

Water Supply Service Area Plan

Kaukauna Utilities

KAUKA25003 | December 29, 2025

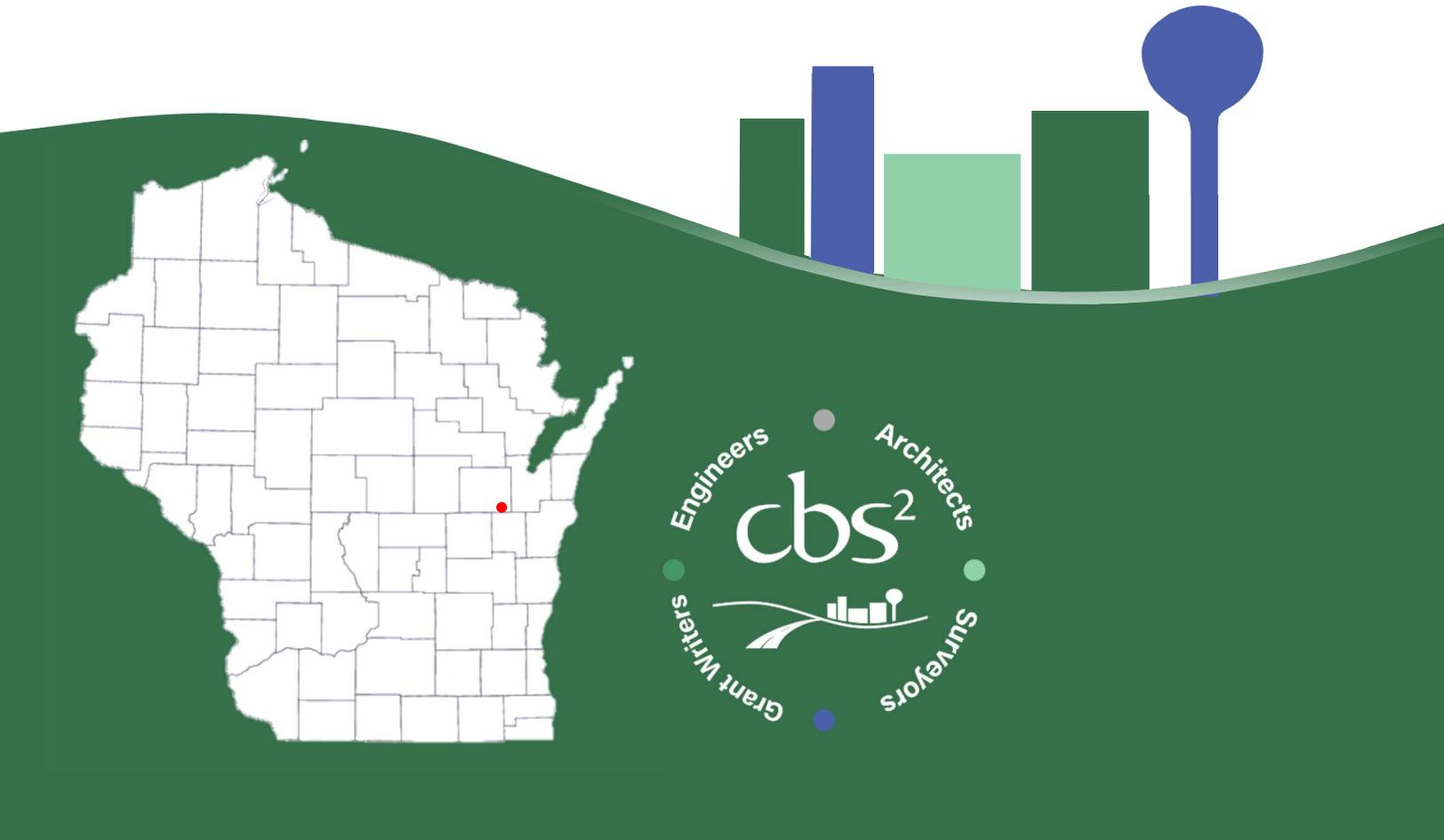


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1 GENERAL INFORMATION

1.1 DESCRIPTION

Kaukauna Utilities serves the City of Kaukauna with drinking water. Kaukauna Utilities has an extensive water system with over 100 miles of water main, two elevated storage tanks, three ground storage reservoirs, and five wells utilizing three pressure filters for removal of iron, manganese, and radium. Kaukauna Utilities provides service to approximately 7,000 customers. Residential customers account for most of the water demand. A map of the existing water system facilities is shown in Figure 2 in Appendix A.

The purpose of this report is to meet Wisconsin Administrative Code NR854 which requires communities serving a population of more than 10,000 people to analyze their water supply system to ensure that the water supply system can provide adequate supply of water to their customers.

1.2 LOCATION

Kaukauna Utilities is located in the City of Kaukauna, WI, which is in Outagamie County in northeastern Wisconsin. A location map of the City of Kaukauna is shown in Figure 1 in Appendix A.

2 WATER SUPPLY

The existing water supply system consists of five municipal wells. The wells can supply a total of 3,225 gpm (4.6 million gallons per day (MGD)) if run concurrently and continuously for 24 hours. The well capacity is shown in **Table 1**.

Table 1: Well Information

Well	Current DNR Approved Well Capacity (GPD)	Maximum DNR-Allowed Pumping Rate (gpm)*	Current Well Pumping Rate (gpm)	Proposed Well Capacity (gpm)
Well 4	864,000	600	555	600
Well 5	360,000	250	315	500
Well 8	756,000	525	475	525
Well 9	1,872,000	1,300	1,300	1,300
Well 10	756,000	525	580	580
Total Well Capacity	4,608,000		3,225	3,505

*Calculated assuming a 24-hour pumping day.

Kaukauna Utilities currently treats raw water at three water treatment plants. The water treatment plants currently utilize filtration for iron, manganese, and radium removal. The radium removal process requires the addition of potassium permanganate and manganese sulfate. Kaukauna Utilities is currently designing a Water System Improvements project that includes upgrading the water treatment process. The new treatment process includes filtration for iron removal, addition of potassium permanganate and manganese sulfate for radium removal, and reverse osmosis for total dissolved solids reduction. A schematic of the new treatment system is shown in Figure 3 in Appendix A.



The raw water quality data for the wells are shown in

Table 2.

Table 2: Raw Water Quality Data

Well No.	Iron (mg/L)	Strontium (mg/L)	Sulfate (mg/L)	Hardness as CaCO3 (mg/L)	Total Dissolved Solids (mg/L)	Sample Date
4	0.61	24	583	754	1,088	2/22/2023
5	0.81	21	607	778	1,173	2/22/2023
10	0.59	27	381	536	802	2/22/2023
8	0.55	20	441	565	862	2/22/2023
9	0.53	26	451	619	918	2/22/2023

3 POPULATION AND WATER DEMAND PROJECTIONS

Past population census data and population projection estimates for the City of Kaukauna are shown in **Table 3**. The past population census data are from the U.S. Census Bureau and they predict the City's population will increase annually at a steady rate of 1.7%.

Table 3: Population Data for the City of Kaukauna

1990 Population	2000 Population	2010 Population	2020 Population	2025 Projection	2030 Projection	2035 Projection	2040 Projection
12,000	13,000	15,500	17,100	18,600	20,200	22,020	24,000

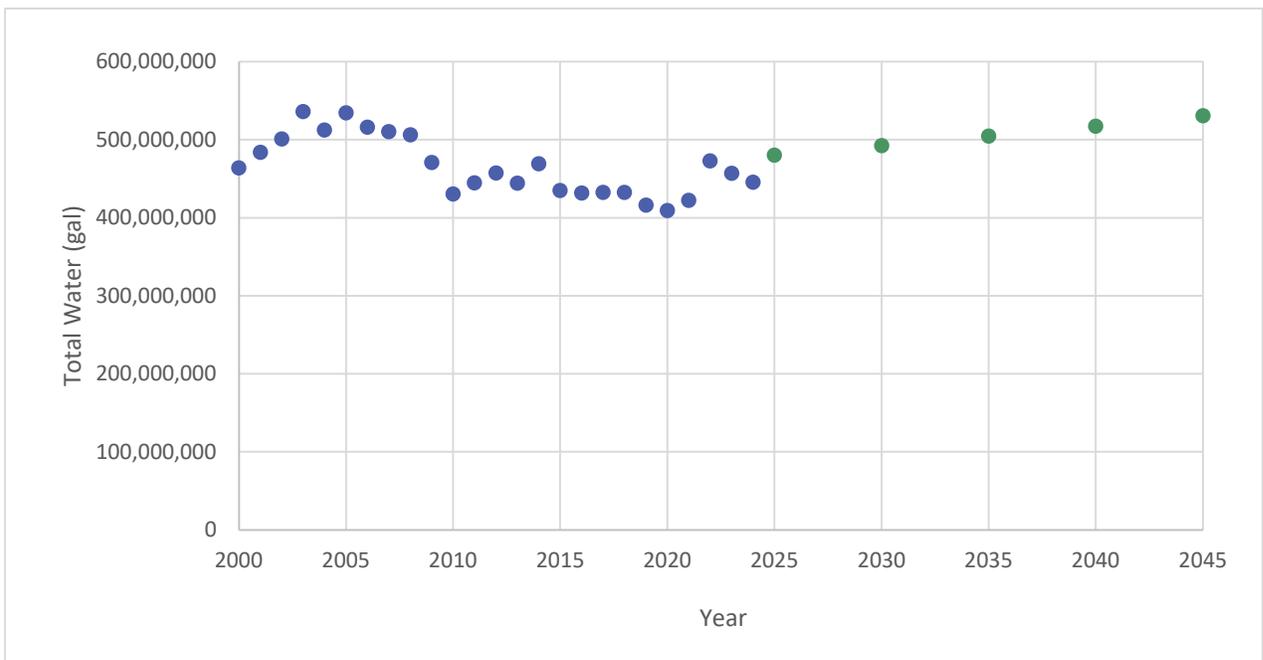
Kaukauna Utilities should also anticipate increased water demand over the next 20 years. This demand includes residential development to the southeast and industrial development to the north. The water demand projections were calculated assuming a 0.5% annual increase in water demand, following discussions with Kaukauna Utilities. The water demand projections are shown in **Table 4** and **Graph 1**.

Table 4: Water Demand Projections

Year	Total Water Demand (gal)	Average Day Demand (gal)	Maximum Day Demand (gal)
2000	464,305,000	1,272,000	2,252,000
2001	484,189,000	1,327,000	1,961,000
2002	501,160,000	1,373,000	2,011,000
2003	536,283,000	1,470,000	2,204,000
2004	512,887,000	1,405,000	3,026,000
2005	534,648,000	1,465,000	2,336,000
2006	516,376,000	1,415,000	2,495,000
2007	510,719,000	1,399,000	2,261,000



2008	506,623,000	1,388,000	2,556,000
2009	471,048,000	1,291,000	2,135,000
2010	430,703,000	1,180,000	2,308,000
2011	444,951,000	1,219,000	2,022,000
2012	457,694,000	1,254,000	1,862,000
2013	444,685,000	1,218,000	1,929,000
2014	469,407,000	1,286,000	1,911,000
2015	435,258,500	1,192,000	2,057,000
2016	432,127,000	1,184,000	2,064,000
2017	432,714,000	1,186,000	2,288,000
2018	432,995,000	1,186,000	2,030,000
2019	416,569,000	1,141,000	2,192,000
2020	409,484,000	1,122,000	1,827,000
2021	422,636,000	1,158,000	1,922,000
2022	473,362,000	1,297,000	2,213,000
2023	457,152,000	1,252,471	1,905,000
2024	445,902,000	1,221,649	2,103,000
2025	480,499,000	1,316,000	2,317,000
2030	492,631,000	1,350,000	2,376,000
2035	505,071,000	1,384,000	2,435,000
2040	517,824,000	1,419,000	2,497,000
2045	530,900,000	1,455,000	2,560,000



Graph 1: Annual Water Demand Projections



4 WATER SUPPLY ANALYSIS & RECOMMENDATIONS

4.1 ANALYSIS

The Public Service Commission (PSC) uses Firm Well Capacity (FWC) to determine how the water supply system will perform under different demand conditions. Firm Well Capacity is the total capacity of the water supply system with the largest well out of service. In the case of Kaukauna Utilities, this would be Well 9, which operates at 1,300 gpm. This formula shows the total FWC of Kaukauna Utilities at 1,925 gpm (2.7 MGD pumping at 24 hours per day; 2.0 MGD pumping at 18 hours per day).

The PSC uses four equations to study a water supply system's ability to provide for different demand conditions. All equations use FWC for the water supplied during an event. Equations 3 and 4 also include storage in the water towers as a supply for the events considered. Equation 1 studies maximum day demand in gallons per minute. Equation 2 looks at average day demand in gallons per minute. Equation 3 includes a fire flow event on a day of maximum demand in gallons per minute. Equation 4 considers maximum hour demand in gallons per minute. These calculations are included in **Appendix B**. A summary of the water demand calculations, for both the current system and future demands for the year 2045 are included in **Table 5**. If the number is positive, then Kaukauna Utilities has excess capacity in that category. If the number is negative, the Utility is deficient in that category, which means Kaukauna Utilities could not supply water under that demand condition with the largest well out of service.

Table 5: Water Demand Calculations Summary

Scenario	Equation 1 – Maximum Day (gpm)	Equation 2 – Average Day (gpm)	Equation 3 – Fire Flow on Maximum Day (gpm)	Equation 4 – Maximum Hour (gpm)
Current 2025 – FWC	131	449	5,456	24,276
Future 2045 – FWC	-120	230	5,205	23,747
Future – With Well 9	1,230	1,580		

4.2 WATER CAPACITY RECOMMENDATIONS

The PSC calculations indicate that the system's storage and well capacity is currently sufficient to provide for maximum day demand, average day demand, a fire flow event, and maximum hour demand. The water storage and well capacity is also sufficient to provide average day, fire flow, and maximum hour demand for the projected demands in 2045. It is projected that the existing system will not be able to provide maximum day demand in the year 2045 with Well 9 out of service.

The above calculations for maximum day demand were made by using a pumping time of 18 hours per day. This 18-hour pumping time leads to the conclusion that Kaukauna Utilities cannot provide the water demand on the current or future maximum day with Well 9 out of service. One solution to this is to run the pumps for 24 hours during maximum day instead of 18 hours if Well 9 is out of service. Kaukauna Utilities' wells can handle a 24-hour pumping day in the short term (such as on the maximum day when Well 9 is out of service), but this is not a recommended long-term solution to meet average day demand. In the case of a 24-hour pumping day, the system spare capacity for the current maximum day demand increases from 0 gpm to 481 gpm. The future spare capacity for maximum day demand increases from -



422 gpm to 165 gpm. The system can handle these maximum day and average day demands with Well 9 out of service but would need to extend the pumping duration.

Another solution to meet these demands is to add another well to the system. The FWC will change significantly if another well is drilled that has a capacity close to Well 9. The calculations require that the largest well is out of service. It is unlikely that planned maintenance would occur on Well 9 during the summer months when maximum day demand occurs. If the calculation is run with the second largest well out of service instead of the largest well out of service, the FWC increases from 1,925 gpm to 2,745 gpm.

5 FUTURE WATER SERVICE AREA

Kaukauna Utilities completed a full system water study which included investigation into a southeast expansion of the water system. The water main expansion extends east to Outagamie Road, south to County Highway KK, and north to County Highway ZZ. A map of the future service area is included in Figure 4 in Appendix A. A water model was developed to study how the system can expand before an additional pressure zone is needed.

The existing water system successfully delivers acceptable fire flow and pressures to most of the expansion. There are low fire flows and low static pressures in the most southeast corner of the expansion. The southeast corner begins east of Military Road and south of Weiler Road. There is a hill in this area that is the cause of low pressures. The minimum static pressure with this scenario is 25 psi and the lowest fire flow is 316 gpm @ 30 psi. This fire flow is below the DNR minimum of 500 gpm @ 20 psi. Kaukauna Utilities could successfully expand to the southeast including all but the most southeast corner before needing to consider another pressure zone or another alternative for this area.

The Water Supply Area Plan aligns with the City of Kaukauna's 2013 Comprehensive Plan. This plan is included in Appendix C. The Comprehensive Plan includes discussion of the water system. The report notes that there is high water hardness in the City and residents invest heavily in private water softeners to remove calcium and magnesium. Kaukauna Utilities plans to address this issue with the Water Treatment System Improvements Project, by adding reverse osmosis treatment to reduce the total dissolved solids in the water which includes calcium and magnesium. This plan will allow customers to spend less on individual water softening.

The Comprehensive Plan also notes that the City is growing in both population and industry. Part of the Comprehensive Plan includes goals and strategies to promote residential, commercial, and industrial growth. Population and industrial growth would result in increased water demand for the Utility. The Water Supply Area Plan recommendation to add another well to the system aligns with the Comprehensive Plan's goal to promote growth in the City.

The most applicable wastewater facility plan is the Fox Cities 2040 Sewer Service Area Plan (SSAP), developed by the East Central Wisconsin Regional Planning Commission. This plan is included in Appendix D. The SSAP aligns with the Water Supply Service Area Plan. The SSAP has a goal for encouraging community growth and development, similar to the City's comprehensive plan. The Water Supply Service Area Plan also includes plans that would support increased water demand.

Another goal of the SSAP is to protect all surface water, especially impaired water ways. One way to achieve this goal is to reduce chlorides sent to the Wastewater Treatment Plant. Because of the high water hardness in Kaukauna, most customers soften water using salt at their homes or businesses. This process



sends chlorides to the Wastewater Treatment Plant. The Utility's Water Treatment System Improvements Plan adds reverse osmosis to the drinking water treatment process to reduce the total dissolved solids which includes reducing calcium and magnesium. This process does not send chlorides to the Wastewater Treatment Plant and will result in a reduction in the total amount of chlorides sent to the Wastewater Treatment Plant.

6 ENVIRONMENTAL IMPACTS

The expansion of the water distribution system mostly follows existing roadways. Environmental impact for water main under existing roadways is minimal and the sites would be restored to their previous elevations following water main installation. A thorough environmental review will be done at the time of any future projects.

7 PUBLIC COMMENT

The customers of Kaukauna Utilities will have the opportunity to comment on the water supply service area plan. The plan will be posted on the Water Department page of the Kaukauna Utilities website. The report will also be added to an upcoming Commission Meeting agenda for public discussion.



APPENDIX A

FIGURES

Table of Figures

- Figure 1 - General Location Map
- Figure 2 - Water System Facility Map
- Figure 3 - Treatment System Schematic
- Figure 4 - Southeast Expansion Area

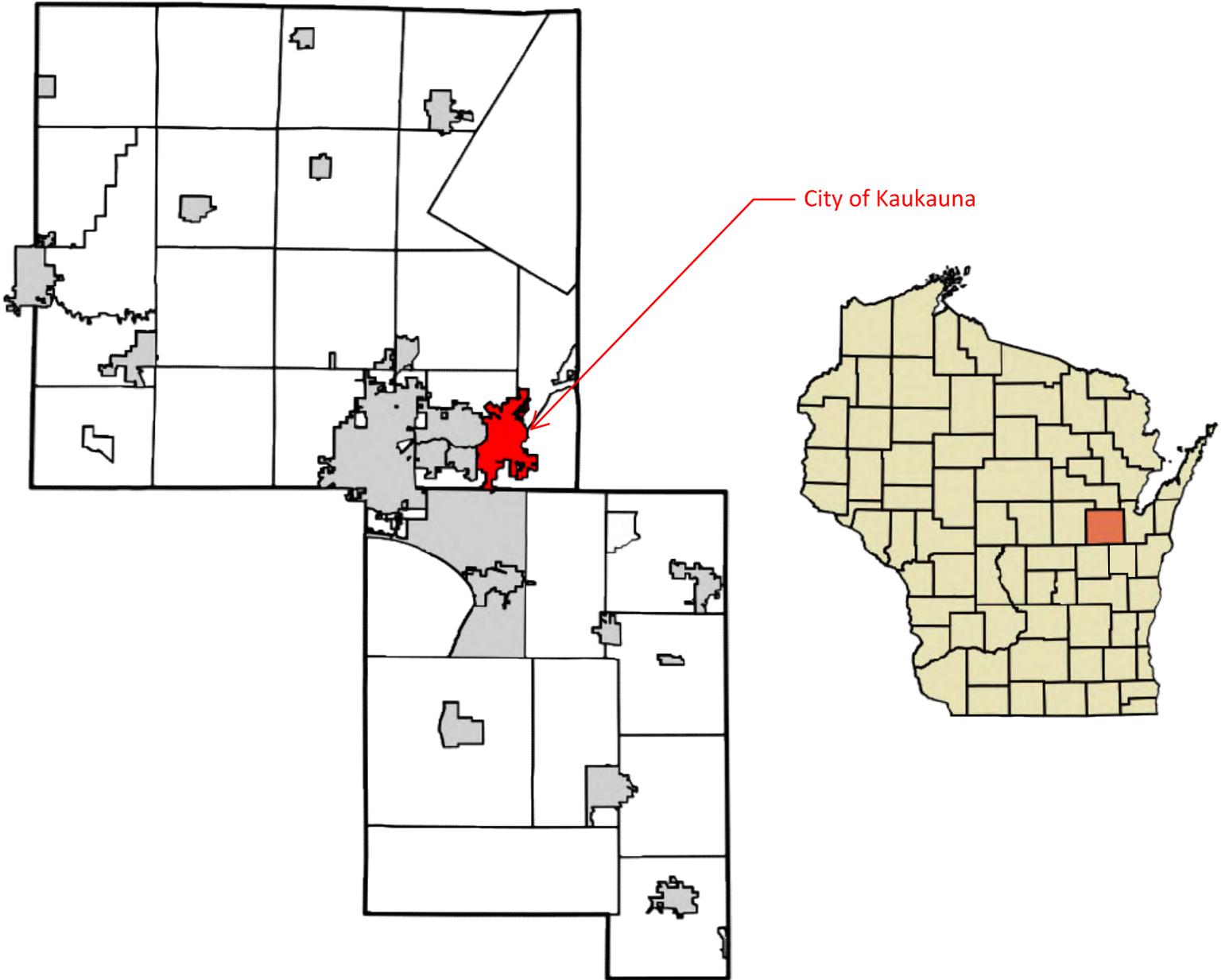
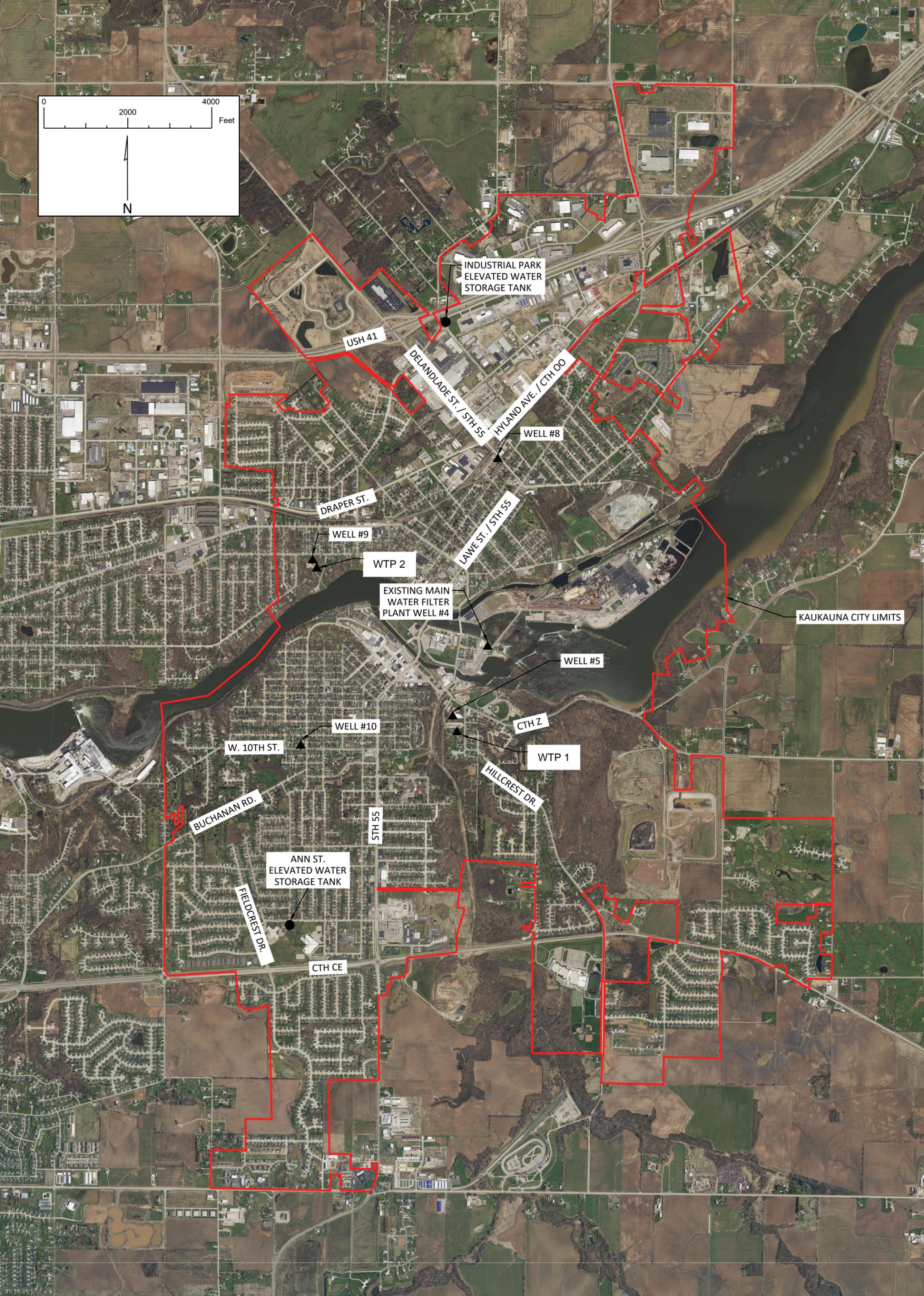


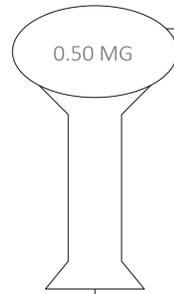
Figure 1: General Location Map



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 Phone: 920.574.3135
 www.cbssquaredinc.com

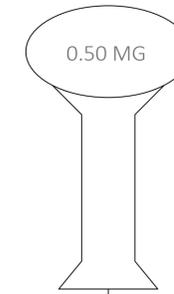
FIGURE 2 - WATER SYSTEM FACILITY MAP

ANN STREET
500,000 GAL
ELEVATED STORAGE TANK



OVERFLOW ELEV. = 865'

INDUSTRIAL PARK
500,000 GAL
ELEVATED STORAGE TANK



OVERFLOW ELEV. = 865'

WELL #8 BUILDING

525 GPM FOR 24 HOURS
PER DAY MAX
756,000 GPD MAX

WELL #8

1,300 GPM FOR 24 HOURS
PER DAY MAX
1,872,000 GPD MAX

WELL #9

1,650 GPM



BYPASS BLEND



BOOSTER PUMPS

WATER TREATMENT PLANT 2

WELL #10 BUILDING

600 GPM FOR 21 HOURS
PER DAY MAX
756,000 GPD MAX

WELL #10

WELL #5 BUILDING

400 GPM FOR 15 HOURS
PER DAY MAX
360,000 GPD MAX

WELL #5

WELL #4 BUILDING

600 GPM FOR 24 HOURS
PER DAY MAX
864,000 GPD MAX

WELL #4

1,650 GPM



BYPASS BLEND



BOOSTER PUMPS

WATER TREATMENT PLANT 1

NOTE: KAUKAUNA WATER
DISTRIBUTION SYSTEM HAS
ONE PRESSURE ZONE

P:\KAUKA\24001 - WATER TREATMENT SYSTEM IMPROVEMENTS\CAD\C3D\KAUKA_24001-WATER SYSTEM SCHEMATICS.DWG



ENGINEERS - SURVEYORS -
ARCHITECTS
CBS Squared Inc.
&
Applied Technologies Inc.



DRAWN BY:	JNW	REVISIONS
DATE:	12/03/2025	DATE: DESCRIPTION:
CHECKED BY:	JW	
HORIZ. SCALE:		
VERT. SCALE:		
PROJECT NO.	KAUKA-24001	

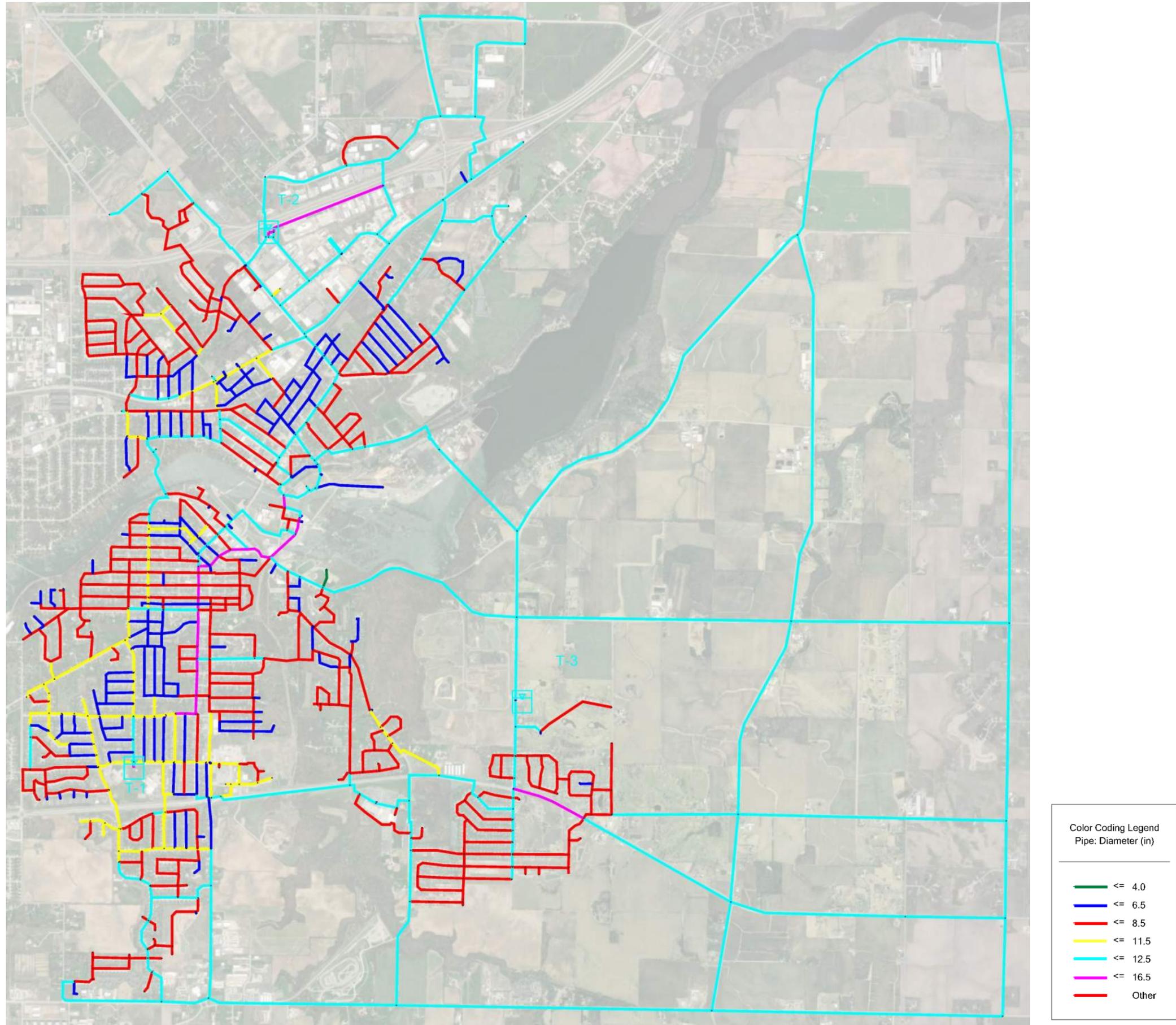
WATER TREATMENT SYSTEM IMPROVEMENTS KAUKAUNA, WI

FIGURE 3 - TREATMENT SYSTEM SCHEMATIC

SHEET

G41

FIGURE 4 - SOUTHEAST EXPANSION AREA



APPENDIX B

Water Demand Summary and Calculations

Customer Classification	2017			2018			2019			2020			2021			2022		
	No. of Customers	Metered Water Use (gal)	% of Total Flow	No. of Customers	Metered Water Use (gal)	% of Total Flow	No. of Customers	Metered Water Use (gal)	% of Total Flow	No. of Customers	Metered Water Use (gal)	% of Total Flow	No. of Customers	Metered Water Use (gal)	% of Total Flow	No. of Customers	Metered Water Use (gal)	% of Total Flow
Residential	5,983	220,464,000	67%	6,015	227,084,000	65%	6,083	224,918,000	66%	6,167	243,177,000	69%	6,263	235,008,000	67%	6,354	235,529,000	67%
Commercial	396	46,678,000	14%	397	50,533,000	15%	398	51,086,000	15%	397	43,227,000	12%	397	46,457,000	13%	408	48,301,000	14%
Industrial	19	30,771,000	9%	19	38,939,000	11%	20	33,654,000	10%	20	38,398,000	11%	20	39,363,000	11%	26	39,477,000	11%
Public	31	12,259,000	4%	32	11,791,000	3%	32	11,546,000	3%	32	10,155,000	3%	32	10,301,000	3%	33	10,095,000	3%
Multifamily Residential	132	17,682,000	5%	132	19,419,000	6%	132	18,753,000	6%	132	18,660,000	5%	132	18,256,000	5%	133	18,202,000	5%
Total	6,561	327,854,000		6,595	347,766,000		6,665	339,957,000		6,748	353,617,000		6,844	349,385,000		6,954	351,604,000	
Total Gallons Pumped into Dist. System		432,714,000			432,995,000			416,569,000			409,484,000			422,636,000			473,362,000	
Average Day Demand		1,188,775			1,189,547			1,144,420			1,121,874			1,161,088			1,300,445	
Total Water Loss		12%			10%			9%			6%			10%			16%	
Maximum Day Demand		2,288,000			2,030,000			2,192,000			1,827,000			1,922,000			2,213,000	
Day of Max Demand		6/27/2017			6/15/2018			1/17/2017			4/22/2020			8/17/2021			5/24/2022	
Reason for Max Day		Hydrant flushing			Hydrant flushing			Water main break			Hydrant flushing			Hydrant flushing			Water main break	
Max Day Ratio		1.92			1.71			1.92			1.63			1.66			1.70	
Population		16,080			16,219			16,274			17,088			17,170			17,372	
Average Person per Household		2.69			2.70			2.68			2.77			2.74			2.73	
Residential gpcd		37.7			38.5			38.0			39.0			37.6			37.2	
Total gpcd		56.01			58.91			57.39			56.70			55.90			55.60	

PSC Numerical Project Justification Equations

Equation 1: Maximum Day Demand

$$SC = [FWC * 18 \text{ hr}/24 \text{ hr}] - MD$$

Equation 2: Average Day Demand

$$SC = [FWC * 12 \text{ hr}/24 \text{ hr}] - AD$$

Equation 3: Fire Flow Demand and Maximum Day Demand

$$SC = FWC + \frac{ES}{T * 60} - F - \frac{R + MD}{24 * 60}$$

Equation 4: Maximum Hour Demand

$$SC = FWC + \frac{ES}{60} - \frac{R + MH * 60}{60}$$

SC = Spare Capacity

FWC = Firm Well Capacity

MD = Maximum Day Demand

AD = Average Day Demand

ES = Effective Storage

T = Time (Fire Flow)

F = Fire Flow

R = Reserve

MH = Maximum Hour Demand

Firm Well Capacity (FWC)

**Firm well capacity is the total well capacity of the wells in the system, with the largest well out of service.*

Well 4 = 600 gpm

Well 5 = 500 gpm

Well 10 = 625 gpm

Well 8 = 525 gpm

Well 9 = 1,350 gpm

$$FWC = \text{Total capacity} - \text{Well 9} = 2,250\text{gpm}$$

Additional calculations were performed with different well capacities. Some scenarios were evaluated with Well 9 also running to show how the system performs in a better-case scenario than FWC. Although

this does not provide the most conservative calculation, it was performed to show Kaukauna how their system can perform when all the wells are operational.

