. Johnston:

The Department of Natural Resources (department) is conditionally approving plans and specifications for a wastewater collection system, storage, and truck loading system in the Town of Clayton, Wisconsin, submitted under the seal of Justin J. Keen, Professional Engineer, Cedar Corporation, Green Bay, Wisconsin, and received for approval on November 5, 2018. Time extensions totaling 16 days were granted to extend the department's 90-day statutory review period.

The wastewater collection system, storage, and truck loading system will be installed in the eastern portion of the Town. The storage tanks and loading station will be constructed southwest of the intersection of Shady Lane and Clayton Avenue.

The plans and specifications and other reports on file with the department were used by the department as the basis for conditional approval.

The plans and specifications are hereby approved in accordance with s. 281.41, Wis. Stats., under approval Number S-2018-0760, subject to the following conditions:

1. That the District meet all applicable terms and conditions set forth in the Stipulation and Final Order entered into by the department and the District to resolve the *Town of Clayton Sanitary District No. 1 v. Wisconsin Department of Natural Resources*, Winnebago County Circuit Court, Case No. 17-CV-0381.
2. That the District obtain ready access to a portable pump of adequate capacity to serve lift station number two, in accordance with the station's design and requirements for emergency operation under s. NR 110.14(12)(b)4., Wis. Adm. Code.
3. That a preconstruction conference be held to familiarize the construction contractor(s) and resident inspector(s) with the erosion control and dewatering requirements and all other provisions and conditions of the approved plans and specifications.
4. That a competent resident inspector be provided during the course of construction.
5. That erosion control methods be used to prevent siltation to lands and waterways adjoining the construction area. These methods shall include but not be limited to the following:

- a. Siltation fences,

- b. Trench stabilization, and
- c. Immediate mulching and seeding.

6. That this department is notified when construction commences and again when the approved facilities are placed in operation. Please notify Roy Van Gheem, wastewater engineer in the department's Green Bay Office.
7. That all storm and other clear water including that from sump pumps, roof drains, cistern overflows, and building foundation drains be excluded from these approved sanitary sewers, that street and building sewers be laid in such a manner as to minimize entrance of groundwater (s. SPS 382.36 (3) (c) 1., Wis. Adm. Code), and that the building sewers and drains be installed to conform to the state plumbing regulations (s. SPS 382.30, Wis. Adm. Code).
8. That if permits under ch. 30, Wis. Stats., are required that no construction begin until such permits are obtained. Information to determine your need for a ch. 30, Wis. Stats., permit can be found at the department web page for waterways and wetlands permits (dnr.wi.gov/waterways/index.html).
9. That an acceptable operation and maintenance manual, or a manual revision or addendum, be prepared for the approved facilities.
10. That a properly certified operator, as required by s. NR 114, Wis. Adm. Code, be retained prior to the start of operation of the wastewater collection system, storage, and truck loading system.
11. That a minimum horizontal distance of 8 feet be maintained between existing or proposed water mains and existing or proposed sewers.
12. That a minimum horizontal distance of 8 feet be maintained between fire hydrants and sanitary sewers or storm sewer inlets.
13. That wherever water mains cross over sewers a minimum vertical clearance of 6 inches be maintained, and that wherever water mains cross under sewers a minimum vertical clearance of 18 inches be maintained, and that at crossings one full length of water pipe be centered on the sewer so that both joints are as far from the sewer as possible.
14. That sufficient earth cover or other suitable cover be provided over the sewers to prevent freezing.
15. That in the event basement drainage to the proposed sewers is not possible for existing buildings, the owner be so advised, in writing, prior to construction of the sewers.
16. That the groundwater infiltration rate for the sanitary sewers not exceed 200 gallons per inch of pipe diameter per mile per day.
17. That outside drops be constructed for sewers entering manholes where the invert elevation of the entering sewer is 24 inches or more above the spring line of the outgoing sewer.
18. That the sewers and manholes located in the flood plain be floodproofed in accordance with ch. NR 116, Wis. Adm. Code, Wisconsin's Flood Plain Management Program.
19. That all necessary permits for dewatering activities associated with the proposed construction be obtained prior to start of construction. In instances of contaminated groundwater, these permits may require treatment and monitoring of the dewatering discharge for various organic and other chemicals.

20. That the improvements be installed in accordance with the plans and specifications, and the above conditions, or subsequent essential and approved modifications.

The department has the authority under s. 281.19(1), Wis. Stats., to adopt rules for the construction, installation, use, and operation of sewerage systems. Chapters NR 108 and 110, Wis. Adm. Code, have been adopted by the department pursuant to this statutory authority. The department has the authority to approve, conditionally approve, or deny plans under s. 281.41, Wis. Stats.

This approval is not to be construed as a department determination on the issuance of a Wisconsin Pollutant Discharge Elimination System (WPDES) permit or an opinion as to the ability of the proposed system to comply with effluent limitations in such a permit.

Tangible personal property, which becomes a part of a waste treatment or pollution abatement plant or equipment, may be exempt from property and sales tax under ss. 70.11(21) and 77.54(26), Wis. Stats. A prerequisite to exemption under this subsection is the filing of a statement on forms prescribed by the Department of Revenue. The forms and instructions may be obtained from the Department of Revenue, Manufacturing and Telco Assessment Bureau, P.O. Box 8933, Madison, Wisconsin 53708-8933.

The plans and specifications have been reviewed in accordance with s. 281.41, Wis. Stats., for compliance with chs. NR 108 and 110, Wis. Adm. Code (or any other applicable section of the Wisconsin Administrative Code or Statutes which may be specifically referenced in the conditions above). This letter should not be construed as an approval for activities requiring approval under other Statutes or by other federal, state or local agencies.

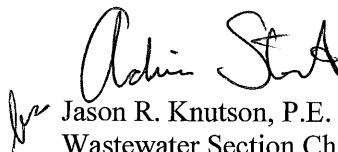
The department reserves the right to order changes or additions should conditions arise making this necessary.

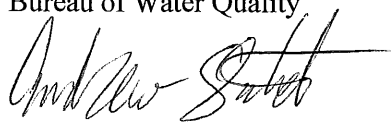
If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., 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 must name the department of Natural Resources as the respondent.

To request a contested case hearing pursuant to s. 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with s. NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with s. 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.

In case construction of this improvement has not commenced or contracts awarded to complete this improvement within two years from this date, this approval shall become void. After two years a new application and plan submittal must be made and approval obtained of this or other plans before any construction work is undertaken.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary


for Jason R. Knutson, P.E.
Wastewater Section Chief
Bureau of Water Quality


Andrew Dutcher
Wastewater Engineer
Bureau of Water Quality

e-cc:

Justin J. Keen - Cedar Corporation
Dennis Steigenberger - Cedar Corporation
Lawrie Kobza - Boardman & Clark LLP
Lorraine Stoltzfus - Wisconsin Dept. of Justice
Roy Van Gheem - Green Bay

EXHIBIT C

FOX WEST SEWERAGE COMMISSION JOINDER AGREEMENT

This Joinder Agreement, entered into this 5 day of FEB, 2020 by and between the Fox West Sewerage Commission, hereinafter referred to as the "Commission", and the Town of Clayton and the Town of Clayton Sanitary District No. 1, Municipal Bodies Corporate, located in Winnebago County, State of Wisconsin, hereinafter referred to as "Clayton".

1. The Parties acknowledge and agree that there is in effect a Fox West Sewerage Commission Ordinance-Contract (Fox West Sewerage Commission being the successor to the Grand Chute-Menasha West Sewerage Commission), the present "contracting parties" being the Town of Grand Chute, the Town of Grand Chute Sanitary District No. 2, the Village of Fox Crossing (d/b/a Fox Crossing Utilities f/k/a the Town of Menasha Utility District f/k/a the Town of Menasha Sanitary District No. 4), the Town of Greenville, and the Town of Greenville Sanitary District.
2. That pursuant to Article II, Section 207, Clayton desires as an eligible municipality, to become an "additional contracting municipality" to the Ordinance-Contract as in existence for the Commission.
3. That attached hereto and incorporated herein by reference is "Exhibit A", a scale map of the Clayton area, requesting, under the terms and conditions of this Contract, to be an additional service area for the Commission.
4. That the Commission and Clayton further understand and agree that upon execution of this Contract by Clayton and acceptance by the Commission, and upon the written consent of all heretofore contracting municipalities, Clayton shall be deemed a party to the existing Ordinance-Contract, to the same extent as an original party thereto, and the Exhibit A property shall be deemed to reflect additional property included in the Commission's Service Region.
5. That pursuant to Article V, Clayton agrees that, as a deemed original Contracting Party, its "Annual Charges" (Section 501), "Payment by Contracting Municipality" (Section 502), "Operating and Maintenance Charges" (Section 503), "Capital Charges" (Section 504), and "Depreciation Charges" (Section 505) shall initially be 2% as defined therein. Further, Clayton agrees that its 2% charge as incorporated herein from the full terms and conditions of the Ordinance-Contract shall be in full force and effect from the date of inception of the Ordinance- Contract, and that any determined payments from date of inception, as determined and computed by the Commission, shall be paid in full by Clayton to the

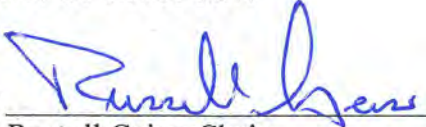
Commission within twenty-five (25) days of invoice. It is understood and agreed that Clayton's percentage will be reallocated in accordance with the Ordinance-Contract when it is an "on-line" user, which shall be defined as the conclusion of the first full fiscal year of the Commission when Clayton's effluent averages .025 MGD. Until Clayton's effluent flows are sufficient to provide reliable meter readings, the Commission may estimate flows by extrapolating water usage or by other recognized industry standard methods. Clayton shall also reimburse the Commission for third-party sampling performed at the site of Clayton's connection points to the Village of Fox Crossing's conveyance system.

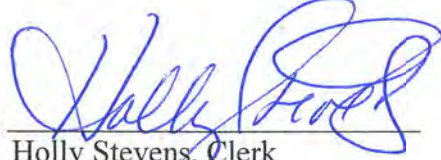
6. In addition to the forgoing, Clayton shall buy into the Commission's plant by paying a one-time buy-in charge of One Million Two Hundred Twenty Five Thousand Two Hundred Fifty One and 18/100 (\$1,225,251.18) Dollars within ninety-five (95) days of this Agreement. However, if said one-time buy-in charge is not paid prior to the Commission's 2019 audit cutoff date of December 31, 2019, said buy-in charge may be recalculated in accordance with the same methodology used to calculate the buy-in charge in 2019.
7. Clayton, as a deemed original Contracting Party, shall effectively own a "2 Percent Share" in the capacity of the Fox West Wastewater Treatment Facility. The Wastewater Flows and Loadings to which Clayton shall have rights to (the 2 Percent Share) are set forth in Exhibit B attached hereto.
8. It is the policy of the Commission that exceedances of flows and loadings by any contracting party are paid for in rates as established, from time to time, by the Commission. It is further understood that Clayton may be required to purchase additional capacity when there is a material increase in flows and loadings. A representative of Clayton will be a member of the Commission with voting rights at such time that Clayton's effluent averages ten percent (10%) of the total effluent treated by the plant in a fiscal year.

SIGNATURE PAGES TO FOLLOW

DATED THIS 15TH DAY OF JANUARY, 2020.

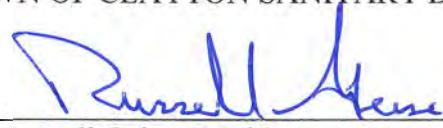
TOWN OF CLAYTON

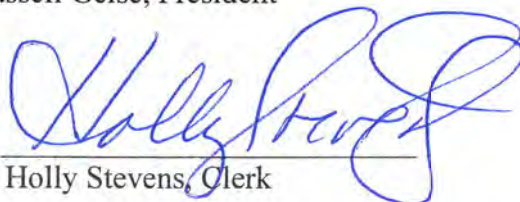
By: 
Russell Geise, Chair

Attest: 
Holly Stevens, Clerk

DATED THIS 15TH DAY OF JANUARY, 2020

TOWN OF CLAYTON SANITARY DISTRICT NO. 1

By: 
Russell Geise, President

Attest: 
Holly Stevens, Clerk

CONSENT AGREEMENT

The following parties, as the "contracting municipalities", under the Fox West Sewerage Commission Ordinance-Contract, and pursuant to the terms and conditions of Article II, Section 207, do hereby consent to the Town of Clayton and the Town of Clayton Sanitary District No. 1 becoming an original "contracting municipality", pursuant to the terms and conditions of the attached Joinder Agreement.

Accepted and approved by the Town of Grand Chute Sanitary District No. 2 this _____ day of _____, 2020.

Accepted and approved by the Town of Grand Chute this _____ day of _____, 2020.

TOWN OF GRAND CHUTE

By: _____
David Schowalter, Town Chairman

Attest: _____
Angie Cain, Clerk

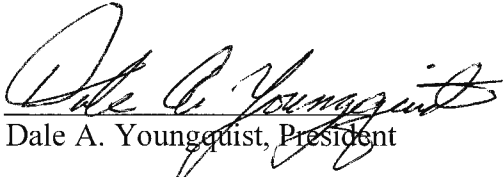
TOWN OF GRAND CHUTE SANITARY DISTRICT NO. 2

By: _____
David Schowalter, President

Attest: _____
Angie Cain, Clerk

Accepted and approved by the Village of Fox Crossing this 5 day of FEBRUARY, 2020.

VILLAGE OF FOX CROSSING

By: 
Dale A. Youngquist, President

Attest:

By: 
Karen Backman, Village Clerk

Accepted and approved by the Town of Greenville this _____ day of _____, 2020.

TOWN OF GREENVILLE

By: _____
Jack Anderson, Town Chairman

Attest: _____
Wendy Helgeson, Clerk

Accepted and approved by the Greenville Sanitary District this _____ day of _____, 2020.

TOWN OF GREENVILLE SANITARY DISTRICT

By: _____
Jack Anderson, President

Attest: _____
Wendy Helgeson, Clerk

The Fox West Sewerage Commission is authorized to enter into this Joinder Agreement pursuant to a vote duly taken and entered into the minutes and records of the Commission on Feb 5, 2020.

FOX WEST SEWERAGE COMMISSION

By: James R Kirk
James Kirk, Superintendent

EXHIBIT A

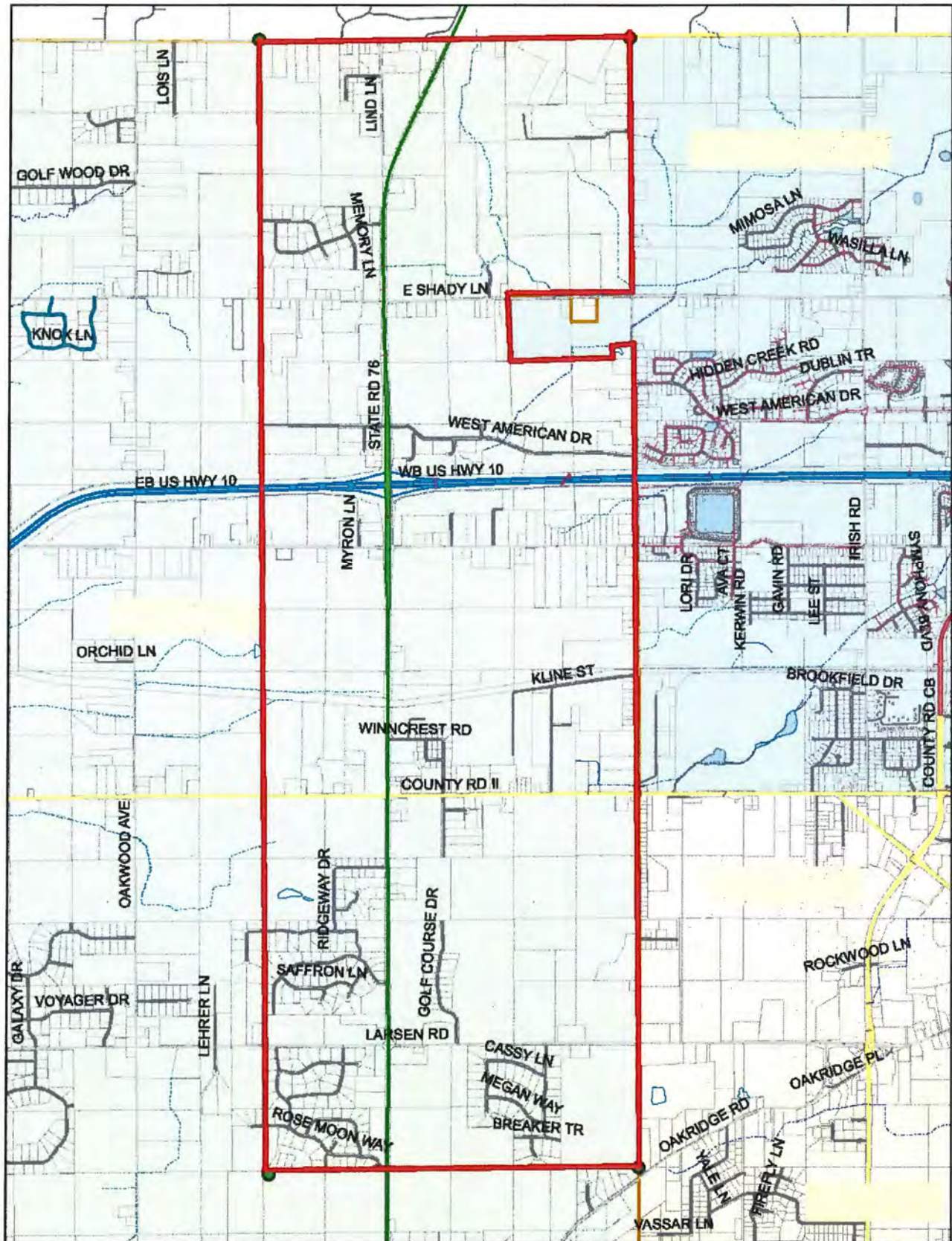


EXHIBIT B**Table #3****WASTEWATER FLOWS & LOADINGS****Proposed Re-Allocation**

Year 2030 Maximum Month Design

Grand Chute-Menasha West Wastewater Treatment Facility

Prepared For The Town Of Clayton - Winnebago County, Wisconsin

McM. No. C0023-9-16-00147

March 2016

Parameter	2030 Design Loading			
FLOW (mgd)	13.1			
BOD (lbs./day)	15,070			
TSS (lbs./day)	17,153			
P (bs./day)	351			
	Current Design Allocation	Flow & Loading Allocation	% Of GCMW 2030 Design	Proposed 2030 Flow & Loadings *
TOWN OF CLAYTON				
Flow (mgd)			1.2%	0.151
BOD (lbs./day)			2.5%	382
TSS (lbs./day)			2.5%	422
P (bs./day)			4.0%	14
	Current Design Allocation	Flow & Loading Allocation	Design Allocation	Loading Allocation
TOWN OF GRAND CHUTE				
Flow (mgd)	52%	6.6548	50.4%	6.6024
BOD (lbs./day)	50.8%	8138	53.2%	8017
TSS (lbs./day)	54.0%	4255	51.2%	8782
P (bs./day)	52.0%	197	54.7%	192
TOWN OF MENASHA (WEST)				
Flow (mgd)	56.0%	5.5544	42.0%	5.5020
BOD (lbs./day)	38%	5275	34.2%	5154
TSS (lbs./day)	42.4%	6175	35.2%	6038
P (bs./day)	35.0%	105	28.7%	101
TOWN OF GREENVILLE				
Flow (mgd)	10%	0.8908	6.4%	0.8384
BOD (lbs./day)	6.8%	1658	10.2%	1537
TSS (lbs./day)	11.0%	2058	11.2%	1921
P (bs./day)	12.0%	49	12.7%	45

* Town of Clayton proposed Flow and Loadings provided by Dean Zanon, Cedar Corporation; 01/28/2016.

* To calculate the proposed reallocation, one-third (1/3) of the Town of Clayton percentage of GCMW 2030 design is deducted from each Member Community, and the proposed loading allocation was recalculated by multiplying the proposed design allocation by the GCMW wastewater Treatment Facility 2030 Maximum Month Design Flow & Loading.

EXHIBIT D

AGREEMENT FOR THE CONVEYANCE OF WASTEWATER BETWEEN THE TOWN OF CLAYTON, TOWN OF CLAYTON SANITARY DISTRICT NO. 1 AND THE VILLAGE OF FOX CROSSING

(Sec. 66.0301 Wis. Stats.)

This **AGREEMENT**, entered into this day of by and between Town of Clayton, organized and existing under the laws of the State of Wisconsin with principal offices at 8348 CTR T Larsen, Wisconsin, hereinafter called the “Town,” the Town of Clayton Sanitary District No., 1, also organized and existing under the laws of the State of Wisconsin with principal offices at 8348 CTR T Larsen, Wisconsin, hereinafter called the “Sanitary District,” (the Town and Sanitary District are jointly referred as the “Town Parties”), and the Village of Fox Crossing, a Municipal Corporation organized and existing, under the laws of the State of Wisconsin with principal offices at 2000 Municipal Drive Neenah, Wisconsin, hereinafter called the “Village,” (the Town, Sanitary District and Village are jointly referred as the “Parties” and are individually referred to as a “Party”), is as follows:

WITNESSETH

WHEREAS, the Village owns and operates a wastewater collection system in the Village, which conveys wastewater to the Fox West Regional Wastewater Treatment Plant; and

WHEREAS, the Village’s wastewater collection system includes interceptors which have capacity for conveying additional wastewater originating in the Sanitary District; and

WHEREAS, the Town Parties plan to design, construct, own, and operate a wastewater collection system located in the Sanitary District; and

WHEREAS, the Town Parties have expressed a desire that the Village convey the wastewater collected by the Sanitary District from those areas in the Sanitary District described in Exhibit A attached hereto (“2019 Service Area”) to the Fox West Regional Wastewater Treatment Plant; and

WHEREAS, the Village has agreed to convey wastewater originating from the Sanitary District’s 2019 Service Area to the Fox West Regional Wastewater Treatment Plant; and

WHEREAS, the wastewater to be conveyed by the Village from the Sanitary District shall be only of the type and nature presently being collected by the Village; and

WHEREAS, the wastewater to be conveyed by the Village from the Sanitary District to the Fox West Regional Wastewater Treatment Plant may originate from various land uses, including residential dwellings, commercial businesses and industrial areas within the Sanitary District's 2019 Service Area, which uses are hereinafter referred to as "users" and;

WHEREAS, the Town Parties and Sanitary District have expressed willingness to enter into a contract for wastewater conveyance pursuant to Section 66.0301 Wis. Stats.

NOW, THEREFORE, in consideration of the payment of \$5.750,000 to be apportioned between the Village and Village Utility by agreement] and other good and valuable consideration to each in hand paid by the other, receipt of which is hereby acknowledged, and in further consideration of the covenants herein contained and the benefits derived by each, the Town, Sanitary District and the Village contract and agree as follows:

A. RECITALS

The recitals hereto are hereby incorporated by reference.

B. NATURE OF THIS AGREEMENT

This Agreement is entered into pursuant to the provisions of §66.0301, Wis. Stats., and shall be construed and enforced in accordance with the provisions of that statute.

C. GENERAL INTENT

The Town Parties will plan, design, construct, own and operate a wastewater collection system within the Sanitary District that will collect wastewater from uses located within the 2019 Service Area. The Sanitary District's wastewater collection system will extend to the Village limits and connect to the Village's wastewater interceptors. The Village shall accept and convey such wastewater from the Sanitary District to the Fox West Regional Wastewater Treatment Plant for treatment and disposal. It is the intent of the Parties that the Sanitary District shall be considered a "contract purchaser" of wastewater conveyance services from the Village for purposes of this Agreement and otherwise, and that the customers within the 2019 Service Area shall be customers of the Sanitary District.

D. SERVICE AREA AND CAPACITY

This Agreement covers the conveyance of wastewater from lands within the 2019 Service Area. The Sanitary District's 2019 Service Area shall include those lands described in Exhibit A attached hereto. Any additions of area to the 2019 Service Area by the Town or Sanitary District must first be approved in writing by the Town and Village, in their discretion. Any future expansion or extension of the Sanitary District's wastewater collection system to serve propert(ies) located outside of Town limits must be approved in writing by the Town and Village, in their discretion. The Village agrees to the conveyance of wastewater of an average daily flow not to exceed **1,311,998** gallons and a peak daily flow not to exceed **3,279,994** gallons of wastewater from the 2019 Service Area.

E. SANITARY DISTRICT COLLECTION SYSTEM

- (1) Except as otherwise provided in this Agreement, the Town Parties shall be responsible for the planning, design, construction, ownership, operation and maintenance of the wastewater collection system located in the Sanitary District. The Town Parties shall be responsible for all costs associated with the planning, designing and construction of the wastewater collection system, including, but not limited to any lift station and force main, necessary to connect to the Village's collection system. All plans and specifications for the Sanitary District's collection system shall be submitted to and be subject to approval by the Village Engineer, which approval shall not be unreasonably withheld or delayed.
- (2) In the event any portion of the collection system needed to service the Sanitary District is located within the Village, the Village shall grant to the Town Parties any permits, easements or other necessary approvals within public right-of-way or within existing public easements necessary to construct and maintain the Sanitary District's wastewater collection system and to connect the Sanitary District's system to the Village's collection system. The Town Parties shall restore any areas disturbed by the construction to pre-construction conditions, and the restoration upon completion of construction must be approved by the Village prior to final payment by the Town Parties to the contractor retained by the Town Parties for said work, which approval will not be unreasonably withheld.
- (3) The Sanitary District's wastewater collection system shall connect to the Village's wastewater collection system at the established connection point or points identified on Exhibit B. Any proposed substitute connection points must be approved by the Village which approval shall not be unreasonably withheld.
- (4) The Sanitary District shall be responsible for the ownership, operation and maintenance of the Sanitary District's wastewater collection system. The Sanitary

District's operating and maintenance responsibility shall apply only to the collection system components owned and operated by the Sanitary District and shall not include the responsibility for maintenance of any service laterals from the sewer main to the building served, or of any facilities located on privately owned property not located in easements. Any approved future expansion of the Sanitary District's wastewater collection system or extensions within the 2019 Service Area will also be undertaken by the Town Parties and paid for by the Town Parties.

- (5) The Sanitary District shall maintain the wastewater collection system in full conformance with WDNR regulations and the provisions of Chapter 28, Subchapter II, of the Village's Municipal Code now in existence or enacted or amended at any time during the existence of this Agreement or any extension thereof. Should the Sanitary District receive an order from the DNR requiring any action relating to the wastewater collection system and should the Sanitary District fail, refuse or neglect to reasonably comply with the order, the Village shall be authorized to take action to correct the ordered deficiency to the extent necessary to achieve compliance at the Sanitary District's expense.

F. FLOW VOLUMES AND CHARACTERISTICS

The Parties agree that the wastewater generated by the Sanitary District will be of normal domestic strength as defined by the Fox West Regional Sewerage Commission. Flows with strength characteristics higher than the stated limits shall be pretreated or corrected at the source prior to entry into the Village's collection system. For purposes of billings to the Sanitary District, flow volumes shall be based on the master flow meters described in Section H; however, the Village's engineer may instead extrapolate water usage data within the 2019 Service Area or use other industry-accepted estimation techniques when flow to and through the master flow meters is too low to obtain accurate readings or when the reliability of said flow data may otherwise be improved through the use of combining flow meter data with other available data. Where on-site water meter data is unavailable due to the limited continued use of on-site private wells as permitted in other agreements entered into contemporaneously herewith, estimates may be used. Measurements of wastewater flow will be based upon quarterly flow meter readings and calculations. Data obtained from the master flow meters and individual water meters shall be made available by the Village to the Town Parties.

G. CONVEYANCE SERVICE

- (1) The Town Parties hereby agree to comply with the construction and sewer use provisions of Chapter 28, Subchapter II, of the Village's Municipal Code now in existence or enacted or amended at any time during the existence of this Agreement or any extension thereof. Village agrees that any sewer use ordinance enacted or to be enacted or amended will treat users in the Sanitary District the same as users in the Village, except as otherwise specifically provided herein.
- (2) The Parties agree that the Village shall have the right to inspect all users within the Sanitary District and if, from any inspection, it is determined by the Village that any deleterious waste is improperly entering the system, or that either the Sanitary District or a user are violating any ordinance rule or regulation or this Agreement, the user and the Sanitary District will be notified in writing and shall be required to cease and desist such discharge immediately in the case of deleterious waste and within five days if some other violation. In the event the Sanitary District and/or user fail to take corrective action (or in the alternative to satisfactorily assure the Village that corrective action will be taken within a specified period of time), the Village, with the full participation and cooperation of the Town Parties, shall pursue any and all remedies available to achieve compliance. The Sanitary District shall be responsible for extraordinary costs of said inspections.
- (3) The Town Parties agree that all Federal, State, Village and local regulations regarding pretreatment of those industrial wastes demanding such pretreatment shall be rigidly monitored and enforced upon the applicable industrial dischargers by the Town Parties.

H. FLOW MEASUREMENT

- (1) The actual flow of sewage from the Sanitary District shall be measured at sewage metering stations at locations identified in Exhibit B that shall be installed to accurately measure the total volume of wastewater from the Sanitary District. The Village's engineer may extrapolate water usage data within the 2019 Service Area or use other industry-accepted estimation techniques when flow to and through the master flow meters is too low to obtain accurate readings or when the reliability of said flow data may otherwise be improved through the use of combining flow meter data with other available data. The metering stations shall be located so that all wastewater conveyed to the Village from the Sanitary District shall be metered. Any new or additional meters shall be at locations mutually acceptable to the Parties. The

Village shall furnish, install, maintain and own the flow meters and telemetry equipment. All costs for installation, operation and maintenance of the metering stations and communication lines shall be the Sanitary District's responsibility.

- (2) The Village and/or the Fox West Regional Sewerage Commission shall take periodic flow proportional samples at the metering station to determine the waste loadings from the Sanitary District and any costs associated therewith shall be the Sanitary District's responsibility.
- (3) The meters shall be calibrated, and if necessary, adjusted, annually by a qualified technician agreed to by the Sanitary District, Village, and Fox West Regional Sewerage Commission. A report of the calibration and adjustment shall be provided by a party to any other party within five (5) days of the receipt of the report. Any costs associated therewith shall be the Sanitary District's responsibility.