Customer Demand

Current Average Day Demand (AD)

2022 PSC WEGS report total gallons of water of 473,362,000 gallons.

This also assumes as 12-hour pumping day.

$$473,362,000 \text{ gal/ year} \div 365 \text{ days} \div 12 \text{ pumping hours/day} \div 60 \text{ min/hr} = \mathbf{1,801 \text{ gpm}}$$

Current Maximum Day Demand (MD)

Using maximum maximum day from PSC WEGS reports 2017-2022 and an 18-hour pumping day.

$$2,288,000 \text{ gal} \div 18 \div 60 = \mathbf{2,119 \text{ gpm}}$$

Current Maximum Hour Demand (MH)

Maximum hour demand was calculated by multiplying the maximum day demand by 2.

$$2,119 \text{ gpm} \times 2 = \mathbf{4,449 \text{ gpm}}$$

20-Year Projections

Year	Total Water Demand (gal)	Average Day Demand (gal)	Maximum Day Demand (gal)
2000	464,305,000	1,272,068	2,252,000
2001	484,189,000	1,326,545	1,961,000
2002	501,160,000	1,373,041	2,011,000
2003	536,283,000	1,469,268	2,204,000
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2022	473,362,000	1,296,882	2,213,000
2025	480,497,991	1,316,433	2,316,922
2030	492,631,168	1,349,674	2,375,427
2035	505,070,722	1,383,755	2,435,410
2040	517,824,391	1,418,697	2,496,907
2045	530,900,105	1,454,521	2,559,957

Projections were determined assuming a 0.5% annual growth rate, starting from the total water demand from 2022. This was decided on as the growth rate following discussions with Kaukauna Utilities.

Future max day determined by multiplying average day by 2.53. This ratio of MD:AD demand is the average of MD:AD demand from the PSC WEGS reports from 2017-2022.

Future Average Day (AD)

$$1,454,521 \text{ gal} \div 12 \text{ pumping} \frac{\text{hours}}{\text{day}} \div 60 \frac{\text{min}}{\text{hr}} = \mathbf{2,020 \text{ gpm}}$$

Future Maximum Day (MD)

$$2,534,548 \text{ gal} \div 24 \div 18 = \mathbf{2,370 \text{ gpm}}$$

Future Maximum Hour (MH)

$$2,347 \text{ gpm} \times 2 = \mathbf{4,978 \text{ gpm}}$$

Additional demand scenarios were also considered. RO treatment system is being added for all wells. This would involve a waste stream of approximately 17% of total water pumped. Therefore, calculations for the RO scenario include an additional 1.17% demand in the system.

Calculations were also performed for maximum day demand assuming a 24-hour pumping day instead of 18-hour pumping day. This would be a realistic short-term solution to meet maximum day demand with Well 9 down.

Fire Demand

Using ISO Fire Demands for schools.

$$\text{Maximum fire flow} = 3,500 \text{ gpm (F)}$$

$$\text{Maximum fire flow duration} = 3 \text{ hr (T)}$$

$$\text{Maximum fire flow volume} = 630,000 \text{ gal}$$

Storage

Current Water Storage (ES)

Assuming 10% of the water tower capacity must be set aside for operational needs.

Table 1: Water Storage

Ann Street Elevated Storage Tank	500,000 Gallons
Industrial Park Elevated Storage Tank	500,000 Gallons
WTP 1 Ground Storage Reservoir	750,000 Gallons
WTP 2 Ground Storage Reservoir	15,000 Gallons
Total	1,765,000 Gallons

$$1,765,000 \text{ gal} \times 0.90 = 1,588,500 \text{ gal}$$

Note: following discussions with the Utility, it was determined to use a reserve (R) of 0 for a more conservative estimate of demand needs.

Equation Results

Scenario	Equation 1 - Max Day GPM	Equation 2 - Average Day GPM	Equation 3 - Fire Flow on Max Day GPM	Equation 4 - Max Hour GPM
Current	131	449	5,456	24,276
Future - FWC	(120)	230	5,205	23,747
Future - With Well 9	1,230	1,580		
Current Demand + RO	(229)	143	5,096	5,468
Future - FWC + RO	(523)	(114)	4,802	5,211
Future - with Well 9, RO	827	1,236	6,152	6,561

APPENDIX C

City of Kaukauna Comprehensive Plan 2013



COMPREHENSIVE PLAN

Prepared for the
City of Kaukauna
By the
Planning and Community Development
Department



Adopted January 2013

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KAUKAUNA – A HISTORICAL PERSPECTIVE

Lion of the Fox - The Electric City - The Friendly City

Kaukauna is Wisconsin's second oldest community and the site of Wisconsin's first land deed. Five Native American tribes occupied the area including the Fox, Winnebago, Muscatine, Menominee, and Potawatomi. These tribes established villages in and around the Kaukauna area where the river dropped 50 feet and created the first major portage on the Fox River. These tribes traded amongst themselves and as white settlers became well-known, particularly the French, established trade relations with the voyagers.

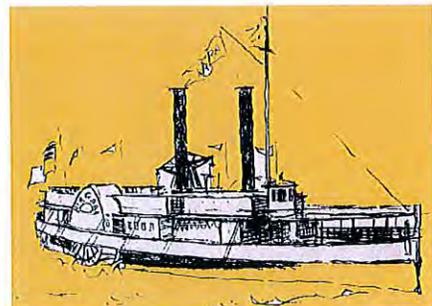
Kaukauna's first known white settler was Dominic Ducharme who, along with Augustine Grignon, built the first log homes after Dominic's arrival in 1770. At that time, the area traded in deer skins, hides, pelts, wild rice, and fish. Fishing must have been significant as Kaukauna is a native word meaning "gathering of the pike". Fur trading was active in the area since the 1650's as traders carried up to 25 tons of pelts in large Durham boats.

In 1838 – 1839, Charles Augustine Grignon (son of Augustine Grignon) built the "Mansion in the Woods". The mansion demonstrated the prosperity of the area which saw fur trading give way to more lucrative resources such as timber and milling. This house still stands and has been made available for tours.



With a 50-foot drop, the Fox River in Kaukauna has the roar of a lion. To exploit the natural resources of the area, water power was needed to operate saw mills and provide an inexpensive means of transporting products to market. The river answered both needs. A series of dams was built to channel the water into sluices that powered individual water wheels. Soon the dams were expanded to accommodate a canal system and in 1855, the steamer "Aguila" was the first boat to pass through the canal and lock system. Power and transportation fueled the establishment of manufacturing firms in Kaukauna and the Fox Valley.

The Fox River provided navigation and power for most communities situated along the river. The canals, power plants, and dams were privately held having been built by various companies and private interests. However, competition and a changing economy forced many companies to either sell their assets or file for bankruptcy. In 1912, the City of Kaukauna purchased various assets from the Green Bay and Mississippi Canal Company that today make Kaukauna the "Electric City". Kaukauna Utilities presently owns and operates, among other assets, eight hydro electric facilities acquired, in part, in 1912.

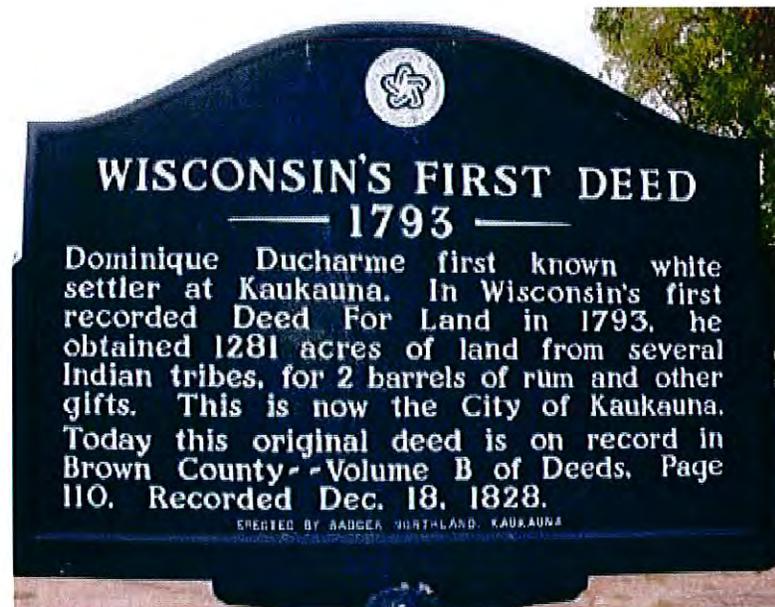


Regional prosperity attracted competing interest. In 1863, the Chicago, St. Paul, and Fond du Lac Railroad reached Kaukauna, furthering trade and commerce. Later with the advent of electricity, Kaukauna Lumber and Manufacturing Company became the first company in the United States to operate an electricity-driven sawmill. Water wheels were replaced by power turbines. Industrial

interests were no longer shackled to the river. Roads, rails, electricity, and an abundance of land spread the community outward. Electricity and railroads led to the demise of the canal system along with improved road and trucking systems. Environmental concerns coupled with diminishing returns closed the lock system in Kaukauna in the 1980's. Today only roads and rail are used for product transport.

With roads and autos came consumer discretion. In the 1960's, malls began to provide a multiple retail experience in an economic scale available to mass consumers. Shoppers were pulled away from traditional downtown shops that had been developed initially for the consumers of the late 1800's and early 1900's. Mega-marts of today compete with malls and downtowns.

Geographic features and historical events shape a community's image and manmade landscape. Having been settled by the French, Kaukauna used the French Long Lot method of surveying. This method plats deep lots perpendicular to major transportation routes, such as the Fox River, even though these lot lines may not run north-south or east-west. The Ducharme Deed of 1793 is a perfect example of a perpendicular street patterned around the river (see below). Today's U.S.G.S. maps show Kaukauna having Government Lots diagonal to the Township and Range System.



Historical Timeline of Kaukauna

	1634	Jean Nicolet Travels Through Kaukauna in Search of the Orient
American Revolution	1760	Charles de Langlade and Pierre Grignon Establish a Trading Post
	1793	First Recorded Land Sale in Wisconsin (Approximately 1,282 Acres)
	1816	First Grist Mill and Saw Mill
	1836	Treaty at Cedar Point (Ceding 4 Million Acres to the Government)
America's Westward Expansion	1837	Grignon Mansion Built
	1848	Wisconsin Becomes a State
	1851	Navigational Lock Construction Begins
Civil War	1855	Steamer Aguila Makes First Lock Crossing
	1863	Railroad Arrives
	1872	First Paper Mill
Growth of Railroads	1880	Kaukauna Times Starts
	1883	Oscar Thilmany Starts Mill
	1897	Park School Built
Start of the Auto Age	1905	Kaukauna "Carnegie" Library Built
	1912	City Acquires "Electric Light Plant"
	1935	Post Office Built
	1959	Commercial Barge Traffic Ceases
	1974	Kaukauna Begins Industrial Park Network



There are many fascinating stories about Kaukauna's early settlers and industrialists depicted on a number of historical kiosks situated throughout the community. The Kaukauna Public Library has many historical documents available for review and the reader may find the following works interesting:

- Kaukauna, Wisconsin "The Lion of the Fox" – Sun Publishing Company
- History of the Streets of Kaukauna – Kaukauna Times Printing Company Compiled by Dr. H.B. Tanner
- Kaukauna's 175th Jubilee Album – Morgan Printing, Kaukauna
- Walking Tour Through Old Kaukauna – City of Kaukauna, Brian Peterson, Editor, Copyright 1983
- Industrial Kaukauna – Francis F. Bowman, Jr., Kaukauna, 1939.

POPULATION TRENDS AND STATISTICAL FORECAST

The following exhibits demonstrate historic populations and population projections through 2035. Often touted as a valuable tool, population projections in reality have a minimal impact on long range planning. What is significant is the provision of compatible land use, ability to extend services, accommodation of job growth, and an ability to take advantage of regional, state, national, and international trends. Population statistics and characteristics are merely an accumulation of how these items, as discussed further in this plan, play out.

Historic Population Trends ⁽¹⁾						
	1970	1980	1990	2000	2010	% Change 1970 – 2010
City of Kaukauna	11,308	11,310	11,982	12,983	15,462	36.7%
Outagamie County	119,398	128,730	140,510	161,091	181,224	51.8%
Wisconsin	4,417,821	4,705,642	4,891,769	5,363,715	5,694,350	28.9%

Population Projection ⁽¹⁾							
	2010	2015	2020	2025	2030	2035	% Change 2010 - 2035
City of Kaukauna	15,462	15,852	16,720	17,400	17,952	18,477	36.7%
Outagamie County	181,224	190,570	200,012	208,688	216,874	224,994	51.8%
Wisconsin	5,694,350	5,931,386	6,110,878	6,274,867	6,415,923	6,560,000	28.9%

(1) US 2010 Census, Wisconsin Department of Administration, East Central Wisconsin Regional Plan Commission Data and Projections, City of Kaukauna Department of Planning and Community Development.

HOUSEHOLD TRENDS

The City of Kaukauna is part of the Fox Cities metropolitan area. Therefore, housing trends and characteristics affect the character and economy of the Fox Valley. What makes Kaukauna unique is that the community has the following traits that impact housing and housing composition:

- Not land-locked and the ability to grow in several directions.
- Sufficient infrastructure in place to expand housing and employment opportunities.
- Majority of housing stock in Kaukauna is over 50 years old and provides quality, affordable housing for new or down-sized families.
- Excellent care facilities for elderly and handicapped individuals.
- Bus service to the greater Fox Cities.
- Full service community including full time paramedic service.
- Minimal infill opportunities of vacant yet developable land.
- A number of adverse land use impacts affect negatively on the housing market.
- High ranking for employment within the City and recreational opportunities.

Historic trends in household characteristics are shown in the following tables:

Percent Population by Age Cohort							
	Median Age	Less than 5	5 – 19	20 – 24	25 – 44	45 – 64	65+
2000							
Kaukauna	35.1	6.5%	24.1%	5.8%	30.5%	19.4%	13.7%
Outagamie County	34.4	6.9%	23.5%	6.1%	31.9%	20.7%	10.9%
Wisconsin	36	6.4%	22.2%	6.7%	29.5%	22.2%	13.0%
2010							
Kaukauna	34.6	7.9%	19.9%	6.3%	29.5%	24.2%	12.0%
Outagamie County	37.1	6.6%	21.1%	6.1%	27.2%	27.2%	11.7%
Wisconsin	38.5	6.3%	20.1%	6.8%	25.4%	27.7%	13.8%

Household Characteristics				
	Total Households	Average Household Size	Married	65+ Living Alone
2000				
Kaukauna	4,971	2.57	67.7%	12.3%
Outagamie County	60,530	2.61	69.7%	8.4%
Wisconsin	2,084,544	2.50	66.5%	9.9%
2010				
Kaukauna	6,270	2.45	63.7%	8.1%
Outagamie County	69,648	2.49	67.7%	7.5%
Wisconsin	2,279,768	2.43	63.7%	9.3%

Education and Attainment - 2010					
	Less Than 9 th Grade	9 th – 12 th No Diploma	High School Graduate	1 – 3 Years College	4+ Years of College
Kaukauna	2.5%	6.3%	43.6%	9.2%	11.6%
Outagamie County	2.3%	4.8%	33.2%	12.6%	19.0%
Wisconsin	3.5%	6.4%	33.3%	9.3%	17.4%

Income						
	Median Household Income		Median Family Income		Per Capita Income	
	2000	2010	2000	2010	2000	2010
Kaukauna	\$43,980	\$52,286	\$50,187	\$64,412	\$18,748	\$24,498
Outagamie County	\$49,613	\$54,498	\$57,464	\$66,905	\$21,943	\$26,751
Wisconsin	\$43,791	\$49,100	\$52,911	\$62,088	\$21,271	\$26,447

Percent of Families Living in Poverty		
	2000	2010
Kaukauna	2.6%	4.7%
Outagamie County	2.9%	6.6%
Wisconsin	5.6%	9.1%

EMPLOYMENT

Kaukauna is part of the Fox Cities and as such, the economy of the Fox Valley is the economy of Kaukauna. Although Kaukauna specifically may have higher or lower base employment by occupation compared to the Valley, the City's employment will trend as the Valley trends. In essence, we are many communities but one economy.

Economies ebb and flow based on a myriad of local, state, national, and world policies and events, and consumer tastes. Depending on circumstances, local change can occur in rapid order such as the economy of 2005 to 2008 or in methodic order such as changes in the energy field. Manufacturing ranks high in the Valley and may have a higher base in Kaukauna; however, the type of manufacturing may change with consumer demand. Also, the Valley has sought to diversify its economy both within and outside of the manufacturing base.

The following table reflects the employment status within the Appleton/Oshkosh/Neenah (Fox Valley) market.

Industry	% of Jobs	Five Year Trend	Earnings Above/Below Average
Agriculture, Forestry, Fishing, Hunting	2	↓	Below
Mining, Quarrying, Oil and Gas Extraction	0.5	↓	Above
Utilities	0.5	↓	Above
Construction	5	↓	Above
Manufacturing	19	↓	Above
Wholesale Trade	4	↑	Above
Retail Trade	11	↓	Below
Transportation and Warehousing	3	↓	Above
Information	2	↔	Above
Finance and Insurance	5	↑	Above
Real Estate, Rental and Leasing	3	↓	Below
Professional, Scientific and Technical Services	4	↓	Above
Management of Companies and Enterprises	2	↓	Above
Administrative Support, Waste Management, Remediation	5	↑	Below
Educational Services	2	↓	Below
Health Care and Social Aesthetics	10	↑	Above
Arts, Entertainment, Recreation	2	↑	Below
Accommodation and Food Services	6	↓	Below
Other Services	5	↑	Below
Government	9	↑	Above

There is a strong base economy in the Fox Valley geared towards manufacturing which shows the highest percent of employment. Although the Five Year Trend was down, it is anticipated that this industry classification will remain strong and actually increase.

This projection is based on the availability of land, infrastructure, buildings, and a strong technical college. The supply, support, and logistical necessities are in place.

As manufacturing brings in dollars and exports a product out, the anticipated manufacturing increase will result in increases in other sectors, particularly transportation and warehousing. Kaukauna is ideally situated to accommodate these growth projections based on a viable industrial park network, low electric rates, future interstate road access, and current employee training programs.

Therefore, based on local logistics blended with projections from the state and regional planning commissions, the City anticipates the following increases, decreases, and relative stability in the following industrial classifications:

Industry	Overall Trend to 2030
Agriculture, Forestry, Fishing, Hunting	↑
Mining, Quarrying, Oil and Gas Extraction	↑
Utilities	↔
Construction	↔
Manufacturing	↑
Wholesale Trade	↓
Retail Trade	↓
Transportation and Warehousing	↑
Information	↓
Finance and Insurance	↓
Real Estate, Rental and Leasing	↔
Professional, Scientific and Technical Services	↓
Management of Companies and Enterprises	↑
Administrative Support, Waste Management, Remediation	↑
Educational Services	↔
Health Care and Social Aesthetics	↔
Arts, Entertainment, Recreation	↓
Accommodation and Food Services	↓
Other Services	↔
Government	↔

GOALS, STRATEGIES, AND REMEDIATION

- The City of Kaukauna has the ability to expand outwardly and redevelop inwardly. The community should seek first to use existing infrastructure to its greatest capacity and then expand. This provides the highest return on investment and efficiency in maintenance costs.
 - To accommodate the population of Kaukauna and the surrounding area, municipal services should increase or decrease in proportion to population characteristics, service area, and demand.
 - Energy costs are anticipated to increase at a rate faster than household earnings. The community should strive toward greater energy independence through sustainable projects such as producing alternative clean energy, energy efficient construction, conservation practices, and retrofit programs for energy conservation thereby reducing or eliminating the gap between earnings and energy costs.
 - As a working class community with an older housing stock, the City can accommodate a greater percentage of low to moderate income families. However, the community should be cautious not to create pockets of poverty by allowing neighborhoods to deteriorate or by reducing the affordability of services.
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ECONOMIC DEVELOPMENT

Overview

The City of Kaukauna's employment base, and thus the primary economic generator, is associated with the paper industry. Thilmany Pulp and Paper is the largest single employer in the area with approximately 1,000+ employees. This primary employer/manufacturer creates secondary and tertiary employment and services which help define the total economic structure of the City and its relation to the regional, state, national and international markets. The Economic Development section is designed to provide a general guideline by which the local economy may be defined and better understood for the purpose of future actions. This section will therefore analyze the industrial and commercial/service base including Thilmany Pulp and Paper, and provide a pattern for mitigating potential adverse impacts.

Manufacturing or Industrial Base. As noted above, the region's economy is based primarily on paper. This is a long established industry created on the availability of natural resources, transportation routes, and energy. The industry provides a high wage rate and creates many secondary jobs through the need for machine parts and supplying the needs of paper and pulp buyers. Industrial spin-offs include printing, mail marketing, packaging, transportation, and various machine shops. The impact of these industries on the economy extends throughout the region from Green Bay to Oshkosh. Kaukauna is strategically situated in the center of these operations and therefore must maintain a significant transportation network to reach and serve the businesses needs.

Non-paper related industries include cast manufacturing, machining and food products. These industries employ a significant number of workers at an average wage rate close to that of the paper industry. These companies contribute significantly to the base economy within the City's Industrial Park Network. Machining and tooling are subject to greater influence through the fluctuations in the national economy and may be considered "foot loose", as they are non-resource oriented industries.

Commercial/Service Base. The City's commercial and service industry is relatively strong and dependent on the strength of the local manufacturing base.

Within Kaukauna

there are three areas of commercial development designed to accommodate three distinct markets. The first is the downtown business core which provides entertainment and service type businesses to the City. The second is highway oriented which caters to the community as well as expanding markets. Highway oriented businesses are situated principally along Highways 55 and 41. Since their market is regional in scope, visibility and vehicle access is a must. Kaukauna's situation is highly suitable for these types of business although considerable dollars exit the community via the adjoining shopping centers, most notably the Fox River Mall region.

The third market is commonly referred to as the neighborhood service. This market is extremely limited and provides service to a narrow range of customers. The neighborhood grocer is a typical example.



Other uses include convenience stores, laundromats, daycare centers, churches and schools. The uses are small in nature and residentially compatible.

Development Scenarios and Mitigation of Adverse Impacts. The secondary manufacturing base within the community had been, and to a lesser degree still is, dependent upon the paper industry. These secondary industries are typically smaller in scope and situated to serve numerous industries of various functions. Accordingly, the demand for new industrial space is relative to the economy of the paper industry and technological changes in the industry including the demand for specialized parts. These secondary industrial plants are often referred to as cottage industries. Since these businesses network with primary manufacturers, the City should accommodate these businesses as best as possible. A full-service supply of shovel-ready industrial space should be available to accommodate needs of .5 acres to 30 acres.

By developing an Industrial Park Network, Kaukauna reduced its historic dependence on the paper industry and is readily capable of meeting economic downsizing in the industry without impacting services. Accordingly, efforts should continue to diversify the base manufacturing from paper. This diversification may also include non-manufacturing employment as well. Incentives may be offered, depending on wage rate and employee numbers, to ensure that the business is established in the region for an extended length of time.

The City's Industrial Park Network was established to accommodate manufacturing facilities and certain commercial highway uses. Exhibit I shows the City's Industrial Park Network. These areas provide potential locations in which businesses may be allowed to diversify from the existing economy. An example of this might be conversion from a previous use, a technological center, an office park, or standard industrial park.

The Fox Valley region and Wisconsin in general, has a weakness in its ability to attract industry that is not resource based. While Wisconsin's work force is considered highly skilled and motivated, the State cannot compete in a national or international market. Accordingly, Kaukauna's industrial efforts should concentrate on resource-based products such as paper, machinery, agriculture, and energy based production. Accommodations would include rail transport for movement of bulk products, land available and designed for support of cottage industries, and the continued production of hydro electricity.

The availability of the labor force to operate the local industry is dependent on the strength of the economy, availability of housing, and the region's ability to educate and train the work force. A strong economy reduces the labor pool and requires an influx of residents to fill positions. For each laborer brought in, the population increases by 1.6, thereby requiring added housing and transportation. Spatial requirements for housing and transportation are addressed within this plan.

Kaukauna and the Fox Valley have an excellent education system based on high standards in technical training. Facilities include the Fox Valley Technical College, the University of Wisconsin - Fox Valley, local college campuses, and numerous union affiliated training centers. Private facilities offer additional training from computers to various functions in the service industry. Facilities such as business incubators should be considered in conjunction with these training centers as a method of encouraging businesses and staying current in training.



To promote development within the City, there are several programs which can be enlisted to attract or promote business. The following is a synopsis of existing local programs and/or incentives:

- The Redevelopment Authority of the City of Kaukauna. RACK provides low interest loans to assist in the acquisition of property and equipment. Interest rates are reduced in the downtown area for greater incentive. Loans hold a second mortgage position behind conventional financing.
- Tax Incremental Financing. TIF Districts provide capital for public improvements and environmental remediation, specifically for downtown redevelopment.
- As property owners, the City could enter in to purchase agreements whereby land costs are reduced or supplied as a low interest loan.
- Available State and/or Federal programs.

The City has an extensive Industrial Park Network that presently has over 700 acres of land with a valuation of over \$94,000,000 in 2011 dollars. The Network is served by rail and has access to US Highway 41 (soon to be Interstate 55). There are approximately 120 acres of shovel-ready commercial/industrial property available within the Network and the ability to expand by an additional 150+ acres of adjoining land. This could substantially increase valuations in the City and employment throughout the region.

To market these properties, and to recognize their regional significance, the City will participate in regional marketing programs, particularly programs centered on the Fox Cities. This regional cooperation will allow for the promotion of the Industrial Park Network whereby individual communities will pool resources for use by a point agency to promote, market, research, and accommodate business prospects.



The following SWOT (Strengths/Weaknesses/Opportunities/Threats) analysis will help identify goals and recommendations towards sustainable economic development.

Strengths
<ul style="list-style-type: none"> • Low electric rates produced by green power. • Extensive and coordinated Industrial Park Network. • Access to US Highway 41 (soon to be Interstate 55). • Rail access including two municipal spurs. • Well-trained labor force for manufacturing and machining. • Diverse economic base. • Ability to expand Industrial Park Network. • Ability to accommodate worker housing.
Weaknesses
<ul style="list-style-type: none"> • Fragmented municipal governments. • Availability of "Green Field" developments reduces value of "Brown Field" sites for redevelopment. • Lack of firm, consistent, or unified approach from State offices. • City lacks an external marketing program. • Image of Kaukauna as a paper mill town with environmental issues. • Lack of diverse commercial base. • Age of downtown commercial buildings.
Opportunities
<ul style="list-style-type: none"> • Regional cooperation through participation in an Economic Development Corporation. • Revitalized downtown through established businesses and specialty shops. • New hydro electric generation plant. • New national emphasis on energy production plays into Industrial Park Network business model of machine and tool shops. • Regional investment in the area technical college. • Availability of worker housing.
Threats
<ul style="list-style-type: none"> • Lack of technology investment towards research and development. • Lack of local entrepreneurship. • Lack of sustainable funding for downtown development. • Lack of free wireless service in business core. • Reduction and stabilization of paper industry. • The age of the existing paper mill and its infrastructure. • Future capacity of sewer treatment plant. • Changes in state, national, and international economies. • Lowering of wages and reduction of disposable income. • Replacing the skill set of retiring works, particularly in the manufacturing sector. • Diminishing tax return on investment in economic development.

GOALS, STRATEGIES, AND RECOMMENDATIONS – ECONOMIC DEVELOPMENT

- Invest resources to mitigate Weaknesses and enhance the City's Strengths.
 - Work regionally and through internal cooperation to reduce the stated Threats.
 - Invest in resources that will move the City's Opportunities to Strengths including expanding on regional opportunities and collaboration among governments and local economic development corporations.
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INDUSTRIAL PARK NETWORK

NEW PROSPERITY CENTER

EXHIBIT I

INDUSTRIAL PARK NORTH

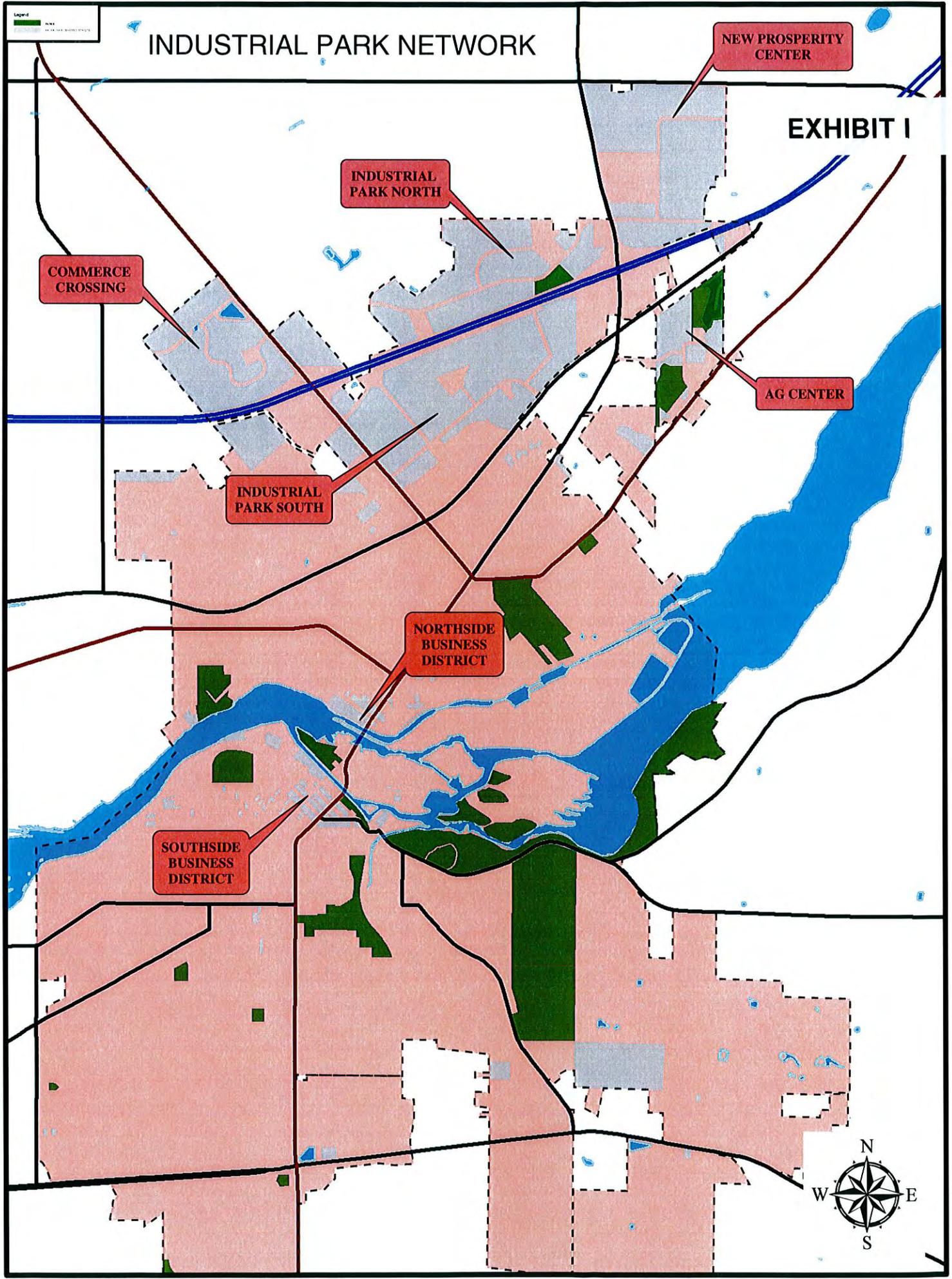
COMMERCE CROSSING

AG CENTER

INDUSTRIAL PARK SOUTH

NORTHSIDE BUSINESS DISTRICT

SOUTHSIDE BUSINESS DISTRICT



HOUSING

Housing is an important element within any municipality when analyzing past and future trends and planning for future growth. The housing element is a requirement of the comprehensive plan as stated in the Wisconsin Statutes. This element requires a compilation of objectives, policies, goals, maps and programs intended to provide an adequate housing supply that meets existing and forecasted housing demand. This element should assess age, structural, value and occupancy characteristics of Kaukauna's housing stock and identify specific policies and programs that:

- Promote the development of housing for residents of Kaukauna.
- Provide a range of housing choices that meet the needs of persons of all income levels, all age groups, and persons with special needs.
- Promote the availability of land for development or redevelopment of low income and moderate income housing.
- Maintain or rehabilitate the City of Kaukauna's existing housing stock.