I. SEWER SERVICE CONNECTIONS

- (1) No connections shall be made to the Sanitary District's collection system without prior written notice to the Village.
- (2) The Village shall have the right to inspect the Town building permit records to ensure compliance with this Agreement. The Village shall also have the right to inspect any work performed relating to sewer service connections. All connections to the system shall meet the requirements of Chapter 28, Subchapter II, of the Municipal Code of the Village.

J. BILLING DATES AND PROCEDURES; PAYMENT TERMS

- (1) The Village is providing wastewater conveyance service to the Sanitary District and the Sanitary District shall be liable for payment for all charges relating to these services. The Village shall bill the Sanitary District on a quarterly basis for all charges. All invoices shall be paid in full within 20 days after the date of billing, and if not so paid, the account shall be considered delinquent. Delinquent payments shall be subject to the same penalties and charges assessed by the Village to Village residents who are delinquent in the payment of sewer charges. The Village shall have the right to withhold approval of any sewer connections while bills are delinquent.

- (2) The Sanitary District shall provide, on a quarterly basis, a customer billing summary which indicates any changes to the number of customers being served by the Sanitary District. The Village shall have the right to inspect the Sanitary District customer billing records to ensure compliance with this Agreement.

K. SEWAGE CONVEYANCE RATES AND ASSESSMENT OF EXTRAORDINARY COSTS

The rates for conveying wastewater discharges from the Sanitary District's wastewater collection system to the Fox West Regional Wastewater Treatment Plant (herein the "Conveyance Fee") shall be established as set forth in Exhibit C. Any extraordinary costs associated with maintenance or improvements or reconstruction to the Village's conveyance system including but not limited to relay projects, reconstruction projects, lining projects, cleaning projects, manhole projects, interceptor projects and televising projects that are necessary for carrying out this agreement (herein "Extraordinary Costs") shall be paid all or in a fair proportion, as the case may be, by the Town Parties; provided, however, that any cost that is built in to the formula provided in Exhibit C shall not be assessed a second time as a cost to the Town Parties. The Parties agree that the cost assessment methodology contained in Exhibit B represents a fair method of allocating the cost of an assessable Extraordinary Cost for a project located in any given area of the Village's conveyance system. The applicable "Clayton %" as referenced in Exhibit B shall be the percentage an Extraordinary Cost that the Sanitary District shall pay for a project in a given area; provided, however, 1) that Exhibit B will be recreated using the same methodology at such time that the Town Parties connect to the Village's conveyance system through a third or subsequent connection point, and 2) Town Parties shall be exclusively responsible to pay for 100% of the Extraordinary Cost of any accommodation or infrastructural improvement that is requested or needed by the Town Parties and/or that is designed to exclusively benefit or serve the Town Parties. Notwithstanding, the Village represents that as of the date of this Agreement, other than the replacement of an occasional manhole or interceptor lining deemed necessary by discoveries made during the occasional televising of downline sewer infrastructure, which occurs from time to time, there are no planned major projects that are likely to result in an assessable extraordinary cost within the next 10-year time frame. This will not prevent the Village from undertaking projects sooner in an unplanned or emergency situation. The Winchester Road interceptor is likely to be the next interceptor to see major improvements within the next 4-10 years; however, at present the Town is not planning to connect through this interceptor so the Town would not likely share in said costs unless the Town changes plans.

L. INDEMNIFICATION

In constructing the Sanitary District's wastewater collection system, as well as performing its obligations under this Agreement, the Town Parties agree to indemnify, save and hold harmless the Village, its successors and assigns, from any and all claims, suits, demands or causes of action, arising out of any act or omission of the Town Parties, their contractors, agents or employees, causing injury, directly or indirectly, to any person or persons whomsoever, or property whatsoever.

M. TERM

This Agreement shall commence upon its execution hereof by all Parties; and shall continue thereafter in perpetuity. This Agreement may be terminated upon the mutual agreement of the Parties.

N. DEFAULT

In the event a Party hereto shall default in its obligations contained herein, then in such event a non-defaulting Party may give notice of such default to the defaulting Party. The defaulting Party shall then have a period of not to exceed thirty (30) days within which to cure such default, except, however, that if the default is in the failure to make any payment required under the terms of this Agreement, then in such event, the terms of Section O of this Agreement shall apply. If the default as specified is not cured within the applicable cure period, then in such event, the non-defaulting Party shall have the right and option to terminate this Agreement, and exercise any other right or remedy provided for by law or equity.

O. PENALTIES

The Town Parties agree that in the event of violation of this Agreement or Chapter 28, Subchapter II, of the Village's Municipal Ordinance (or any subsequent revision thereof), and after 30-days written notice, penalties may be assessed as allowed by said code for each violation, with each day of continued violation considered as a separate "offense" for which an additional penalty assessment would be due. All such penalties shall be paid at the time the next monthly billing is due and payable.

P. NOTICE

All notices, demands, and communications provided for herein or made hereunder shall be delivered or mailed first class with postage prepaid, addressed in each case as follows, unless some

other address shall have been designated in a written notice given in like manner, and shall be deemed to have been given or made when so delivered or mailed:

Village of Fox Crossing
Attn: Director of Public Works
Village of Fox Crossing
2000 Municipal Drive
Neenah, WI 54956

Town of Clayton
Attn: Clerk
8348 County Road T
Larsen, WI 54947

Q. BINDING EFFECT

This Agreement shall be binding upon the Parties hereto and their respective successors and assigns, including an incorporated successor to the Town and shall be considered to run with the land of the Town and any incorporated successor thereto, whether in whole or in part.

R. ASSIGNMENT

Neither the Town, the Sanitary District, nor the Village may assign this Agreement or their interests herein, without the prior written consent of the other.

S. BOOKS AND RECORDS

The Town Parties and the Village shall keep accurate books, records, and accounts of costs, expenses, expenditures, and receipts as they pertain to this Agreement. Upon reasonable notice, a Party shall be entitled to examine any and all such books and records. A Party may request an annual certified audit report of the books and records of another Party.

T. DISPUTES

The Parties hereto agree that the resolution of any dispute concerning the interpretation of this Agreement or the rates, rules and practices of the Parties shall be determined in a bench trial in the Circuit Court for Winnebago County.

U. EFFECTIVE DATE

The effective date of this Agreement shall be the date upon which it is executed by the last of the Parties to this Agreement.

V. EFFECT OF AGREEMENT

The Village and Town Parties recognize that this Agreement is the product of a unique set of circumstances. Accordingly, it is mutually acknowledged that many of the provisions contained herein are unique unto themselves and should not be seen as precedent for any future agreement between the Village and other entities.

W. SEVERABILITY

If any clause, provision, or section of this Agreement be declared invalid by any Court of competent jurisdiction, the invalidity of such clause, provision or section shall not affect any of the remaining provisions provided all essential terms and purposes of the agreement remain substantially valid.

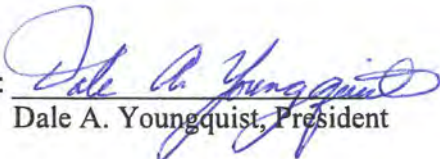
X. ANCILIARY AGREEMENTS

The validity of this agreement is contingent upon the parties' contemporaneous signing, delivery of, and continuing validity of various ancillary agreements; namely the "Agreement for the Provision of Water Service between the Town of Clayton and the Village of Fox Crossing," the "Intermunicipal Agreement Between the Town of Clayton and the Village of Fox Crossing," and that certain "Fox West Sewerage Commission Joinder Agreement" entered into by and between the Town of Clayton, Town of Clayton Sanitary District No. 1 and third-party Fox West Sewerage Commission, all entered into on even date herewith.

[SIGNATURES BEGIN ON THE FOLLOWING PAGE]

DATED THIS 27 DAY OF January, 2020

VILLAGE OF FOX CROSSING

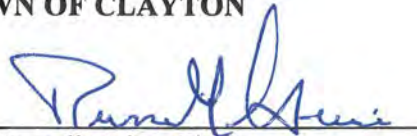
By: 
Dale A. Youngquist, President

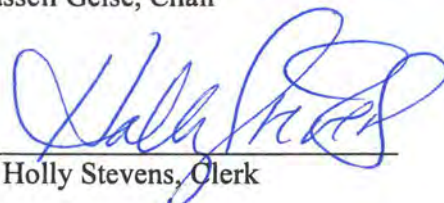
Attest:

By: 
Karen Backman, Village Clerk

DATED THIS 15TH DAY OF JANUARY, 2020

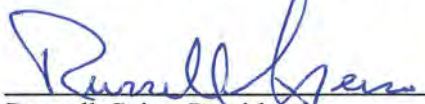
TOWN OF CLAYTON

By: 
Russell Geise, Chair

Attest: 
Holly Stevens, Clerk

DATED THIS 15TH DAY OF JANUARY, 2020

TOWN OF CLAYTON SANITARY DISTRICT NO. 1

By: 
Russell Geise, President

Attest: 
Holly Stevens, Clerk

EXHIBIT A – 2019 SERVICE AREA

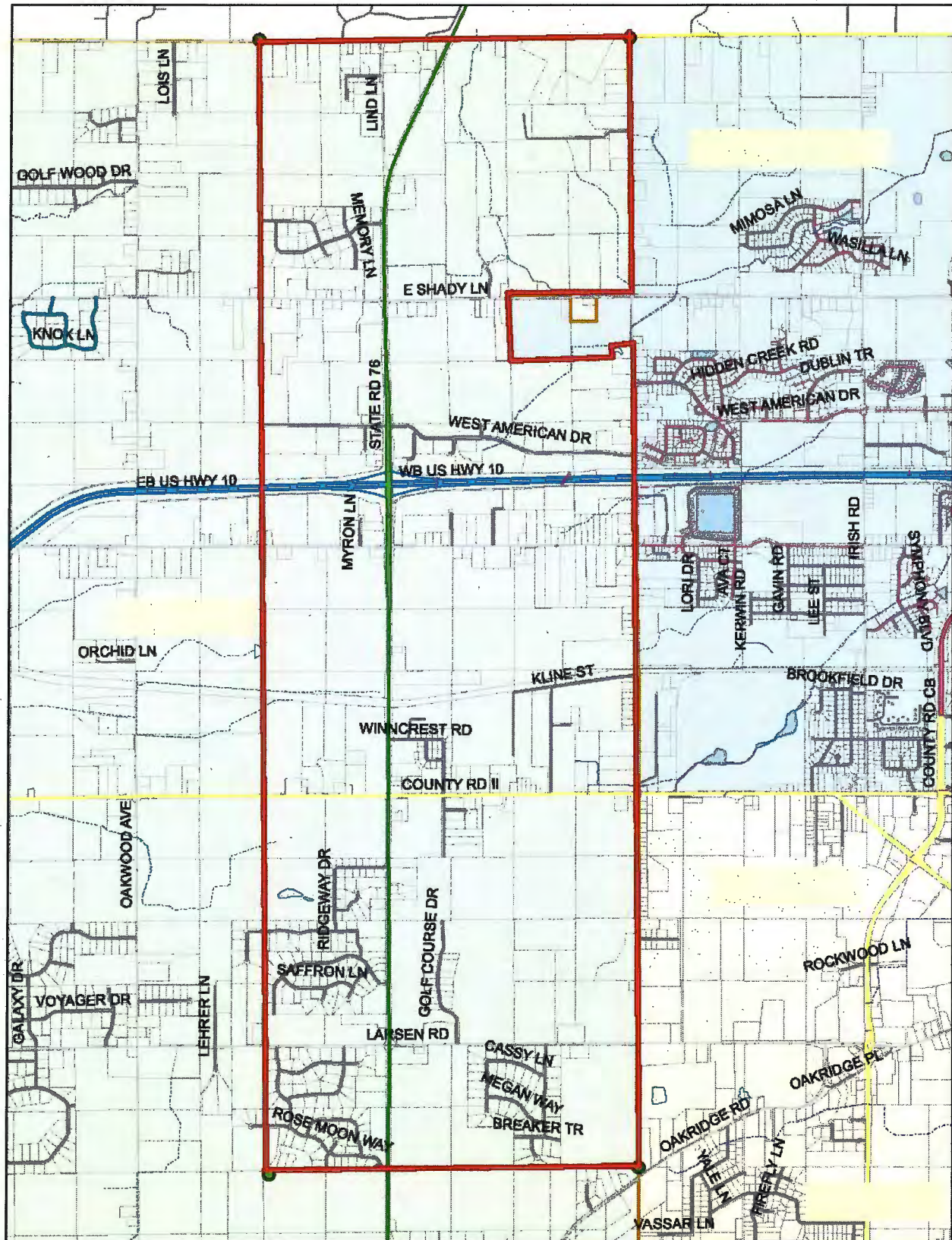
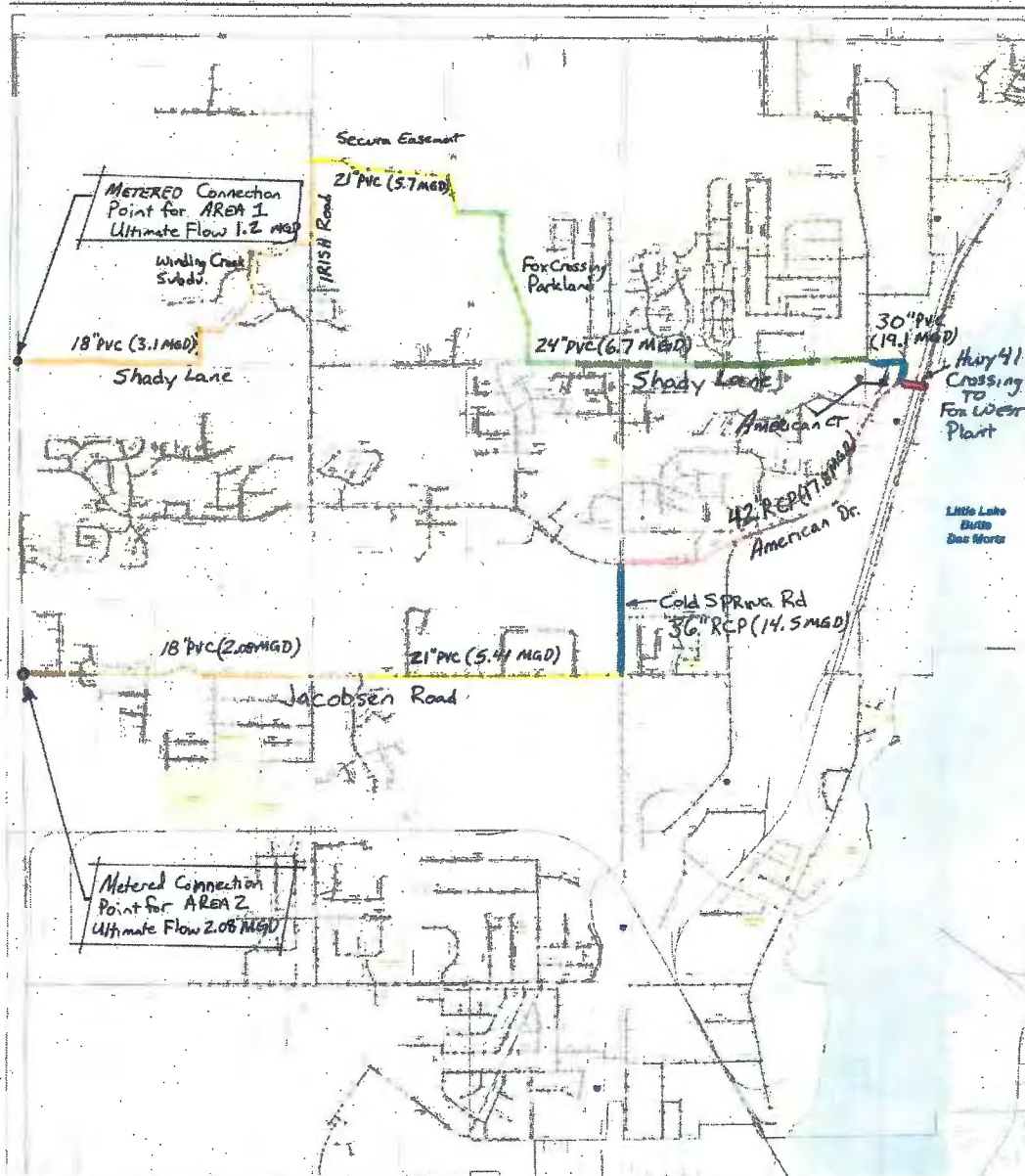


EXHIBIT B – CONNECTION POINTS AND COST-SHARING FORMULA

Fox Crossing - Clayton Shared Sanitary Interceptors



Clayton Reserved Interceptor Capacity AREA 1 Connection - 1.2 MGD Peak Flow				Clayton Reserved Interceptor Capacity AREA 2 Connection - 2.08 MGD Peak Flow			
Interceptor	SIZE	CAPACITY	CLAYTON %	Interceptor	SIZE	CAPACITY	CLAYTON %
Shady/IRISH	18"	3.1 MGD	38.7%	Jacobsen Rd	18"	2.8 MGD	74.3%
Secura Easement	21"	5.7 MGD	21.1%	Jacobsen Rd	21"	5.4 MGD	38.4%
Park/Shady	24"	6.7 MGD	17.9%	Cold Springs Rd	36"	14.5 MGD	14.3%
Shady/American	30"	19.1 MGD	6.3%	American Dr	42"	17.8 MGD	11.7%
Hwy 41	48"	21.1 MGD	15.5%*	Hwy 41	48"	21.1 MGD	15.5%*

18" PVC 30" PVC 48" RCP
 21" PVC 36" RCP * Based on 3.28 MGD from Clayton (AREA 1 + AREA 2)
 24" PVC 42" RCP

EXHIBIT C – CONVEYANCE FEE FORMULA

The initial Conveyance Fee shall be \$0.46/1,000 gallons. The Village shall recalculate said Conveyance Fee annually, beginning in 2020, in accordance with the following methodology:

Fox Crossing Utilities, a division of the Village of Fox Crossing, assigns half of its cost of water metering, billing collection, and office/administration to its sewer utility, because water meter data, the water billing system, and the water-related office and administration is also used for sewer billing.

For the purposes of this Agreement, the sum of account 863 (meter expense), account 875 (maintenance of meters), account 902 (meter readings), account 903 (billing collection), and account 705 (office/administration), as shown in the Village's annual accounting records, shall constitute the "Total Conveyance Expense."

The Conveyance Fee in a given year shall be the three-year rolling average of the Total Conveyance Expense in each of the previous three years divided by the total flows through the Village's collection system in each of the previous three years (including, but not limited to flows originating in the Town and Village).

For example, the initial conveyance fee of \$0.46/ 1,000 gallons was calculated using data from 2018, 2017, and 2016 as follows:

Year	Total Flow (MGD)	Total Conveyance Expense	Conveyance Fee
2018	945.5	\$444,315.90	\$0.47/ 1,000 gallons
2017	915.0	\$400,651.33	\$0.44/ 1,000 gallons
2016	1,028.8	\$491,147.42	\$0.48/ 1,000 gallons

The three-year rolling average of the forgoing is \$0.46/ 1,000 gallons – constituting the initial Conveyance Fee to be charged by the Village to the Sanitary District.

When 2019 accounting data becomes available, the Conveyance Fee shall be recalculated by the Village using data from 2019, 2018, and 2017, respectively.

The Conveyance Fee shall be recalculated by the Village in each subsequent year using the same methodology.

Should the Village materially change its accounting system or methodology, adjustments should be made to the Conveyance Fee formula to ensure a fair and consistent result.

EXHIBIT E

**AGREEMENT FOR THE PROVISION OF WATER SERVICE BETWEEN THE
TOWN OF CLAYTON AND THE VILLAGE OF FOX CROSSING**

(Sec. 66.0301, Wis. Stats.)

This **AGREEMENT**, entered into this ____ day of _____, 2020, by and between Town of Clayton, organized and existing under the laws of the State of Wisconsin with principal offices at 8348 CTR T Larsen, Wisconsin, the Town of Clayton Sanitary District No., 1, also organized and existing under the laws of the State of Wisconsin with principal offices at 8348 CTR T Larsen, Wisconsin, (the Town and Sanitary District are jointly referred as the "Town") and the Village of Fox Crossing, a Municipal Corporation organized and existing, under the laws of the State of Wisconsin with principal offices at 2000 Municipal Drive Neenah, hereinafter called the "Village", is as follows:

WITNESSETH:

WHEREAS, the Village owns and operates a system of water supply, storage, pumping, and distribution facilities which has capacity for supplying water utility service to properties located in the Town; and

WHEREAS, the Town has no water supply, storage, pumping or distribution capabilities and has expressed a desire that the Village provide retail water utility service to properties located in certain identified areas in the Town, said lands being those described in Exhibit A attached hereto ("2019 Water Service Area"); and

WHEREAS, the Village has agreed to sell water to persons and places located in the 2019 Water Service Area; and

WHEREAS, §66.0813(1), Wis. Stats., authorizes a Village owning a water utility to serve persons or places outside its corporate limits, and §66.0813(3), Wis. Stats., authorizes the limits of the Village's provision of water utility service in the Town to be delineated and fixed by Village ordinance; and

WHEREAS, water supplied to the 2019 Water Service Area by the Village may supply property improvements supporting various land uses, including residential dwellings, commercial businesses and institutional and industrial areas within the boundaries of the Town, the serviced properties being referred to as "users"; and

WHEREAS, the Town and Village have expressed willingness to enter into a contract for water utility service pursuant to §66.0301, Wis. Stats; and

WHEREAS, in consideration of the payment of Five Million Seven Hundred Fifty Thousand (\$5,750,000.00) Dollars and other good and valuable consideration to each in hand paid by the other, receipt of which is hereby acknowledged, and in further consideration of the covenants herein contained and the benefits derived by each, the Town and the Village contract and agree as follows:

A. RECITALS

The representations and recitations set forth in the foregoing Recitals are material to this Agreement and are hereby incorporated into and made a part of this Agreement as though they were fully set forth in this Paragraph A and constitute representations and understandings of the Village and the Town according to the tenor and import thereof.

B. GENERAL INTENT AND OWNERSHIP

The Town, at its sole expense, will acquire necessary land and easements and plan, design, and construct water supply facilities in the 2019 Water Service Area (the "Town Area Facilities"), including but not limited to, water mains, service laterals, and booster pump stations with back-up generators and the like, for connecting to the Village's water system. The Town Area Facilities shall be designed to provide water and fire protection service to users located within the 2019 Water Service Area. After construction, the Town will dedicate the Town Area Facilities to the Village, and the Village will own the Town Area Facilities, subject to acquisition by the Town under the provisions of Paragraph T. The Town Area Facilities shall include all facilities up to and including the "curb stop" unless, the service is larger than two inches, in which case the Town Area Facilities will extend to the first valve at the connection point.

C. SERVICE AREA AND CAPACITY

The Village's provision of water utility service in the Town shall be limited to only those lands described in Exhibit A, the 2019 Water Service Area, attached hereto.

D. TOWN AREA FACILITIES

- (1) The Town shall be responsible and bear all costs for the planning, design, bidding, and construction of the Town Area Facilities needed to serve properties within the 2019 Water Service Area. All plans and specifications for the Town Area Facilities shall be submitted to the Village Engineer for review and approval, which shall be provided promptly and not be unreasonably withheld or denied. The Village Engineer's review shall be for purposes of determining consistency with construction requirements and standards of similar Village construction projects.
- (2) The Village, or its delegee, shall be permitted to periodically inspect construction of the Town Area Facilities.
- (3) If Town Area Facilities will be constructed in the Village, the Village shall grant to the Town any permits, easements or other necessary approvals within public right-of-way or within existing public easements needed for the construction of the Town Area Facilities. The Town shall restore any

areas disturbed by the construction to pre-construction conditions, and the restoration upon completion of construction must be approved by the Village prior to final payment by the Town to the contractor retained by the Town for said work, which approval will not be unreasonably withheld.

- (4) Upon completion of the construction of the Town Area Facilities, the Town shall dedicate the Town Area Facilities to the Village and the Village shall accept dedication and ownership. Any warranties shall pass through to the Village.
- (5) The Village shall be responsible for the operation and maintenance of the Town Area Facilities, but it may contract with the Town or a third-party to conduct such operation and maintenance. The Town shall inform the Village of breaks/malfunctions in the Town Area Facilities of which it becomes aware.
- (6) Any future expansion or extension of the Town Area Facilities to serve additional properties in the 2019 Water Service Area will also be undertaken and paid for by the Town under the process set out in this Section D. Any future expansion or extension of the Town Area Facilities to serve property(ies) located outside of the 2019 Water Service Area must be approved in writing by the Town and Village, in their discretion.
- (7) Because the parties assume that the Town will regain ownership of the Town Area Facilities in the near term, pursuant to Paragraph S, below, and because the onus is on the Town to do so, typical troubleshooting, minor maintenance, and phased periodic upgrades of Town Area facilities shall be paid for by the Village; major reconstruction or replacements shall be paid for by the Town.

E. METERS

The Town shall install meters and remote meter reading technology consistent and compatible with the Village's existing meters and meter reading technology now deployed or to be deployed in the future (to the Village's specification to ensure seamless integration with the Village's existing systems) for accurately measuring the quantity of water delivered to each water customer in the 2019 Water Service Area. The Town shall dedicate the meters and meter reading technology to the Village. The Village shall operate, maintain, calibrate, and read the meters of its retail customers as required by Chapter 196, Wis. Stats., and Chapter PSC 185 of the Wisconsin Administrative Code.

F. WATER SUPPLY

The water provided by the Village to water customers in the 2019 Water Service Area shall satisfy all applicable regulations for safe drinking water. The Village shall provide water pressure sufficient to satisfy all applicable pressure

requirements of the Wisconsin Department of Natural Resources (the “DNR”), of the Wisconsin Public Service Commission (the “PSC”), the Environmental Protection Agency (“EPA”), and the American Water Works Association (“AWWA”). The Town shall reasonably cooperate with the Village to facilitate the provision of retail water service by the Village to water users located within the Town.

G. COSTS OF CONSTRUCTION

The Town may recover its costs for the planning, design and construction of the Town Area Facilities in any manner allowed by law (but shall not directly or indirectly pass any such costs onto the Village or its related entities).

H. LOCAL ORDINANCES

- (1) The Town agrees to adopt, comply and enforce the provisions of Chapter 28, Subchapter III, of the Village's Municipal Code now in existence or enacted or amended and/or renumbered at any time during the existence of this Agreement or any extension thereof. Both the Town and Village agree that any water utility ordinance enacted or to be enacted or amended will treat users in the either municipality the same, except as otherwise specifically provided herein. Notwithstanding the forgoing, the Town is not required to comply with any special assessment or impact fee provisions included in Chapter 28, Subchapter III, of the Village's Municipal Code.
- (2) The parties agree that the Village shall have the right to inspect all necessary components of the Town Area Facilities and the Town shall assist the Village to any extent reasonably necessary. The Town agrees to take all reasonable actions to assist the Village in ensuring continuous water supply to water customer in the 2019 Water Service Area.
- (3) No new or reconstructed or improved private wells will be permitted within the area represented in Exhibit A. The Town shall enact appropriate ordinances to prohibit any such new or reconstructed or improved private wells and shall be responsible for all costs of enforcement and removal of any wells installed in violation of this paragraph.
- (4) Generally, all water users within the area represented by Exhibit A shall be required to connect to the Village's water system, shall be required to become customers of the Village's water system, and shall be prohibited from using private on-site wells. As a limited exception to this rule, the preexisting wells identified (by property owner and parcel number) on Exhibit C shall be allowed to remain until the earlier of 1) any such listed well fails or 2) a parcel owner transfers a parcel to another owner or entity. At such time that a well fails or one of the parcels listed in Exhibit C changes ownership, said new owner shall be required to become a customer of the Village's water utility within 30 days and said customers and parcels shall

be prohibited from any further use of private on-site wells. Minor maintenance to the existing wells identified in Exhibit C shall be allowed, but in no event shall such minor maintenance include drilling, lining, motor replacement, control replacement, pump replacement, or repair or replacement of the electrical supply system or plumbing infrastructure. Any well needing such repairs or replacement shall be deemed to have “failed.” The purpose of this paragraph is to provide some very limited relief to parcel owners who recently invested in new well infrastructure, but to also require all parcel owners to become customers of the Village’s water utility as soon as possible. The Town shall enact appropriate ordinances to strictly enforce this paragraph and shall be responsible for all costs of enforcement and removal of any wells installed in violation of this paragraph.

I. WATER SERVICE CONNECTIONS

- (1) The Village shall have the right to inspect the Town building permit records to ensure compliance with this Agreement. The Village shall also have the right to inspect any work performed relating to water service connections. All connections to the Town Area Facilities shall meet the requirements of Chapter 28, Subchapter III, of the Municipal Code of the Village and the Wisconsin State Plumbing Code.

J. BILLING DATES AND PROCEDURES; PAYMENT TERMS

- (1) The Village is providing retail water utility service to customers in the 2019 Water Service Area, and those customers shall be liable for payment for all charges relating to these services. The Village shall bill customers in the 2019 Water Service Area on the same basis and at the same rate as it bills customers located in the Village.
- (2) Customers in the 2019 Water Service Area shall be subject to the same terms and conditions of service as customers within the Village. The terms and conditions of service shall be those on file with the PSC. Customers in the 2019 Water Service Area shall be required to pay all invoices in full by the due date, and if not so paid, the account shall be considered delinquent. Delinquent payments shall be subject to the same penalties and charges assessed by the Village to Village residents who are delinquent in the payment of water charges.
- (3) In the event any water customer(s) in the 2019 Water Service Area are delinquent in payment of water bills, the Town will take measures to collect the delinquent charges in accord with Wisconsin statute §66.0809 as authorized under Wisconsin statute §66.0707.

K. COMPUTATION OF BILLS

- (1) Water customers in the 2019 Water Service Area shall be billed at the retail water rates approved by the PSC. A copy of the current Village Utility Rate Schedule is attached here as Exhibit B.
- (2) The Village shall bill all water customers in the 2019 Water Service Area in strict conformity with the Village's Customer Water Utility Rate schedule and all PSC regulations, as applied to all individual customer meters at rates applicable to Village customers, as modified from time to time.