Housing is an important resource for the City of Kaukauna and residents who live here. For many residents, housing is their single largest expenditure on a continual basis. Housing should satisfy community needs while maintaining a quality housing stock and supporting further growth. The City of Kaukauna has certain distinct amenities, such as being a regional labor center and having adequate developable land, which can support upward growth trends in housing and the economy. Forecasting methods connect Kaukauna's key amenities with historic and projected data to further plan for housing in the City. The analysis of regional housing growth also provides guiding insight into the housing element for the City of Kaukauna. By following the historic trends and suggested recommendations, Kaukauna will satisfy planned objectives far beyond 2030.

Housing Characteristics

Housing characteristics such as occupancy, structure type, age, value, and projections are further analyzed based on the unique assets of the City. This section relies heavily on historic demographic information. A "housing unit" is in reference to a "house, apartment, mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters," as defined by the U.S. Census Bureau. The Census Bureau goes on to further distinguish a "household" as all the people who occupy a housing unit as their usual place of residence. Historical data provides the root analysis on housing trends in Kaukauna. Funding opportunities for assistance projects can also be heavily reliant on these archived figures.

Statistical data is a valuable tool when used in conjunction with knowledge of Kaukauna's key characteristics. Background knowledge and understanding the current situation of the City is crucial and should be incorporated with trends observed from historical data to create an accurate housing forecast for the City of Kaukauna.

- Housing Occupancy

In the City of Kaukauna, occupancy status can be used to observe trends in the housing market. These trends can help create a consensus on whether more assistance focused on home ownership, rent, or home improvement/renovation is needed. The City of Kaukauna currently (2010) has 6,270

occupied households, with 4,353 households being owner occupied and 1,917 households being renter occupied (See Appendix Table 1 and 2). The ratio of owner occupied units to renter occupied units has remained relatively constant in both Kaukauna and Outagamie County between 2000 and 2010. The changes depicted in historical data show ratios of owner occupied housing decreasing by about two percent and renter occupied housing increasing by about two percent in Kaukauna, and in Outagamie County, owner occupied housing decreasing by one percent and renter occupied housing increasing by one percent in Outagamie County over the past ten years (2000 to 2010).

In the City of Kaukauna, housing vacancy has risen slightly from 3.3% to about 4.9% between 2000 and 2010, which is slightly higher than Outagamie County's vacancy rate (4.8%) in 2010. This accounts for an increase in vacant households by 155 households through the past decade (2000 to 2010) in Kaukauna. To further break down the vacancy rates for the City of Kaukauna, the vacancy rate for owner occupied households has increased from 0.9% to 2.6% from 2000 to 2010. Vacancy rates for renter occupied households has also increased from 5.5% to 7.9% over the past decade (2000 to 2010) As a general guide, if the owner occupied vacancy rate is below 1.5% or if the renter occupied vacancy rate is below 5%, then housing is in short supply. This data shows that Kaukauna historically has had a housing stock that was in short supply for rental housing and just above the cut-off for owner occupied housing. Although housing vacancy rates have only risen by a small percentage over the general guide's cut-off rates, it is still important to recognize that the vacancy rates are rising and certain measures should be taken to stabilize these rates. Kaukauna, like many other surrounding communities, has also been affected by the recent national foreclosure crisis, which reflects the current (2010) vacancy rates being higher than in 2000.

One possible method to reduce the vacancy rates in Kaukauna would be to improve the visual appeal and historical integrity of the City's aging neighborhoods, which may be a benefit once the foreclosure crisis is over and the home sales market starts moving again. Continual review and enforcement of the City's building and housing code is one way of maintaining housing quality and improving deteriorating housing stock. In order to assist historic buildings in complying with building codes, implementation of the state historic building code for qualifying structures provides alternative and cost effective ways of improving and maintaining the integrity of historic buildings. Educational opportunities for residents about home maintenance and community rehabilitation, by informing people about home maintenance methods and financial assistance, may also help maintain and improve the quality of the City's housing stock. Financial assistance and grants, such as Community Development Block Grants, to help rehabilitate housing and community aesthetics should also be utilized and sought after by the City to further achieve the restoration of the City's historical integrity and deteriorating neighborhoods. Technical assistance and tax credits for rehabilitation of historic buildings are available through the Wisconsin Historical Society. Further assistance general housing provided by "Focus on Energy" for energy efficient upgrades and the Wisconsin Housing and Economic Development Authority (WHEDA) for affordable housing is also available to individuals and municipalities. Improving



the quality and aesthetic integrity of neighborhoods also increases the sense of community that is important to well-functioning neighborhoods. An analysis of existing housing stock can provide useful information regarding housing occupancy and also gauge the effectiveness of assistance programs currently being implemented. Data for housing occupancy and vacancy provided by the U.S. Census Bureau is indicated in the Appendix on Table 1 and Table 2.

- Structure Type

Housing structures are classified by the number of dwelling units in each structure. Trends in housing for both Outagamie County and the State of Wisconsin are apparent in Kaukauna's housing data. Single family, single unit housing structures, which include both attached and detached units, is the most prevalent structure type seen in the city, estimated as accounting for roughly 74% of the of the city's housing stock (American Community Survey, 2005-2009). Two to four unit structures account for about 12.5%, structures with five or more units make up approximately 13%, and manufactured homes, such as mobile homes, trailers, or other structures, account for less than 1% of the City's housing stock. Compared to historical data, the ratio of different housing structures in the City have remained relatively stable between the 2000 US Census and the 2005-2009 estimates. As a result of large multifamily units being developed on the north side of Kaukauna, the largest increase in housing structure ratios in the City is seen in five or more unit structures. There has also been a slight increase observed in the ratio of manufactured homes in the City. The number of manufactured homes has more than doubled, from 12 to 29 units, and structures with five or more units has increased by approximately 54%, from 549 units to 845 units. Decreases in the ratio of single family units and two to four unit structures in the City have also occurred between 2000 and 2005-2009 estimates. When compared to Outagamie County and the State of Wisconsin, Kaukauna has a higher ratio of two to four unit structures, and a lower ratio of five or more unit structures and manufactured homes. When it comes to single family units, Kaukauna has a higher ratio than the State of Wisconsin, but a slightly lower ratio than Outagamie County. Although there are noticeable differences in ratios of different housing when comparing Kaukauna with Outagamie County and the State, Kaukauna's data is very similar to the County, greater differences are seen when compared to the State. This is indicative of both Kaukauna and Outagamie County having higher incomes compared to the rest of the State with the assumption that larger incomes are connected to owning single family units.

The housing stock in Kaukauna has increased in previous years as a response to market demands and increased available land. Subdivision expansion of single family dwellings away from the urban core should be addressed with policy and strict development regulations well into the future. The increasing number of units, and thus structures, indicates that organized development is demanded within the City and should be an area of focus. Data for housing structure types provided by the U.S. Census Bureau and the American Community Survey is indicated in Table 3.

- Housing Conditions

As housing and rental structures within the City continue to age, there is a need for maintenance and improvements in order to achieve acceptable housing standards that reflect the structures' original integrity and promote the City of Kaukauna as a vibrant community. The City of Kaukauna has an older housing stock compared to County and State figures. According to the American Community Survey, 2005-2009, the largest portion of the City's housing stock was built before 1959, which represents 42.7% (2,763) of the entire housing stock. Housing built from 1960 to 1979

represents 19.3% (1,251) of the housing stock and housing built from 1980 to 1999 represents 21.7% (1,406) of the housing stock. New housing developments built after the year 2000 accounted for only 16.4% (1,058) of the units.



When compared to Outagamie County and the State, Kaukauna has higher concentrations of housing that were built in the year 2000 or later and housing that was built before 1959 (American Community Survey, 2005-2009). The most noticeable difference in concentrations is seen when comparing housing units built before 1959 between Kaukauna and Outagamie County, Kaukauna has a ten percent higher concentration of housing stock built prior to 1959, than the County. Due to a higher

concentration of older housing stock in the City, compared to county and state figures, Kaukauna may need to focus efforts on maintaining the quality and integrity of the aging housing stock, and rehabilitation of degrading houses. Further, demolition of abandoned or substandard structures to provide infill opportunities for new development in established neighborhoods may also be an initiative of the City. These methods of infill or maintenance on existing housing structures should follow appropriate development processes and recommendations before all required governing bodies. Data for age of housing structures provided by the U.S. Census Bureau, 2000 and the American Community Survey, 2005-2009 is indicated in the Appendix Table 4.

This presents two opportunities for the City; encourage renovations of existing housing and promote new development. There are multiple aging housing units in need of remediation and limited new construction occurring in the City, presenting a potential lack of assistance for remediation of the housing stock and new home development. In older neighborhoods, the demolition and replacement of dilapidated structures should not interfere with the integrity and environment of the existing neighborhood. There should be limited, if any, negative impacts on existing properties in a neighborhood by the development of another property. Newly constructed housing units should be consistent with the design scheme and historical character of the neighborhood. Remediated structures should also resemble renovated units rather than a new unit through the orientation, design, and landscaping. Housing orientation refers to the directional placement of a dwelling unit, garage, and any additional structures on the property. By promoting the reconfiguration of structure locations, the City will prevent monotonous streetscapes and a standardized subdivision appearance. The ability for new housing structures to be designed in almost any manner creates a real opportunity to develop housing stock that will provide positive lasting impressions on potential new residents and visitors alike. With supportive efforts from the City, the concepts of new development and renovations of the existing housing stock will draw higher income residents into the urban core of the community, thus providing a boost in the local economy.



The older housing stock portrays unique craftsmanship and architecture of previous generations and should be preserved to keep intact the City's cultural identity. Historical elements of existing stock should be showcased to visitors and residents through informational literature provided by the City and Kaukauna Area Historical Society. There are opportunities for tax credits and incentives for structures deemed significant enough to be listed on the National Registrar of Historic Places. The City should encourage participation within the private sector and support all other efforts intended to achieve this historical standard.

The City of Kaukauna also has a valuable resource in expandable land to the north, east, and south where new development can be further placed. Affordability of land is a major factor in determining which areas within or near the City have the highest potential of becoming developed with housing. The City of Kaukauna should strive to provide affordable land for needed expansions in or near the City while protecting the landscape and prominent natural features and surrounding lands. Priority should be placed on new developments where municipal services already exist as infill development or in close proximity to existing services. Developing near existing services reduces costs of extending municipal services and also reduces adverse impacts on natural features stemming from uncontrolled development. Taking advantage of infill opportunities also reduces the need for suburban sprawl outside the City limits and reduces the depletion or degradation of natural features. Additional information on the preservation of natural lands and features is further discussed in the Agricultural, Natural, and Cultural Resources chapter.

The surplus of vacant existing housing stock presents a significant challenge for Kaukauna. The City has adequate housing to accommodate an increasing population without resorting to expansive suburban development. The nature of society as a whole, with the influence of the automobile, has become accustomed to suburban expansion rather than the redevelopment and rehabilitation of existing housing stock. Depending on the fluctuating market of existing housing stock, Kaukauna may either have a positive commodity within the community or a major liability if market pressures for housing decline.

Along with value of land, housing values provide significant insight into the makeup and quality of an area's housing stock, and demand for housing within an area. Lower values may characterize a deteriorating stock where rehabilitation and renovation assistance may need to be provided by the City to assist homeowners. Lower values may also indicate an excessive housing stock within an area that has low housing demand. Higher values may indicate that the majority of the housing stock is in good shape and homeowners are taking the right action in maintaining their units. Higher values may also indicate an insufficient housing stock within an area that has an increasing demand for housing. Housing stock values for the City of Kaukauna are lower than both Outagamie County and the State of Wisconsin, with Kaukauna's median housing value being \$133,100, Outagamie County's being \$149,600, and the State of Wisconsin's being \$166,100 (American Community Survey, 2005-2009). The value of existing units has also seen tremendous shifts since 2000 where 65.6% (2036) of units were valued at less than \$100,000. According to the American Community Survey, 2005-2009, an estimated percentage of only 20.4% (886) of homes fell in this value range and the highest percentage of Kaukauna's housing stock is valued from \$100,000 to \$149,000 (43.6%).

The City's median housing values have increased by about 46% from 2000 to 2010. This shows a rate of increase greater than Outagamie County (41.1%) and lower than the State of Wisconsin (48.0%). These increases can be seen by looking at census data, which reflects increases in values of

new owner occupied housing units being built compared to values of older structures. Data for recent and historic values of housing structures provided by the U.S. Census and the American Community Survey, 2005-2009 is indicated in Table 5 and Table 6.

Attracting higher value housing to the City will increase the median household value of the City, thus improving the municipal tax base of Kaukauna. This can be done by preserving highly aesthetic natural area to create visually appealing neighborhoods. Innovative subdivision design and providing extensive amenities in these neighborhoods will also attract higher income residents that will increase the need for higher value housing. Providing incentives and technical assistance to developers, individual homeowners, and high paying industries also helps promote higher income residents and housing in the City. Cooperation between the City and developers is crucial to the continual success of any community.

- Housing and Rental Affordability

Portions of Kaukauna residents struggle to find housing that meets their basic needs while remaining affordable. The U.S. Department of Housing and Urban Development (HUD) defines affordable housing as the owner/renter paying no more than thirty percent of their monthly gross income towards housing. According to the American Community Survey, between 2005 and 2009, an estimated 15.8% of Kaukauna residents that own a house are classified as living in unaffordable housing. This percentage is considerably lower than both state (28.3%) and county (23.4%) estimates and has shown almost no change from 2000. As for residents that rent housing, approximately 44.7% of these included individuals are classified as living in unaffordable housing. This percentage is higher than Outagamie County (39.8%), but slightly lower than the state's (45.9%) overall estimate. When comparing the data from the 2005 to 2009 American Community Survey for estimated renter housing affordability with data from the 2000 US Census, there is a noticeable increase in people living in unaffordable housing in Kaukauna, Outagamie County and the state. This trend may be due to increased rental costs as a result of the uncertain housing market or the increased unemployment rate seen throughout the state and nation as a whole. Data for owner and renter costs as a percentage of household income is indicated in the Appendix Tables 7.1-7.2 Tables 8.1-8.2.

For the purpose of HUD's Consolidated Plans, it further breaks down households into income brackets based on the median household income of the community and the amount spent on housing. Median household income is derived from a compilation of all routinely received income of residents over the age of 18. The household income brackets are used as a general guide by HUD to classify residents and accordingly provide support. The divisions and respective income levels are:

- Extremely low-income households are those with incomes below 30% of the community's median household income level.
- Very low-income households are those with income between 30% and 50% of the community's median household income.
- Low-income households are those with incomes between 50% and 80% of the community's median household income level.
- Moderate-income households are those with incomes between 80% and 95% of the community's median household income level.

The US Census contains data on median household income, for the City, county and state.

- City of Kaukauna: median household income (2009 inflated dollars): \$52,286
- Outagamie County: median household income (2009 inflated dollars): \$55,763
- State of Wisconsin: median household income (2009 inflated dollars): \$51,569

The City of Kaukauna, being a strong industrial and business provider, has a large population of its residents in the workforce living above the median income level. The population of people 65 years of age or older, whose social security payments are tallied as income, is well below the median income level. The ratio of Kaukauna's population that is over age 65 is 12.2%, which is higher than Outagamie County (11.8%) and lower than the State of Wisconsin (13.7%) (US Census 2010). This is reflected as one major reason Kaukauna finds itself at an income level slightly above the state, but below Outagamie County. It should be noted that Kaukauna has taken significant strides in raising its median income.

Since median household income can be such a versatile tool to indicate economic and housing problems that exist in our communities, it is crucial to look at regional incomes to compare with the community. As previously mentioned, Kaukauna's household income is just slightly higher than the state average but below the county average. This may highlight development implications for the City, where focus being placed on higher income level residents to potentially reclaim residential units in the urban core surrounding the downtown districts is optimal. Potentially down-zoning certain industrial, commercial, or institutional parcels near the urban core to residential may also help with promoting higher income residents and higher valued housing to be developed in the urban core. Pockets of poverty also exist in the community and efforts should be applied to enhance these areas, both socially and aesthetically.

Home ownership and rental costs typically are higher for newly constructed facilities rather than refurbished existing facilities. This is reflected by the older housing stock and lower median household income. The lower median household income in Kaukauna compared with the county does not mean all residents are low- to moderate-income. The large population of retired residents who live off a fixed income present a contradiction to this figure. Many retirees live in their owner-occupied housing units and are classified as low-income. Retired residents may have financial savings and investments to live a comfortable lifestyle which would be unattainable strictly on their present income level. For this reason, the data for household income of Kaukauna residents may be skewed and appear to have lower than average household incomes, but still be financially stable overall. Data for income characteristics provided by the U.S. Census 2000 and the American Community Survey, 2006-2009 is indicated in the Appendix Table 9.

- Housing Programs

There are many resources available to municipalities and homeowners alike to provide or receive funding for maintenance of current housing stock, home ownership and rental assistance, and other initiatives in place to improve housing situations in communities like Kaukauna. The housing struggle for many Kaukauna residents can be eased by taking advantage of the programs available through the city, region, or state.

The Kaukauna Housing Authority is a public assistance entity that was created through the Housing and Urban Development Act of 1968. Both Golden Ventures Apartments and the Kaukauna Housing Authority were constructed in 1969 and received positive support from the community.

There is a wide variety of housing programs through the Kaukauna Housing Authority. The Section 8 Housing Choice Voucher Program provides assistance to eligible households by providing subsidized rental cost, based on household income. Typically, families must be above 50% of the annual median household income level for the community. Another financial resource is through the Public Housing Authority (PHA), which is required to pay 75% of applicants housing voucher if they are below 30% of the median household income level, classified as an extremely low-income household. Low rent public housing at Golden Ventures Apartments is also provided through the Kaukauna Housing Authority. Elderly and special needs assistance can be garnered at this location. Historically, there has been 100% occupancy rate at Golden Ventures. There has been a noticeable shift in occupants at the facility. Traditionally, elderly couples have accounted for the majority of tenants, but more recently younger disabled individuals have been the majority. This creates an unstable generational gap where problems steadily occur.

There are also other facilities in the Kaukauna and greater Fox Valley area that offer elderly and special needs services. St. Paul Elder Services in Kaukauna offers assisted living, accommodating facilities and care programs for the elderly. Round House Manor is also an elderly low income housing apartment that is subsidized by the federal government's HUD. This facility features fewer amenities but still provides very reliable services in Kaukauna.

The Fox Valley area and Eastern Wisconsin as a whole put forth great efforts into providing adequate housing and services for their low income, elderly, and special needs residents. There is a multitude of resources and information available to any resident in search of aid. Programs, either mandatory/granted through the state or nonprofit organizations have been established to provide assistance and education strictly for housing purposes of this manner.

The Outagamie County Housing Authority offers safe and sanitary housing for low and moderate income residents. It also provides educational and housing rehabilitation programs to improve the housing stock in the county. The Appleton Housing Authority is another resource that is primarily focused on the greater Appleton area, but does provide outreach for Fox Valley residents and helpful networking options with assistance programs in the area.

The Fox Cities Housing Coalition is a collection of area organizations from the Fox Cities focused on providing adequate affordable housing for all residents. The spectrum of services provided is broad but mainly aims at combating low to moderate income housing. Housing resource information exists amongst the involved organizations, where nearly any housing concern or issue can be addressed by the coalition.



The State of Wisconsin offers an extensive list of funding programs and services to promote affordable housing for its residents. Educational material along with suggested guidelines for potential housing programs can be supplied by the state.

The Wisconsin Housing and Economic Development Authority (WHEDA) is an independent authority focused on providing low-cost financing for home ownership, renting, and small business development. The revenue generated from the sale of bonds provides the funding for these assistance programs.

Under the direction of the Wisconsin Economic Development Corporation (WEDC), the Division of Housing and Community Development (DHCD) works with local governments and non-profit organizations to provide technical and financial assistance to low income, elderly, and special needs residents. Their main emphasis is providing housing assistance and special needs programs through a multitude of different state and local initiatives. Fair housing issues are also largely dealt with by this division of government. Estimated housing projections, sampling data, and housing development suggestions are provided through the Department of the Administration (DOA).

There are also numerous non-profit and business organizations established around the state that deal with housing issues. Cooperation with these state, regional, and local organizations may provide significant experience and insight to Kaukauna's housing plan.

Housing Demand

- Population Trends

The City of Kaukauna has increased in population by 36.7% (4,154) from 1970 to 2010 (US Census 1970, 1980, 1990, 2000 and 2010). In just recent years from 2000 to 2010, Kaukauna has seen an increase of 19.1% (2,479) in its population (Table 10). East Central Wisconsin Regional Planning Commission (ECWRPC) and the Department of Administration (DOA) provide communities with projected population data that can then be applied to comprehensive plans for assistance in the planning for future housing trends. Using these projections as a reference, the City of Kaukauna has created its own projections to include most recent US Census 2010 data, creating a "low" and "high" projection. These projections were created by using the percent increases between 5 year intervals projected by the ECWRPC and the DOA in their projections provided to the City. The projections created by the City of Kaukauna are shown in Table 11.1 and graphically represented in Figure 11.1. These "low" and "high" projections were then averaged to create a simplified version of Kaukauna's projected future population shown in Table 11.2 and graphically represented in Figure 11.2. Kaukauna's population is expected to increase by 4.8-6.2% per each 5 year interval. Using this data, the city may see a population increase of 24.0%, from 15,462 to 19,178 residents, by the year 2030. This is a faster rate of increase than both Outagamie County (20.8%) and the State of Wisconsin (12.4%) (Table 11.2). Although the projected increases show a constant and relatively steady increase, the City of Kaukauna may experience faster rates of growth. One reason for this is Kaukauna has expandable land primarily to the east and south for residential use. There is also available land to the north for the expansion of Kaukauna's industrial sector, which may bring in more jobs and residents. The villages that border Kaukauna to the west are mostly landlocked or with very limited room to grow. As the Fox Valley's industrial and commercial sectors continue to grow, there may be a need for residents working in the Fox Valley to relocate to Kaukauna for

professional or personal reasons. Data for population trends and projections were provided by the U.S. Census Bureau, East Central Wisconsin Regional Planning Commission (ECWRPC), Wisconsin Department of Administration (DOA), and the City of Kaukauna.

- Household Trends

The City of Kaukauna currently has a total 6,596 housing units consisting of 6,270 occupied units and 326 vacant units, with approximately 2.45 persons per household (US Census 2010). The East Central Wisconsin Regional Planning Commission (ECWRPC) provided the City of Kaukauna with projected future households and persons per household data that is applicable to future growth and community development. The ECWRPC has developed two methodologies for projecting future households and persons per household based on different characteristics of Kaukauna and Outagamie County, further described as a side note in conjunction with Table 12 in the Appendix. Although these projections provided for the city do not include 2010 US Census data, they are official projections used by the ECWRPC for sewer service work and long range transportation/land use planning purposes. The projected unit expansion rate is roughly 5.7-7.6% per every 5 years projected using methodology A, or 83 to 90 new households each year. Using methodology B, the projected unit expansion rate is roughly 5.1-6.5% per every 5 years projected, or 71 to 76 new households each year. These household projections are right on-track with historic increases. Using these projection methods, Kaukauna will have a 25.4 - 29.1% increase in households by the year 2030. The projected persons per household shows a constant decrease through the year 2030, reflecting a faster household rate of increase compared to the population rate of increase through 2030. Projection numbers may fluctuate based on the growth of the Fox River Valley and the neutral location of the City between the major economic centers of the region, Appleton and Green Bay, and available expandable land to the north, east, and south. Also, promoting economic growth and including incentives for industries, such as TIF districts, may also require additional growth within the City. Data for household trends provided by the East Central Wisconsin Regional Planning Commission (ECWRPC) is indicated in the Appendix in Table 12.

- Development Trends

The City of Kaukauna Building Inspection Office keeps detailed records of newly constructed housing in the City. Structures and the number of respective units can be further applied to projected housing development models, unit developments, and analyses of historic construction trends. Community and regional demand for housing structures creates a force for development, where certain constructions will thus be deemed more appropriate. Promoting new housing development is essential to creating lasting neighborhood networks and citizen partnerships in the community. Newly constructed housing data should be used as an analytical tool and a reminder that changing market pressures must be factored into the planning process for new development.

In previous years, there have been periods of extensive multifamily development (>Two Family Structures) as seen with the construction of 30 new facilities in 2001 and 2002, resulting in 356 new units. More recently, single family construction has also seen periods of rapid construction, with an average of 137 structures per year being constructed from 2003 – 2005. A future spike in single family construction could occur as the housing market and financing situations surrounding new homes improves. A focus on promoting higher valued housing in the City

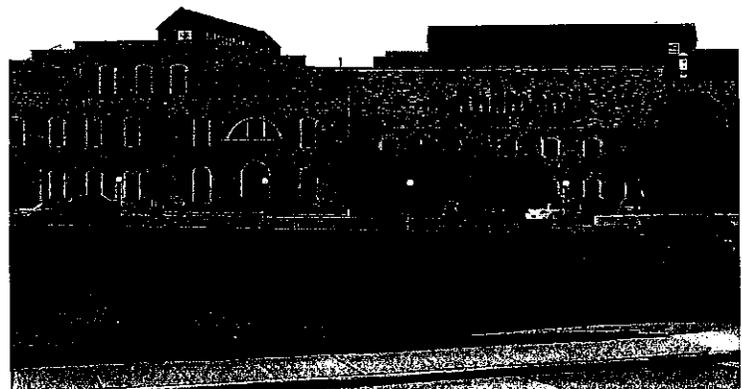
should also be a priority, which may also result in additional housing development. Subdivision ordinances, as well as procedures and policies for environmental protection should be applied to new development occurring within the City and extra territorial jurisdiction areas. Policy on groundwater quality, floodplain restriction, soil erosion, and farmland and habitat preservation, further explained in the Agricultural, Natural, & Cultural Resources element, should be implemented in all future development, including renovation and reconstructions. Data on historic development trends provided by the Kaukauna Building Inspection Office is indicated in Table 13.

Housing Issues and Concerns

Kaukauna is located at a focal point of the Fox Valley. The perception of the City through media and by word of mouth could amplify to its housing and economic market in a positive or negative manner. Thus, Kaukauna should take every opportunity to highlight its progressive policy, sustainable initiatives, and promising economic future. Emphasis should be directed towards its strong recreational programs, and new development projects and opportunities whenever possible.

- Thilmany Mill

As one of the major employers in Kaukauna, Thilmany Paper Mill is directly tied to visitors' perception of the City. Through the industrial operations, waste products are produced and a strong odor is emitted from the treatment process. The Thilmany Mill is making substantial strides in reducing the odor emitted as well as the amount of waste entitled to treatment. As a result of 60 percent of wind in the City originating from the southwest, the areas impacted the greatest by the odor are areas to the north and east of the paper mill. This



non-toxic odor leaves a lasting impression on Fox Valley residents and visitors alike that is difficult to mitigate. By informing the public of the environmental improvements to the treatment process and expressing that no health risks can be had, there is attention brought to a subject that may have been ignored or not noticed by some. Not concerning anyone with the odor is possibly the best action to take in this situation to avoid unnecessary negative attention. Residential Development should be focused to the south and west of the mill to further reduce the impact and negative perception created by the odor.

- Wisconsin International Raceway (WIR)

Wisconsin International Raceway is located directly to the south of Kaukauna in the Town of Buchanan within the Konkapot Creek bottoms and provides a degree of recognition for

Kaukauna as an entertainment venue in the area. When in use, this raceway creates a considerable amount of noise. Noise pollution is a major concern when designing communities and can become a major impediment to the community's attractiveness. The noise generated from racing events at the WIR has a negative impact on the housing climate of the city due to the noise pollution threatening Kaukauna's attractiveness as a home for potential buyers. Prevailing winds from the Southwest carry noise throughout the community. New housing developments in the South and Beaulieu Hill neighborhoods experience the greatest negative impacts from WIR. Maintaining and/or creating forested natural areas near the race track is one way of controlling and minimizing the effects of noise created by events held at WIR. In addition to noise pollution, some events generate substantial attendance and therefore, large volumes of traffic influx which also has potential to draw away from Kaukauna's appeal.

- River Utilization

The Fox River is an important and underutilized commodity in the City of Kaukauna. It is heavily used for its industrial power and electrical generation ability, which results in its aesthetic characteristics being somewhat overshadowed by these development types. Industrial land



uses, rail lines and busy roadway corridors seem to take away from the splendor of the waterway, dulling the natural aspects it possesses. There are also single family houses along the river on the City's west side. These houses are primarily located on the north bank of the river as it runs through Kaukauna, but there are also some single family houses located on the south bank of the river. Reclamation of dilapidated or vacant properties near the river should be transformed into higher valued housing to

minimize conflicting land uses along the river. Trail systems along the Fox River have been incorporated with the 1000 Islands Conservancy and another trail along the river runs from the "Family & Friends" Sculpture Garden to Thilwerth Park. In order to promote this resource and make it more available to the residents of the City, Kaukauna should incorporate downtown multifamily housing into its development plans, similar to Canal Place, that accommodate all income levels. Such a great resource should be utilized to its full scenic potential and be available to a larger portion of residents.

- Neighborhood Development Analysis

The neighborhood development analysis is designed to help the community grow in areas that best comply with housing objectives. Growth can be thought of in two manners - new development and existing housing rehabilitation. New development projects should satisfy multiple objectives, including, but not limited to: open space preservation, minimal service infrastructure development, environmental protection, and quality of life for residents. Traditional neighborhood development designs can provide understanding into potential



implementation aspects that can be incorporated in new development. In the same manner, conservation subdivisions principles can be incorporated by supporting developers who include resource protection into their plans. Qualities of a new subdivision should include many of these open space and environmentally conscious features because the market tends to sway potential homeowners to demand these features. These features also attract higher income residents and higher valued housing development that can improve the value of Kaukauna's housing stock. Existing housing redevelopment projects should further support the quality of life in the neighborhood and be compatible with surrounding structure designs. Population expansion and aging should be keenly watched in accordance with housing development. The baby boomer generation will reach retirement between 2011 and 2029. This substantial portion of the overall population will likely take one of the following housing steps towards retirement: "relocate to a fair climate location, downsize housing, or join a nursing home or extended care facility," says Dowell Myers in his article in the Journal of the American Planning Association, "Aging Baby Boomers and the Generational Housing Bubble." He offers three suggestions for communities, where Kaukauna should be no exception, "limit overbuilding of new housing, retain elderly in the community, and attract young and immigrant households to local neighborhoods." Kaukauna fits into these suggestions, where 12.2% (1,881) of the current population is age 65 and older and the population in Kaukauna that fits into the "Baby Boomer" age gap accounts for 5,413 residents, which translates to 35.0% of the entire city population (US Census 2010). To further highlight the population implication on housing, Kaukauna historically has not had a larger retired population. From 2000 to 2010, there was a 5.4% increase in the number of residents age 65 and older (1,785 to 1,881) based concentration of population in each age cohort.

Retaining the expected elderly population in Kaukauna will support strong community diversity. The City can strategically plan to achieve this by offering senior oriented jobs, easy access to community facilities, and improve on senior care assistance such as at-home and limited low-cost health care. Existing programs provided privately and publicly are making positive steps towards ensuring retired and elderly residents remain in the City. Kaukauna also offers numerous senior care facilities, a full time paramedic unit, and senior citizen recreational services. For further explanation on the population demographics of Kaukauna and related projections, refer to the "Issues and Opportunities" section of the plan.

There are certain housing regulations that homeowners must follow and comply with in the City of Kaukauna. Chapter 19 of the Municipal Code for Kaukauna provides regulations on housing and property maintenance. The code establishes minimum housing and property standards to ensure that public safety, health, and welfare are accommodated for. This provides the City with leverage to enforce that housing units are maintained and that the objectives covered in this section regarding existing units are reached. Increasing the amount of high value housing will also help improve the quality of housing in the City. This should be done by creating highly appealing neighborhoods through effective placement and design, and promoting higher income industries to locate in the City. With the utilization of state incentives, cooperation with non-profit organization, and a concentration on housing by the City, Kaukauna should be on the right path to deal with housing issues.

An extended objective of the City should aim efforts at providing affordable public transportation to all residents. Valley Transit service provides bus transport at low cost rates to Kaukauna residents. Buses are retrofitted with bike racks near the hood, making commuting

without a vehicle more convenient. More in and outbound locations should be added. Infrastructure could also be expanded in the same manner, where new, functional bus stops may promote system use. Taxi services also provide residents with transportation in Kaukauna and throughout the Fox Valley. Locally, Aloha Taxi LLC serves the City and surrounding area. A trail network connecting residents to bus stops with the intention of voiding the necessity of motor vehicle



transportation could also be useful for the residents of Kaukauna. A trail system could also efficiently connect public facilities, recreational areas, and commercial business areas. Beyond the trail system, pedestrian friendly development such as well maintained sidewalks, signage, lights, painted roadways, and bike lanes could further support this initiative.

Public transportation initiatives should be developed in accordance with plans for “Transportation” and “Agricultural, Natural, and Cultural Resources” elements. These plans should encompass the infrastructure additions and social changes needed to create an effective, multi-dimensional public transportation system.

- Overview of Findings

There are patterns in the data for Kaukauna that can be extracted for the City’s use to systematically develop into the future. The percent change in housing units from 2000 to 2010 is relatively high in Kaukauna when compared to Outagamie County, accounting for a 28.3% (1,454) unit increase. Projected housing unit growth is roughly 5.1-7.6% per every five years projected into the future, depending on the method used. This results in an approximate projected 25.4 - 29.1% increase by 2030. This projection is slightly higher than the projected population increase of 24% by 2030. The continual development of primarily single family units within the City accounts for 74% of Kaukauna’s housing being single family. Occupancy data shows that vacated units have also increased by 90.6% from 2000 to 2010, from 171 to 326 units. Both owner occupied vacancy rates and renter occupied vacancy rates have increased from 2000 to 2010. The increased previous development and slowing economy may be a driving force behind the elevated vacancy rate and slow recent development trends seen throughout the City.

Existing housing stock built before 1959 represents approximately 42.7% (2,763) of structures in the community, which is the largest portion of the housing stock in the City. New developments built after the year 2000 accounted for 16.4% (1,058) of the units. The value of existing units has also seen tremendous shifts in past years. The greatest shift noticed in housing values was seen in household values of less than \$100,000 with a 57.7% decrease in the past decade.

Kaukauna has historically had one of the lowest median household incomes in the general region. The percentage of owner-occupied housing affordability has stayed relatively constant in Kaukauna over the past decade with roughly 15.8% of owner-occupied units being unaffordable. In Outagamie County, the percentage of unaffordable owner occupied housing has increased from 15.2% to 23.4%. When it comes to renter affordability, both the City and County have increased in percentage of unaffordable housing, with the City's unaffordable renter occupied units increasing from 30.1% to 44.7% and Outagamie County increasing from 25.4% to 39.8%.

GOALS, STRATEGIES, AND RECOMMENDATIONS - HOUSING

- Adequately accommodate for all low- to moderate-income residents, both current and future.
 - Accommodate low- and moderate-income housing by providing infrastructure and permitted land-use controls for less expensive housing types.
 - Encourage developers who seek out incentives or plan to provide a certain amount of low income units in their housing structure. Continue to work with developers who have previously included low income housing with projects in an effort that they will continue including low income housing.

- Ensure that housing and care facilities are provided to elderly and special needs residents, both current and future.
 - Equal housing opportunity should be provided through assistance programs to elderly, special needs, and low- to moderate-income residents.
 - Work with Kaukauna Area School District to promote volunteering opportunities at elderly/special needs households. Get students acclimated with housing issues that exist not only in the community but also the area/state.
 - Provide assistance, financial and physical, to elderly/disabled people for rehabilitation of existing housing stock to provide a sanitary and safe living environment for elderly, special needs, and low income residents.
 - Provide adequate and affordable means of transportation for the elderly and disabled within the City.
 - Maintain and create sidewalks and trail systems that are functional and easily accessible for the elderly and disabled.

- Maintain existing housing stock to its full structural and aesthetic integrity to support strong neighborhood networking and a sense of community.
 - Support and assist the creation of neighborhood associations to provide communication between residents, safety in the community, and progressive action in each neighborhood.
 - Discourage single family residential neighborhoods from being rezoned and converted to multifamily units, especially in older neighborhoods, including Central City North and South.
 - Promote interaction between non-profit housing organizations and other community organizations (i.e. Kiwanis, Lions Club, VFW) to endorse citizen interest and concerns regarding housing.
 - Support mixed use development and rehabilitation of second story housing units in Downtown Central Business District and other commercially zoned areas.
 - Analyze existing housing assistance programs to ensure that they are effectively achieving their goals and providing their full potential to the community.
 - Gather feedback from housing assistance recipients and individuals who were involved with the process/program including Community Development Block Grant (CDBG) opportunities and their effectiveness.
 - Maintain existing housing stock through citizen education and use of government assistance for remodeling/rehabilitation purposes. City of Kaukauna should take the initiative to address these issues, creating a “fix-up” or “renovation” program for existing home owners. This could be achieved through informative literature, seminars, information fairs, etc.

- Administer weatherization education and program assistance for housing improvements.
 - Further assistance should be provided for rehabilitation of higher income households through the use of low interest loans from financial institutions.
 - Ensure that deteriorating public infrastructure such as sidewalks, streets, parks, and signage are maintained to their highest structural and aesthetic potential.
 - Further develop a quality sidewalk and recreational trail system to support walkability throughout the community and interaction/cooperation between neighborhoods. This will further strengthen Kaukauna's sense of community and promote strong neighborhood relations.
 - The City should coordinate educational sessions and material on affordable housing, maintenance, rehabilitation, and other housing issues with the Kaukauna Housing Authority.
- Promote organized, systematic development plans that alter the built or natural environment as little as possible.
 - Minimize intrusions/negative impact on existing properties when developing housing and infrastructure.
 - Administer policies and zoning ordinances that protect all of the environmental and constructed features within the community when developing housing.
 - Administer restrictive controls through municipal code regulations and responsible land ethics on extended development.
 - Encourage future development in areas that can be served conveniently and economically with public utilities and services.
 - Support diversity of new housing development to avoid monotony in housing units and develop a unique city character.
 - In locations that are appropriate, install reduced street widths and other infrastructure features that are less expensive to promote development.
 - Encourage a diversity of housing structures, including smaller single family, condominium, and townhouse units which reduce energy demands for heating and cooling. Achieve this by reviewing the City's zoning incentives that support these types of developments.
 - Residential Multi-family housing should reflect the design characteristics of single family houses pre-existing in the neighborhood.
 - Maintain adequate open space in development applications defined in zoning regulations, where natural ecological features are preserved and green space is left to enhance the quality of life for residents.
 - Limit speculation housing production by promotion of existing housing stock.
 - Consistently monitor open space and park areas for improvements and maintenance that would further support neighborhood networking and community strength.
- Administer that all development and redevelopment pursuits comply with the policy regulations of the City's municipal code.
 - Housing stock and future development should occur in symmetry with the designed plans and goals of the other elements provided in this comprehensive plan.
 - Promote orderly, systematic growth of housing developments through municipal policy and reliance on sound judgment through municipal codes.

- Ensure that all future development take place with best land use practices and regulations in mind. Ecological and built environments should be conserved at minimum through land use code compliance.
 - Separate multifamily development throughout the City, where roadways and sidewalks can support increased user capacity, through restrictive standards for large, isolated facilities and lenient standards for small, dispersed facilities.
 - Encourage multifamily and two-family development projects with highest allowable density in close proximity to downtown to reduce residential footprint, increasing downtown business customer base, and utilize riverfront scenic beauty. Development plans should exclude the conversion of large single family units into multifamily.
 - Ensure private housing stock maintenance by strictly enforcing the municipal housing code on negligent residential units.
 - Promote aesthetic beauty of multifamily development landscaping by accepting uniquely designed site plans in accordance with surround neighborhood design, further discouraging “cookie cutter” residential units.
- Attract higher value housing developments in the City.
 - Preserve highly aesthetic natural areas for the development of visually appealing neighborhoods.
 - Avoid monotonous streetscapes of traditional neighborhood designs by implementing curve/linear street designs and other visually appealing street designs, such as cul-de-sacs, in new developments to improve character in relation to aesthetic areas.
 - Provide limited connections to high traffic roads to reduce heavy automobile traffic through neighborhoods.
 - Create larger lot sizes with large front yard setbacks to appeal to higher income residents.
 - Provide pedestrian friendly street designs, such as adequate sidewalks and bike lanes/trails, and adequate lighting for multimodal traffic.
 - Incorporate decorative lighting, where viable, to further achieve a positive visual perception.
 - Incorporate public gathering places in neighborhoods, such as parks, swimming/fishing ponds etc., to promote resident interaction and a sense of community.
 - Provide visually appealing street landscaping in new neighborhoods, such as vegetated medians, wide planting strips and various trees, to further appeal to a natural looking environment.
 - Promote new development south and west of the paper mill, opposite of prevailing winds, to minimize the negative perception created by the odor emitted.
 - Promote energy efficient housing designs to enhance the progressiveness in the City and to attract a higher income class of residents.
 - Provide information on technical assistance and tax incentives for energy efficient construction and design of housing units.
 - Provide information and assistance for first time homebuyers about incentives for the purchase or construction of new homes; primarily through the Wisconsin Housing and Economic Development Authority.

- Attract higher income businesses into the City, such as professional services, by providing economic incentives in order to attract higher income residents to the area that will create a need for higher valued housing.
 - Create TIF districts for high paying industries to promote higher income residents to relocate to Kaukauna and to provide additional assistance to the company for improvements and additional growth.
 - Preserve land near economic centers of the City for residential development to allow short distance travel to and from the workplace, possibly through transfer/purchase of development rights.
 - Reduce or waive certain development fees, such as water and sewer hook ups, to provide incentive for new development.
 - Provide predevelopment funding to pay up-front costs, such as Environmental Impact Assessments (EIA), to encourage developers to become involved.
-

HOUSING ELEMENT EXHIBITS

Table 1: Housing Units

Jurisdiction	2000					2010				
	Total	Occupied		Vacant		Total	Occupied		Vacant	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
City of Kaukauna	5,142	4,971	96.7%	171	3.3%	6,596	6,270	95.1%	326	4.9%
Outagamie County	62,614	60,530	96.7%	2,084	3.3%	73,149	69,648	95.2%	3,501	4.8%

Source: U.S. Census 2000 Summary File 1 (SF1); U.S. Census 2010 Redistricting Data File

Table 2: Occupancy and Vacancy Characteristics

	City of Kaukauna		Outagamie County	
	2000	2010	2000	2010
Total Housing Units	5,142	6,596	62,614	73,149
Total Occupied Housing Units	4,971	6,270	60,530	69,648
Owner Occupied	3,553	4,353	43,830	49,738
Vacancy Rate	0.9%	2.6%	0.9%	N/A
Renter Occupied	1,418	1,917	16,700	19,910
Vacancy Rate	5.5%	7.9%	4.9%	N/A
Vacant Housing Units	171	326	2,084	3,501

Source: U.S. Census 2000 Summary File 1 (SF1) -100 Percent Data; U.S. Census 2010 Summary File 1 (SF1) -100 Percent Data

Table 3: Total Housing Units by Structure

Jurisdiction	Single Family Units		2 to 4 Units		5 or More Units		Mobile Home, Trailer, or Other		Total Housing Units	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2000										
City of Kaukauna	3,819	74.3%	758	14.8%	549	10.7%	12	0.2%	5,138	100.0%
Outagamie	46,548	74.3%	6,856	10.9%	7,990	12.8%	1,220	1.9%	62,614	100.0%
Wisconsin	1,609,407	69.3%	281,936	12.1%	325,633	14.0%	104,168	4.5%	2,321,144	100.0%
2005-2009										
City of Kaukauna	4,796	74.0%	808	12.5%	845	13.0%	29	0.4%	6,478	100.0%
	+/- 305	+/- 3.9	+/- 180	+/- 2.8	+/- 192	+/- 2.9	+/- 102	+/- 0.8	+/- 250	-
Outagamie	53,580	75.2%	7,197	10.1%	9,474	13.3%	1,005	1.4%	71,256	100.0%
	+/- 630	+/- 0.9	+/- 546	+/- 0.8	+/- 594	+/- 0.9	+/- 177	+/- 0.2	+/- 345	-
Wisconsin	1,799,514	70.6%	278,456	10.9%	370,895	14.5%	101,050	4.0%	2,549,915	100.0%
	+/- 7,838	+/- 0.2	+/- 3,769	+/- 0.1	+/- 3,839	+/- 0.2	+/- 1,250	+/- 0.1	+/- 4,916	-

Source: U.S. Census 2000 Summary File (SF3) – Sample Data; American Community Survey, 2005-2009

Table 4: Total Housing Units by Age

Year Built	City of Kaukauna		Outagamie County		State of Wisconsin	
	2005-2009		2005-2009		2005-2009	
	Number	Percent	Number	Percent	Number	Percent
2005 or later	251	3.9%	1,681	2.4%	57,283	2.2%
Margin of Error	+/- 116	+/- 1.8	+/- 202	+/- 0.3	+/- 1,341	+/- 0.1
2000 to 2004	807	12.5%	7,945	11.1%	207,180	8.1%
Margin of Error	+/- 150	+/- 2.3	+/- 450	+/- 0.6	+/- 2,376	+/- 0.1
1990 to 1999	860	13.3%	12,633	17.7%	360,824	14.2%
Margin of Error	+/- 138	+/- 2.0	+/- 532	+/- 0.7	+/- 2,851	+/- 0.1
1980 to 1989	546	8.4%	8,492	11.9%	253,932	10.0%
Margin of Error	+/- 118	+/- 1.9	+/- 516	+/- 0.7	+/- 2,512	+/- 0.1
1970 to 1979	734	11.3%	10,891	15.3%	394,599	15.5%
Margin of Error	+/- 174	+/- 2.6	+/- 538	+/- 0.8	+/- 3,455	+/- 0.1
1960 to 1969	517	8.0%	6,290	8.8%	260,339	10.2%
Margin of Error	+/- 132	+/- 2.0	+/- 383	+/- 0.5	+/- 2,647	+/- 0.1
1959 or Earlier	2,763	42.7%	23,324	32.7%	1,015,758	39.8%
Margin of Error	+/- 318	+/- 4.6	+/- 818	+/- 1.1	+/- 4,788	+/- 0.2
Total Housing Units	6,478	100.0%	71,256	100.0%	2,549,915	100.0%

Source: American Community Survey, 2005-2009

Table 5: Owner Occupied Housing Stock Value (2005-2009)

Jurisdiction	City of Kaukauna		Outagamie County		Wisconsin	
	Number	Percentage	Number	Percentage	Number	Percentage
Less than \$50,000	56	1.3%	1,054	2.1%	74,488	4.7%
Margin of Error	+/- 40	+/- 0.9	+/- 187	+/- 0.4	+/- 1,339	+/- 0.1
\$50,000 to \$99,999	830	19.1%	6,359	12.8%	221,058	14.1%
Margin of Error	+/- 152	+/- 3.2	+/- 400	+/- 0.8	+/- 2,606	+/- 0.1
\$100,000 to \$149,999	1,890	43.6%	17,625	35.4%	363,574	23.2%
Margin of Error	+/- 209	+/- 4.3	+/- 602	+/- 1.2	+/- 3,411	+/- 0.2
\$150,000 to \$199,999	879	20.3%	11,940	24.0%	341,211	21.7%
Margin of Error	+/- 163	+/- 3.5	+/- 483	+/- 0.9	+/- 3,185	+/- 0.2
\$200,000 to \$299,999	579	13.4%	9,107	18.3%	336,925	21.5%
Margin of Error	+/- 117	+/- 2.8	+/- 414	+/- 0.8	+/- 2,675	+/- 0.1
\$300,000 to \$499,999	87	2.0%	3,126	6.3%	170,893	10.9%
Margin of Error	+/- 57	+/- 1.3	+/- 276	+/- 0.6	+/- 1,933	+/- 0.1
\$500,000 to \$999,999	16	0.4%	476	1.0%	50,188	3.2%
Margin of Error	+/- 26	+/- 0.6	+/- 113	+/- 0.2	+/- 966	+/- 0.1
\$1,000,000 or more	0	0.0%	97	0.2%	10,892	0.7%
Margin of Error	+/- 93	+/- 0.5	+/- 42	+/- 0.1	+/- 467	+/- 0.1
Total Housing Units	4,337	100.0%	49,784	100.0%	1,569,229	100.0%
Margin of Error	+/- 232	-	+/- 563	-	+/- 9,389	-
Median Housing Value	\$133,100		\$149,600		\$166,100	
Margin of Error	+/- 4,527	-	+/- 1,355	-	+/- 364	-

Source: American Community Survey, 2005-2009

Table 6: Owner Occupied Housing Stock Value (2000)

Jurisdiction	City of Kaukauna		Outagamie County		Wisconsin	
	Number	Percentage	Number	Percentage	Number	Percentage
Less than \$50,000	61	1.9%	655	1.7%	73,450	6.5%
\$50,000 to \$99,999	2,036	63.7%	16,623	43.7%	396,893	35.4%
\$100,000 to \$149,999	801	25.1%	12,754	33.5%	343,993	30.6%
\$150,000 to \$199,999	239	7.5%	5,100	13.4%	173,519	15.5%
\$200,000 to \$299,999	44	1.4%	2,237	5.9%	95,163	8.5%
\$300,000 to \$499,999	14	0.4%	527	1.4%	30,507	2.7%
\$500,000 to \$999,999	0	0.0%	110	0.3%	7,353	0.7%
1,000,000 or more	0	0.0%	9	0.0%	1,589	0.1%
Total Housing Units	3,195	100.0%	38,015	100.0%	1,122,467	100.0%
Median Housing Value	\$91,200		\$106,000		\$112,200	

Source: U.S. Census 2000 Summary File 3 (SF3) Sample Data

Table 7.1: Monthly Owner Costs as a Percentage of Household Income (2005-2009)

	City of Kaukauna		Outagamie County		Wisconsin	
	Number	Percent	Number	Percent	Number	Percent
Housing Units	4,337	100.0%	49,672	100.0%	1,563,581	100.0%
Margin of Error	+/- 268	-	+/- 858	-	+/- 8,235	-
Less than 20%	2,152	49.6%	24,050	48.4%	695,798	44.5%
Margin of Error	+/- 275	+/- 14.5	+/- 822	+/- 3.7	+/- 4,808	+/- 0.6
20.0 to 24.9%	931	21.5%	8,531	17.2%	242,352	15.5%
Margin of Error	+/- 170	+/- 7.1	+/- 573	+/- 2.0	+/- 2,375	+/- 0.3
25.0 to 29.9%	565	13.0%	5,501	11.1%	182,730	11.7%
Margin of Error	+/- 132	+/- 5.3	+/- 365	+/- 1.3	+/- 2,366	+/- 0.3
30.0 to 34.9%	284	6.5%	3,612	7.3%	123,226	7.9%
Margin of Error	+/- 98	+/- 4.1	+/- 312	+/- 1.1	+/- 2,021	+/- 0.2
35.0% and more	405	9.3%	7,978	16.1%	319,475	20.4%
Margin of Error	+/- 123	+/- 4.8	+/- 539	+/- 1.9	+/- 3,054	+/- 0.3

Source: American Community Survey, 2005-2009

Note: Excludes unit where costs cannot be computed

Table 7.2: Monthly Owner Costs as a Percentage of Household Income (1999)

	City of Kaukauna		Outagamie County		Wisconsin	
	Number	Percentage	Number	Percentage	Number	Percentage
Housing Units	3,195	100.0%	38,105	100.0%	1,122,467	100.0%
Less than 20%	1,865	58.4%	22,148	58.3%	634,277	56.5%
20.0 to 24.9%	520	16.3%	6,287	16.5%	173,620	15.5%
25.0 to 29.9%	294	9.2%	3,648	9.6%	109,833	9.8%
30.0 to 34.9%	179	5.6%	2,096	5.5%	64,892	5.8%
35.0% and more	321	10.0%	3,691	9.7%	135,075	12.0%
Not Computed	16	0.5%	145	0.4%	4,770	0.4%

Source: U.S. Census 2000 Summary File 3 (SF3) – Summary Data

Table 8.1: Monthly Rental Costs as a Percentage of Household Income (2005-2009)

	City of Kaukauna		Outagamie County		Wisconsin	
	Number	Percentage	Number	Percentage	Number	Percentage
Housing Units	1,754	100.0%	17,485	100.0%	637,568	100.0%
Margin of Error	+/- 214	-	+/- 642	-	+/- 3,947	-
Less than 20%	524	29.9%	5,901	33.7%	181,862	28.5%
Margin of Error	+/- 139	+/- 7.7	+/- 448	+/- 2.5	+/- 2,726	+/- 0.4
20.0 to 24.9%	269	15.3%	2,602	14.9%	87,878	13.8%
Margin of Error	+/- 109	+/- 6.1	+/- 319	+/- 1.7	+/- 2,237	+/- 0.3
25.0 to 29.9%	177	10.1%	2,019	11.5%	75,372	11.8%
Margin of Error	+/- 71	+/- 4.0	+/- 284	+/- 1.6	+/- 1,893	+/- 0.3
30.0 to 34.9%	194	11.1%	1,676	9.6%	54,194	8.5%
Margin of Error	+/- 107	+/- 5.7	+/- 263	+/- 1.5	+/- 1,577	+/- 0.2
35.0 and more	590	33.6%	5,287	30.2%	238,262	37.4%
Margin of Error	+/- 166	+/- 8.5	+/- 467	+/- 2.4	+/- 2,805	+/- 0.4

Source: American Community Survey, 2005-2009

Note: Excludes unit where costs cannot be computed

Table 8.2: Monthly Rental Costs as a Percentage of Household Income (1999)

	City of Kaukauna		Outagamie County		Wisconsin	
	Number	Percentage	Number	Percentage	Number	Percentage
Housing Units	1,423	100.0%	16,515	100.0%	641,672	100.0%
Less than 20%	530	37.2%	7,099	43.0%	242,345	37.8%
20.0 to 24.9%	204	14.3%	2,656	16.1%	90,934	14.2%
25.0 to 29.9%	188	13.2%	1,828	11.1%	67,926	10.6%
30.0 to 34.9%	97	6.8%	964	5.8%	44,573	6.9%
35.0 and more	332	23.3%	3,239	19.6%	162,669	25.4%
Not Computed	72	5.1%	729	4.4%	33,225	5.2%

Source: U.S. Census 2000 Summary File 3 (SF3) – Summary Data

Table 9: Income Characteristics

Jurisdiction	Households				Families			
	Total Number	Margin of Error	Median Income	Margin of Error	Total Number	Margin of Error	Median Income	Margin of Error
Income in 1999								
City of Kaukauna	4,999	-	43,980	-	3,434	-	50,187	-
Outagamie County	60,578	-	49,613	-	42,489	-	57,464	-
Wisconsin	2,086,304	-	43,791	-	1,395,037	-	52,911	-
In 2009 Inflation Adjusted Dollars								
City of Kaukauna	6,161	+/- 207	52,286	+/- 3,275	3,917	+/- 205	64,412	+/- 3,237
Outagamie County	68,107	+/- 524	55,763	+/- 1,010	45,819	+/- 771	68,476	+/- 1,579
Wisconsin	2,246,512	+/- 9,254	51,569	+/- 163	1,460,340	+/- 7,044	64,609	+/- 278

Source: U.S. Census 2000 Summary File 3 (SF3) – Sample Data; American Community Survey, 2005-2009

Table 10: Historic Population Change, 1970-2010

Jurisdiction	1970	1980	1990	2000	2010	% Change (1970-2010)
City of Kaukauna	11,308	11,310	11,982	12,983	15,462	37.4%
Outagamie County	119,398	128,730	140,510	161,061	176,695	48.0%
Wisconsin	4,417,821	4,705,642	4,891,769	5,363,715	5,686,986	28.7%

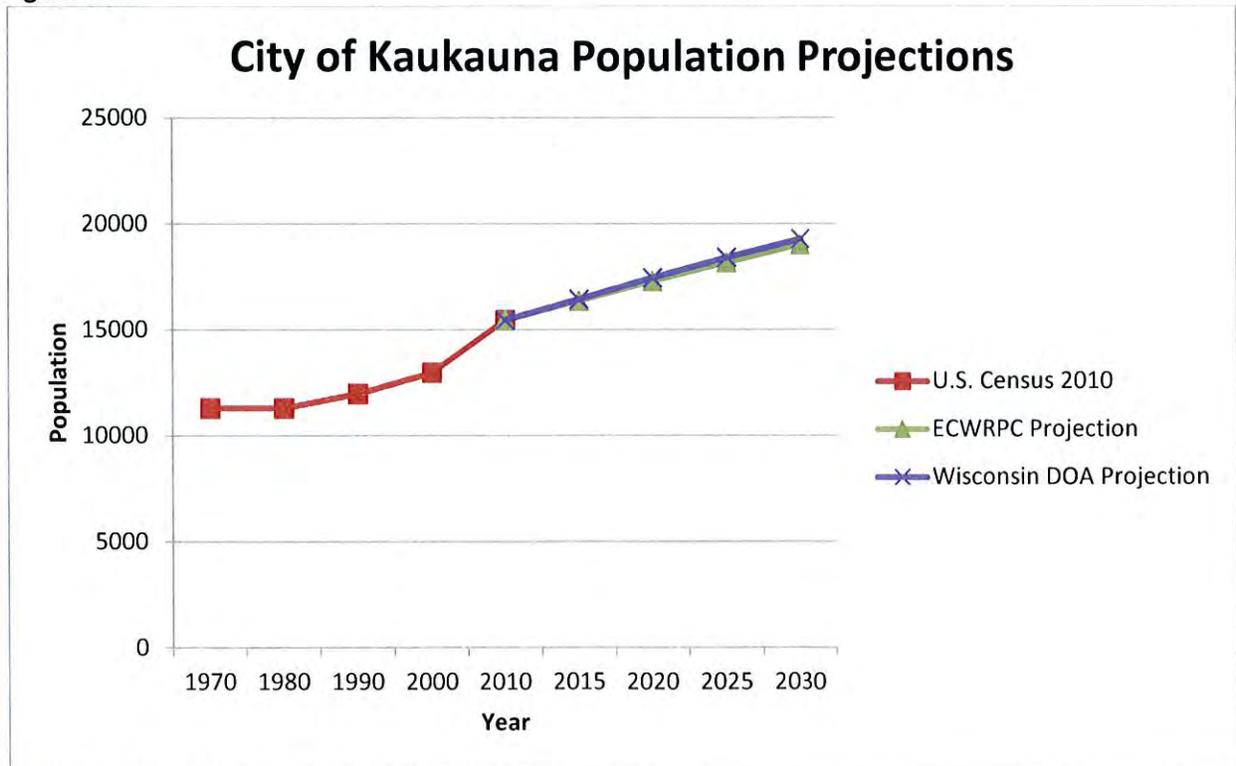
Source: U.S. Census, 1970-2000; U.S. Census 2010 Summary File 1 (SF1)

Table 11.1: Future Population Projections

Jurisdiction	U.S. 2010 Census	2015 Projection	2020 Projection	2025 Projection	2030 Projection	2010 to 2030	
						Numeric Change	Percent Change
C. Kaukauna (Low)	15,462	16,378	17,316	18,197	19,046	3,584	23.2%
C. Kaukauna (High)	15,462	16,454	17,460	18,422	19,308	3,846	24.9%
Outagamie County (Low)	176,695	185,807	195,013	203,472	211,454	34,759	19.7%
Outagamie County (High)	176,695	186,775	197,017	206,755	215,622	38,927	22.0%
Wisconsin (Low)	5,686,986	5,864,874	6,042,345	6,204,521	6,343,005	656,019	11.5%
Wisconsin (High)	5,686,986	5,899,849	6,111,063	6,296,350	6,444,377	757,391	13.3%

Source: City of Kaukauna Population Projections

Figure 11.1



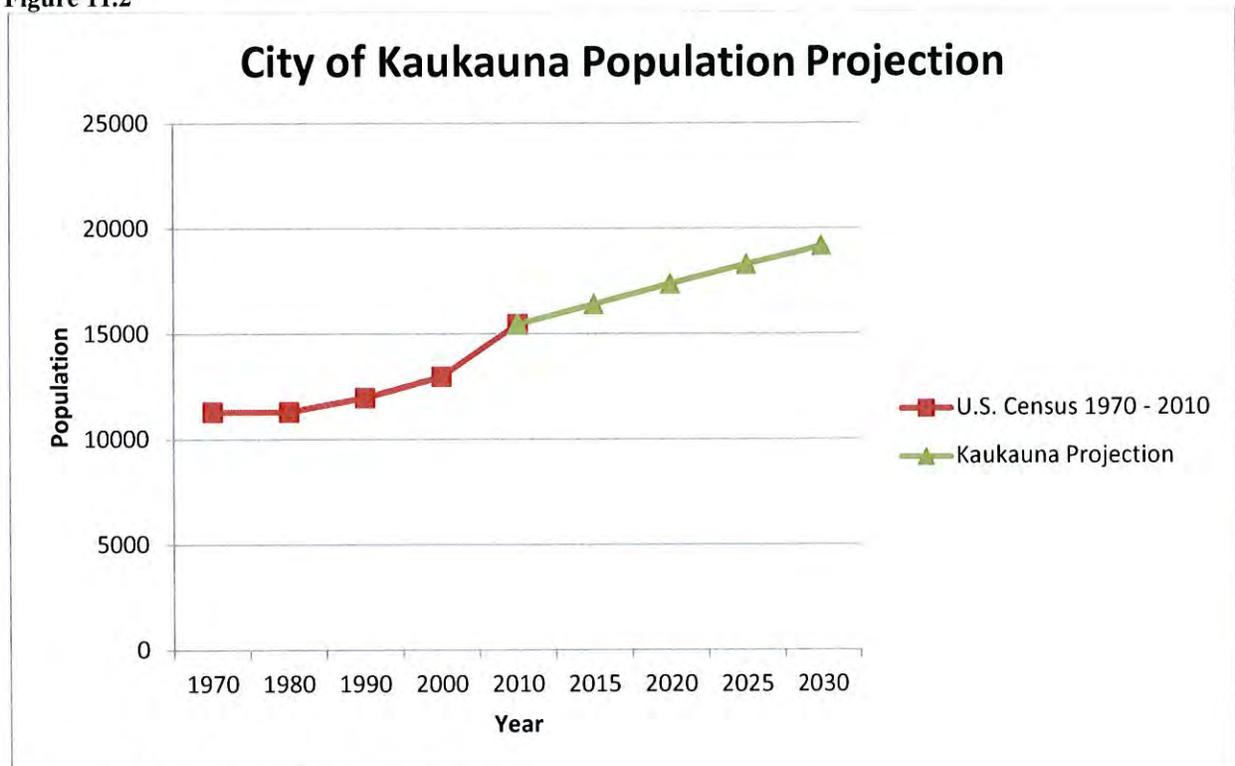
Source: City of Kaukauna Population Projections

Table 11.2: City of Kaukauna Future Population Projection (Average)

Jurisdiction	U.S. Census 2010	2015 Projection	2020 Projection	2025 Projection	2030 Projection	2010 to 2030	
						Numeric Change	Percent Change
C. Kaukauna	15,462	16,416	17,388	18,310	19,178	3,716	24.0%
Outagamie County	176,695	186,291	196,015	205,112	213,529	36,834	20.8%
Wisconsin	5,686,986	5,882,390	6,076,685	6,250,356	6,393,614	706,628	12.4%

Source: City of Kaukauna Population Projection

Figure 11.2



Source: City of Kaukauna Population Projections

Table 12: Future Household Projections

Jurisdiction	Method Used	2010		2015		2020		2025		2030	
		No. HH	Persons Per HH								
City of Kaukauna	A	5,973	2.49	6,426	2.45	6,885	2.42	7,296	2.40	7,712	2.37
	B	5,852	2.54	6,234	2.52	6,623	2.51	6,984	2.50	7,341	2.49
Outagamie County	A	70,321	2.52	75,104	2.48	79,872	2.45	84,030	2.43	88,186	2.32
	B	68,865	2.58	72,760	2.56	76,663	2.55	80,173	2.55	83,578	2.54

Source: East Central Wisconsin Regional Planning Commission, 2004

Note: The ECWRPC as the official Metropolitan Planning Organization for the Fox Cities Urbanized Area, has developed two methodologies for projecting future households. The first methodology, hereafter referred to as the Methodology A, calculates future household growth by distributing the projected number of households in Outagamie County to each minor civil division (city, village, town) based on the historic percentage of Outagamie County households which have been located within the particular

minor civil division. The second methodology, hereafter referred to as Methodology B, assumes that the minor civil division's average number of persons per household will change at the same rate as Outagamie County's average number of persons per household as projected by the Wisconsin Department of Administration (DOA). In methodology B, the projected population, as described in the previous section, is divided by the projected average household size to determine the future amount of households within the minor civil division.

Table 13: Newly Constructed Housing Structures & Subsequent Units

Year	Single Family		Two Family		Multi Family		Totals	
	Structures	Units	Structures	Units	Structures	Units	Structures	Units
2010	33	33	1	2	1	8	35	43
2009	46	46	4	8	0	0	50	54
2008	39	39	4	8	0	0	43	47
2007	63	63	4	8	7	57	74	128
2006	60	60	2	4	2	18	64	82
2005	130	130	18	36	2	26	150	192
2004	112	112	6	12	0	0	118	124
2003	169	169	8	16	0	0	177	185
2002	88	88	17	34	9	108	114	230
2001	69	69	17	34	21	248	107	351
2000	61	61	10	20	0	0	71	81
1999	37	37	6	12	0	0	43	49
1998	37	37	11	22	1	34	49	93
1997	37	37	11	22	1	34	49	64
1996	31	31	5	10	1	8	37	49
1995	42	42	3	6	1	4	46	52

Source: Kaukauna Building Inspection Office

TRANSPORTATION

Introduction

The City of Kaukauna strives to provide the most efficient transportation network to assist in the movement of commerce and people. The City has excellent access to US highways and a future Interstate Highway, is well connected to the Fox Cities, has rail service, a bicycle trail system, is part of the Fox River Navigation Authority, and is served by a bus route. As a center of industrial commerce, emphasis is placed on the movement of new material, finished product, and in the safe 24-7 access of workers to work place.