L. DISPUTES

The parties hereto agree to be bound by the provisions of §196.37, Wis. Stats., in the resolution of any dispute concerning the interpretation of this Agreement or the rates, rules and practices of the parties.

M. BOOKS AND RECORDS

The Town and the Village shall keep accurate books, records, and accounts of costs, expenses, expenditures, and receipts as they pertain to this Agreement. Upon reasonable notice, either party shall be entitled to examine any and all such books and records. Either party may request an annual certified audit report of the books and records of the other party.

N. EFFECTIVE DATE

The effective date of this Agreement shall be the date upon which it is executed by the last of the parties to this Agreement.

O. TERM OF CONTRACT; REMEDIES

- (1) The term of this Agreement shall be perpetual, unless the Agreement is terminated by mutual agreement.
- (2) In addition to the penalties provided herein, and in the event of violation of the terms of this Agreement or of any rule and regulation of the DNR, the EPA, or other authority having legal jurisdiction in these matters, either party may sue in any court of record for declaratory judgment or other relief as may be provided by law.
- (3) The Town shall periodically evaluate no less than every five (5) years whether to apply to the PSC for a certificate of authority to be a public utility providing water service within the Town or a portion of the Town. The Village shall not oppose Town efforts to obtain a certificate of authority from the PSC.

P. EFFECT OF AGREEMENT

The Village and Town recognize that this Agreement is the product of a unique set of circumstances. Accordingly, it is mutually acknowledged that many of the provisions contained herein are unique unto themselves and should not be seen as precedent for any future agreement between the Village, the Town and/or other entities.

Q. SEVERABILITY

If any clause, provision, or section of this Agreement be declared invalid by any Court of competent jurisdiction, the invalidity of such clause, provision or section shall not affect any of the remaining provisions provided all essential terms and purposes of the agreement remain substantially valid.

R. ANCILIARY AGREEMENTS

The validity of this agreement is contingent upon the parties' contemporaneous signing, delivery of, and continuing validity of various ancillary agreements; namely the "Agreement for the Conveyance of Wastewater between the Town of Clayton, Town of Clayton Sanitary District No. 1 and The Village of Fox Crossing," the "Intermunicipal Agreement Between the Town of Clayton and the Village of Fox Crossing" and that certain "Fox West Sewerage Commission Joinder Agreement" entered into by and between the Town of Clayton, Town of Clayton Sanitary District No. 1 and third-party Fox West Sewerage Commission, all entered into on even date herewith.

S. BINDING AGREEMENT

This Agreement shall be binding upon the parties hereto and their respective successors and assigns, including an incorporated successor to the Town and shall be considered to run with the land of the Town and any incorporated successor thereto, whether in whole or in part.

T. TRANSFER OF OWNERSHIP

- (1) During the term of this Agreement, the Village shall not transfer, pledge, assign or in any manner encumber the Town Area Facilities.
- (2) If the PSC authorizes the Town, or a sanitary district or water district created by the Town, to become a public water utility, upon the written request of the Town, and in accordance with any conditions required by the PSC, the Village shall tender, relinquish and transfer all right title and interest to the Town Area Facilities, free and clear of any liens or encumbrances, for consideration of One (\$1.00) Dollar.

- (3) If the PSC authorizes the Town to become a public water utility, and the Town re-acquires the Town Area Facilities from the Village, the Town shall become a wholesale water customer of the Village.
- (4) The Village shall charge the Town wholesale water rates established by the PSC based upon the volume of water purchased by the Town as measured by a master meter(s).
- (5) Master Metering System
 - a. Before re-acquiring the Town Area Facilities, the Town shall install an above-ground metering station equipped with a fully functional telemetry system so as to enable both the Town and Village to access real-time flows and pressures.
 - b. The Village shall own and maintain the master meter and telemetry system within the above-ground metering station. The master meter shall be tested and calibrated by the Village annually at Village expense. Copies of all system testing and calibration reports shall be submitted to both parties within 30 days of the date of meter testing or calibration. The Village shall have access to the meter(s) located in the metering station for maintenance purposes at any reasonable time. The meter(s) shall be tested by the Village in accord with a PSC recommended schedule, and copies of all test results shall be provided to the Town. The Town may request additional tests at its expense.

U. VILLAGE'S OBLIGATIONS COMMENCE UPON PSC APPROVAL

Upon entering into this Agreement, the Parties shall take reasonable steps to present this Agreement to the PSC and request and obtain approval for the Village to operate as a utility and to provide retail water service to the 2019 Service Area. The Village shall not be required to provide retail water service until PSC approval is obtained.

V. INDEMNIFICATION

For good and valuable consideration, the Town and its successors and assigns, including any incorporated successor to the Town agree to indemnify, defend and hold harmless the Village and its officers, officials, employees and agents from and against any and all liability, loss, damage, expenses, costs, including attorney's fees, arising in any way out of the goods provided and activities performed pursuant to this Agreement, to the extent caused by any negligent act or omission of the Town, anyone employed by it or anyone for whose acts it may be liable.

W. NOTICE

All notices, demands, and communications provided for herein or made hereunder shall be delivered or mailed first class with postage prepaid, addressed in each case as follows, unless some other address shall have been designated in a written notice given in like manner, and shall be deemed to have been given or made when so delivered or mailed:

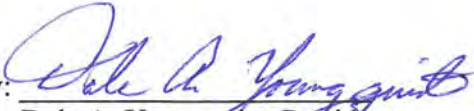
Village of Fox Crossing
Attn: Director of Public Works
Village of Fox Crossing
2000 Municipal Drive
Neenah, WI 54956

Town of Clayton
Attn: Clerk
8348 County Road T
Larsen, WI 54947

[SIGNATURE LINES ON NEXT PAGE]

DATED THIS 27 DAY OF January, 2020

VILLAGE OF FOX CROSSING

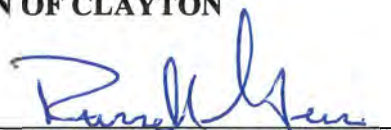
By: 
Dale A. Youngquist, President

Attest:

By: 
Karen Backman, Village Clerk

DATED THIS 15TH DAY OF JANUARY, 2020

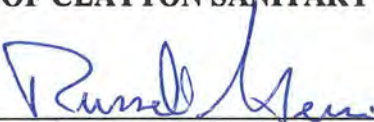
TOWN OF CLAYTON

By: 
Russell Geise, Chair

Attest: 
Holly Stevens, Clerk

DATED THIS 15TH DAY OF JANUARY, 2020

TOWN OF CLAYTON SANITARY DISTRICT NO. 1

By: 
Russell Geise, President


Attest: 
Holly Stevens, Clerk

EXHIBIT A – 2019 SERVICE AREA

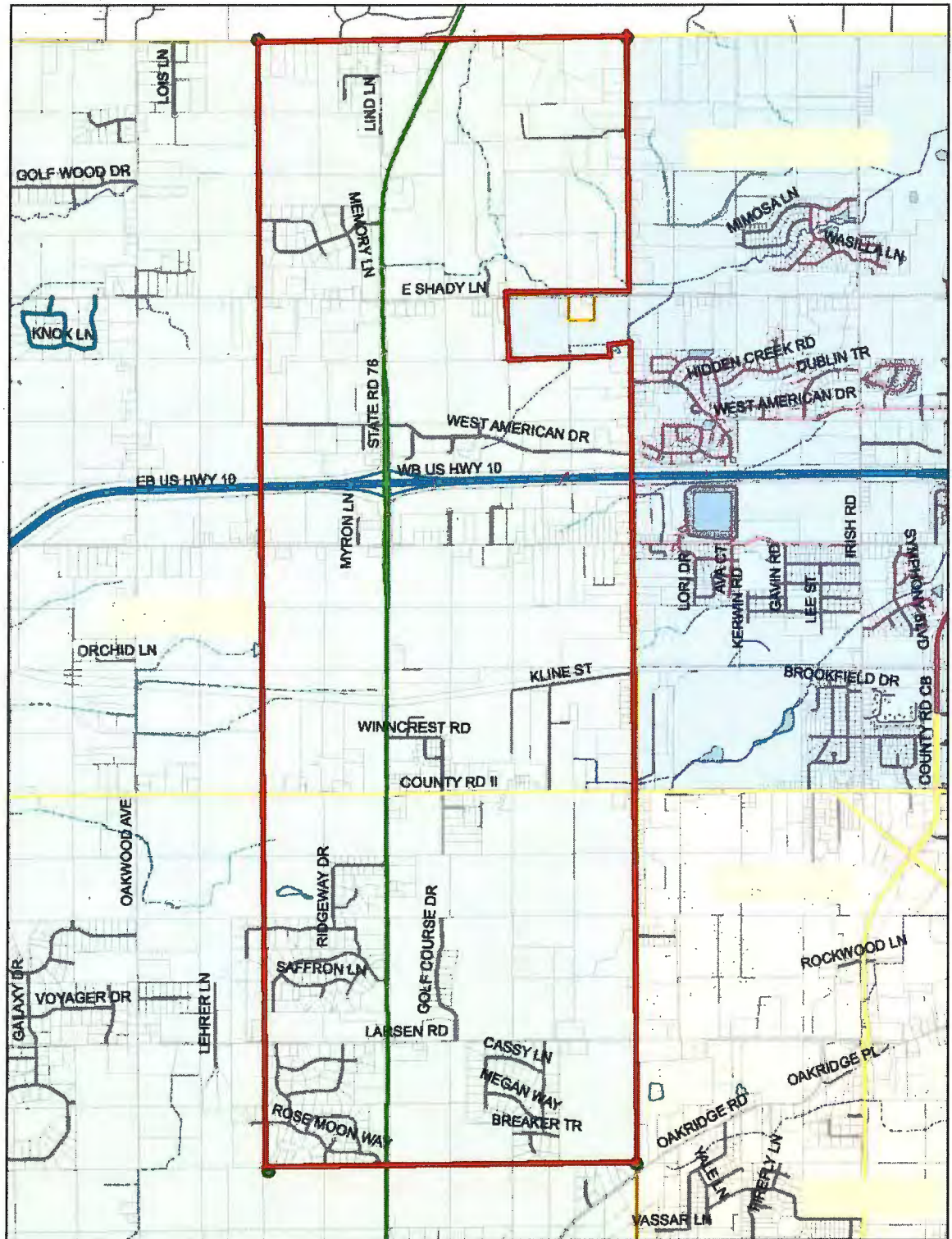


EXHIBIT B

Village Utility Rate Schedule



Public Service Commission of Wisconsin

Ellen Nowak, Chairperson
Mike Huebsch, Commissioner
Lon Roberts, Commissioner

610 North Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

June 28, 2017

Ms. Myra Piergrossi, Finance Director
Village of Fox Crossing
2000 Municipal Drive
Neenah, WI 54956
E-mail: MPiergrossi@foxcrossingwi.gov

Re: Application of the Town of Menasha, Winnebago County, 3550-TW-100
Wisconsin, as a Water Public Utility, for Utility Name
Change and Tariff Revisions

Dear Ms. Piergrossi:

The Public Service Commission (Commission) has received your application for a water utility name change. The application was received on April 17, 2017. Your application states that the entire Town of Menasha was incorporated into the Village of Fox Crossing through a series of steps that culminated on December 20, 2016. Your application also states that the new boundaries of the Village-owned water utility, hereby known as Fox Crossing Utilities, matches the same boundaries of the previous water utility, formerly known as the Town of Menasha Utility District.

While your water utility name has been changed in our files to Fox Crossing Utilities, your identification number, 3550, will remain the same. Please note that your utility operations and service obligations also remain unchanged.

Commission staff has printed revised rate sheets that have been placed on file as Amendment 23. A copy is enclosed for your records. The utility's current rates and rules must be available for public inspection and review at the utility's office and all bill payment stations pursuant to Wis. Admin. Code § PSC 185.22. The utility should mark the old rates and rules as superseded and keep them in a separate file. Pursuant to Wis. Admin. Code § PSC 185.19, the utility must keep a permanent file of its previous rates and rules. If you have any questions, please contact Stephen Kemna at (608) 266-3768.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Knudson".

Steven A. Knudson
Administrator
Division of Water, Telecommunications & Consumer Affairs
SPK:pc DL:01535551
Enclosures

Telephone: (608) 266-5481
Home Page: <http://psc.wi.gov>

Fax: (608) 266-3957
E-mail: pscsec@wisconsin.gov

RATE FILE

Sheet No. 1 of 2

Schedule No. PWAC-1

Amendment No. 23

Public Service Commission of Wisconsin

Fox Crossing Utilities

Purchased Water Adjustment Clause

The Fox Crossing Utilities (utility) may apply a purchased water adjustment clause (PWAC) to its water rates set forth under Schedules F-1 and Mg-1 to reflect an increase or decrease in the rates charged by its wholesale water supplier, Fox Crossing Utilities (wholesaler). The adjustment can be made effective on or after the effective date of the wholesaler's rate change. Adjustments under this PWAC that result in an increase cannot be effective until the utility has filed the proposed change with the Public Service Commission (Commission) and the Commission has accepted the adjustment for filing. The utility shall provide notice to its customers of such change in rates resulting from application of the PWAC.

The utility must request Commission authorization for a PWAC rate change within 90 days of a change in its wholesale water supplier's rates or forfeit all adjustment to its rates under the PWAC until the time of its next rate case.

Calculation of Adjusted Quarterly / Monthly Public Fire Protection Service Charges --- F-1

$$C = Z \times (1 + P)$$

$$P = (N - B) / T$$

Where C = Adjusted Schedule F-1 retail service charges rounded up to the nearest cent.

Z = Current Schedule F-1 direct retail service charges.

P = Adjustment factor rounded up to the nearest hundredth of a percent, which is four places past the decimal point (XXXX).

N = New wholesale public fire protection service charge.

B = Current wholesale public fire protection service charge.

T = Total dollar revenue from retail service charges per rate Schedule F-1

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Public Service Commission of Wisconsin

Fox Crossing Utilities

Sheet No. 2 of 2

Schedule No. PWAC-1

Amendment No. 23

Purchased Water Adjustment Clause

Calculation of Adjusted Quarterly / Monthly Service Charges - - - Mg-1

$$C = Z \times (1 + P)$$

$$P = (N - B) / T$$

Where: C = Adjusted Schedule Mg-1 retail service charges rounded up to the nearest cent.

Z = Current Schedule Mg-1 retail service charges.

P = Adjustment factor rounded up to the nearest hundredth of a percent, which is four places past the decimal point (.XXXX).

N = New wholesale service charge.

B = Current wholesale service charge.

T = Total dollar revenue from retail service charges per Schedule Mg-1.

Commodity Charge Adjustment - - - Mg-1

$$AVBR = VBR + A$$

Where: AVBR = Adjusted Schedule Mg-1 retail volume block rates rounded up to the nearest cent.

VBR = Current Schedule Mg-1 retail volume block rates.

A = New wholesale volume charge less the current wholesale volume charge.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. F-1

Public Service Commission of Wisconsin

Amendment No. 23

Fox Crossing Utilities**Public Fire Protection Service**

Public fire protection service includes the use of hydrants for fire protection service only and such quantities of water as may be demanded for the purpose of extinguishing fires within the service area. This service shall also include water used for testing equipment and training personnel. For all other purposes, the metered or other rates set forth, or as may be filed with the Public Service Commission, shall apply.

Under Wis. Stat. § 196.03(3)(b), the municipality has chosen to have the utility bill the retail general service customers for public fire protection service.

Public Fire Protection Service Charges:

	<u>Quarterly</u>	<u>Monthly</u>		<u>Quarterly</u>	<u>Monthly</u>
3/8-inch meter - \$	13.14	4.38	3-inch meter - \$	198.00	66.00
1/2-inch meter - \$	13.14	4.38	4-inch meter - \$	330.00	110.00
1-inch meter - \$	33.00	11.00	6-inch meter - \$	657.00	219.00
1 1/4-inch meter - \$	48.00	16.00	8-inch meter - \$	1,050.00	350.00
1 1/2-inch meter - \$	66.00	22.00	10-inch meter - \$	1,578.00	526.00
2-inch meter - \$	105.00	35.00	12-inch meter - \$	2,103.00	701.00

Customers who are provided service under Schedules Mg-I, Ug-I, or Sg-I shall be subject to the charges in this schedule according to the size of their primary meter.

Billing: Same as Schedule Mg-I.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. Upf-1

Amendment No. 23

Public Service Commission of Wisconsin**Fox Crossing Utilities****Private Fire Protection Service - Unmetered**

This service shall consist of permanent or continuous unmetered connections to the main for the purpose of supplying water to private fire protection systems such as automatic sprinkler systems, standpipes, and private hydrants. This service shall also include reasonable quantities of water used for testing check valves and other backflow prevention devices.

Private Fire Protection Service Demand Charges:

	<u>Quarterly</u>	<u>Monthly</u>
2-inch or smaller connection	\$ 45.00	\$ 15.00
3-inch connection	\$ 75.00	\$ 25.00
4-inch connection	\$ 120.00	\$ 40.00
6-inch connection	\$ 210.00	\$ 70.00
8-inch connection	\$ 300.00	\$ 100.00
10-inch connection	\$ 450.00	\$ 150.00
12-inch connection	\$ 540.00	\$ 180.00
14-inch connection	\$ 675.00	\$ 225.00
16-inch connection	\$ 810.00	\$ 270.00

Billing: Same as Schedule Mg-1.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 2 of 2

Schedule No. Mg-1

Amendment No. 23

Public Service Commission of Wisconsin

Fox Crossing Utilities

General Service - Metered

Billing: Bills for water service are rendered monthly or quarterly and become due and payable upon issuance following the period for which service is rendered. A late payment charge of 1 percent per month will be added to bills not paid within 20 days of issuance. This late payment charge shall be applied to the total unpaid balance for utility service, including unpaid late payment charges. This late payment charge is applicable to all customers. The utility customer may be given a written notice that the bill is overdue no sooner than 20 days after the bill is issued. Unless payment or satisfactory arrangement for payment is made within the next 10 days, service may be disconnected pursuant to Wis. Admin. Code ch. PSC 185.

Combined Metering: For residential customers, volumetric readings from all meters on a single service lateral shall be combined for billing. For nonresidential customers, volumetric readings may be combined for billing if the utility for its own convenience places more than one meter on a single water service lateral. Multiple meters placed for the purpose of identifying water that is not discharged into the sanitary sewer are not considered for utility convenience and may not be combined for billing nonresidential customers. This requirement does not preclude the utility from combining readings where metering configurations support such an approach. Volumetric readings from individually metered separate service laterals may not be combined for billing purposes.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. OC-1

Amendment No. 23

Public Service Commission of Wisconsin

Fox Crossing Utilities

Other Charges

Non-Sufficient Funds Charge: The utility shall assess a \$30.00 charge when a payment rendered for utility service is returned for non-sufficient funds. This charge may not be in addition to, but may be inclusive of, other non-sufficient funds charges when the payment was for multiple services.

Billing: Same as Schedule Mg-1.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. Mpa-1

Amendment No. 23

Public Service Commission of Wisconsin

Fox Crossing Utilities

Public Service

Metered Service

Water used by the Fox Crossing Utilities on an intermittent basis for flushing sewers, street washing, flooding skating rinks, drinking fountains, etc., shall be metered and billed according to the rates set forth in Schedule Mg-1 for nonresidential customers.

Unmetered Service

Where it is impossible to meter the service, the utility shall estimate the volume of water used based on the pressure, size of opening, and the period of time the water is used. The estimated quantity shall be billed at the volumetric rates set forth in Schedule Mg-1 for nonresidential customers, excluding any service charges.

Billing: Same as Schedule Mg-1.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. Ug-1

Public Service Commission of Wisconsin

Amendment No. 23

Fox Crossing Utilities

General Water Service - Unmetered

Service may be supplied temporarily on an unmetered basis where the utility cannot immediately install a water meter, including water used for construction. Unmetered service shall be billed the amount that would be charged to a metered residential customer using 11,000 gallons of water per quarter under Schedule Mg-1, including the service charge for a ¾-inch meter. If the utility determines that actual usage exceeds 11,000 gallons of water per quarter, an additional charge for the estimated excess usage shall be made according to the rates under Schedule Mg-1.

This schedule applies only to customers with a 1-inch or smaller service connection. For customers with a larger service connection, the utility shall install a temporary meter and charges shall be based on the rates set forth under Schedule Mg-1.

Billing: Same as Schedule Mg-1

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. MI-1

Amendment No. 23

Public Service Commission of Wisconsin

Fox Crossing Utilities

Municipal Interconnect Charge

For emergency water service provided to the Waverly Sanitary District through an unmetered connection.

Service Charge: Applicable charge for an equivalent 6-inch meter under Schedule Mg-1.

Volume Charge: Applicable charge for Non-Residential Customers under Schedule Mg-1.

Billing: Same as Schedule Mg-1.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. SWS-1

Public Service Commission of Wisconsin

Amendment No. 23

Fox Crossing Utilities

Standby Water Service

A standby charge shall apply to each lot or equivalent parcel of land for which water system facilities are available but are not connected. An equivalent parcel of land shall be each full 100 feet where unplatted. An isolated parcel of less than 100 feet shall be equivalent to a lot. Where more than one lot or equivalent is used as a unit and a customer is connected, the total charge for water service to such customer shall be not less than the standby charge applicable to the several lots. This rate is not applicable to land declared by the local municipality as unbuildable.

For each lot or equivalent parcel of land – \$9.60 per quarter.

Example: An unplatted 480 foot parcel of land would constitute four equivalent parcels.

Billing: Same as Schedule Mg-1.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. Sg-1

Public Service Commission of Wisconsin

Amendment No. 23

Fox Crossing Utilities

Seasonal Service

Seasonal customers are general service customers who voluntarily request disconnection of water service and who resume service at the same location within 12 months of the disconnection, unless service has been provided to another customer at that location in the intervening period. The utility shall bill seasonal customers the applicable service charges under Schedule Mg-1 year-round, including the period of temporary disconnection.

Seasonal service shall include customers taking service under Schedule Mg-1 or Schedule Ug-1.

Upon reconnection, the utility shall apply a charge under Schedule R-1 and require payment of any unpaid charges under this schedule.

Billing: Same as Schedule Mg-1, unless the utility and customer agree to an alternative payment schedule for the period of voluntary disconnection.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. BW-1

Amendment No. 23

Public Service Commission of Wisconsin

Fox Crossing Utilities

Bulk Water

All bulk water supplied from the water system through hydrants or other connections shall be metered or estimated by the utility. Utility personnel or a party approved by the utility shall supervise the delivery of water.

Bulk water sales are:

- A. Water supplied by tank trucks or from hydrants for the purpose of extinguishing fires outside the utility's service area;
- B. Water supplied by tank trucks or from hydrants for purposes other than extinguishing fires, such as water used for irrigation or filling swimming pools; or,
- C. Water supplied from hydrants or other temporary connections for general service type applications, except that Schedule Ug-1 applies for water supplied for construction purposes.

A service charge of \$40.00 and a charge for the volume of water used shall be billed to the party using the water. The volumetric charge shall be calculated using the highest volumetric rate for residential customers under Schedule Mg-1. In addition, for meters that are assigned to bulk water customers for more than 7 days, the applicable service charge in Schedule Mg-1 will apply after the first 7 days.

The water utility may require a reasonable deposit for the temporary use of its equipment under this and other rate schedules. The deposit(s) collected shall be refunded upon return of the utility's equipment. Damaged or lost equipment shall be repaired or replaced at the customer's expense.

Billing: Same as Schedule Mg-1.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. R-1

Amendment No. 23

Public Service Commission of Wisconsin

Fox Crossing Utilities

Reconnection Charges

The utility shall assess a charge to reconnect a customer, which includes reinstalling a meter and turning on the valve at the curb stop, if necessary. A utility may not assess a charge for disconnecting a customer.

During normal business hours:	\$40.00
After normal business hours:	\$60.00

Billing: Same as Schedule Mg-I.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. Cz-1

Amendment No. 23

Public Service Commission of Wisconsin

Fox Crossing Utilities

Water Lateral Installation Charge
--

The utility shall charge a customer for the actual cost of installing a water service lateral from the main through curb stop and box if these costs are not contributed as part of a subdivision development or otherwise recovered under Wis. Stats. Chapter 66.

Billing: Same as Schedule Mg-1.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 10

Public Service Commission of Wisconsin

Schedule No. X-1

Fox Crossing Utilities

Amendment No. 23

Water Utility Operating Rules

Compliance with Rules

All persons now receiving water service from this water utility, or who may request service in the future, shall be considered as having agreed to be bound by the rules and regulations as filed with the Public Service Commission of Wisconsin.

Establishment of Service

Application for water service may be made in writing on a form furnished by the water utility. The application will contain the legal description of the property to be served, the name of the owner, the exact use to be made of the service, and the size of the service lateral and meter desired. Note particularly any special refrigeration, fire protection, or water-consuming air-conditioning equipment.

Service will be furnished only if (1) the premises have a frontage on a properly platted street or public strip in which a cast iron or other long-life water main has been laid, or where the property owner has agreed to and complied with the provisions of the water utility's filed main extension rule, (2) the property owner has installed or agrees to install a service lateral from the curb stop to the point of use that is not less than 6 feet below the surface of an established or proposed grade and meets the water utility's specifications, and (3) the premises have adequate piping beyond the metering point.

The owner of a multi-unit dwelling has the option of being served by individual metered water service to each unit. The owner, by selecting this option, is required to provide interior plumbing and meter settings to enable individual metered service to each unit and individual disconnection without affecting service to other units. Each meter and meter connection will be treated as a separate water utility account for the purpose of the filed rules and regulations.

No division of the water service lateral to any lot or parcel of land shall be made for the extension and independent metering of the supply to an adjoining lot or parcel of land. Except for duplexes, no division of a water service lateral shall be made at the curb for separate supplies for two or more separate premises having frontage on any street or public service strip, whether owned by the same or different parties. Duplexes may be served by one lateral provided (1) individual metered service and disconnection is provided and (2) it is permitted by local ordinance.

Buildings used in the same business, located on the same parcel, and served by a single lateral may have the customer's water supply piping installed to a central point so that volume can be metered in one place.

The water utility may withhold approval of any application where full information of the purpose of such supply is not clearly indicated and set forth by the applicant property owner.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 2 of 10

Schedule No. X-1

Public Service Commission of Wisconsin

Amendment No. 23

Fox Crossing Utilities

Water Utility Operating Rules

Reconnection of Service

Where the water utility has disconnected service at the customer's request, a reconnection charge shall be made when the customer requests reconnection of service. See Schedule R-1 for the applicable rate.

A reconnection charge shall also be required from customers whose services are disconnected (shut off at curb stop box) because of nonpayment of bills when due. See Schedule R-1 for the applicable rate.

If reconnection is requested for the same location by any member of the same household, or, if a place of business, by any partner of the same business, it shall be considered as the same customer.

Temporary Metered Service, Meter, and Deposits

An applicant for temporary water service on a metered basis shall make and maintain a monetary deposit for each meter installed as security for payment for use of water and for such other charges which may arise from the use of the supply. A charge shall be made for setting the valve and furnishing and setting the meter. See Schedule BW-1 for the applicable rate.

Water for Construction

When water is requested for construction purposes or for filling tanks or other such uses, an application shall be made to the water utility, in writing, giving a statement of the amount of construction work to be done or the size of the tank to be filled, etc. Payment for the water for construction may be required in advance at the scheduled rates. The service lateral must be installed into the building before water can be used. No connection with the service lateral at the curb shall be made without special permission from the water utility. In no case will any employee of the water utility turn on water for construction work unless the contractor has obtained permission from the water utility.

Customers shall not allow contractors, masons, or other persons to take unmetered water from their premises without permission from the water utility. Any customer failing to comply with this provision may have water service discontinued and will be responsible for the cost of the estimated volume of water used.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

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Schedule No. X-1

Public Service Commission of Wisconsin

Amendment No. 23

Fox Crossing Utilities

Water Utility Operating Rules

Use of Hydrants

In cases where no other supply is available, permission may be granted by the water utility to use a hydrant. No hydrant shall be used until the proper meter and valve are installed. In no case shall any valve be installed or moved except by an employee of the water utility.

Before a valve is set, payment must be made for its setting and for the water to be used at the scheduled rates. Where applicable, see Schedule BW-1 for deposits and charges. Upon completing the use of the hydrant, the customer must notify the water utility to that effect.

Operation of Valves and Hydrants and Unauthorized Use of Water - Penalty

Any person who shall, without authority of the water utility, allow contractors, masons, or other unauthorized persons to take water from their premises, operate any valve connected with the street or supply mains, or open any fire hydrant connected with the distribution system, except for the purpose of extinguishing fire, or who shall wantonly damage or impair the same, shall be subject to a fine as provided by municipal ordinance. Utility permission for the use of hydrants applies only to such hydrants that are designated for the specific use.

Refunds of Monetary Deposits

All money deposited as security for payment of charges arising from the use of temporary water service on a metered basis, or for the return of a hydrant valve and fixtures if the water is used on an unmetered basis, will be refunded to the depositor on the termination of the use of water, the payment of all charges levied against the depositor, and the return of the water utility's equipment.

Service Laterals

No water service lateral shall be laid through any trench having cinders, rubbish, rock or gravel fill, or any other material which may cause injury to or disintegration of the service lateral, unless adequate means of protection are provided by sand filling or such other insulation as may be approved by the water utility. Service laterals passing through curb or retaining walls shall be adequately safeguarded by provision of a channel space or pipe casing not less than twice the diameter of the service connection. The space between the service lateral and the channel or pipe casing shall be filled and lightly caulked with an oakum, mastic cement, or other resilient material and made impervious to moisture.

In backfilling the pipe trench, the service lateral must be protected against injury by carefully hand tamping the ground filling around the pipe. There should be at least 6 inches of ground filling over the pipe, and it should be free from hard lumps, rocks, stones, or other injurious material.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION 3550-TW-100

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Public Service Commission of Wisconsin

Schedule No. X-1

Fox Crossing Utilities

Amendment No. 23

Water Utility Operating Rules

Service Laterals (continued)

All water service laterals shall be of undiminished size from the street main into the point of meter placement. Beyond the meter outlet valve, the piping shall be sized and proportioned to provide, on all floors, at all times, an equitable distribution of the water supply for the greatest probable number of fixtures or appliances operating simultaneously.