Compilation of Policies, Objectives and Goals

Streets and Highways. The City's street system is classified by function. These classifications are Interstate, Major Arterial, Arterial, Collector and Local. Street classifications are based on primary function first and the volume of traffic second. Exhibit II is a street map of Kaukauna showing current and projected classifications.

The City of Kaukauna is situated on the Fox River which divides the downtown commercial district. The river also separates the Industrial Park Network and interstate system from the residential growth occurring to the south of the river. To accommodate traffic flow over the river, there are eight bridges, including those that cross the navigation and power canals. One is a lift bridge originally built in 1978 to accommodate river traffic. River traffic ceased shortly afterwards, and the bridge has been inoperable since the early 1980's.

The City is also divided by the Konkapot Creek which has two bridges that are a little over one mile in distance. Both road crossings are county roads and are classified as either major arterial or arterial. Due to topographic constraints, it is unlikely that additional crossings will develop. Since a large portion of Kaukauna's future growth will be to the east of the Konkapot Creek, consideration must be given towards long term capacity and preservation of bridges for vehicles and emergency equipment.

The City of Kaukauna's road network is well laid out and functionally efficient. The City's Industrial Park Network provides direct access to US Highway 41 (future Interstate 55) with two ramps located at State Highway 55 and County Road J. This proximity to interstate roadways helps separate heavy truck traffic from residential vehicles. Consideration should be given to maintaining this operation and to accommodate all traffic.



Mass Transit. The City of Kaukauna is served by a regional bus service (Valley Transit) which connects Kaukauna with the Fox Cities and Oshkosh. Valley Transit is owned and operated by the City of Appleton with funding from state and federal transportation funds, as well as from the communities and counties served. Each

participating community has a member or representatives on the Valley Transit Board of Directors. This helps assure regional participation and that services meet community needs.

In the future, mass transit service can be expanded to include service between metropolitan areas. Several examples of this type of service might include bus lines, light rail, or specialized transit such as a weekend service to transport college kids from university cities such as Madison to Kaukauna (or the Appleton bus terminal). Consideration should also be given to extending bus service to Outagamie County Regional Airport to further accommodate mass transit.

Transportation Facilities for the Disabled. The mission statement of Valley Transit is as follows:

Valley Transit exists to meet community mobility needs and enhance quality of life by providing options for efficient and reliable transportation.

This is designed to include disabled persons, persons with limited mobility, and persons not otherwise able to operate a motor vehicle. Valley Transit operates fully accessible low-floor buses on all regular fixed routes. The low-floor design means no stairs at the front of the bus. A kneeling feature and ramp allow safe, easy access for passengers using mobility devices and for those who find steps difficult. Valley Transit II service is also available for individuals who, for reasons of disability, are unable to use the fixed route bus service. Valley Transit II is provided under the requirements of the Americans with Disabilities Act (ADA).

Bicycles. The City has an extensive trail network to accommodate bicycles. Exhibit III shows the trails, on-street trails, and future systems, both on and off road. The bicycle routes serve two distinct functions. First, they provide recreation and promote a healthy lifestyle. Trails for bicycles meander through restored prairies, along the river, and along an abandoned rail line. They lead to parks and other cultural features such as the 1000 Island Environmental Center. Second, bicycle routes connect residential areas with school and work destinations. While bicycle trails for recreation tend to be off-road, connecting routes for work and school are often on-street. Care must be taken to plan those routes in a safe manner and to educate drivers on the presence of bicyclists and bicycle rights.

Walking. Pedestrian accommodations have consistently ranked high in Kaukauna. Over 95% of Kaukauna's residential areas that have completed streets include sidewalks. Every major commercial district has public sidewalks.

As a policy, pedestrian accommodations should continue. Additional consideration should be given to extending pedestrian access to industrial work places and for the safe crossing of major roads, rivers, and other obstacles.

Railroads. The City is served by CN Railroad which is the only provider in the Fox Cities. To accommodate industrial users, the City has two rail spurs with public sidings in our Industrial Park Network. In addition, Thilmany Paper has a spur to receive raw product and for the shipment of finished material. This spur extends about one-half mile and includes a rail swing bridge over a navigation canal. Other businesses previously had sidings but have discontinued use. In some cases, the track and switch equipment exists and can be easily available. In other areas, only right of way exists.

Air Transportation. The City of Kaukauna is situated between two major airports that serve air carrier and air cargo clients. Outagamie County Regional Airport and Brown County's Austin Straubel International Airport presently offer scheduled passenger services from several carriers, charter flights, and air freight express services. Both airports are within 30 minutes of Kaukauna and both offer taxi and shuttle services. Day, overnight, and long term parking is available at both airports.

Trucking. Having access to heavy truck routes, the City is well located for trucking operations. The Industrial Park Network along with area industrial operations move considerable product. Logistics have to be in place to accommodate trucks including bypass lanes, sufficient pavement thickness, sufficient acceleration and deceleration ramps, fueling stations, repair bays, trailer repair and storage, policing services and overnight accommodations.

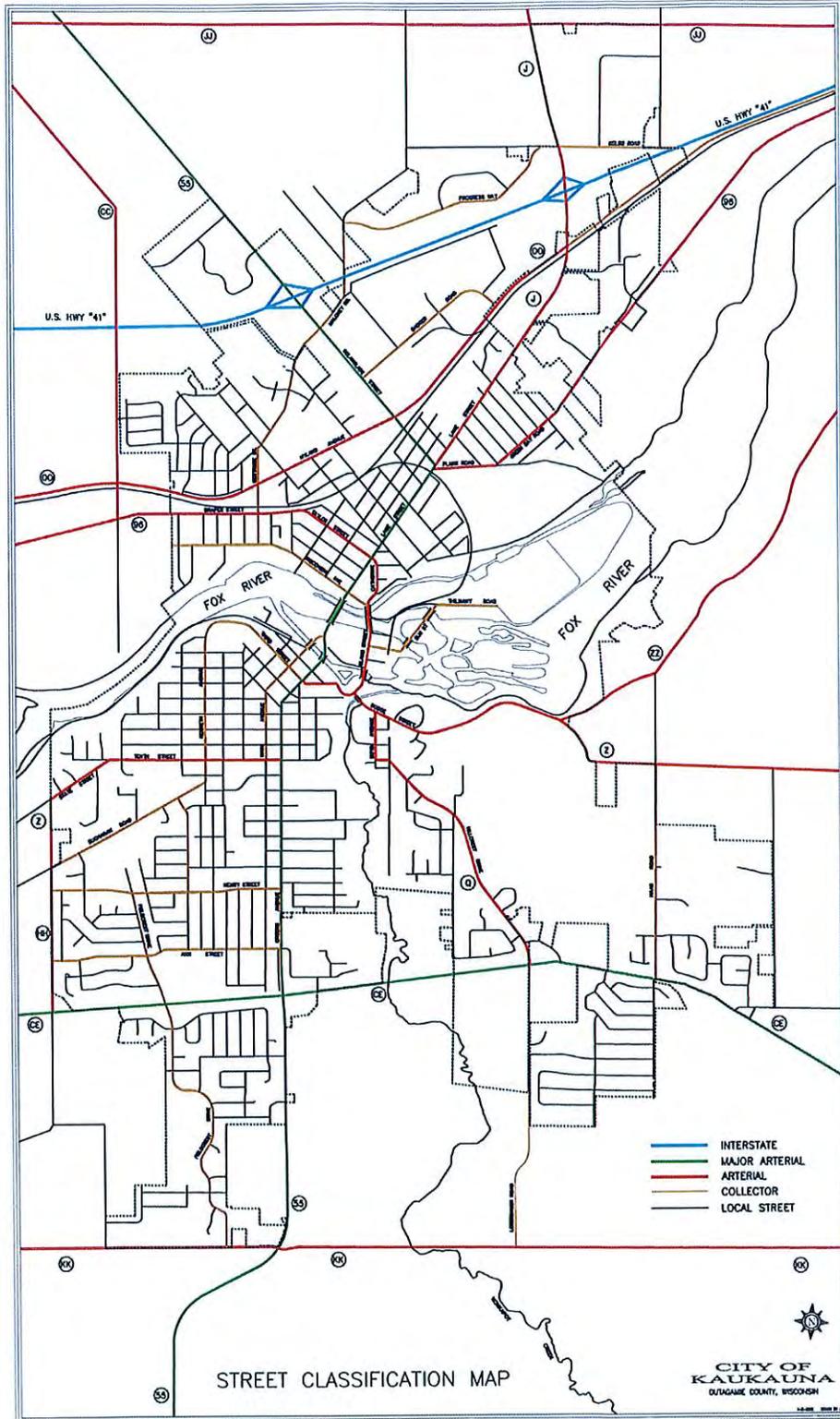
Water Transportation. There are no active commercial ports in Kaukauna. Thilmany Pulp and Paper received coal via barge traffic and salt piles were also received in the past by barge. However, navigation on the river ceased around 1980. Placed in caretaker's status, the State acquired the lock system, created the Fox River Navigation Authority, and is now in the process of refurbishing the locks.

The system will not likely be used for commercial purposes on a regular basis. The primary objective of the Fox River navigation system is to accommodate leisure and pleasure boaters. Therefore, the logistics of accommodating barge traffic is not deemed necessary.

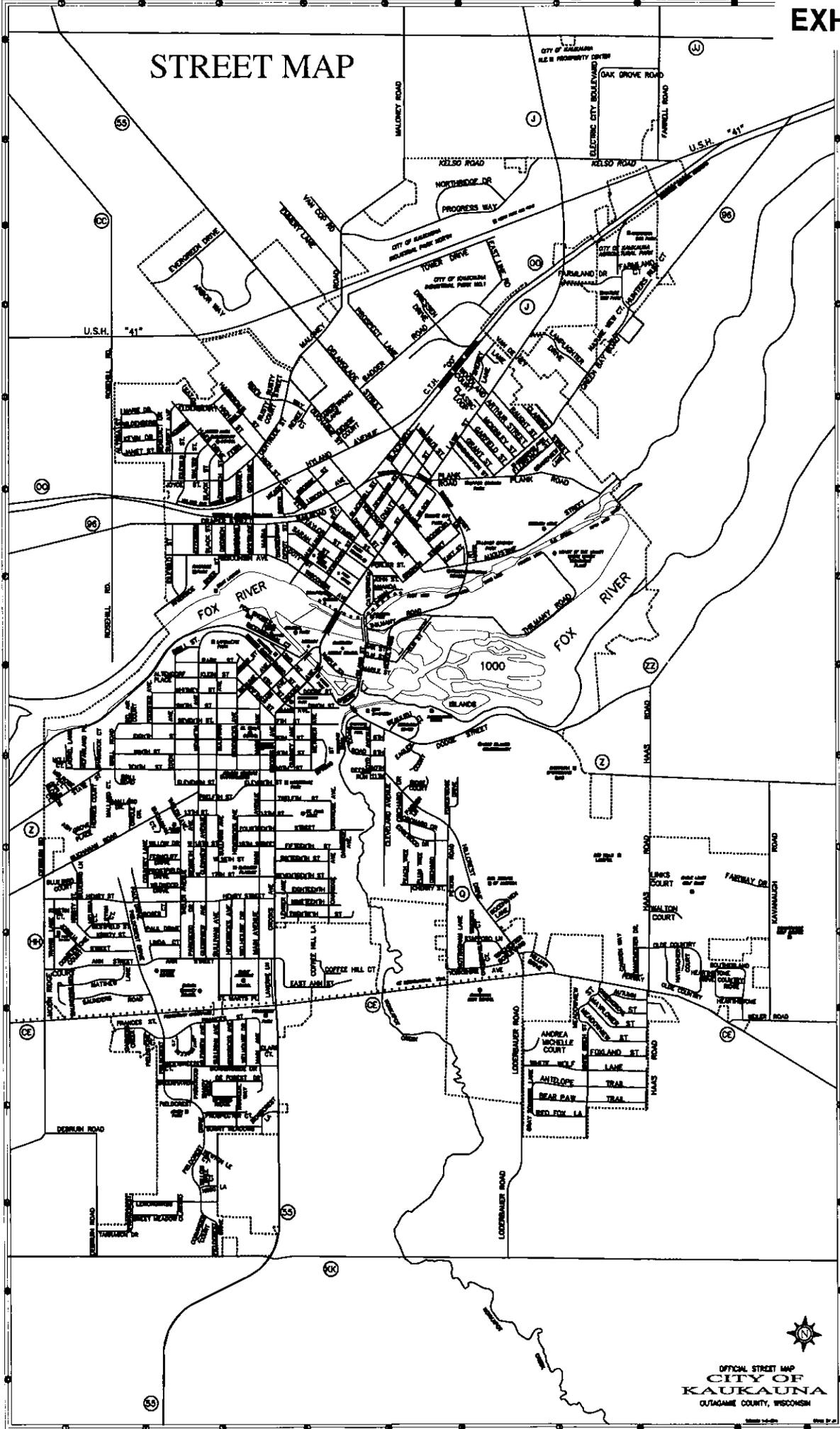
However, an open navigation system will present challenges for the City. Of primary concern is operating the lift bridge on Island Street and getting the bridge to operate. Other concerns include the railroad swing-bridge, ground maintenance, and public protection services.

GOAL, STRATEGIES, AND RECOMMENDATIONS - TRANSPORTATION

- Ensure that adequate infrastructure is in place to accommodate vehicular, heavy truck, bicycle and pedestrian access.
 - Provide for the extension of a trail network adjoining major transportation routes to provide a safe alternative to and from work/school.
 - Road improvements should take into consideration safe routes to school and improved pedestrian access.
 - Roundabouts should be considered at major intersections to reduce congestion and improve traffic flow.
 - Maintain major bridge structures, repair or replace, over the Fox River, power canal and navigation canal, and over/under Highway 41, to provide for uninterrupted vehicle access through 2060.
 - To the greatest extent possible, use concrete streets for the reduction of maintenance, replacement, and resurfacing costs.
 - Provide for the movement of individuals to and from shopping facilities, work, recreation, health care, and other services, in a timely and cost effective manner.
 - Participate in regional transit authorities that provide service to multiple areas within the Fox Cities for persons of all incomes, abilities, ages, and mental aptitudes. A regional service can best accommodate persons with disabilities, the elderly, and multiple modes of transit such as bicycles, cars, rail, plane, and others.
 - There have been regional efforts to open navigation on the Fox River since settlers first entered the valley. Kaukauna has a five lock system to bypass an approximately 51 foot drop in river elevation that was originally built in the 1850's.
 - Repair or replace bridges over the navigation canal to accommodate boaters.
 - Weigh the potential benefits of an open navigation system versus the cost of replacing a rail road swing bridge to serve an industrial client.
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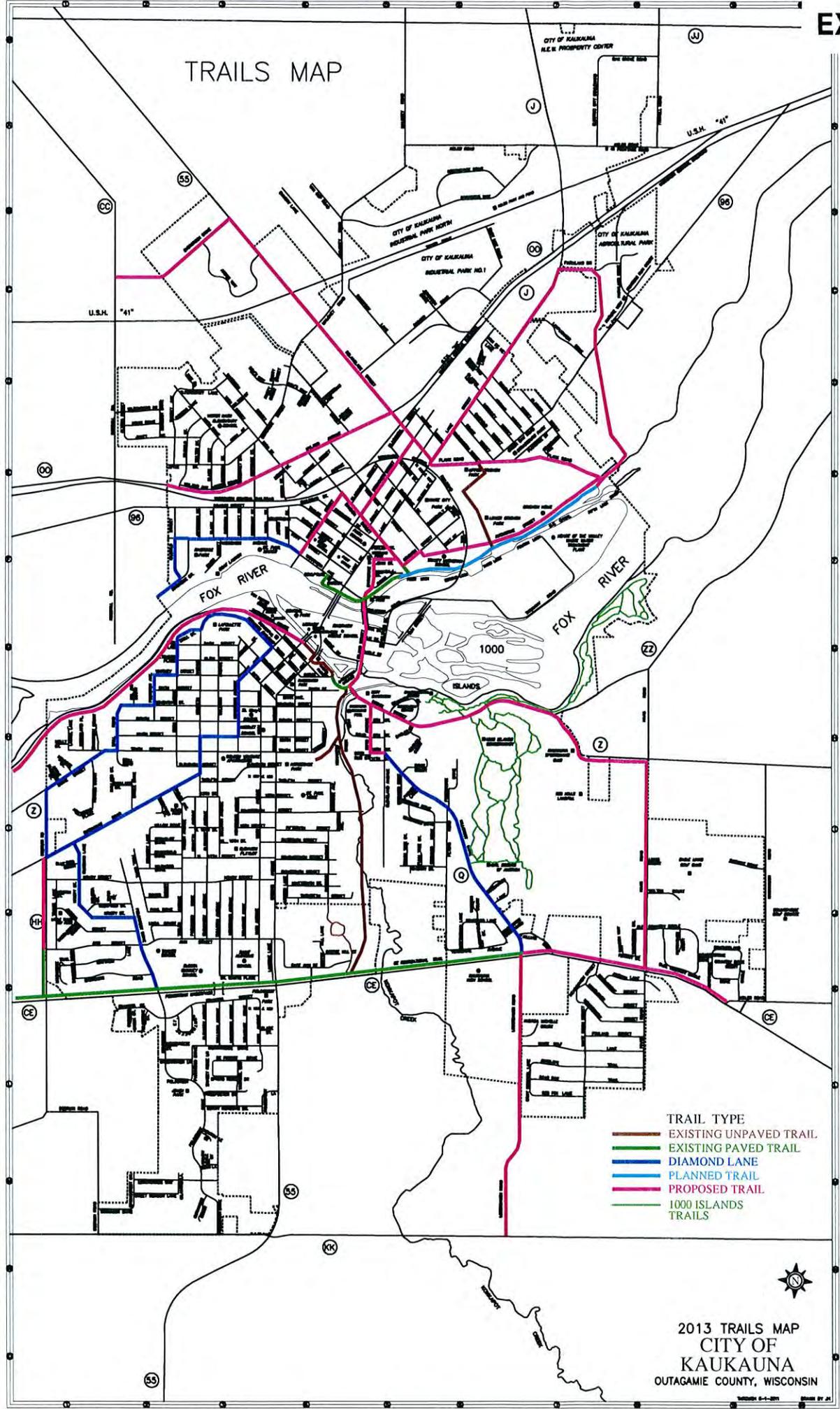


STREET MAP



OFFICIAL STREET MAP
 CITY OF KAUKAUNA
 OUTAGAMIE COUNTY, WISCONSIN

TRAILS MAP



- TRAIL TYPE
- EXISTING UNPAVED TRAIL
 - EXISTING PAVED TRAIL
 - DIAMOND LANE
 - PLANNED TRAIL
 - PROPOSED TRAIL
 - 1000 ISLANDS TRAILS



2013 TRAILS MAP
 CITY OF
 KAUKAUNA
 OUTAGAMIE COUNTY, WISCONSIN

DATE: 04-2011 DRAWN BY: JH

UTILITIES AND COMMUNITY FACILITIES

Electrical Supply and Distribution



Within the corporate limits of the City, there are three hydro electric generation plants owned and operated by Kaukauna Utilities. Two of the facilities – Old Badger and New Badger – are scheduled to be replaced in 2013 – 2014. The Federal Regulatory Commission has issued a 50-year license for a new turbine plant that will increase production of hydro powered electricity by 25% over current operations.

Water power has been in use within the City since the 1800's, initially powering individual water wheels and later, electric generators. As a municipality, the City has been generating electricity since 1912 through eight generating facilities along the Fox River.

It is estimated that 72% of carbon emissions come from coal burning power plants. Clean renewable energy produced in close proximity to the user helps reduce these emissions albeit in a very minute manner. However, grass root efforts are needed as small scale operations in many communities will add up to make an impact. Given Kaukauna Utilities knowledge of energy production and distribution, the City in the term of this report should consider the following initiatives:

- If economically feasible, take the necessary steps to increase hydro production by capturing water from the Ogee Dam and newer generators at the City Plant.
- Explore and implement additional sources of renewable energy such as wind generators and solar tracking panels.
- Encourage private production of renewable energy, specifically towards commercial properties and specifically towards solar production.
- Explore emerging technology towards renewable energy production regardless of scale, source of power, or private/public production.
- Engage local schools, technical colleges, universities, and other educational institutions toward the study of renewable energy production.

Production is one factor of providing electrical service. The other factor is distribution. To insure capacity and minimum disruption, Kaukauna Utilities should, to the greatest extent possible, place electrical lines underground and situated for easy access in the event of needed repairs. Platting of future parcels should be coordinated with Kaukauna Utilities to insure proper placement of easements. This also provides for the underground placement of partner utilities such as cable and telephone.

Special consideration should be given to the placement or upgrade of various electrical substations. The Industrial Park Network continues to grow and will draw additional demand as well as generate growth to the south and east. In addition, power may be generated from renewable sources, in significant volume, outside the river corridor. Potential land areas should be identified for the location of electrical apparatus.

The following Exhibit IV shows Kaukauna Utilities' existing service territory which includes all the incorporated area of the City.

Sanitary Sewer Service

The provision of sanitary sewer service plays a key role in the future development of the City and has an impact on the treatment and capacity of sewer outside the City. The City of Kaukauna's sewage is treated by the Heart of the Valley Metropolitan Sewerage District (HOVMSD) located near the fifth lock in Kaukauna. The HOVMSD treatment facility presently takes wastewater from the Darboy Sanitary Sewer District, City of Kaukauna, and the Villages of Combined Locks, Kimberly, and Little Chute. The HOVMSD is governed by one representative from each of the five member communities.

A Sewer Service Area (SSA), according to NR-121 of the state code, is an "area presently served or anticipated to be served by a sewage treatment system within the sewer service area plan's 20-year planning period". The Wisconsin Department of Natural Resources (WDNR) directs and is responsible for the implementation of sewer service area plans. East Central Wisconsin Regional Planning Commission (ECWRPC) has a contractual agreement with the WDNR to serve as the sewer service area planning agency in the Fox Cities. WDNR requires that new municipal sewer extensions fall within the designated SSA. The entire City falls within the SSA boundary.

In addition to the SSA boundary, there is a Planning Area Boundary (PAB). The PAB is based on the following, nonexclusive factors – the "ultimate service" area of the treatment plant based on capacity; the extent of planned service areas for individual lift stations or interceptor sewers; and/or the proximity of nearby clusters of development currently using on-site systems which may have long-term needs for sanitary sewer. The HOVPAB encompasses the entire City.

Besides SSA and PAB boundaries, the *2030 Fox Cities Sewer Service Area Plan* also delineated environmentally sensitive areas and discussed the impacts of development on water quality. **The Fox Cities SSA Plan indicates that, during its planning period (2005 – 2030), the growth needs of HOVSSA should be met by recent upgrades to the wastewater treatment plant.** Future updates to the Fox Cities SSA Plan should be consulted to track whether projections for sewerage capacity have changed.

Wastewater is conveyed to the HOVMSD plant through a collection system owned and maintained by the City of Kaukauna. There are two primary interceptors that serve the City – a main on the north side that flows to a lift station and force main along Augustine Street near the fifth lock and a south main that flows to the island area and connects with the HOVMSD main prior to the plant.

Kaukauna presently contributes 60% of the flow to the HOVMSD. The total daily influent load to the plant is presently around 55% of the plant's capacity. However, heavy rainfalls increase the influent by means of storm water inflow and infiltration. While the capacity of the plant would indicate that sufficient capacity exists to treat water in a means that would allow member communities to expand,

rain events may reduce this capacity. Other factors include pipe size and type of waste. To help assure future expansions are properly accommodated, consideration must be given towards reducing inflow and infiltration of storm water.

Storm Water Management

Controlling storm water has two primary objectives. The first is to control volume so as to minimize property damage during heavy, moderate, or long term storm events. The second is to filter storm water run-off to improve the quality of the water shed.

Storm water quantity is controlled by a number of regional ponds that provide for measured control and, in some cases, quality control. Ponds are either “dry” or “wet” depending on their depth below the outflow. Due to the presence of clay in the Kaukauna area, there is minimal infiltration of storm water to effectively control quantity.

Since the vast majority of the City’s streets are urbanized with curb and gutter, the majority of the collection system is piped. In some cases, there is minor ditching, but for the most part, the ponds are fed at a single point discharge. In most cases, there is sufficient drop/grade in the pipe to quickly and efficiently control run-off. The velocity of the pipe also prevents debris from accumulating, thus lowering maintenance costs. Exhibit V shows the location of storm ponds in Kaukauna. It is worth noting that some situations, such as large apartment complexes, have privately maintained ponds.

In 2002, the United States Environmental Protection Agency (EPA) identified Outagamie County for inclusion in the Stormwater Phase II Final Rule. As part of this mandate, communities within Outagamie County must continue managing storm water quantity, and begin managing storm water quality. The EPA sets forth minimum control measures as part of the mandate, which include:

- Public participation and outreach
- Public participation/involvement
- Illicit discharge detection and elimination
- Construction site run-off control
- Post-construction run-off control
- Pollution prevention/good housekeeping

Per the Wisconsin Department of Natural Resources NR216 Stormwater requirements, the City of Kaukauna is required to reduce storm water pollutants that discharge into the Fox River. To date, the City meets or exceeds the standards and will strive to comply with future provisions.

To help finance these goals, the City established a storm water utility. This is a City-wide utility that provides guidance for storm water management and financing and assembles year-end reports that are on file with the City Engineer. Future compliance issues should rely heavily on this utility.

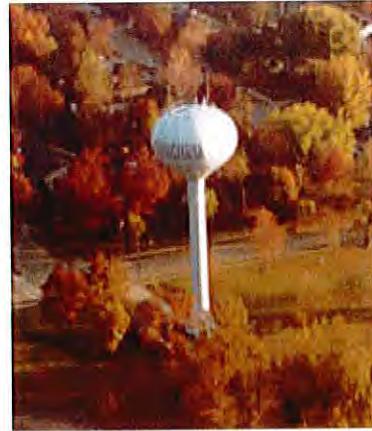
Water Supply

Water supply to the City is distributed by Kaukauna Utilities. A policy and objective of this distribution system is to provide clean, safe drinking water for the citizens of Kaukauna in adequate quantities and pressures so as to provide an uninterrupted source of fire protection and/or suppression. To

accommodate these objectives, goals, and policies, the City's water pressure is equalized by syncing two water towers at opposite ends of the community. Major looped mains are 12", 18", or 24". Other mains are 8".

To ensure quality and pressure, all mains should be looped with no main under 8" in size. A few 6" mains exist and should be upgraded on a schedule consistent with street resurfacing or in conjunction with other projects.

The City receives water via wells from the underlying Cambrian Sandstone Aquifer. This aquifer appears to have sufficient capacity and provides safe water with minimal treatment. While water quality is good, the water is "hard" causing residents to invest heavily in water softeners and salt and in plumbing repairs. Future wells should seek water of less hardness while preserving quantity and quality.



Kaukauna is a rapidly growing community in both population and industry. Although numerous conservation programs are in effect, and by reference here should be encouraged in the future, the anticipated usage will increase. Therefore, potential locations of future wells and mains should be considered now.

Solid Waste Disposal

The City of Kaukauna provides curbside collection of solid waste materials including yard waste, leaf collection, and large and irregular items (purchase of a municipal sticker is required for some items). Collection is provided weekly for garbage, monthly for large and irregular items, and seasonally for leaves and yard waste.

Household garbage is collected by automation from containers provided by the City. Disposal is to the Outagamie County landfill.

Yard waste is taken to a site within the City used by Thilmany Paper as a landfill for paper waste and by-products. Vegetation is composted while dirt and clean debris is used for berms.

Waste oil can be dropped off at the Municipal Services Building. Other hazardous waste materials can be disposed of through Outagamie County's Clean Sweep Program that provides drop-off sites at various locations throughout the State.

As an objective and policy, solid waste disposal should continue to provide convenient waste removal in a timely and cost effective manner to insure:

- Waste is properly disposed.
- Landfills are not overly burdened.
- Debris is kept from direct access to storm water.
- Continue efficiency in transporting waste.
- Uniform enforcement of material separation.

Recycling Facilities

Kaukauna and Outagamie County residents are mandated to participate in a recycling program. The City contracts with the County for curbside collection of eligible materials – primarily glass, plastic, cardboard and paper. Collection is the same day as municipal garbage collection, however, only every other week.

Materials do not have to be separated, but the system is not automated. Accordingly, it is more labor intensive and time consuming. Further, on windy days, recyclables tend to blow around neighborhoods. Therefore, some people are hesitant to properly recycle due to the method of collection.

As an objective and policy, recyclables pick up should be as convenient and timely as garbage. The system should be automated with options for weekly pick up. The goals of the program would be:

- Reduce waste stream to the landfill
- Reduce inadvertent wind-blown material
- Reduce weight of recyclables due to rain or snow
- Allow for quicker, less labor-intensive collection

On-Site Wastewater Treatment Technology

The City of Kaukauna has few if any on-site residential wastewater systems. As a policy, all residential units should be connected to a main and treated at the regional treatment facility.

Pretreatment for certain industrial/commercial users is required such as Thilmany Pulp and Paper and various meat processing facilities and restaurants. All must comply with current WDNR regulations and any policies of the regional sanitary sewer district if discharging into a sewer main.

Parks

The City of Kaukauna with a 2012 population of approximately 15,600 has, for its relative size, the largest, most comprehensive park system in the Fox Valley. This park system, and our recreational programs, add to the area's quality of life and make Kaukauna one of the best communities in which to raise a family.

To help maintain a high standard of parks, the City adopts a five-year Park and Recreation Plan. This plan which catalogues existing conditions and outlines new and innovative programs is by reference a part of the Comprehensive Plan including any subsequent updates.

The City is greatly advantaged with natural resources such as a river "pool" with boat landing above the Army Corps Dam and whitewater rapids below, wooded ravine and river bottom as part of a nature preserve, hills for sledding, an athletic complex, dog walking park, downtown sculpture garden, historic properties, and more. The total park and recreation open space is approximately 727 acres or 30.75 acres per 1,000 residents (2010 figures). The current standard recommended by the State is 6 to 10 acres. The average in the Fox Valley is 17.27 acres among communities in excess of 6,100 residents.

The following is a summary of parks in the City of Kaukauna:

- 1000 Islands Conservancy: In 1969, the 1000 Islands Conservancy area was officially created by the City Council, prohibiting any commercial, industrial or residential development in the area. The 1000 Islands Conservancy Area contains abundant species of wildlife, including a pair of nesting Bald Eagles. An Observation Report for the Kaukauna Bald Eagle Nest site has been developed. Recommendations as a result of the report can aid in protecting eagle nesting. In the lower Conservancy Area, the acreage consists of wooded shoreline along the Fox River. The upper Conservancy Area consists of wooded ravines and high land. The upper acreage is adjacent to the Thilmany landfill. The nature center offers educational programs and maintains a system of nature trails.
- Horseshoe Park: This community park is located in the south-central portion of the community. The site is heavily wooded on the eastern half and adjoins the Konkapot Creek Trail which follows an abandoned railroad grade. Nature trails are located in the lower level and connect with the 1000 Islands Environmental Center, Bayorgeon Fields and the Municipal Swimming Pool by City sidewalk. Park facilities include a lighted softball diamond, press box, concession stand with scoreboard, unlit youth ball diamond, rec-lot with playground structure, park identification sign, off-street parking, grills, security lighting, horseshoe pits, a heated shelter building with restrooms and a sand volleyball court. This park has the potential for a storm water pond in line with the piped intermittent stream which daylight at the park.
- Lower Grignon Park: This community park is complemented by the presence of the historic Charles A. Grignon Mansion. The mansion has been placed on the National Register of Historic Places and is owned and operated by the Outagamie County Historical Society. The mansion is being restored to preserve the historic structure for future generations. The lower level offers an abundance of open space, including a tobogganing hill (known as Mount Misery), several soccer and football fields, flag football, and a football fundamentals program. The potential for an ice rink is at the park but due to lack of use it has not been flooded in recent years. Other improvements to the lower level include restroom/concession stand staffed by the Electric City Soccer Association, playground equipment, and off-street parking. Across the street is an Army Corps of Engineers interpretive display, featuring a lumber exhibit, waterfall and waterwheel, benches, and a footbridge leading to Lock Number 4. An unofficial and unimproved foot trail crosses the railroad tracks and links Grignon Park with White City Park.
- Konkapot Preserve: This 23-acre portion of the reclaimed former Lehrer landfill is privately owned but leased to the City for 20 years with 2 five-year options for park purposes. A DNR grant enabled the developer to remediate the landfill site contingent on the land being placed in public use. The developer is responsible for the landfill and any problems which may arise. The City of Kaukauna used a portion of the DNR grant, along with matching funds, to plant native prairie grasses and wild flowers along with the installation of a gravel trail through the preserve. An Eagle Scout project resulted in the construction of a pavilion along the trail for people to relax and enjoy the preserve which is adjacent to the Konkapot Creek Trail.
- Doty Bayorgeon Field: This park and recreation complex serves many active recreational uses. Features include a lighted football field with broadcast booth and concession stand facilities, a metric running track, bleachers, scoreboard, two lighted softball diamonds, off-street parking, lighted baseball diamond with scoreboard and bleachers, restrooms, and a concession stand. Kaukauna Area School District utilizes these facilities for home games.