Replacement and Repair of Service Laterals

The service lateral from the main to and through the curb stop will be maintained and kept in repair and, when worn out, replaced at the expense of the water utility. The property owner shall maintain the service lateral from the curb stop to the point of use.

If an owner fails to repair a leaking or broken service lateral from the curb to the point of metering or use within such time as may appear reasonable to the water utility after notification has been served on the owner by the water utility, the water will be shut off and will not be turned on again until the repairs have been completed.

Abandonment of Service

If a property owner changes the use of a property currently receiving water service such that water service will no longer be needed in the future, the water utility may require the abandonment of the water service at the water main. In such case, the property owner may be responsible for all removal and/or repair costs, including the water main and the utility portion of the water service lateral.

Charges for Water Wasted Due to Leaks

See Wis. Admin. Code § PSC 185.35.

Thawing Frozen Service Laterals

See Wis. Admin. Code § PSC 185.88.

Curb Stop Boxes

The curb stop box is the property of the water utility. The water utility is responsible for its repair and maintenance. This includes maintaining, through adjustment, the curb stop box at an appropriate grade level where no direct action by the property owner or occupant has contributed to an elevation problem. The property owner is responsible for protecting the curb stop box from situations that could obstruct access to it or unduly expose it to harm. The water utility shall not be liable for failure to locate the curb stop box and shut off the water in case of a leak on the owner's premises.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

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Public Service Commission of Wisconsin

Schedule No. X-1

Fox Crossing Utilities

Amendment No. 23

Water Utility Operating Rules

Installation of Meters

Meters will be owned, furnished, and installed by the water utility or a utility-approved contractor and are not to be disconnected or tampered with by the customer. All meters shall be so located that they shall be protected from obstructions and permit ready access for reading, inspection, and servicing, such location to be designated or approved by the water utility. All piping within the building must be supplied by the owner. Where additional meters are desired by the owner, the owner shall pay for all piping. Where applicable, see Schedule Am-1 for rates.

Repairs to Meters

Meters will be repaired by the water utility, and the cost of such repairs caused by ordinary wear and tear will be borne by the water utility.

Repair of any damage to a meter resulting from the carelessness of the owner of the premises, owner's agent, or tenant, or from the negligence of any one of them to properly secure and protect same, including any damage that may result from allowing a water meter to become frozen or to be damaged from the presence of hot water or steam in the meter, shall be paid for by the customer or the owner of the premises.

Service Piping for Meter Settings

Where the original service piping is installed for a new metered customer, where existing service piping is changed for the customer's convenience, or where a new meter is installed for an existing unmetered customer, the owner of the premises at his/her expense shall provide a suitable location and the proper connections for the meter. The meter setting and associated plumbing shall comply with the water utility's standards. The water utility should be consulted as to the type and size of the meter setting.

Turning on Water

The water may only be turned on for a customer by an authorized employee of the water utility. Plumbers may turn the water on to test their work, but upon completion must leave the water turned off.

Sprinkling Restrictions and Emergency Water Conditions

Where the municipality has a policy regarding sprinkling restrictions and/or emergency water conditions, failure to comply with such may result in disconnection of service

See Wis. Admin. Code § PSC 185.37.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

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Public Service Commission of Wisconsin

Schedule No. X-1

Fox Crossing Utilities

Amendment No. 23

Water Utility Operating Rules

Failure to Read Meters

Where the water utility is unable to read a meter, the fact will be plainly indicated on the bill, and either an estimated bill will be computed or the minimum charge applied. The difference shall be adjusted when the meter is again read, that is, the bill for the succeeding billing period will be computed with the gallons or cubic feet in each block of the rate schedule doubled, and credit will be given on that bill for the amount of the bill paid the preceding period. Only in unusual cases shall more than three consecutive estimated or minimum bills be rendered.

If the meter is damaged (see Surreptitious Use of Water) or fails to operate, the bill will be based on the average use during the past year, unless there is some reason why the use is not normal. If the average use cannot be properly determined, the bill will be estimated by some equitable method.

See Wis. Admin. Code § PSC 185.33.

Complaint Meter Tests

See Wis. Admin. Code § PSC 185.77.

Inspection of Premises

During reasonable hours, any officer or authorized employee of the water utility shall have the right of access to the premises supplied with service for the purpose of inspection or for the enforcement of the water utility's rules and regulations. Whenever appropriate, the water utility will make a systematic inspection of all unmetered water taps for the purpose of checking waste and unnecessary use of water.

See Wis. Stat. § 196.171.

Vacation of Premises

When premises are to be vacated, the water utility shall be notified, in writing, at once, so that it may remove the meter and shut off the water supply at the curb stop. The owner of the premises shall be liable for prosecution for any damage to the water utility's property. See "Abandonment of Service" in Schedule X-1 for further information.

Deposits for Residential Service

See Wis. Admin. Code § PSC 185.36.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

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Sheet No. 7 of 10

Schedule No. X-1

Public Service Commission of Wisconsin

Amendment No. 23

Fox Crossing Utilities

Water Utility Operating Rules

Deposits for Nonresidential Service

See Wis. Admin. Code § PSC 185.361.

Deferred Payment Agreement

See Wis. Admin. Code § PSC 185.38.

Dispute Procedures

See Wis. Admin. Code § PSC 185.39.

Disconnection and Refusal of Service

See Wis. Admin. Code § PSC 185.37.

The following is an example of a disconnection notice that the utility may use to provide the required notice to customers.

DISCONNECTION NOTICE

Dear Customer:

The bill enclosed with this notice includes your current charge for water utility service and your previous unpaid balance.

You have 10 days to pay the water utility service arrears or your service is subject to disconnection.

If you fail to pay the service arrears or fail to contact us within the 10 days allowed to make reasonable deferred payment arrangement or other suitable arrangement, we will proceed with disconnection action.

To avoid the inconvenience of service interruption and an additional charge of (amount) for reconnection, we urge you to pay the full arrears IMMEDIATELY AT ONE OF OUR OFFICES.

If you have entered into a Deferred Payment Agreement with us and have failed to make the deferred payments you agreed to, your service will be subject to disconnection unless you pay the entire amount due within 10 days.

If you have a reason for delaying the payment, call us and explain the situation.

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Public Service Commission of Wisconsin

Schedule No. X-1

Fox Crossing Utilities

Amendment No. 23

Water Utility Operating Rules

Disconnection and Refusal of Service (continued)

DISCONNECTION NOTICE (continued)

PLEASE CALL THIS TELEPHONE NUMBER, (telephone number), IMMEDIATELY IF:

1. You dispute the notice of delinquent account
2. You have a question about your water utility service arrears.
3. You are unable to pay the full amount of the bill and are willing to enter into a deferred payment agreement with us.
4. There are any circumstances you think should be taken into consideration before service is discontinued.
5. Any resident is seriously ill.

Illness Provision: If there is an existing medical emergency in your home and you furnish the water utility with a statement signed by either a licensed Wisconsin physician or a public health official, we will delay disconnection of service up to 21 days. The statement must identify the medical emergency and specify the period of time during which disconnection will aggravate the existing emergency.

Deferred Payment Agreements: If you are a residential customer and, for some reason, you are unable to pay the full amount of the water utility service arrears on your bill, you may contact the water utility to discuss arrangements to pay the arrears over an extended period of time.

This time payment agreement will require:

1. Payment of a reasonable amount at the time the agreement is made.
2. Payment of the remainder of the outstanding balance in monthly installments over a reasonable length of time.
3. Payment of all future water utility service bills in full by the due date.

In any situation where you are unable to resolve billing disputes or disputes about the grounds for proposed disconnection through contacts with our water utility, you may make an appeal to the Public Service Commission of Wisconsin by calling (800) 225-7729.

(WATER UTILITY NAME)

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

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Sheet No. 9 of 10

Public Service Commission of Wisconsin

Schedule No. X-1

Fox Crossing Utilities

Amendment No. 23

Water Utility Operating Rules

Collection of Overdue Bills

An amount owed by the customer may be levied as a tax as provided in Wis. Stat. § 66.0809.

Surreptitious Use of Water

When the water utility has reasonable evidence that a person is obtaining water, in whole or in part, by means of devices or methods used to stop or interfere with the proper metering of the water utility service being delivered, the water utility reserves the right to estimate and present immediately a bill for unmetered service as a result of such interference, and such bill shall be payable subject to a 24-hour disconnection of service. If the water utility disconnects the service for any such reason, the water utility will reconnect the service upon the following conditions:

- A. The customer will be required to deposit with the water utility an amount sufficient to guarantee the payment of the bills for water utility service.
- B. The customer will be required to pay the water utility for any and all damages to water utility equipment resulting from such interference with the metering.
- C. The customer must further agree to comply with reasonable requirements to protect the water utility against further losses.

See Wis. Stat. §§ 98.26 and 943.20.

Repairs to Mains

The water utility reserves the right to shut off the water supply in the mains temporarily to make repairs, alterations, or additions to the plant or system. When the circumstances will permit, the water utility will give notification, by newspaper publication or otherwise, of the discontinuance of the water supply. No credit will be allowed to customers for such temporary suspension of the water supply.

See Wis. Admin. Code § PSC 185.87.

Duty of Water Utility with Respect to Safety of the Public

It shall be the duty of the water utility to see that all open ditches for water mains, hydrants, and service laterals are properly guarded to prevent accident to any person or vehicle, and at night there shall be displayed proper signal lighting to insure the safety of the public.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

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Sheet No. 10 of 10

Public Service Commission of Wisconsin

Schedule No. X-1

Amendment No. 23

Fox Crossing Utilities

Water Utility Operating Rules

Handling Water Mains and Service Laterals in Excavation Trenches

Contractors must call Digger's Hotline and ensure a location is done to establish the existence and location of all water mains and service laterals as provided in Wis. Stat. § 182.0175. Where water mains or service laterals have been removed, cut, or damaged during trench excavation, the contractors must, at their own expense, cause them to be replaced or repaired at once. Contractors must not shut off the water service laterals to any customer for a period exceeding 6 hours.

Protective Devices

- A. Protective Devices in General: The owner or occupant of every premise receiving water supply shall apply and maintain suitable means of protection of the premise supply and all appliances against damage arising in any manner from the use of the water supply, variation of water pressure, or any interruption of water supply. Particularly, such owner or occupant must protect water-cooled compressors for refrigeration systems by means of high and/or low pressure safety cutout devices. There shall likewise be provided means for the prevention of the transmission of water ram or noise of operation of any valve or appliance through the piping of their own or adjacent premises.
- B. Relief Valves: On all "closed systems" (i.e., systems having a check valve, pressure regulator, reducing valve, water filter, or softener), an effective pressure relief valve shall be installed at or near the top of the hot water tank or at the hot water distribution pipe connection to the tank. No stop valve shall be placed between the hot water tank and the relief valve or on the drain pipe. See applicable plumbing codes.
- C. Air Chambers: An air chamber or approved shock absorber shall be installed at the terminus of each riser, fixture branch, or hydraulic elevator main for the prevention of undue water hammer. The air chamber shall be sized in conformance with local plumbing codes. Where possible, the air chamber should be provided at its base with a valve for water drainage and replenishment of air.

Cross-Connections

Every person owning or occupying a premise receiving municipal water supply shall maintain such municipal water supply free from any connection, either of a direct or of an indirect nature, with a water supply from a foreign source or of any manner of connection with any fixture or appliance whereby water from a foreign supply or the waste from any fixture, appliance, or waste or soil pipe may flow or be siphoned or pumped into the piping of the municipal water system.

See Wis. Admin. Code § NR 811.09.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Public Service Commission of Wisconsin

Schedule No. X-2

Fox Crossing Utilities

Amendment No. 23

Water Main Extension Rule

Water mains will be extended for new customers on the following basis:

- A. Where the cost of the extension is to immediately be collected through assessment by the municipality against the abutting property, the procedure set forth under Wis. Stat. § 66.0703 will apply, and no additional customer contribution to the utility will be required.
- B. Where the municipality is unwilling or unable to make a special assessment, the extension will be made on a customer-financed basis as follows:
 - 1. The applicant(s) will advance as a contribution in aid of construction the total amount equivalent to that which would have been assessed for all property under A.
 - 2. Part of the contribution required in B 1. will be refundable. When additional customers are connected to the extended main within 10 years of the date of completion, contributions in aid of construction will be collected equal to the amount which would have been assessed under A. for the abutting property being served. This amount will be refunded to the original contributor(s). In no case will the contributions received from additional customers exceed the proportionate amount which would have been required under A., nor will it exceed the total assessable cost of the original extension.
- C. When a customer connects to a transmission main or connecting loop installed at utility expense within 10 years of the date of completion, there will be a contribution required of an amount equivalent to that which would have been assessed under A.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION 3550-TW-100

RATE FILE

Sheet No. 1 of 1

Schedule No. X-3

Amendment No. 23

Public Service Commission of Wisconsin

Fox Crossing Utilities

Water Main Installations in Platted Subdivisions

Application for installation of water mains in regularly platted real estate development subdivisions shall be filed with the utility.

If the developer, or a contractor employed by the developer, is to install the water mains (with the approval of the utility), the developer shall be responsible for the total cost of construction.

If the utility or its contractor is to install the water mains, the developer shall be required to advance to the utility, prior to the beginning of the construction, the total estimated cost of the extension. If the final costs exceed estimated costs, an additional billing will be made for the balance of the cost due. This balance is to be paid within 30 days. If final costs are less than estimated, a refund of the overpayment will be made by the water utility.

EFFECTIVE: April 17, 2017
PSCW AUTHORIZATION: 3550-TW-100

Exhibit C

Existing Permitted Wells

Parcel Number	Owner	Address City Zip
1 006-0326-01	Steven Edward Rusch	9207 Clayton Ave Neenah 54956
2 006-0329-01	Keith/Lynn Foegen	9147 Clayton Ave Neenah 54956
3 006-0330-01	Adam Boutwell	9189 Clayton Ave Neenah 54956
4 006-0340-01	Donald/Julie Judnic	9075 Clayton Ave Neenah 54956
5 006-0340-02	Kim Maurer	9045 Clayton Ave Neenah 54956
6 006-0346-03	George/Johanna Heider	8909 Clayton Ave Neenah 54956
7 006-0346-04	James/Lucy Krasin	8935 Clayton Ave Neenah 54956
8 006-0346-05	Paul/Linda Niemi	8923 Clayton Ave Neenah 54956
9 006-0347	Keith Orcutt/Linda Galow	8951 Clayton Ave Neenah 54956
10 006-0348-01	Town of Clayton	8879 Clayton Ave Neenah 54956
11 006-0348-02	Brad A Swiontek	8869 Clayton Ave Neenah 54956
12 006-0348-07	James/Terry Calder	8825 Clayton Ave Neenah 54956
13 006-0350-01	Jeffrey/Tori Straw	8795 Clayton Ave Neenah 54956
14 006-0351-02	Karen Thorne	8759 Clayton Ave Neenah 54956
15 006-0363-01	Richard/Christine Knapinski	8605 Clayton Ave Neenah 54956
16 006-0363-02	Douglas Malliet	8635 Clayton Ave Neenah 54956
17 006-0363-03	Jerome Eid	8611 Clayton Ave Neenah 54956
18 006-0363-04	Dallas Cross	8657 Clayton Ave Neenah 54956
19 006-0363-05	Thomas/Wendy Kiesow	8673 Clayton Ave Neenah 54956
20 006-0363-06	Carmen/Nicole Granato	8649 Clayton Ave Neenah 54956
21 006-0370-05	Carl/Nancy Knox	8527 Clayton Ave Neenah 54956
22 006-0616	Jane Van de Hey-Waddington	8497 Clayton Ave Neenah 54956
23 006-0630-01	Kenneth/Terri Gruetzmacher	8249 Clayton Ave Neenah 54956
24 006-0636-01	Ronald/Bonnie Muthig	8197 Clayton Ave Neenah 54956
25 006-0338-02	Marvin/Joyce Meyer	2828 Fairview Rd Neenah 54956
26 006-0338-03	David/Robin Hamilton	2842 Fairview Rd Neenah 54956
27 006-0338-04	Larry/LeAnn Williams	2818 Fairview Rd Neenah 54956
28 006-0338-06	Thomas/Sandra Eckstein	2878 Fairview Rd Neenah 54956
29 006-0339-02	John/Constance Podolski	2692 Fairview Rd Neenah 54956
30 006-0339-02-01	Virginia Walotka	2722 Fairview Rd Neenah 54956
31 006-0339-03	Kyle Cada/Monica Wilczopolski	2772 Fairview Rd Neenah 54956
32 006-0339-03-01	Randy Marquardt	2784 Fairview Rd Neenah 54956
33 006-0339-04	Brian/Victoria Phillips	2750 Fairview Rd Neenah 54956
34 006-0344-01	Justin Seidl	2606 Fairview Rd Neenah 54956
35 006-0344-02	Jon VanMarter	2612 Fairview Rd Neenah 54956
36 006-0344-03	Daneal Silvers/Andrea Spampinato	2620 Fairview Rd Neenah 54956
37 006-0344-04	Patrick/Susan McGinnis	2636 Fairview Rd Neenah 54956
38 006-0344-06	Michael Flunker/Tiffany Mascal	2632 Fairview Rd Neenah 54956
39 006-0345-01	Kevin/Lynnnann Gast	2672 Fairview Rd Neenah 54956
40 006-0345-02	Michael Cotter	2662 Fairview Rd Neenah 54956
41 006-0345-03	Michael Schroeder	2684 Fairview Rd Neenah 54956

42 006-0346	Guenter Ruebekeil	2528 Fairview Rd Neenah 54956
43 006-0346-01	Judy Wittmann	2584 Fairview Rd Neenah 54956
44 006-0346-02	Randall/Melanie Dumke	2594 Fairview Rd Neenah 54956
45 006-0346-06	Willard Shepard	2570 Fairview Rd Neenah 54956
46 006-0346-08	Brian/Kathy Blumenberg	2554 Fairview Rd Neenah 54956
47 006-0346-09	Richard/Jean Tesch	2536 Fairview Rd Neenah 54956
48 006-0348-03	Joseph/Brenda Wilz	2565 Fairview Rd Neenah 54956
49 006-0348-05	Pershing/Lynette Cox	2565 Fairview Rd Neenah 54956
50 006-0348-06	Gary/Kathleen Reader	2543 Fairview Rd Neenah 54956
51 006-0348-08	Rod/Gail Evers	2535 Fairview Rd Neenah 54956
52 006-0349	Jennifer Olson	2687 Fairview Rd Neenah 54956
53 006-0349-01	Jeffrey/Jessica Hardell	2673 Fairview Rd Neenah 54956
54 006-0349-01-02	Jim/Holly Polfuss	2651 Fairview Rd Neenah 54956
55 006-0349-02	Gregory Enerson	2603 Fairview Rd Neenah 54956
56 006-0349-02-01	Richard/Sandra Custer	2645 Fairview Rd Neenah 54956
57 006-0349-03	Jennifer Olson/Jacqueline Maynard	2685 Fairview Rd Neenah 54956
58 006-0352-02	Alan/Deborah Manteufel	2761 Fairview Rd Neenah 54956
59 006-0352-03	Mary Jane Volkman	2775 Fairview Rd Neenah 54956
60 006-0352-04	Max Rasmussen	2789 Fairview Rd Neenah 54956
61 006-0372	Karen Borchert Rev Tst	2915 Fairview Rd Neenah 54956
62 006-0373-01	Lynn/Cindy Stacker	3065 Fairview Rd Neenah 54956
63 006-0378-01	Paul Heider	3209 Fairview Rd Neenah 54956
64 006-0362-01-03	VH Enterprises	2716 County Rd II Neenah 54956
65 006-0362-03	VHE II-1 LLC	2704 County Rd II Neenah 54956
66 006-0369-02	VHE II-1 LLC	2678 County Rd II Neenah 54956
67 006-0369-03	VHE II-1 LLC	2670 County Rd II Neenah 54956
68 006-0369-04	VHE II-1 LLC	2686 County Rd II Neenah 54956
69 006-0369-05	Irvin/Barbara Allen	2692 County Rd II Neenah 54956
70 006-0615	James/Bonnie Salm	2535 County Rd II Neenah 54956
71 006-0617	John F Farrell Rev Tst	2689 County Rd II Neenah 54956
72 006-0620-01	Aaron Klockzein	2757 County Rd II Neenah 54956
73 006-0620-02	Luke/Patricia St Pierre	2715 County Rd II Neenah 54956
74 006-0634-01	Hugh/Mary Jane Davies	2604 Larsen Rd Neenah 54956
75 006-0638-04	Barbara Bombinski	2595 Larsen Rd Neenah 54956
76 006-0638-03	Jeremy/Amanda Dassler	2615 Larsen Rd Neenah 54956

EXHIBIT F

INTERMUNICIPAL AGREEMENT BETWEEN THE TOWN OF CLAYTON AND THE VILLAGE OF FOX CROSSING

This Agreement entered into this ____ day of _____, 2020, by and between the Town of Clayton, hereinafter referred to as "Clayton", a municipal corporation organized and existing under the laws of the State of Wisconsin, and the Village of Fox Crossing, hereinafter referred to as the "Village", a municipal corporation organized and existing under the laws of the State of Wisconsin.

WHEREAS, Clayton has filed an action with the Circuit Court for Winnebago County (Case No. 17-CV-1027) challenging the Village's annexation of lands commonly known as the "Prince Annexation" pursuant to Wis. Stat. § 66.0203(3)(a); and

WHEREAS, Clayton has filed a petition with the Circuit Court for Winnebago County (Case No. 18 CV 990) for incorporation of a portion of the Town as a Village pursuant to Wis. Stat. § 66.0203(3)(a); and

WHEREAS, the Village has intervened in Case Number 18 CV 990 regarding the validity of Clayton's incorporation petition; and

WHEREAS, Wis. Stat. § 66.0225 (2) allows parties to any action, proceeding or appeal in court for the purpose of testing the validity or invalidity of any annexation, incorporation, consolidation or detachment, to enter into a written stipulation, compromising and settling any such litigation and determining the common boundary line between the municipalities; and

WHEREAS, Wis. Stat. § 66.0225 (3) allows parties to any action, proceeding or appeal in court for the purpose of testing the validity or invalidity of any annexation, incorporation, consolidation or detachment to enter into an agreement under s. 66.0301 (6) or s. 66.0307 as part of a stipulation to settle the boundary action; and

WHEREAS, the Parties desire to work together to arrive at a mutually agreeable resolution to outstanding issues related to the annexation and incorporation disputes and thereby avoid the delay, expense, and uncertainty resulting from protracted litigation; and

WHEREAS, the Parties have entered into negotiations related to provision of utility services by the Village to Clayton, and the Parties have agreed to terms for provision of sanitary sewer and municipal water service under terms set forth in the "Agreement for the Conveyance of Wastewater between the Town of Clayton, Town of Clayton Sanitary District No. 1 and The Village of Fox Crossing" attached hereto as Exhibit A and the "Agreement for the Provision of

Water Service between the Town of Clayton and the Village of Fox Crossing” attached hereto as Exhibit B.

NOW, THEREFORE, in consideration of the mutual promises herein stated, relief from the uncertainty and expense of litigation, and other good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

I. SETTLEMENT OF LITIGATION.

Pursuant to Wis. Stat. § 66.0225, the parties shall execute and submit a stipulated settlement to the Court for resolution of the above-referenced lawsuits (with the exception of the contested incorporation matter – the parties may continue to maintain their current respective positions or any other position in said matter) by the entry of a judgment incorporating by reference the terms of this Agreement.

II. CONSIDERATION.

- A. As and for consideration for utility service and boundary settlement, Clayton shall pay the Village the sum of Eleven Million Five Hundred Thousand Dollars (\$11,500,000) (the “Comprehensive Imbursement”).
- B. The Comprehensive Imbursement shall be allocated as follows:
 - 1. Payment for Sanitary Sewer Capacity: \$5,750,000.
 - 2. Payment for Water Utility Capacity: \$5,750,000.
- C. The Comprehensive Imbursement shall be paid in two (2) installments. The first installment in the sum of Six Million Five Hundred Thousand (\$6,500,000) Dollars shall be paid within ninety-five (95) days of the date of execution of this Agreement. The second installment in the sum of Five Million (\$5,000,000) Dollars plus interest accruing at a rate of three (3%) percent per year shall be paid within two (2) years of the date of execution of this Agreement. There shall be no prepayment penalty.
- D. As and for consideration for the Town’s agreement to dismiss an action Winnebago County Case No. 17-CV-1027 challenging the Village’s annexation of lands, the Village shall purchase the Town owned lands located within the annexed territory free and clear of encumbrances. The purchase price shall be the sum paid by the Town to acquire the subject

land, in the sum of Seven Hundred Sixteen Thousand (\$716,000.00) Dollars¹, which shall be paid within ninety-five (95) days of the date of execution of this Agreement.

III. ANNEXATIONS AND ATTACHMENTS.

- A. Except for the lands referenced in subsection III B below, the Village shall not accept or grant any annexation of lands within Clayton depicted within a red border on Exhibit C the “Boundary Adjustment Area”) for a period of ten (10) years following the date of the Court's approval of the Stipulation provided for in Section I of this Agreement, without the written approval of Clayton.
- B. The Village may accept annexation petition(s) for annexation of lands within Clayton depicted within an orange border on Exhibit C (the “Annexable Area”) at any time. Clayton shall not object to the annexation of these lands at any time in any manner. If Clayton incorporates, Clayton shall agree to detach the land depicted within an orange border on Exhibit C upon request by said land owner pursuant to Wis. Stat. §66.0227. Neither Clayton nor the Town of Clayton Sanitary District No. 1 shall provide sewer or water service to the land depicted within an orange border in Exhibit C without written approval of the Village; the Town of Clayton Sanitary District No. 1 shall be a signatory this this agreement as evidence of its consent and agreement to this provision.

IV. EXTRATERRITORIAL JURISDICTION

There shall be a ten (10) year moratorium on the Village's exercise of extraterritorial zoning authority and extraterritorial plat approval authority within the Town of Clayton. During this moratorium period, all rezonings and land divisions within the Town shall be deemed approved by the Village. This moratorium shall not be considered a waiver under Wis. stat. §236.10 (5). Rather, this moratorium shall prohibit the Village from denying extraterritorial subdivision or rezoning applications within the Town under the remaining sections of Wis. stat. §236.10 for the designated term of this Agreement. Notwithstanding the moratorium, all rezoning and land division applications shall be submitted to the Village for comment at least twenty (20) days before the Town takes formal action on any rezoning or land division application.

¹ Purchase price based upon Town's cost of acquisition - \$25,000/acre x 28.64 acres.

V. ENFORCEMENT OF AGREEMENT.

- A. This Agreement shall be for ten (10) years and shall be enforceable through the Circuit Court for Winnebago County. However, nothing herein shall limit the parties, through mutual agreement to consent to any issue being resolved by written agreement of the affected parties or through mediation or arbitration subject to the final approval of the circuit court.
- B. This Agreement shall apply equally to the Town of Clayton and to any successor incorporated municipality created to govern the territory of Clayton. References to Clayton in this Agreement shall be deemed to include its successor entity.

VI. PAYMENT OF ATTORNEY FEES.

Clayton agrees to pay the Village's actual attorney's fees paid by the Village to the Godfrey & Kahn Law Firm and the Herrling Clark Law Firm expended for the purpose of objecting to and settlement of the practical implementation of that certain "Stipulation and Final Order Between the District and the Department in Case No. 17-CV-0381 Consent Order" entered into between the Town of Clayton Sanitary District No. 1 and the Department of Natural Resources within the context of a Decision by the Department of Natural Resources affecting what is referred to internally as "Project No. S-2018-0760" in the sum of \$215,858.26. Clayton will also pay any additional attorney's fees of the Village actually paid by the Village to the Godfrey & Kahn Law Firm and the Herrling Clark Law Firm related to the subject matter hereof provided bills for said attorney's fees are received by the Village on or before March 1, 2020 and provided the grand total of all reimbursable attorney's fees may not exceed \$220,000.00. Payment shall be made within 95 days from the date of this Agreement.

VII. SEVERABLE PROVISIONS.

If any clause, provision, or section of this Agreement is declared to be invalid by any Court of competent jurisdiction, the invalidity of such clause, provision or section shall not affect any of the remaining provisions of this Agreement provided all essential terms and purposes of the agreement remain substantially valid.

VIII. ANCILIARY AGREEMENTS.

The validity of this agreement is contingent upon the parties' contemporaneous signing, delivery of, and continuing validity of various ancillary agreements; namely the "Agreement for the Conveyance of Wastewater between the Town of Clayton, Town of Clayton Sanitary District No. 1 and The Village of Fox Crossing" attached hereto as Exhibit A and the "Agreement for the Provision of Water Service between the Town of Clayton and the Village of Fox Crossing" attached hereto as Exhibit B and that certain "Fox West Sewerage Commission Joinder Agreement" entered into by and between the Town of Clayton, Town of Clayton Sanitary District No. 1 and third-party Fox West Sewerage Commission on even date herewith.

DATED THIS 27 DAY OF January, 2020

VILLAGE OF FOX CROSSING

By: Dale A. Youngquist
Dale A. Youngquist, President

Attest:

By: Karen Backman
Karen Backman, Village Clerk

DATED THIS 15TH DAY OF JANUARY, 2020

TOWN OF CLAYTON

By: Russell Geise
Russell Geise, Chair

Attest: Holly Stevens
Holly Stevens, Town Clerk

DATED THIS 15TH DAY OF JANUARY, 2020

**TOWN OF CLAYTON
SANITARY DISTRICT
NO. 1**

By: 
Russell Geise, President


Attest: 
Holly Stevens, Clerk

EXHIBIT A

**Agreement for the Conveyance of Wastewater between the Town of Clayton, Town
of Clayton Sanitary District No. 1 and The Village of Fox Crossing**

EXHIBIT B

**Agreement for the Provision of Water Service between the Town of Clayton and the
Village of Fox Crossing**

EXHIBIT C

Boundary Adjustment Area (in red) and Annexable Area (in orange)