- Dog Exercise Park: Completed in 2006, this 13-acre facility won the 2007 Park Section Award for Excellence from the Wisconsin Park and Recreation Association. The dog park has three distinct areas for dogs and their human companions to play together. An area for small dogs, an area for all dogs without water, the water, and the walking trail area are all separated from each other by a chain link fence. The water area is a unique feature not found at other area dog parks and the ½ mile trail allows unleashed walking of dogs. The park offers picnic tables and benches along with vending machines and receptacles for dog waste and garbage. The paved parking area can accommodate up to 40 vehicles.
- Riverside Park and Boat Launch: This community park is located in the north-central portion of the City along the north bank of the Fox River. The upper park area has access from Riverside Drive. It contains off-street parking, a shelter building with restrooms, a picnic area with grills, horseshoe pits, night lighting and playground equipment. There is on-street parking for approximately 100 cars. The lower park area has access from River Street. It has a Little League baseball diamond, picnic tables and grills, concession stand facilities, restrooms, night lighting, boat launch, drinking fountain, park identification sign, and parking for approximately twenty-five cars and trailers. Adjacent to the boat launch is a fishing pier dock area and protective breakwater.
- Jonen Park: This community park is located on the southwestern edge of the City limits adjacent to Fieldcrest Drive. The park includes soccer and baseball fields, a basketball court, sledding hill, large pond, open space and playground equipment. The area to the south of Jonen Park expects future residential growth making this community park an attractive addition to the park system.
- Municipal Swimming Pool: This facility was constructed in 1990-1991, and includes a zero-depth outdoor pool complete with diving well, water slide, bathhouse, concession building, sand play area, sand volleyball court, night lighting and off-street parking. This state of the art recreation facility is one of Wisconsin's finest public swimming pools. During the summer of 2008 a fenced archery range was installed with multiple shooting areas and targets in the pool area complex.
- LaFollette Park: This community park serves the central portion of the City. Facilities of this mature wooded park include a shelter and restrooms, picnic tables and grills, drinking fountain, two park identification signs, softball backstop, night lighting, paved basketball court, sand volleyball court, horseshoe pits, playground apparatus equipment, and off-street parking.
- Konkapot Creek Trail: This segment of trail has three railroad bridges and follows the Konkapot Creek. The trail runs from Dodge Street to the "CE" Trail which runs from Kaukauna to Appleton and accepts bicycle as well as pedestrian traffic.
- Nature View Park: This wetland preserve, while lacking in traditional park features, is nonetheless an important part of the City park system. Maintaining the natural state of an area surrounded by commercial and residential uses benefits the wildlife and the people who may come to bird watch or simply relax and listen to the sounds of the wetlands.
- Upper Grignon Park: Facilities in the upper level of the park include playground equipment, the mount misery sledding hill, park identification sign, picnic tables and grills. In addition, the park offers a challenging 18-hole disc golf course, which winds through the wooded areas of the park.

- White City Park: This is one of two neighborhood parks in the northeast portion of the community. The topography is rolling and wooded. Improvements include a softball diamond, picnic tables and drinking fountain, park identification sign and playground equipment. During winter, sledding is also available in the rolling park. An unofficial and unimproved foot trail crosses the railroad tracks and joins White City Park with Grignon Park.
- Van Epern Park and Pond: Located in the City's Industrial Park network as a part of the NEW Prosperity Center, this park and pond serves dual purposes. It is designed to provide detention for the storm water from the development before entering Apple Creek, and will also serve as a recreation opportunity. A picnic area and trail are also planned for the park and a dock stretching out into the water will enhance fishing experiences.
- Kaukauna Sportsmen's Club: The Sportsmen's Club has a rifle, pistol, shotgun range and a clubhouse located within the corporate limits. It is open year round and is used by the general public, hunter's safety course participants, and the Police Department for training purposes.
- Kelso Park and Pond: Located in the City's Industrial Park North, this neighborhood park and pond has dual uses. It is designed to provide detention for the storm water from the Industrial Park Network. The park also was designed for tenants of the industrial park network to have a place to relax. There is a walking trail with bridges over the inlet and outfall of the pond. A picnic area is also in the park as well as a dock stretching out into the water. The Kaukauna Rotary Club has erected a large flagpole in the park.
- Central Park: Central Park has seen several improvements in recent years. The multiple functions of this facility make it an asset to both active and passive recreational users. The City has held a number of annual events on these grounds. Because of its scenic location along the dam and the Fox River, Central Park has great potential that may require continued park improvements. Facilities include off-street parking, an identification sign, soccer field, softball backstop, drinking fountain and picnic tables. The public library is located in this park.
- Anderson Park: This future neighborhood park will serve the southeast side residents north of C.T.H. "CE". Planned features are passive in nature with a picnic area, shelter building, playground equipment, and open space.
- Strasbourg Park: This neighborhood park is the second park in the northeast portion of Kaukauna. Facilities include a softball diamond, basketball court, and playground equipment with an open play area.
- Thelen Park: This rec-lot services the neighborhoods on Kaukauna's southwest side. Features include playground equipment, a shelter, picnic tables and grills, drinking fountain, and a softball diamond.
- Hydro Park: This downtown neighborhood park is centrally located and contains a main feature which represents the history of hydropower in the City of Kaukauna. This feature is designed to attract people to the area and encourage interaction with other residents of the City. The park is located along the waterpower canal and will be separated by decorative fence. A pavilion

with bathrooms and open space along with the extension of the Konkapot Trail through the downtown will complete the park.

- “Family & Friends” Sculpture Garden: Located in the north side business area scenic overlook, this park has sculptures and benches on the upper part. A switch-back trail descends to the shipping canal of the Fox River and then under the Lawe Street Bridge to the Canal View senior housing complex connecting the garden with Thilwerth Park
- Glenview Play Lot: This rec-lot serves the south-central neighborhoods of the community. The lot is located along a ravine and is partially wooded. Facilities include an older style park identification sign, drinking fountain, picnic table and grill, softball backstop, and playground equipment.
- Fieldcrest Park: Located on the City's south side, this rec-lot serves the newer residential area south of County Highway "CE". Recent improvements include playground equipment, drinking fountain, picnic area, and open play space.
- Thilwerth Park: Located along the U.S. Government Canal, this narrow park includes leased ground from the U.S. Government, a portion of the trail network with historical kiosks, and a fishing pier. The park includes a monument to Oscar Thilmany and Monroe A. Wertheimer, pioneers in the manufacturing of pulp and paper in Kaukauna. The park is subject to redevelopment and future improvements will include trail extensions, winter activities and additional fishing piers.
- Little Tykes Tot Park: This rec-lot is located on the City's southwest side and serves residents near the intersection of De Bruin Road and C.T.H. "CE". Features will include two swing sets, a slide, diggers, merry-go-round, drinking fountain, picnic tables and open space.
- Veteran's Memorial Park: This public green space is located in the central part of the community, north of the Fox River at the intersection of Lawe and Catherine Streets. Facilities include benches, a drinking fountain, walkway and a monument to Veterans. A new honoring ring monument honoring all veterans from Kaukauna who served will be constructed during the summer of 2011. A second monument is located near Reaume and Hendricks Avenues. This monument recognizes the Revolutionary War Service of area veterans.
- Fassbender Park: The second mini-park located in the central portion of the City and South of the Fox River is bordered by Crooks Avenue, Fourth Street Plaza and Quinney Avenue. Improvements to this wooded lot include a decorative fountain, drinking fountain, benches, park identification sign, and a monument to Herbert Fassbender, originator of Kaukauna Klub Dairy.
- Skateboard Park: The public skate park is a popular activity for young people. It is located in the downtown next to City Hall. The park is complete with a curbed skating area and half pipe ramps along with other features popular with skateboarders and roller-bladers.

As a policy, parks and recreation programs and improvements should be directed by a five-year plan which is readily updated and can accommodate the latest trends.

Given the extensive park network in place, it is unlikely that the City will need to acquire additional land for major parks in the next 20 years. Concentration should be focused on existing parks so as to benefit from financial investments and allow public use as soon as possible.



Telecommunications Facilities

The City is well served by telecommunications including fiber optics. To assist in wireless service for the region, the City has adopted a telecommunications tower ordinance that accommodates multiple co-locates on permitted towers. In total, there are three towers specifically designed for multiple tenants including a lattice type structure that has increased capacities. The City's Utility also has two water towers that permit co-location for added antennas.

To better assure uninterrupted service, the Utility should continue its practice of co-locating underground services. This reduces the risk of downed lines due to accidents, storms, or icing. Shared trenching of electric and telecommunications lines also saves money and space in terrace areas and easements.

As a goal and policy, the City, it's Utility, and various private telecommunications providers should work together to achieve the following:

- Maintain ordinances to accommodate trends in the telecommunications industry.
- Share common easements and facilities to effectively make use of space and infrastructure.
- Encourage the placement and maintenance of high speed telecommunications facilities, specifically for commercial and industrial uses.

Cemeteries

The City of Kaukauna does not maintain cemeteries or own property for burial sites. The attached Exhibit VI shows the location of various private cemeteries within the corporate limits.

Private cemeteries appear to have significant space for expansion. Further, there has been no public request for burial space beyond what is currently available.

Health Care Facilities

Within the City of Kaukauna there are three clinics that provide a variety of health care options. Each clinic is staffed by physicians who are properly equipped to handle day to day health care situations. Hospitals and extended care facilities are available within the Fox Cities metropolitan area. This includes elder care facilities and nursing homes, and dementia and Alzheimer's facilities also located in Kaukauna.

Adequate health care facilities exist within the community. Although the City does not have a hospital within its corporate limits, there is quick and ready access to multiple hospitals within a 15-mile radius of the City. Growth anticipated in the City over the next 20 years is not expected to warrant the investment of a full service hospital. However, clinics and specialty care facilities such as dialysis, dental, and orthopedic are expected to grow.

Child Care Facilities

The City does not provide child care or day care facilities. Municipal code allows day care operations in areas within the Industrial Park Network close to workplaces as well as in residential areas close to homes. Therefore if demand arises, there are many options for day care providers to expand operations.

Police

The City of Kaukauna provides full time police service including detectives, patrol officers, school liaison officers and various crime prevention programs. The department is staffed by a Chief, Assistant Chief, Lieutenant/Detective, four Sergeants, 17 Patrol Officers, and one Community Service Officer. This provides 1.35 officers for every 1,000 residents.

Kaukauna has an extensive and growing Industrial Park Network. There are no less than 80 major employers in the network along with smaller operations. It is anticipated that within the term of this plan, the Industrial Park Network will more than double in operations. These operations will generate growth in the community; however, industrial and commercial development will outpace residential growth. Accordingly, Kaukauna's daytime population will exceed its residential population resulting in increased traffic and other logistics that will have an impact on future police services.



Therefore police services must consider servicing not just the resident population, but the workforce population and accompanying businesses. As a policy, goal, and objective, police services for the community should consider the following future provisions and anticipated conditions:

- Commercial/industrial growth will lead to an increase in calls and in the diversity of the calls.
- Highway 41 being transferred to an interstate system may increase calls that require additional coordination with local, state, and federal authorities.
- Statistically, Kaukauna is a relatively safe community with a low crime rate. However, being part of a regional community, crime will filter into Kaukauna. Therefore, crime prevention and identification programs should increase. Greater priority should be placed on the increased use of community service officers.
- Consider reducing, eliminating, transferring, or not implementing minor police duties such as animal control and licensing, parking meter enforcement, property nuisance calls, and the like so as to keep patrol officers available for critical tasks.
- Provide for a modern, adequately equipped facility that can house the department and its logistical needs.
- Wherever feasible, consider a reduction in services or reimbursement of services for duties performed outside the corporate limits.
- Increase crime prevention programs through the school system and by means of urban design programs.

Fire/Rescue

The City of Kaukauna operates a full time Fire Department that includes paramedic services. The department is staffed with a Chief, four Assistant Chiefs, four Lieutenants, six Drivers, and four Firefighters all of whom are also Paramedics. In addition, the City has approximately 17 paid-on-call Firefighters.

Services provided by the department include rescue/paramedic services, water rescue, fire inspections, fire fighting, confined space entry, and accident management. The City's equipment includes fire-fighting vehicles and all associated apparatus, ambulances, and water rescue/recovery equipment. The combination of equipment, training, staffing, and other associated factors has resulted in the City having a fire insurance rating of 4. This rating provides reduced insurance rates for businesses that insure through participating insurance companies.



As a full service community, the Fire Department provides fire and paramedic services to residents and businesses. These services are critical to a number of facilities including elder care and assisted living facilities, clinics and other health care facilities, industrial operations and other areas with work place hazards.

The department presently operates out of a central location in downtown Kaukauna. This provides reasonable response times for the majority of the City. However, the ambulance/paramedic services extend beyond the corporate limits as shown in Exhibit VII. It should be clearly understood that these residents may not receive the equivalent response times as those in areas closer to the central location.

Relative to future services, the City is divided by a number of unique features and circumstances. These features will, along with financial capabilities and other factors, influence emergency response for fire and rescue services. The following divisions should be taken in consideration:

- The Fox River divides the City. Although there are two major road crossings, there is always a delay potential.
- The Konkapot Creek divides the south side in an east/west direction. Bridges are situated roughly one mile apart. Delay potentials exist here as well.
- Elder care facilities and most medical facilities are located on the south side. These are heavy ambulance users.
- Major industrial facilities are located on the north side. Although fewer calls are made relative to south side care facilities, the potential for multiple patients as well as the threat of commercial/industrial fires is greater.
- The CN Railroad mainline splits the north side of the City. There are several crossings; however, some delays may exist.

As an objective and goal relative to comprehensive planning, City fire and rescue services must strive to accomplish the following:

- Maintain a fire insurance rating of 4 or better.
- Investigate and implement methods of reducing or eliminating obstacles to faster response times.
- As the City's ambulance calls increase due to expanded industrial growth or growth among senior care facilities, the City should consider reducing the extraterritorial service area to avoid over-working staff and equipment.
- Investigate new facilities for an expanded Fire Department that has quick access to major arterial streets.

Library

The City's library is centrally located along Highway 55 in downtown Kaukauna. The original library is a Carnegie Library built in 1905 on property donated by the Green Bay and Mississippi Canal Company. The facility was built at approximately 6,000 square feet, is multi-level, and is still used as a library. This library is on the National Register of Historic Properties.

In 1976, the library received a two-level, 6,300 square foot addition. Subsequently, an elevator was added to gain access to all levels.

Libraries situated in downtown areas can provide benefits to the public beyond typical library programs. Libraries provide a depository of historic information, research tools for small businesses, meeting rooms, community focal points, and attract considerable patrons to the downtown area. Traditional library programs are being supplemented by trends in the industry. Within the next twenty years, libraries must adjust to meet changes in technology, consumer demand, and in expanding or maintaining library structures.

Should these trends result in a demand and the feasible implementation of a new library structure, the following points should be considered as goals and policies:



- The original Carnegie structure should be preserved and used for public benefit.
- A library should be situated in the core of the community.
- The library should identify the logistical needs of the facility for the next 40 years prior to any move.
- The library should consider adjoining man-made or aesthetic surroundings to provide inspiration to patrons.
- Given trends in the industry and ever-changing technology, new space should be considered for multifunctional uses.

Kaukauna Area School District

A high quality school system plays a critical role in attracting families, providing recreational and learning opportunities throughout the year, and in strengthening the economy by providing a skilled and well educated workforce. A sound education system prepares individuals for the next chapter in their lives regardless of age, mental, or physical capabilities.

The Kaukauna Area School District is managed by a school board operating independently of the City. The district includes all of the City of Kaukauna as well as considerable area outside the City as shown in Exhibit VIII. Presently all public schools in the district are located in the City including the high school.

The district's population growth is primarily to the south. This trend is anticipated to continue. Therefore, future schools or school expansions should consider southern locations. An aerial view of the district's two schools along County Road "CE" shows that ample space exists to accommodate potential expansions.



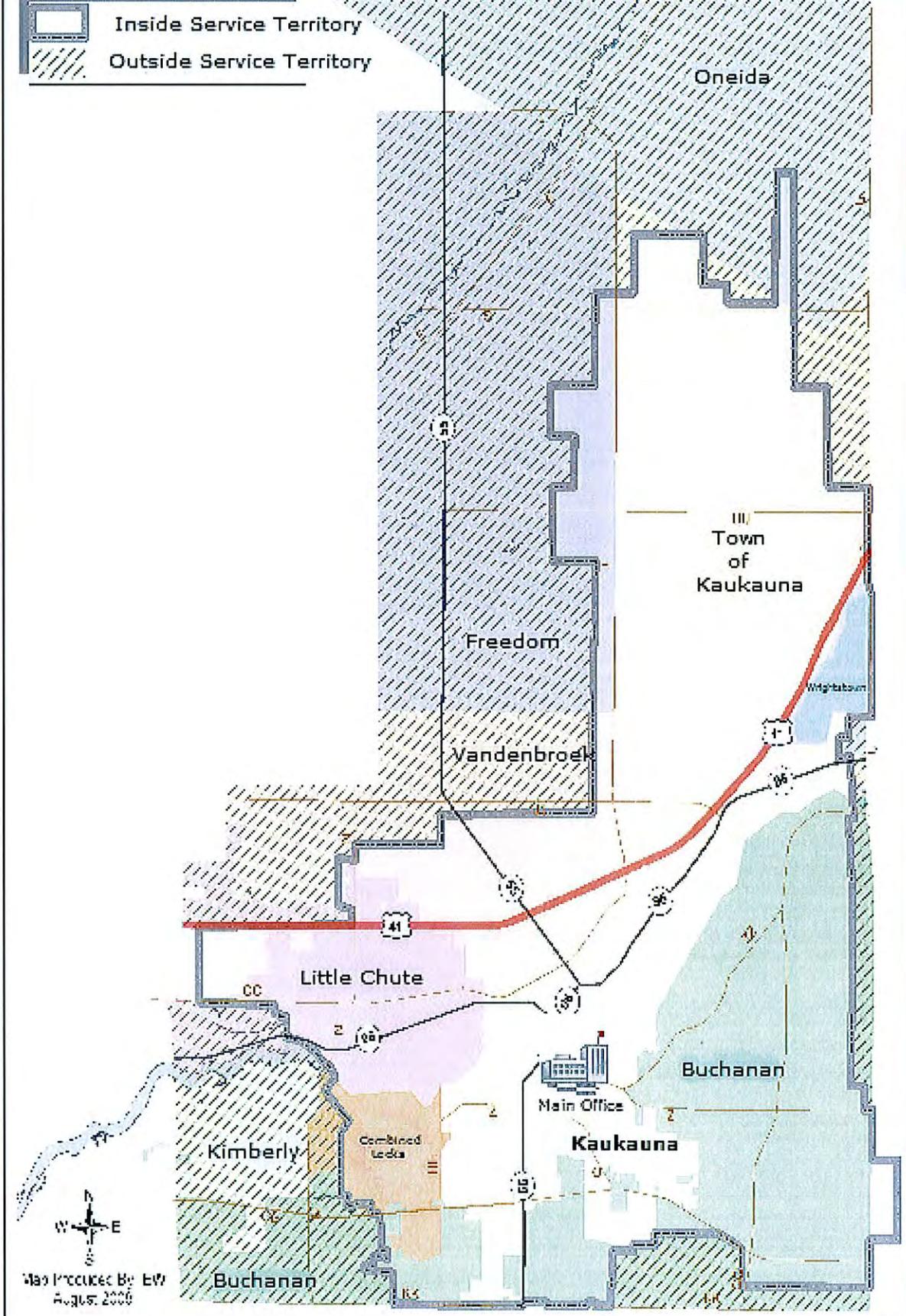
Municipal consideration should be given to ensure students, parents, and visitors to the school have a safe route to all facilities. This includes pedestrians, vehicles and buses. As a policy, the City should continue to place sidewalks with access to schools, crossing guards where appropriate, separate buses and vehicles, control intersections for traffic, and locate schools adjacent to arterial roads.

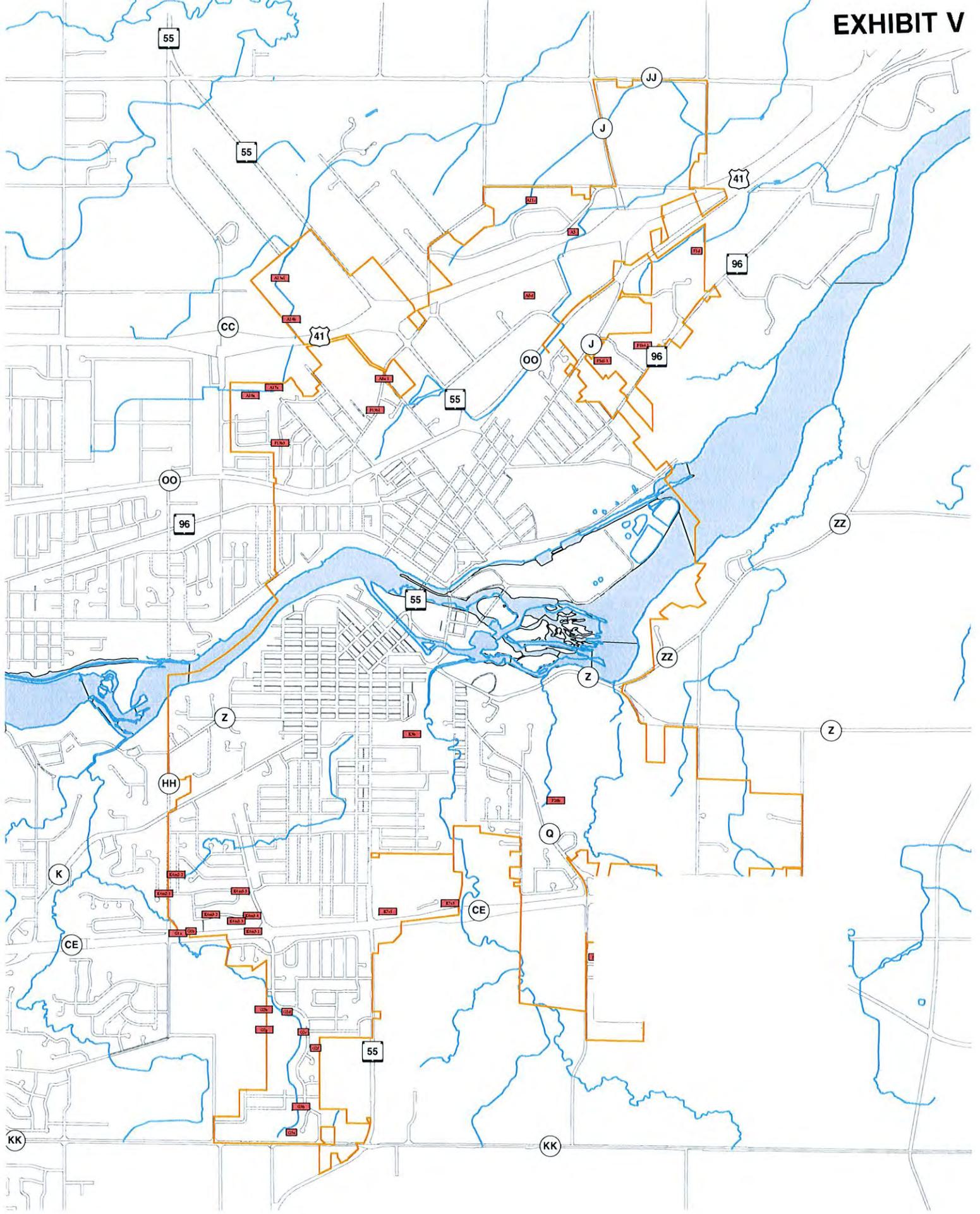
As a goal and policy of the City, the following should be taken into consideration:

- Promoting technical education that matches the type of industry situated in Kaukauna.
 - Provide safe routes to school for all uses.
 - Work with the district to provide a wide range of educational/recreational programs that use municipal athletic fields, the 1000 Islands Environmental Center, public library, parks, Grignon Mansion, and trail network.
 - Involve the district in future TIF programs.
 - Assist in siting and/or expanding schools through dedication of land use and space. This may not occur in the immediate future but should be reviewed on a six to eight year basis.
-

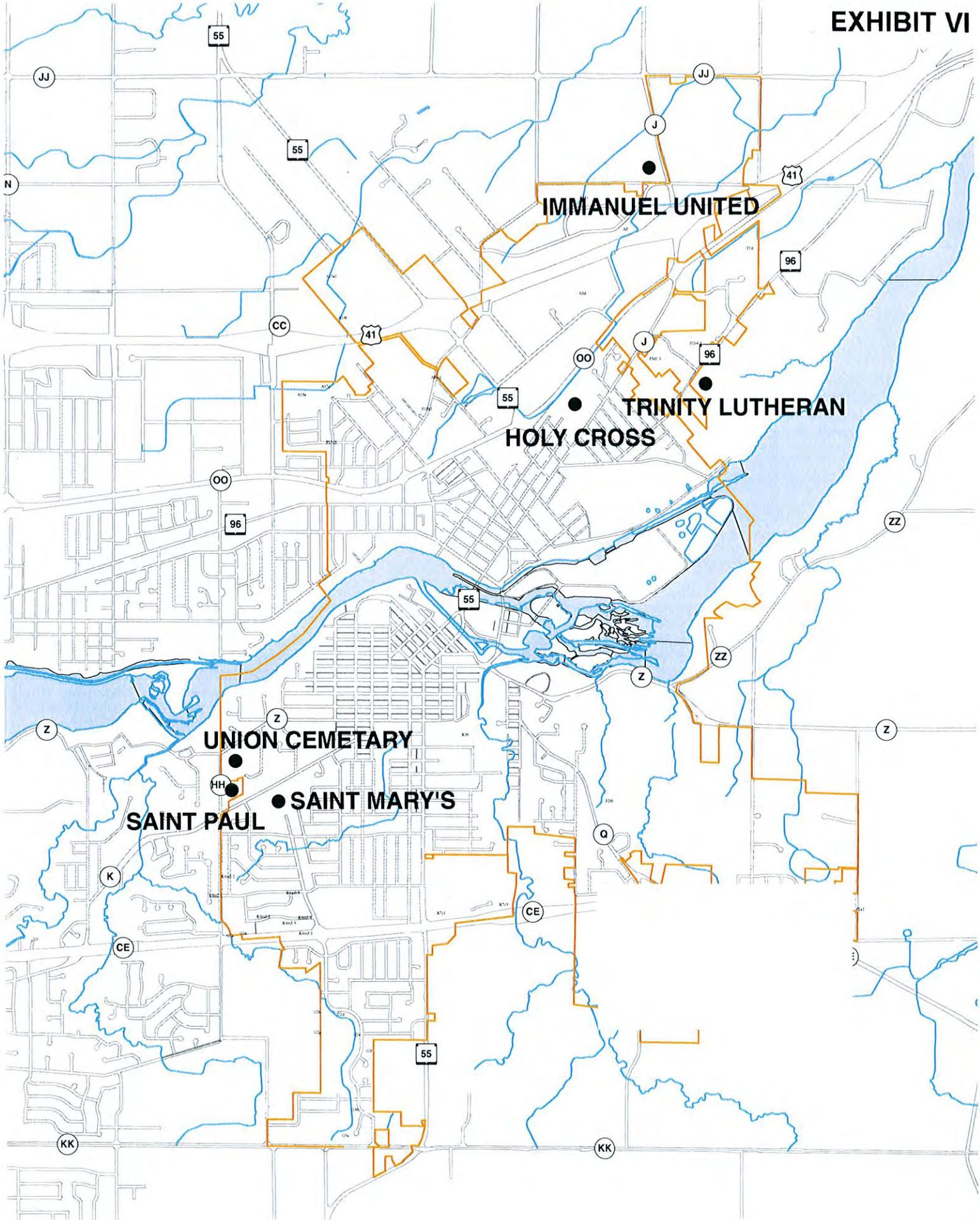
KU Electric Service Territory

-  Inside Service Territory
-  Outside Service Territory



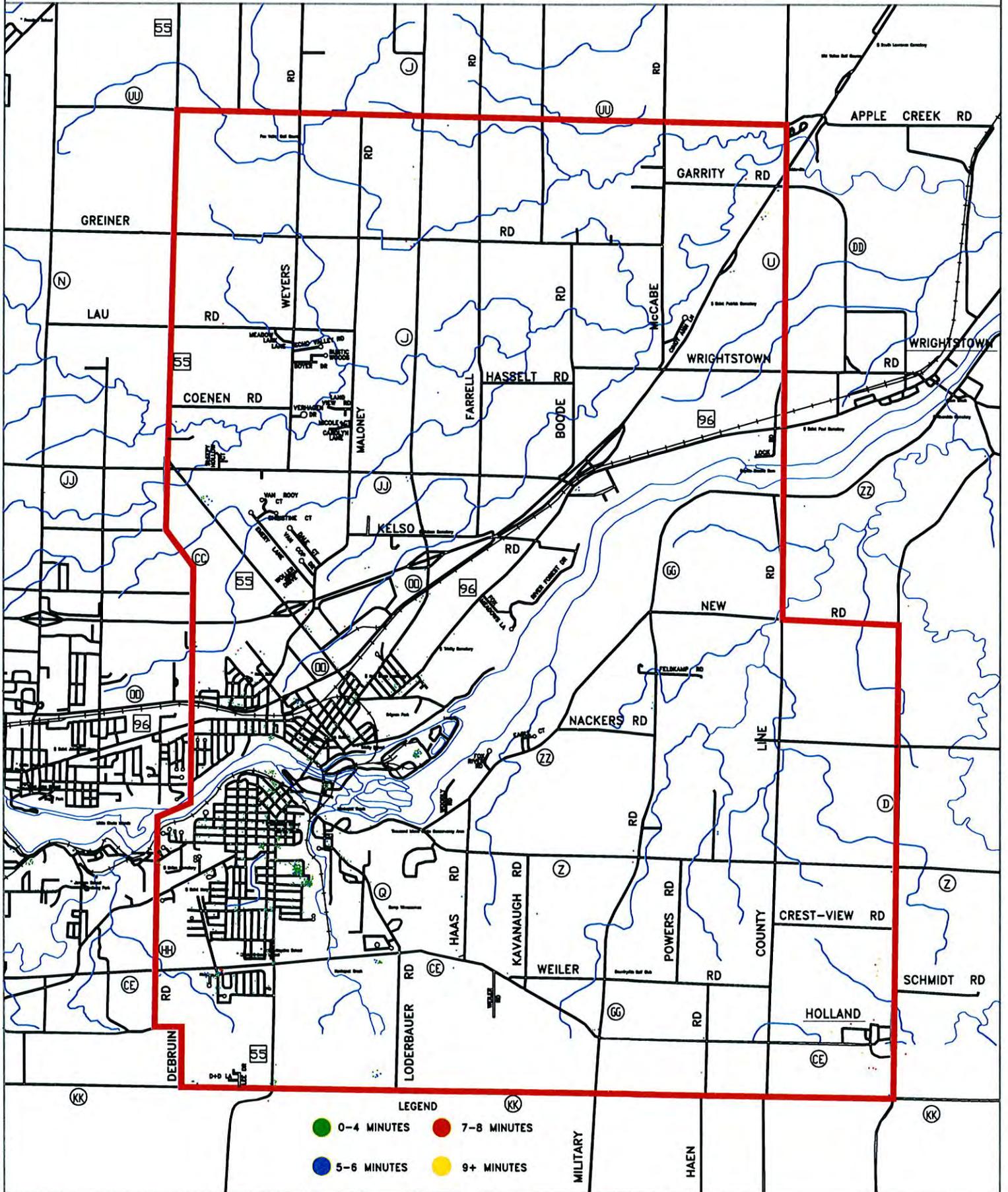


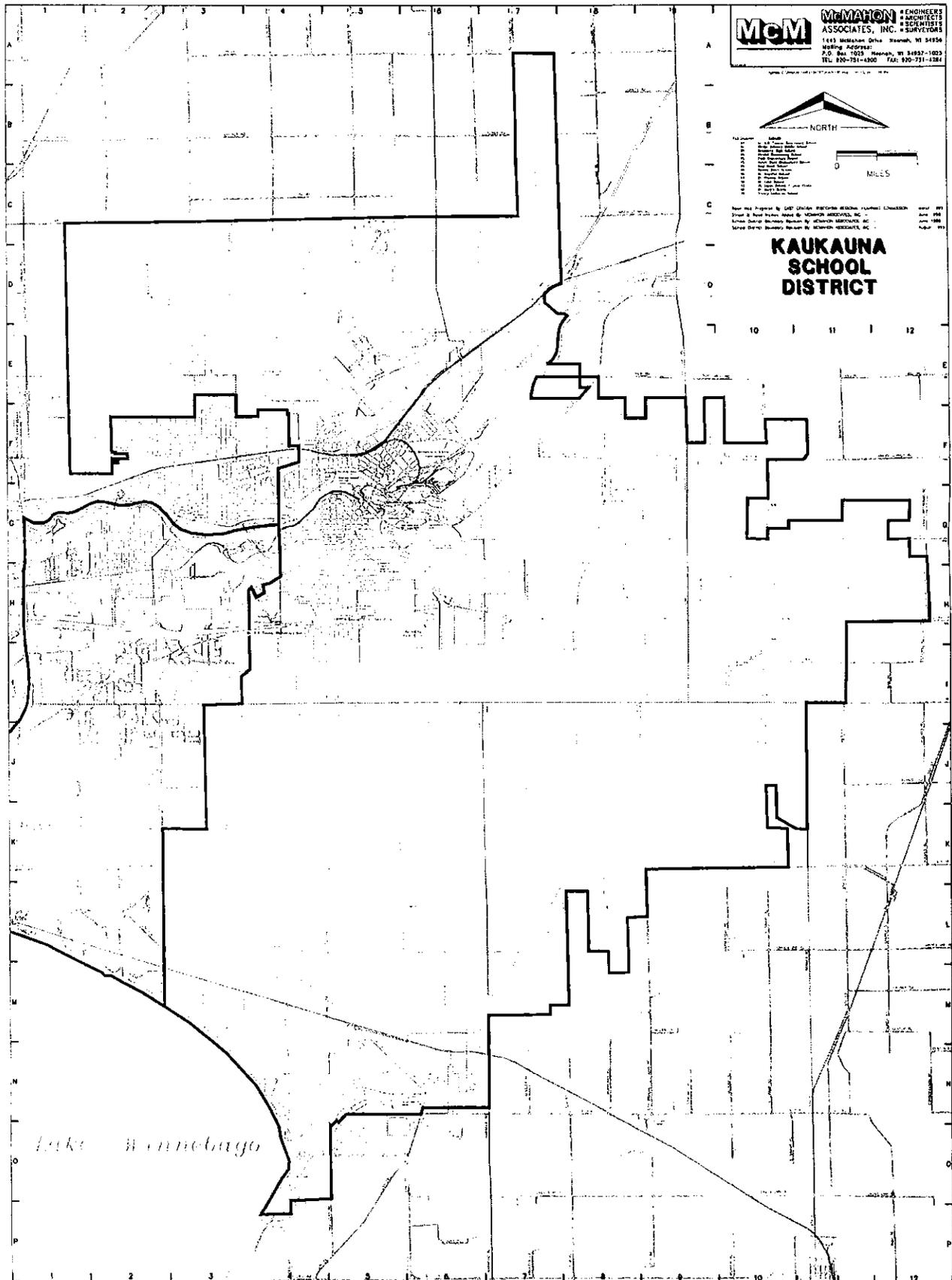
STORM WATER PONDS



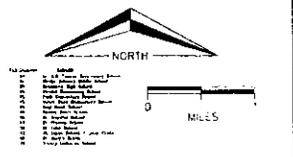
CEMETARY MAP

CITY OF KAUKAUNA AMBULANCE SERVICE AREA





McM **McMAHON** ENGINEERS
ASSOCIATES, INC. ARCHITECTS
PLANNERS SURVEYORS
1411 Westlake Drive Kaukauna, WI 54954
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P.O. Box 1023 Kaukauna, WI 54957-1023
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Map Prepared by: GUY (2004) BROWN (2004) HANSEN (2004) CHAMBERLAIN (2004) JUNE 2004
Scale: 1 inch = 1 mile. Drawn by: GUY (2004) BROWN (2004) HANSEN (2004) CHAMBERLAIN (2004) JUNE 2004
Scale: 1 inch = 1 mile. Drawn by: GUY (2004) BROWN (2004) HANSEN (2004) CHAMBERLAIN (2004) JUNE 2004

**KAUKAUNA
SCHOOL
DISTRICT**

10 11 12

AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

The Agricultural, Natural, and Cultural Resources element of the comprehensive plan is a requirement of the Wisconsin Statutes. This element requires for a compilation of objectives, policies, goals, maps and programs for the conservation, and promotion of the effective management of the following natural resources:

- Groundwater
- Forests
- Productive Agricultural Areas
- Environmentally Sensitive Areas
- Threatened and Endangered Species
- Stream Corridors
- Surface Water
- Floodplains
- Wetlands
- Wildlife
- Wildlife Habitat
- Metallic and Non-metallic resources



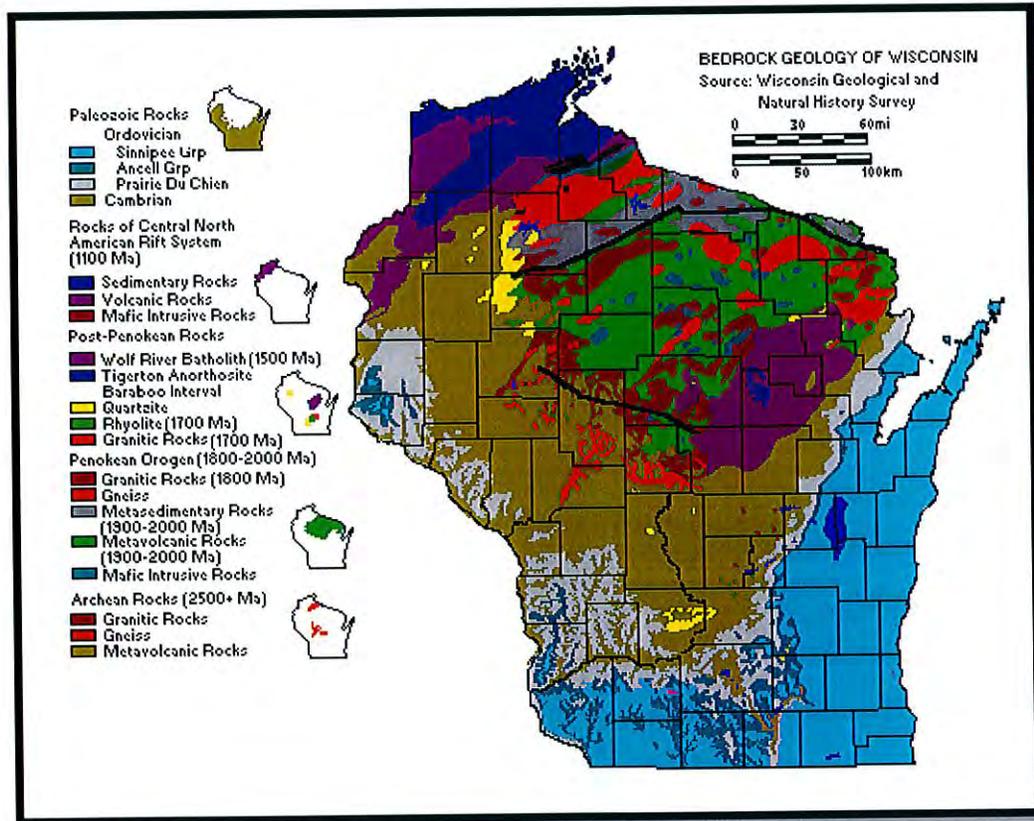
Agricultural Resources

Agriculture and related businesses are important economic resources in the region. According to the Census of Agriculture, Outagamie County has a total of 1,362 operating farms. Outagamie County's total market value of products sold is approximately \$236,703,000 ranking the county ninth in the state for total market value of products sold. Approximately 77 percent of this value is livestock sales and 23 percent being crop sales. Currently, there are no agricultural lands located within the municipal boundaries of Kaukauna and any agricultural lands incorporated into the City are assumed to be converted to residential, commercial, industrial or recreational use. Plans for the management and preservation of farmland have been incorporated into surrounding towns' comprehensive plans and Outagamie County's comprehensive plan. A variety of tools and methods are available to townships and municipalities for the preservation of agricultural lands. Some of tools include Conservation/Cluster Development for subdivisions, conservation easements, purchasing of development rights and transfer of development rights. Federal and State Farmland Preservation Programs can also provide assistance to people in the agricultural industry. The City of Kaukauna should take into consideration future land use plans of surrounding towns and villages, and any other comprehensive planning efforts in relation to agriculture in order to promote sustainable development practices on best suited lands and to avoid conflicting land uses.

There is a farmer's market held downtown Kaukauna every Saturday from June through October. It attracts a variety of local vendors that have various fruits and vegetables, flowers, handmade crafts and much more for sale. This is an entertainment opportunity for the residents of Kaukauna and the surrounding area where they can buy locally grown food and other goods. The farmer's market may also attract people to other businesses within the downtown area and provide an economic boost to the community.

Geology and Topography

Kaukauna is located in the Eastern Ridges and Lowlands geographic province of Wisconsin, which covers a vast area of Wisconsin that borders Lake Michigan. This province is characterized as being covered by a variety of limestone layers and deposits of sand, gravel, clay, rock, and mineral deposits from the continental ice sheets that once covered most of Wisconsin. The bedrock of Kaukauna is primarily composed of grey and brown dolostone typically greater than 60 inches below the surface. This type of bedrock is characteristic of the Sinnipee Group bedrock geology that is composed of three dolostone formations, which are Galena, Decorah, and Platteville in descending order.



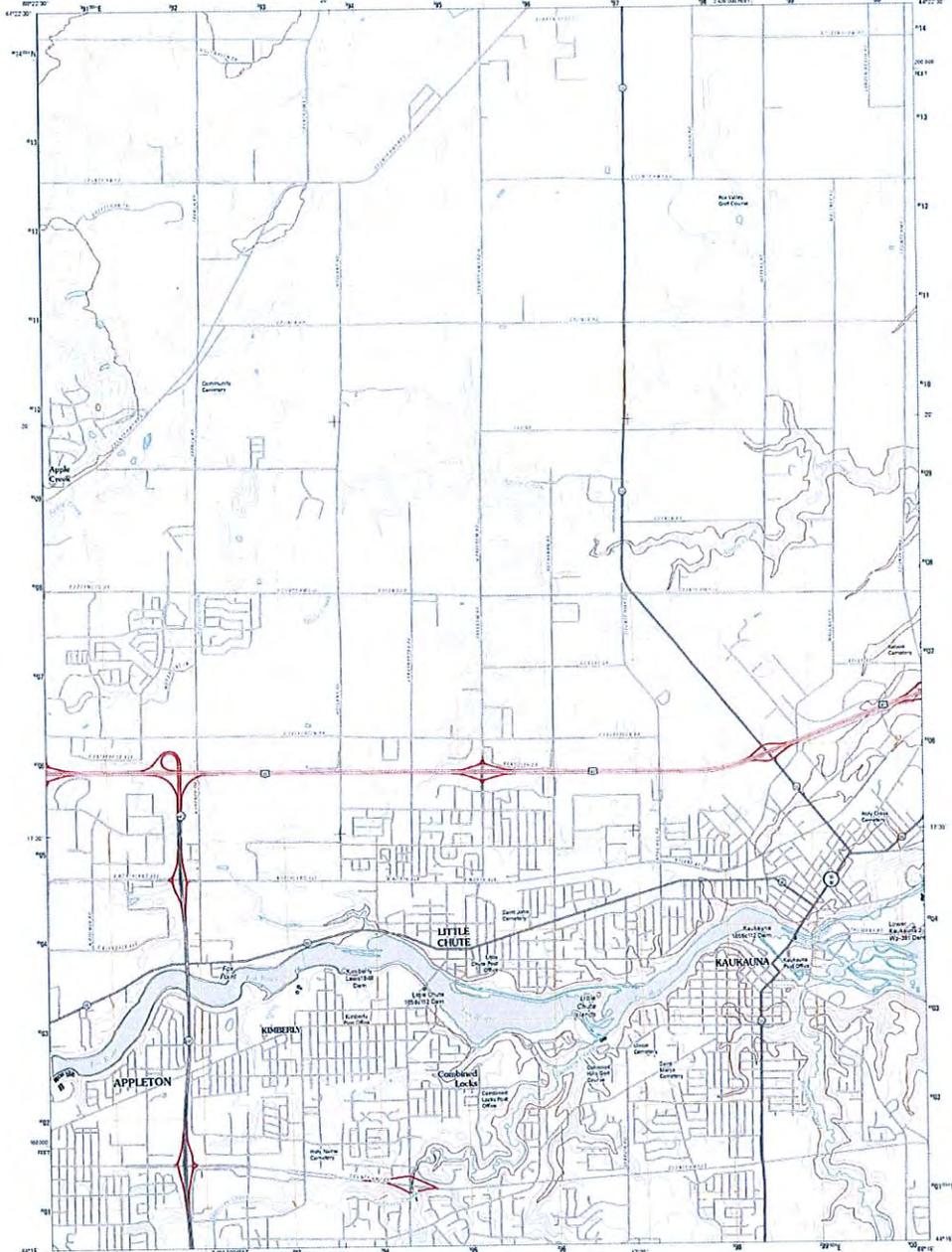
The topography of Kaukauna varies from steep ravines, to rolling hills, to flat land. The portion of the city north of the Fox River mainly consists of gentle rolling hills and flat areas. The topography south of the Fox River has greater variation due to the Konkapot Creek and other intermittent creeks that run through the City. Ravines and varied slopes have been created by the Fox River, Konkapot creek, and other creeks which account for Kaukauna's changes in elevation that ranges from 610 feet to 730 feet above sea level. Some steep slopes may inhibit the potential to develop in certain areas.



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY



KAUKAUNA QUADRANGLE
WISCONSIN
7.5-MINUTE SERIES
125 120



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
North Carolina Datum of 1846 (NCD86)
1:50,000-scale and 1:250,000-scale
1:50,000-scale and 1:250,000-scale
1:50,000-scale and 1:250,000-scale

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Version: National Topographic Series, 2008
Catalogue: National Topographic Series, 2008
Control: National Topographic Series, 1999



SCALE 1:24 000

CONTOUR INTERVAL: 20 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
This map was produced in accordance with section 0.1 of the
draft USGS Standards for 7.5-Minute Quadrangle Maps.
A contour line interval of 20 feet is used.



Black	Green	Dark
Blue	Light	Light
Blue	Light	Light
Blue	Light	Light

ROAD CLASSIFICATION

Interstate Route	State Route	CS	DS
US Route	Local Road		
Road	Road		
Interstate	US Route		

KAUKAUNA, WI
2010

Soils and Mining

The general soil associations for the City and the surrounding area are the Winneconne-Manawa association with a small area of Menominee-Grays-Rousseau association to the northeast. The Winneconne-Manawa association is characterized as well drained to somewhat poorly drained, medium to moderately fine textured with slow to very slow permeability. These soils are also typically underlain by either silt clay glacial till or clay lacustrine sediments. The Menominee-Grays-Rousseau association is characterized as having soils that are well to moderately well drained, coarse to medium textured and have moderate to rapid permeability. Menominee-Grays-Rousseau soils are underlain by lacustrine silt loam and very fine sand, windblown fine sand, or sandy loam glacial till. Lacustrine deposits refer to soils being deposited from former lakes and glacial till refers to material, such as rock and boulders, and soils directly deposited from glacial ice. The soils in Kaukauna are primarily composed of calcareous clayey lacustrine deposits.

Winneconne, Manawa, and Kewaunee soils are the most prevalent series' of soils found in the City of Kaukauna with the most commonly identified soil classifications being Winneconne Silty Clay Loam, Manawa Silty Clay Loam, and Kewaunee Silt Loam, in respective order of abundance throughout the city. There is also a considerable amount of Grays soils found on Kaukauna's north side.

The Winneconne Series of soils consists of well drained and moderately well drained soils that were formed on lacustrine plains. These soils usually have moderate available water capacity and slow to very slow permeability. The Manawa Series consists of somewhat poorly drained soils primarily near depressions and drainage ways. These soils were formed on glacial till plains and lacustrine basins. Manawa Series soils have high available water capacity and slow permeability. The Kewaunee Series consists of well drained and moderately well drained soils formed on glacial till plains. This series of soils has moderate available water capacity and moderately slow to slow permeability. The Grays series is characterized as well drained to moderately well drained soils formed on old glacial lake plains. These soils have high available water capacity and slow permeability.

With the assumption that land incorporated into the City will be converted to residential, commercial, industrial or recreational use, the primary focus of planning for soil conditions should be on development opportunities and constraints. Development opportunities are ranked on a three tier scale as "not limited", "somewhat limited", or "very limited". "Not limited" defines an area as having soil conditions that are very favorable for a specified use with very low expected maintenance. "Somewhat limited" defines the area as having soil conditions that are moderately favorable for a specified use and limitations can be overcome or minimized by effective planning, design or installation. "Very limited" defines the area as having one or more soil conditions that are unfavorable for a specified use. Major improvements and special design are usually required to accommodate these areas for a specified development.

Building site development throughout the majority of the City is somewhat limited to very limited. Suitability for dwellings with and without basements, local roads and streets, and small commercial buildings is mostly very limited on the south side. The same is true for the north side of the City, but there are a few areas classified as not limited for dwellings with and without basements, and small commercial buildings. When it comes to recreational development, the most favorable development type is the development of paths and trails with the majority of the City being classified as not limited. Picnic and camp area opportunities are mostly very limited to somewhat limited throughout Kaukauna, with some areas north of the Fox River that are not limited. Playground area development is somewhat

limited throughout the entire City also. The limiting factors for recreation and building site development are primarily due to high clay content, flooding, and shrink-swell issues. These limitations may inhibit development in some areas of Kaukauna, but can usually be overcome with innovative planning, engineering, and construction methods.

There currently are no metallic mining sites located in Kaukauna. The only mining site in Kaukauna is the Kaukauna Limestone Quarry. This site is a non-metallic mining site and its major commodity is crushed and broken stone. Expansion of this quarry is limited due to the potential use of land surrounding the quarry. Chapter NR 135 of the Wisconsin Administrative Code requires the reclamation of all active non-metallic mining sites once the site becomes inactive. Reclamation of abandoned mining sites decreases the negative environmental effects of the mine site and protects the environment through erosion control and increased habitat through re-vegetation of the site. Outagamie County has adopted a non-metallic mining reclamation ordinance in compliance with Chapter NR 135, which establishes a program to ensure the effective reclamation of non-metallic sites. This ordinance is described in detail in Chapter 38 Article II of the Outagamie County, Wisconsin Code of Ordinances.



Climate

The climate of Kaukauna is characterized by a wide variation of temperatures. On average, the coolest month is January with an average low temperature of 8 degrees Fahrenheit. The warmest month on average is July with an average high temperature of 81 degrees Fahrenheit. Kaukauna typically has 162 days annually with a minimum temperature below 32 degrees Fahrenheit.

The average annual precipitation is 30.16 inches and the average annual snowfall is around 48 inches. The wettest month of the year is typically August with an average of 3.9 inches of precipitation and the driest month is February with 1.04 inches of average precipitation.

Air

The quality of air in a community is important to the health of individuals and the natural environment. The extent of how much polluted air affects an individual depends on several factors such as the type of pollutant, concentration of the pollutant in the air, the time of exposure to a person's lungs, and individual's health conditions. Air pollution not only affects people and organisms that breathe the pollutants, but can also affect the quality of lakes, streams, drinking water, and the foods we eat by deposition of pollutants into these resources. Air pollution control standards and regulations are stated in state statutes and the Wisconsin Administrative Code, which reflect many of the requirements and standards presented in the federal Clean Air Act.



In order to monitor the amount of potentially harmful pollutants in the air and to notify residents of any possible dangers, the Wisconsin Department of Natural Resources has set up a network of monitoring stations across the state. There are three (3) monitoring stations located in the surrounding region of Kaukauna (Fox Cities, Oshkosh, and Fond du Lac). These stations monitor levels of the most serious health related air pollutants according to the Environmental Protection Agency (EPA), which are ozone, particle pollution, sulfur dioxide, nitrogen oxides, and carbon monoxide. Owners or operators of individual facilities that emit air contaminants in quantities above applicable reporting levels are also required to submit an annual air contaminant emission inventory report as stated in Chapter NR 438 of the Wisconsin Administrative Code.

The Wisconsin Department of Natural Resources keeps historical air emission information at the city, county, and state levels for all of the previously mentioned air pollutants. Although air quality in the region is generally classified as good to excellent, air pollutant reports list Kaukauna as having elevated levels of air pollution for carbon monoxide, nitrogen oxides, particulate matter (PM and PM10), and sulfur dioxide. These reports are based off of emissions reports submitted by the individual facilities that are required to report their emissions. A significant contributor to air pollution in Kaukauna stems from the city's leading economic industry, Thilmany Paper Mill.

Financial resources are available to assist companies like the Thilmany Paper Mill in complying with air quality standards. Issuing of industrial revenue bonds to companies is an effective tool to support industrial development through the sale of tax exempt bonds, which can then be used to finance the manufacturing facility's capital investments, such as more efficient and environmentally friendly ways of controlling harmful emissions. In order to maintain and improve the quality of our air, the City of Kaukauna must pursue effective strategies for managing the amount of pollutants that enter the air we breathe and work with major contributors of air pollution in the city to reduce the amount of air pollution being emitted into the environment.

Groundwater

The City of Kaukauna's drinking water is exclusively provided by groundwater aquifers. The quality of this drinking water is crucial to public health and safety. Kaukauna Utilities is responsible for the City's drinking water resources and maintains five municipal wells that supply drinking water to the entire city. These wells are all located between 534 feet and 841 feet deep. In order to maintain a clean and safe drinking water source in Kaukauna, frequent testing for potentially harmful contaminants is required by state law through the Safe Drinking Water Act of 1974. These requirements are also enforced through Chapter NR 809 of the Wisconsin Administrative Code. Some contaminants that may be present in groundwater include microbial contaminants such as viruses and bacteria, inorganic contaminants such as salts and metals, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants. These contaminants seep into the groundwater most commonly as a result of human and animal activity, as well as urban storm water runoff. Once a groundwater resource is contaminated, it is particularly difficult to clean up due to the vast size of groundwater resources and inaccessibility to the aquifers.

Groundwater quality standards are established for substances detected in or having a reasonable probability of entering groundwater resources of the state as stated in the Wisconsin Administrative Code Chapter NR 140. The Wisconsin Bureau of Drinking Water and Groundwater is the regulating authority for groundwater management and enforcement of the Safe Drinking Water Act regulations.

According to the Consumer Confidence Report of Kaukauna Utilities, the only contaminant that exceeded the Maximum Contaminant Level (MCL) is coli form bacteria, which is a microbiological contaminant. In order to exceed the MCL of coli form, the bacteria are found in five percent or more of the city's monthly samples. Coliform is naturally present in the environment and can also be an indicator for other potentially harmful bacteria that may be present.

Groundwater protection strategies should be considered in order to maintain and possibly improve the City of Kaukauna's drinking water quality. Due to some characteristics of the soil in Kaukauna such as limiting water infiltration factors for groundwater recharge, the careful management and monitoring of drinking water resources is crucial. Some strategies for localities to promote groundwater protection are education of residents about groundwater contamination, identification of contaminant sources, and creation and implementation of a wellhead protection plan. Zoning to prevent residential and commercial development near water recharge areas is another method to further protect our drinking water resources because these development types create considerable amounts of impervious surfaces. The placement of storm water retention and detention ponds near highly developed areas and the design of conservation subdivisions instead of the traditional subdivision design also promote groundwater recharge and infiltration of water into the subsurface.

Financial resources for groundwater protection include state revolving loan funds provided through the Wisconsin Department of Natural Resources. These funds provide low interest loans to communities looking to improve their drinking water systems and may be a viable resource to Kaukauna if improvements to the drinking water system are needed. Aside from specific examples for groundwater protection, cohesion and cooperation of federal, state, and local groundwater management strategies is the most effective tool for the protection of our groundwater resources.

Wetlands and Shoreland

The protection of wetlands and shorelands is important in order to promote public health, general welfare and economically sound development for the City of Kaukauna and its residents. Wetlands are defined in the Municipal Code of Kaukauna as areas where water is at, near, or above the land surface long enough to support aquatic or hydrophytic vegetation and which have soils indicative of wet conditions. Shorelands are defined as lands within 1,000 feet from the ordinary high water mark of a lake pond or flowage or 300 feet from the ordinary high water mark of a river or stream or to the landward side of a floodplain, whichever distance is greater. Wetlands and shorelands are beneficial to municipalities by serving as water retention areas for high intensity water events, which reduce the effects of flooding and erosion within an area. They also act as water filtration systems by slowing water velocity and allowing time for water to infiltrate into the soil. Water infiltration is essential for filtering out sediments, nutrients, heavy metals, organic compounds, and contaminants such as nitrate-nitrogen and phosphorus before water reaches the groundwater collections. Wetlands and shorelands are also beneficial as fish and wildlife habitat and serve as quality recreational areas.

Wetlands in the City are located in the 1000 Islands Conservancy District and near the extreme southeast corner of the municipal border. There are also several



wetland areas located on the north side of Kaukauna near the Industrial Park Network and Commerce Crossing. Exhibit VIX is a map of wetlands and shorelands in Kaukauna.

Cities and villages are required by law to protect all unfilled wetlands that are five acres or larger, are shown on the Wisconsin DNR's final wetland inventory maps, or are located within shore lands, as stated in Wisconsin Statutes and Chapter NR 117 of the Wisconsin Administrative Code. The City of Kaukauna has also adopted a Shoreland-Wetland Ordinance as stated in detail in Chapter 16 of the Municipal Code of Kaukauna. The purpose of this ordinance is to maintain the storm and floodwaters, prevent and control water pollution, protect fish and wildlife resources, prohibit land uses detrimental to shoreland-wetland areas, and preserve shore cover and natural aesthetics.

Due to urban development pressures there is a noticeable declining amount of quality wetlands and shorelands in Wisconsin. Education about the benefits of these resources, implementation and enforcement of ordinances, identification of open space opportunities to reduce wetland depletion and promotion of wetland restoration are some ways of protecting these valuable resources. Implementation of Best Management Practices and buffer zones near these resources also help maintain the quality of wetlands and shorelands. With careful management, the benefits wetlands and shorelands provide to the natural environment, the City, and its residents can be preserved for the future generations of the City of Kaukauna.

Surface Water and Stream Corridors

Kaukauna is located in the Lower Fox River Basin which consists of six watersheds, three of which are within the city limits of Kaukauna (Apple and Ashwaubenon Creeks Watershed, Plum and Konkapot Creeks Watershed, and Fox River – Appleton Watershed). The majority of the water on the north side of Kaukauna flows to the Apple and Ashwaubenon Creek Watershed and enters Apple Creek. The majority of the water on the south side of Kaukauna flows to the Plum and Konkapot Creek Watershed, which then enters the Konkapot Creek. Both Apple Creek and Konkapot Creek discharge into the Fox River. Water from areas that are adjacent to the Fox River, flow through the Fox River – Appleton Watershed and immediately enter the Fox River.



The greatest source of surface water in the City of Kaukauna is the Fox River, which divides the City through the downtown area, creating a north and south side of Kaukauna. The river extends approximately 3 ½ miles through the City and is fed by other tributaries and streams that are also located in the City. The Army Corps of Engineers is the nation's lead flood control agency and controls the dam and locks system located in the downtown area on the Fox River. The river is a valuable resource for the Thilmany Paper Mill and hydroelectricity production in Kaukauna. Land adjacent to the Fox River is almost completely developed for residential, commercial, industrial and recreational uses, but there is a limited amount of undeveloped and publicly owned open space along the riverfront.



The Konkapot Creek is a natural drainage system for the south side of Kaukauna and a tributary to the Fox River. The creek flows northward through the south side of Kaukauna and eventually connects with the Fox River. Konkapot Creek carries substantial runoff pollution from agricultural fields and areas south of Kaukauna in the Towns of Buchanan and Harrison. The lack of buffers surrounding the stream in both towns creates the potential for the creek to carry large amounts of sediments and contaminants that eventually deposit into the Fox River. Areas within the City of Kaukauna that surround the creek are primarily forested with a few residential houses nearby. These forested areas that surround the stream provide a vegetative buffer for pollutants before runoff water enters the stream.

There are also several intermittent streams that flow through the 1000 Islands Conservancy District and discharge into the Fox River. Another intermittent stream is on the north side of the Fox River near Grignon Park that eventually discharges into the river. These intermittent streams, by definition, may carry water most of the year, but the flow may stop occasionally due to periods of limited water.

Throughout the City are several detention and retention ponds intended to collect storm water and prevent polluted runoff water from entering natural surface water resources. These ponds also serve as reservoirs for water that increase the chance for water infiltration into the soils. The riparian edge of the ponds can potentially be used as habitat for a variety of bird, reptile, and other wildlife species. These riparian edges also provide opportunity for the establishment of native plant populations. Also if the pond can sustain a minimum depth of eight feet over a minimum of half acre surface area throughout the entire year, these ponds could be used as a productive warm water fisheries resource, although recreational fishing in retention/detention ponds is not recommended due to high concentrations of storm water runoff pollutants.



There are a variety of financial resources available for the protection of surface water resources from the Wisconsin Department of Natural Resources, State of Wisconsin, and Federal entities. Programs that may be beneficial to the City of Kaukauna are the Urban Rivers Grant Program indicated in Chapter NR 51 of the Wisconsin Administrative Code and the Municipal Flood Control Grant Program indicated in Chapter NR 199 of the Wisconsin Administrative Code. Both of these grant programs are geared toward providing funds to municipalities for the purchase of available lands adjacent to water resources in urban areas to improve flood control and increase economic and recreational opportunities. There are also River Protection Management Grants which provide funds to protect and restore rivers and their ecosystems.

In order to protect the quality of these surface water resources and stream corridors located within Kaukauna, enforcement of the Shoreland-Wetland Ordinance, previously mentioned in the Wetlands and Shorelands section, is an important tool to maintain and improve the water resources that are important to the City of Kaukauna. The establishment of vegetative buffers or other best management practices along the edges of the surface waters to prevent and reduce the entering of pollutants is also a protective measure that helps improve the quality surface water resources.

Floodplains

A floodplain is a natural extension of a waterway that is vulnerable to flooding during high water events. Delineating and maintaining floodplains near rivers, streams, and other water resources is important to communities in order to reduce the negative effects of flooding events and to maintain economically sensible development.

Floodplains serve multiple purposes for communities by providing a storage area for flood waters and by reducing flood velocity, flood peaks and sedimentation from storm water runoff. Flood plains also contribute to increased groundwater recharge, provide quality wildlife habitat and help protect water quality in waterways. These attributes of floodplains all contribute to promote public health, welfare and safety within a community.

The Federal Emergency Management Agency (FEMA) is the governing body that designates flood hazard areas near surface water resources. Flood hazard areas are defined as areas near surface water resources that have a one percent chance of flooding on a yearly basis, also called a base flood or 100 year flood. These areas are depicted on Flood Insurance Rate Maps (FIRM) for insurance purposes and eligibility of Natural Disaster Mitigation Grants. Floodplains identified in the city of Kaukauna are delineated along the Fox River and Konkapot Creek. Exhibit X is the FEMA flood plain map.

Cities are required to adopt a reasonable and effective floodplain ordinance as stated in Wisconsin Statutes and Chapter NR 116 of the Wisconsin Administrative Code. The reason for floodplain ordinances that are implemented by municipalities is to deter development near water bodies and to define eligibility of homeowners to participate in FEMA's National Flood Insurance Program. The City of Kaukauna has adopted a Floodplain Zoning Ordinance and is detailed in Chapter 17 of Municipal Codes of Kaukauna.

The protection and management of floodplains can be accomplished through the enforcement of the city's Floodplain Zoning Code and the Shoreland-Wetland Zoning Code. Education of residents about flood risks and accurate identification of flood plains are also important factors for the better management of floodplains.

Storm Water Runoff, Erosion and Nonpoint Source Pollution

Storm water runoff is a growing concern for urban communities due to the increased development of buildings and infrastructure within the community which cause numerous adverse effects on water quality. Water resources in Kaukauna have several significant threats stemming from increased impervious surfaces, effects of surface runoff created by construction, and the characteristics of soils. Development creates impervious surfaces in areas that were once covered with natural grasses or forests. These impervious surfaces prevent water from infiltrating into the ground and collecting in the city's aquifers. As a result of decreased infiltration, there is an increase in the amount of wastewater that flows directly into surface water resources, which may contain high concentrations of pollutants. New development also causes increased sedimentation and contaminants entering the stream due to the effects on lands surrounding construction sites and the removal of buffer zones adjacent to surface water resources. The properties of the soils in Kaukauna are another contributor to problems with storm water management due to the soil's limiting wastewater infiltration properties and slow water movement within the soils.

The City of Kaukauna has a Wisconsin Pollution Discharge Elimination System (WPDES) Municipal Stormwater Discharge Permit, which controls urban non-point source pollution by regulating discharges from municipal separate storm sewer systems (MS4). Kaukauna's MS4 discharges storm water runoff into Apple Creek, Konkapot Creek, Plum Creek, and Fox River. All of these water resources where storm water is discharged are currently part of the 303(d) impaired waters list. Chapter NR 216 of the Wisconsin Administrative Code establishes criteria defining storm water discharges needing WPDES storm water permits and to implement appropriate performance standards of Chapter NR 151 of the Wisconsin Administrative Code. The goal of Chapter NR 216 is to minimize the discharge of pollutants carried by storm water runoff from certain industrial facilities, construction sites, and municipal separate sewer systems.

In order to protect the valuable water resources in Kaukauna and throughout the state, there has been various Best Management Practices implemented throughout the city. Some BMP's that are being implemented in Kaukauna include vegetated buffers around water resources, retention and detention ponds, and vegetated swales or ditches. These BMP's all help to slow the velocity of flowing water and allow for sediments and pollutants to filter out before entering the major water resources.

Another measure being taken to protect water resources is Outagamie County has adopted a Stormwater Management Ordinance found in Chapter 48 of the Code of Ordinances of Outagamie County, Wisconsin. The purpose of this ordinance is to set long term, post construction requirements and criteria which will diminish the negative effects of storm water runoff to the aquatic environment and general public. The City of Kaukauna has also put into effect three storm water ordinances described in detail in Chapter 22 of the Municipal Code of Kaukauna. The Construction Site Erosion Control Zoning Ordinance and the Post-Construction Stormwater Management Zoning Ordinance are both established in reference to construction sites during and after the construction activities in order to manage storm water entering water resources. The Illicit Discharge and Connection Ordinance refers to the municipal separate storm water sewer system (MS4) and any non-storm water discharge entering it.



The Construction Site Erosion Control Zoning Ordinance is intended to prevent and control water pollution and soil erosion during construction activities by requiring an approved erosion and sediment control management plan. Erosion and sediment control plans outline plans for Best Management Practices (BMP) and other control methods on construction sites to reduce and control the total suspended solids carried in runoff. The Post-Construction Storm Water Management Zoning Ordinance is intended to prevent and control water pollution and soil erosion on post construction sites in order to reduce the negative environmental effects of previous construction activity. This ordinance also requires a storm water management plan for post-construction sites, with the implementation of Best Management Practices to reduce the amount of total suspended solids entering water resources, control peak discharges, and to promote infiltration of storm water into soils. The Illicit Discharge and Connection Ordinance is intended for the regulation of non-storm water discharges into waters of the state or the municipal separate sewer system (MS4). This ordinance establishes methods for controlling the introduction of pollutants into waters of the state or the MS4 in order to comply with requirements of the WPDES permit process. The overall goal of these three ordinances is to protect the quality of Kaukauna's surface water and groundwater resources by regulating the amounts of contaminants and

sediments that enter water resources through storm water runoff, erosion, and non-point and point sources of pollution.

Planning and construction grants through Urban Non-Point Source and Storm Water Grants are financial means available to municipalities to improve urban water quality by limiting or ending sources of urban nonpoint source pollution. The Clean Water Fund Program is also a financial assistance resource that may be available to the city that provides subsidized loans to municipalities for wastewater treatment and urban storm water projects. The City of Kaukauna's water quality can be managed effectively with compliance to storm water ordinances of Kaukauna, surrounding townships and Outagamie County, along with community education and implementation of best management practices near water resources.

Woodlands and Recreational Resources

Woodlands and recreational resources are important to a community's public health, general welfare, and economy. Forest resources contribute to communities by offering wildlife habitat, protection of water resources, improved air quality, and recreational uses. The City of Kaukauna and its residents take great pride in its natural areas and the opportunities they provide.

- 1000 Islands Conservancy Zone

One of the most prominent public natural areas within the City of Kaukauna is the 1000 Islands Conservancy Zone. This zone was established in 1969 with 240 acres intended to preserve the land in a natural state with the idea of teaching good conservation methods and preserving the natural resources. The 1000 Islands Conservancy Zone has grown to approximately 350 acres and



is maintained by a small group of full time staff members and volunteer work primarily from the Friends of 1000 Islands organization. Within this conservancy zone, there is 7.2 miles of trails for public recreational use including hiking, cross country skiing, and bird and wildlife watching. Various programs are also offered to the public and school groups through the 1000 Islands Environmental Center such as making maple syrup, paper making, Earth Week activities, and multiple nature hikes. The conservancy is home to an abundance of wildlife that reside at the conservancy for all or part of the year. Some of the wildlife includes a pair of nesting eagles, whitetail deer, mink, muskrat, raccoons, woodchucks and many other species. There are also birds such as Great Blue Herons, owls, bitterns, teal coot, ducks, and many other migratory birds that find sanctuary in the conservancy. The butterfly garden also attracts many species of butterflies that travel throughout the area.

- Camp Winnecomac Girl Scout Camp

Another extensive natural area within the City of Kaukauna is the Girl Scouts of the Northwestern Great Lakes camp named Camp Winnecomac. This natural area consists of 40

acres that is continuous with 1000 Islands Conservancy District. This area has two lodges, tent cabins, yurts, and unit shelters intended for the attendees of the camps. There is also opportunity for the public to enjoy this natural resource by using the trails located throughout the park for hiking and cross country skiing. As a result of this area being an extension to the natural corridor that the 1000 Islands Conservancy provides, there is also an abundance of similar wildlife that resides in this natural area.

- Konkapot Preserve

The Konkapot Preserve is another natural area that provides habitat for wildlife and recreational opportunities. The preserve is a 23 acre parcel of land located on the south side of Kaukauna, off of County Highway CE and adjacent to the Konkapot Creek Trail. This natural area is a remediated landfill, which was formerly the Lehrer Landfill. With help from a DNR grant, native prairie grasses and wildflowers were planted in the preserve to create a natural prairie land which promotes diverse plant and animal species. There is also a trail system that runs through the preserve with a pavilion built by an Eagle Scout Project for public use. An Environmental Remediation Tax Incremental Financing District (ERTIF) was created to address this property and the development currently on the former landfill property.



- Konkapot Creek Trail

The Konkapot Creek Trail is a recreational trail that is approximately 1¼ miles and serves as wildlife habitat and a corridor for wildlife throughout the City. The trail runs along the Konkapot Creek from the trail's northern-most point on Dodge Street to the Konkapot Preserve on the south side of Kaukauna. The trail features three railroad bridges and a gravel trail for recreational hiking and biking. The area surrounding the Konkapot Creek Trail is primarily privately owned, but is a quality habitat for many wildlife species as for most of it is forested.

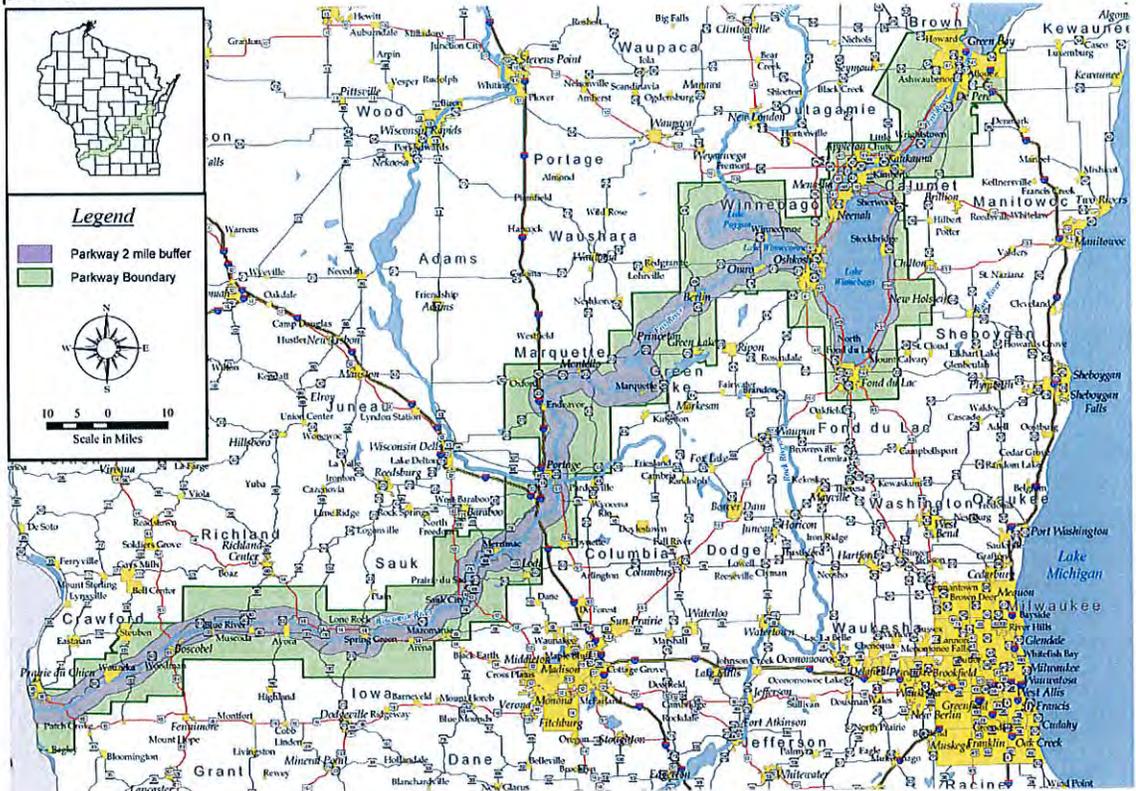
- Rapide Croche Park



Rapide Croche Park is a 36 acre park located four miles northeast of Kaukauna and next to the Rapid Croche Dam. This park is owned by the City of Kaukauna and has a shelter, picnic area, and fishing opportunities which makes it a valuable recreation resource. Proposed improvements for the park include a trail system, a boat launch with a parking area, a new shelter and picnic facility upgrades. Outside of the recreational area, this park is mostly forested and runs along the Fox River providing quality wildlife habitat and a vegetated buffer along the river corridor.

- Fox Wisconsin Heritage Parkway

The Fox Wisconsin Heritage Parkway is a parkway that extends from the southwest corner of Wisconsin near Prairie du Chien to the Bay of Green Bay. The parkway follows the Fox and Wisconsin Rivers' corridors and creates multiple recreational and educational opportunities. It also promotes quality natural habitat and an extensive wildlife corridor through the state. This project is a collaborative effort of environmental groups, state and federal agencies, and county, municipal and private sectors. Multiple restoration and improvement measures are being taken to promote this resource. Restoration to the lock sites and buildings along the parkway and improvements to trail systems and other recreational attributes are some of the measures being taken to promote this quality resource and maximize the potential economic benefits it can provide.



- City Parks and Open Spaces

There are currently 31 parks and open spaces in Kaukauna, including some of the previously mentioned natural spaces. These open spaces are both municipally owned and non-municipally owned. These resources are very important to the City and its residents for recreational opportunities and they also provide green space for wildlife throughout the area. Further information on these open space and recreational resources can be found in the City of Kaukauna's Open Space and Recreation Plan. Exhibit XI shows a map of forested land and recreational resources in the City.

Environmentally Sensitive Habitat and Wildlife Concerns

Environmentally sensitive habitats generally refer to environmental corridors which are defined as “spatial patterns of occurrence of any or all of the combined features of water, wetlands and steep topography of 12.5% or greater found in an urban or urbanizing environment”.

Environmentally sensitive habitats are crucial to water quality, wildlife resources, and aesthetics of a community.

The Natural Heritage Inventory Program of the Wisconsin Department of Natural Resources is a program that focuses on locating and documenting rare species and natural lands that may be threatened or endangered by depletion or extinction. Although the Natural Heritage Inventory does not have any lands located in Kaukauna that are identified for protection, there are several areas and environmental concerns identifiable in the City that should be considered when referencing environmentally sensitive areas.

The first area of concern is the land adjacent to each side of the Konkapot Creek Trail. This area consists of primarily private ownership and is heavily wooded with mature stands of trees. The terrain is relatively steep and development is unlikely due to the topography. This area serves as quality habitat for various species and a natural corridor for movement of wildlife throughout the city.



The second environmentally sensitive area is located to the south and west of the Kaukauna High School and is also a continuation of the natural corridor that the Konkapot Creek provides. This is a heavily wooded area with steep terrain. This natural area also serves as a natural corridor and sanctuary for wildlife species. Kaukauna High School also uses this area as an educational instrument for the students to learn about the natural community and sustainability of the ecosystem.



A third environmentally sensitive area in the City is the land next to the Fox River on each side. The land along the banks of the river is both publicly and privately owned with relatively steep terrain along the banks of the river. With some of the land being privately owned, some buffering vegetation has been removed, although residents are urged to minimize the removal of the buffering vegetation. Careful management and protective strategies need to be implemented in order to protect these environmentally sensitive areas and their importance to water resources, wildlife, health of the overall natural environment and their educational opportunities for the public.

The other areas of environmental concern in the City of Kaukauna pertain to wildlife concerns and do not have exact delineations of lands. The first concern pertains to areas near detention ponds and streams where there is a noticeable increasing population of muskrats. Due to the

muskrat's destructive behavior to the shorelines and water quality, and their rapid reproduction, there is a need for population management strategies to minimize the negative effect this species poses.



A second concern pertaining to wildlife resources is the protection of fish spawning habitat near Apple Creek from the adverse effects of industrial development and construction. This creek is used as a major spawning habitat for fish coming from the Fox River. Protective measures concerning runoff and pollution, such as the Stormwater Management plans previously mentioned, need to be implemented and enforced in order to sustain healthy natural fisheries in the Fox River.

A third concern pertaining to wildlife resources is the increasing urban Whitetail Deer population. Deer browsing of native plants within the urban boundaries is diminishing the abundance and diversity of the native plant populations. This is allowing for non-native and invasive species to take the place of the lost native plants. Management plans for controlling the urban deer herd will need to be researched further and implementation is necessary to protect the quality and biodiversity of the urban natural areas.

Threatened and Endangered Species

Biodiversity of plant and animal communities is crucial to the success and sustainability of any natural environment. To promote and protect the biodiversity among our plant and animal communities, it is important to protect the species of plants and animals that are rare or are being threatened by extinction. Wisconsin law prohibits the "taking" of any plant or animal listed as endangered or threatened, unless authorized by the Wisconsin Department of Natural Resources with an Endangered and Threatened Species Permit. As urban sprawl and expansion of cities becomes needed and more prevalent, the protection of crucial and environmentally sensitive lands will be necessary in order to protect the community's resources and species that are threatened or endangered within our community.



The Wisconsin Department of Natural Resources has available information on endangered/threatened species and environmentally sensitive lands through the Bureau of Endangered Resources. Through this bureau, the Natural Heritage Inventory maintains data on locations of endangered/threatened species and lands, and is available upon request through the Endangered Resources Review Program. This program is intended to work with landowners, businesses, and communities to help them comply with the endangered resources laws and to preserve the endangered/threatened resources when considering development on specific parcels of land.





The Wisconsin Department of Natural Resources' Natural Heritage Inventory does also provide free information that is available online, based on the Public Land Survey System (PLSS) coordinates of endangered/threatened species and lands, but not specific parcels. This provides a list of endangered and threatened species, both plant and animal, or environmentally sensitive areas that are located within each township. With Kaukauna's PLSS coordinates being Township 21N Range 18E, there are three plants and one bird listed as being endangered or threatened in our area. The three plants that are listed are the Showy Lady's Slipper (*Cypripedium reginae*), American Gromwell (*Lithospermum latifolium*), and Marbleseed (*Onosmodium molle*). The bird that was included in the list is the Bald Eagle (*Haliaeetus leucocephalus*). These species and their habitats are protected by law and enforcement of these laws and public compliance is crucial to the success and biodiversity of the natural areas located in Kaukauna.

Cultural Resources

Cultural resources such as monuments, memorials, and Historic Structures and places are defining characteristics of any community. The City of Kaukauna has a very rich history dating back to when Jean Nicolet was the first explorer to pass through Kaukauna. The first land deed of Wisconsin was obtained by Dominique Ducharme and the first home built in Outagamie County is the Grignon Mansion located along the south side of the Fox River. Kaukauna also became a prominent trading post for white settlers and the Native Americans within the area. The maintenance and preservation of these defining characteristics of historical and cultural importance should be of high priority to keep intact the cultural integrity and historical significance the city of Kaukauna holds.



- Historic Preservation Commission

The City of Kaukauna adopted a Historic Preservation Ordinance in 1996 that created the Historic Preservation Commission. The commission feels that the protection, enhancement, perpetuation, and use of sites with special character or special architectural, archaeological, or historic interest is a public necessity and is required in the interest of health, prosperity, safety, and welfare of the people of Kaukauna. Duties of the commission include recommending designation of historic structures, sites and districts within the City of Kaukauna to be considered in the National Register of Historic Places or preservation within the City. These recommendations should be supported through architectural and cultural analysis and significance to the history and culture of the City of Kaukauna, State of Wisconsin, or the nation. More detailed information on the Historic Preservation Commission and historic preservation in the city of Kaukauna can be found in Chapter 15 of the Municipal Codes of Kaukauna, Wisconsin.

The purposes for protection and enhancement of cultural and historical resources as stated by the Historic Preservation Committee of Kaukauna are:

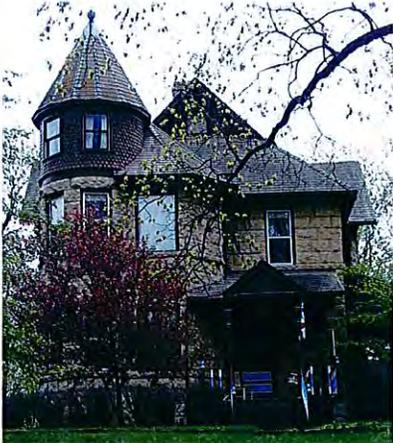
- Protect, enhance, and preserve historical and cultural sites and districts that represent or reflect elements of the City of Kaukauna’s social, economic, political, and architectural history.
- Safeguard the City of Kaukauna’s historic, prehistoric, and cultural heritage as reflected by the historic structures, sites, and districts.
- Stabilize and improve property values and enhance visual and aesthetic character.
- Protect and enhance the City of Kaukauna attractions to residents, tourists, and visitors, and serve as a support and stimulus to business and industry.

The State of Wisconsin Historical Society Division of Historic Preservation maintains a database and information on all historic buildings, sites and archaeological sites documented in the National Register of Historic Places that are located in Wisconsin. Kaukauna has eighteen buildings, sites, or districts that are included in the National Register of Historical Places and the protection of these is crucial to the City of Kaukauna’s rich cultural and historical heritage.

- Historical structures are any improvement which has a special character or special historic interest or value as part of the development, heritage, or cultural characteristics of the City of Kaukauna, state or nation, and which has been designated as a historic structure pursuant to the provisions of Chapter 15 of the Municipal Code of Kaukauna. Historical structures in Kaukauna include:
 - Merrit Black House – 104 River Road
 - Grignon Mansion – Augustine Street
 - Lundauer and Rupert – 137, 139, 141 East Second Street
 - Frank St. Andrews House – 320 Dixon Street
 - Norman Brokaw House – 714 Grignon Street
 - Holy Cross Church – 309 Desnoyer Street
 - Julius J. Martens Building – 124 to 128 East Third Street
 - St. Mary’s Church – 119 West 7th Street
 - Fargo’s Furniture – 172 to 176 West Wisconsin Avenue
 - Captain Meade House – 309 Division Street
 - Charles W. Stribley House – 705 West Wisconsin Avenue
 - Kaukauna Public Library – 111 Main Avenue
 - Nicolet School – 109 East 8th Street
 - Kuehn Blacksmith Store – 148 to 152 East Second Street
 - Klein Dairy Farmhouse – 1018 Sullivan Avenue
- Historic Sites are parcels of land of historic significance due to a substantial value in tracing the history or prehistory of man, or upon which a historic event has occurred, and which has been designated as a historic site or an improved parcel, on which is situated a historic structure and any abutting improved parcel used as and constituting part of the premises on which the historic structure is situated.
- Historic Districts are areas designated by the Common Council on recommendation of the Commission that contains two or more historic improvements or sites.

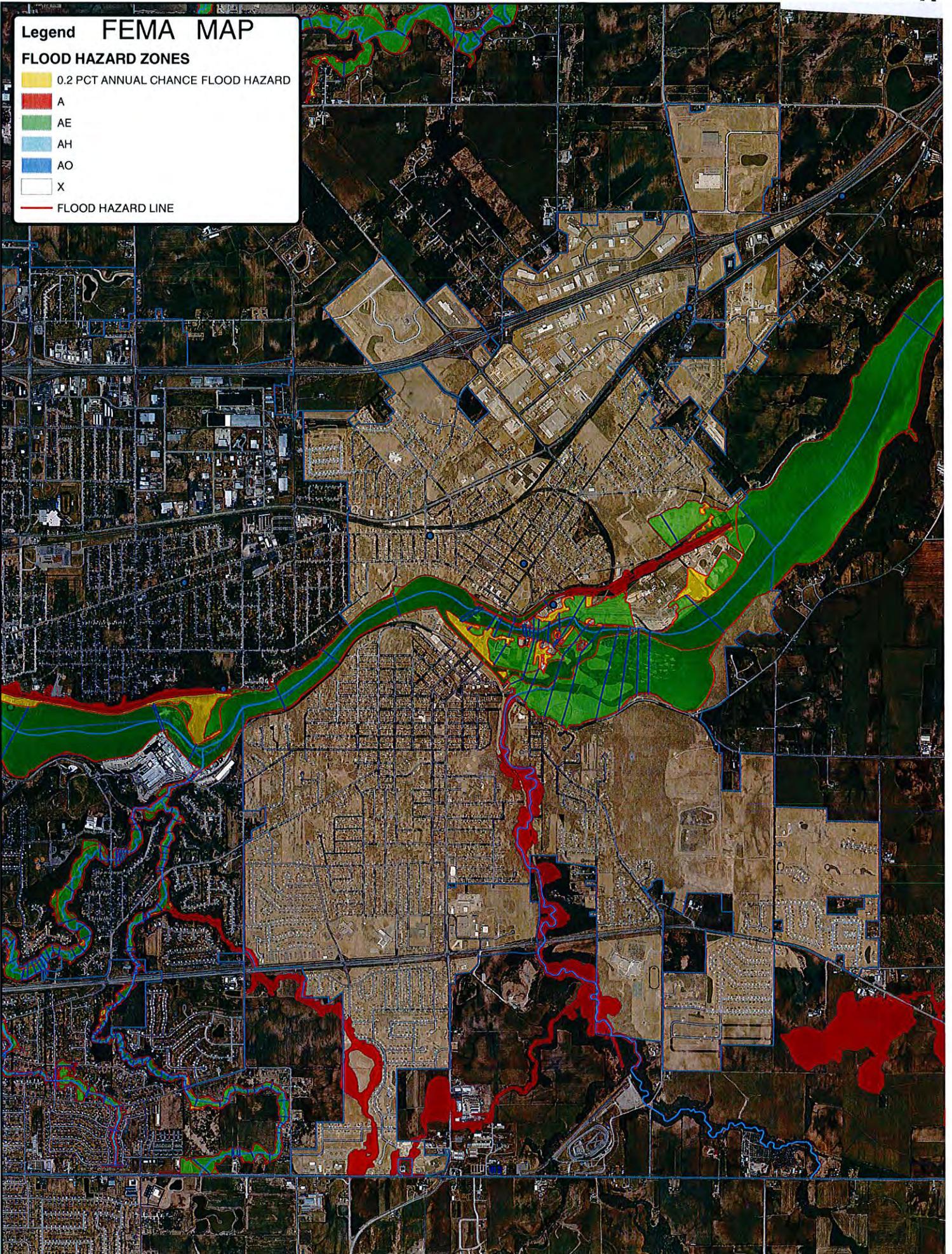
Historic sites and districts in Kaukauna include the Osprey Site (address restricted) and the Kaukauna Locks Historical District in Downtown Kaukauna.

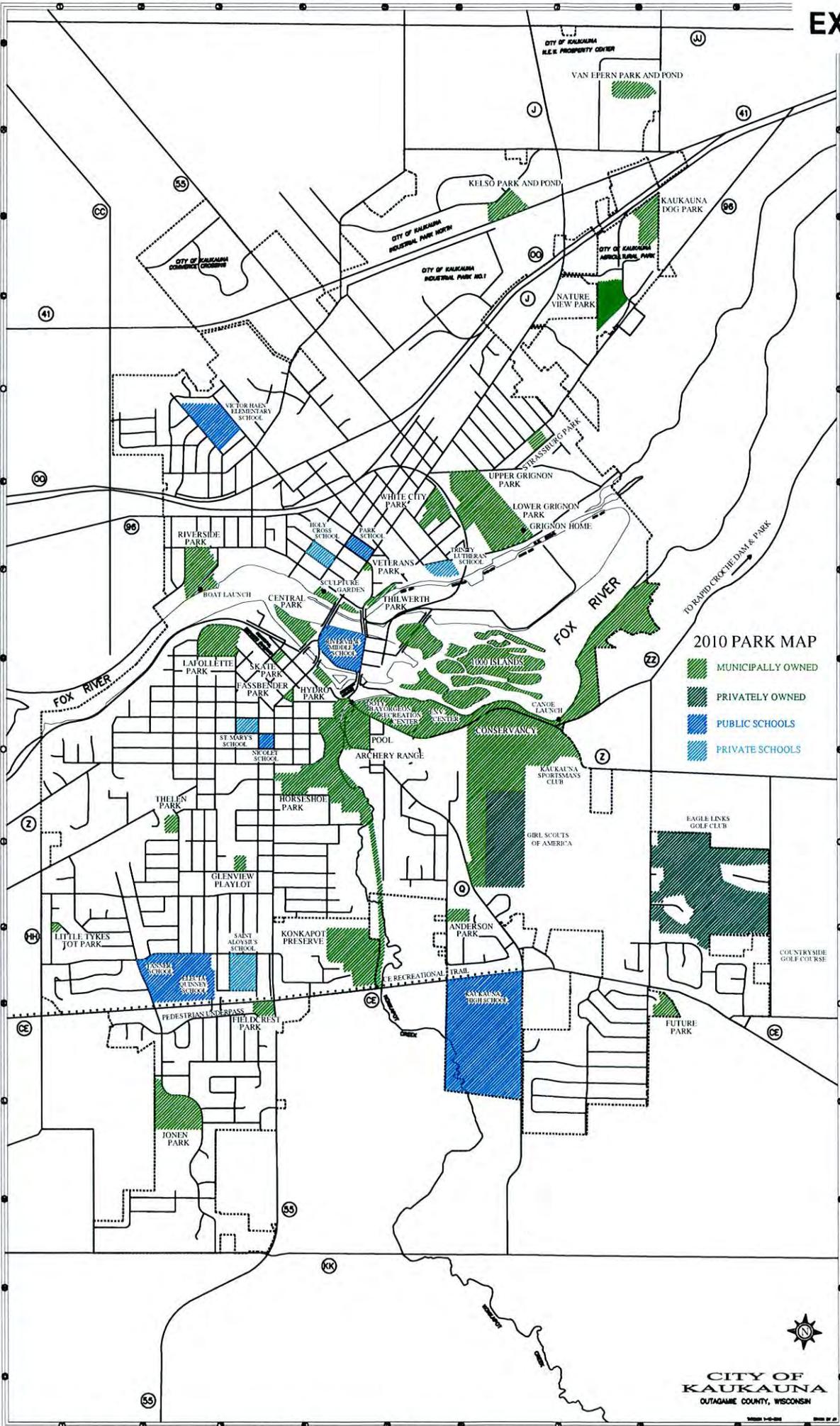
These cultural resources need to be protected using the power and influence provided by the Historic Preservation Commission in order to keep Kaukauna's strong cultural heritage viable and important to the image of the City. Also, any needed improvements, remediation, or creation of cultural resources should be done so accordingly to keep intact the cultural backbone of the City. Exhibit XII is a map showing historic structures, sites, and districts in the City.

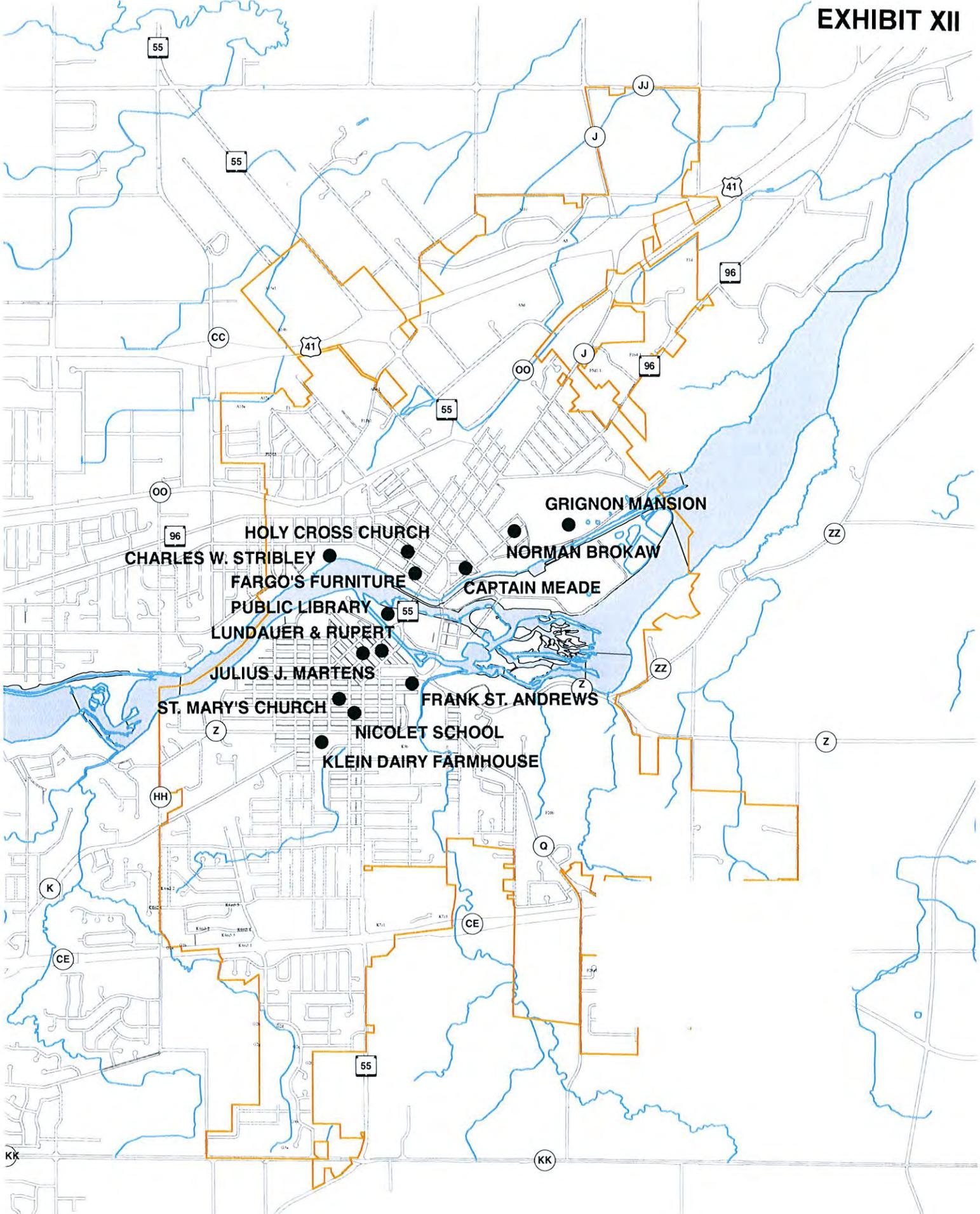


Legend FEMA MAP
FLOOD HAZARD ZONES

- 0.2 PCT ANNUAL CHANCE FLOOD HAZARD
- A
- AE
- AH
- AO
- X
- FLOOD HAZARD LINE







HISTORIC SITES

LAND USE

Land Use Vision Statement

In 2030, the City of Kaukauna is an attractive place to live and work due to the influence of good policies and responsible leadership.

Introduction

Land use will directly influence all elements presented in the Comprehensive Plan. The choices for housing type and location, transportation alternatives, business locations, recreational opportunities, and the quality of the environment, are all inter-related through land use. Land use policy decisions have far-reaching repercussions that influence housing growth, the protection of natural resources, and a number of other factors.

Inventory and Analysis

The following pages provide a thorough analysis of land use trends and projections for the City of Kaukauna. The inventory and analysis of land use information and working knowledge of Kaukauna created the basis upon which the Plan Commission developed a land use plan, and upon which the community determined a preferred future land use map. This is shown as Exhibit XIII.

Existing Land Use

A detailed inventory of land uses was conducted for the City in 2010. Periodic updates to the City's inventory are completed as part of the region-wide land use update required for the Fox Cities MPO Long Range Transportation/Land Use Plan. Land use information was compiled into general land use categories as is presented in the table at the end of this section. As a result of this inventory, a number of conclusions and issues have been identified, and recommendations have been made to guide future land use planning efforts. A map of the existing City land use follows as Exhibit XIV.

Future Land Use Categories

- **Agricultural**. Agricultural land is broadly classified as land that is used for crop production. Agricultural uses include farming, dairying, pastures, apiculture (bees), aquaculture (fish, mussels), cropland, horticulture, floriculture, viticulture (grapes), silviculture (trees) and animal and poultry husbandry. All agriculture uses are referenced from adjoining town's land use maps.
- **Single Family**. Single family land is classified as land that is used primarily for human habitation. These residential land uses include single and two-family residential, farmstead, mobile home parks, and garages for residential use. Within platted subdivisions, residential land use encompasses the entire lot. In rural areas where lots are typically larger, single family includes the primary residence, outbuildings, and the mowed area surrounding the structures. Single family also includes isolated garages and similar structures on otherwise undeveloped rural lots. Farmsteads include the farm residence, the mowed area between the buildings and the associated outbuildings.

- **Multi Family.** Multi family includes apartments of three or more units, condos, rooming and boarding houses, residence halls, group quarters, retirement homes, nursing care facilities, religious quarters, and the associated parking and yard areas.
- **Commercial.** Commercial land uses represent the sale of goods and services and other general business practices. Commercial uses include retail and wholesale trade, services, and other like uses.
- **Industrial.** Industrial land uses represent a broad category of activities which involve the production of goods. Industrial uses include construction, manufacturing which includes warehousing associated with factory or mill operations and other like industrial facilities.
- **Green Designated Housing.** Green housing represents residential developments that use existing natural resources such as forest, open prairie, wetlands, and ponds as an asset to the development. This housing, whether single or multi family, strives to reduce the urban footprint with minimal impact infrastructure and preservation of adjoining natural resources. This may include cluster development as well as large lots for the preservation of resources.
- **Mining.** This recognizes the existence of an open pit quarry which may be in operation through 2030.
- **Public.** This land use references such areas as parks, schools, utilities, reclaimed landfills, potential environmental easements or corridors for the preservation of natural resources, cemeteries, wetlands, and other like uses.

2010 Land Use Classification – City of Kaukauna		
Land Use	Estimated Acres	Percent of Total
Agricultural	203	4.21
Golf	87	1.81
Institutional	204	4.23
Parks	210	4.37
Residential	1,556	32.30
Generally Undeveloped	230	4.78
Primarily Woodland	560	11.63
Commercial	248	5.16
Industrial	492	10.21
Mining	27	0.57
Rail	45	0.93
Roads (Including State)	829	17.20
Utilities	127	2.60
TOTAL	4,818	100.00%

2010 Estimated Land Use Classification – Extraterritorial Review Area		
Land Use	Estimated Acres	Percent of Total
Agricultural	28,128	70.32
Golf	240	0.600
Institutional	1,600	0.04
Parks	232	0.58
Residential	3,992	9.98
Generally Undeveloped	392	0.98
Primarily Woodland	3,704	9.26
Commercial	296	0.74
Industrial	600	1.50
Mining	104	0.026
Rail	88	0.22
Roads (Including State)	2,244	5.61
Utilities	92	0.23
TOTAL	41,712	100.08%

Note: Estimated acreage does not include the Fox River which slightly skews the percentages.

Land Use and Development Trends

The City has the ability to expand services and infrastructure to the north, east, and south. A boundary agreement with the Town of Buchanan and the corporate limits of the Villages of Combined Locks and Little Chute limit westerly growth.

Given current land use trends, the location of transportation corridors, and the siting and capacity of infrastructure, the City has capacity for the following growth corridors up to 2030.

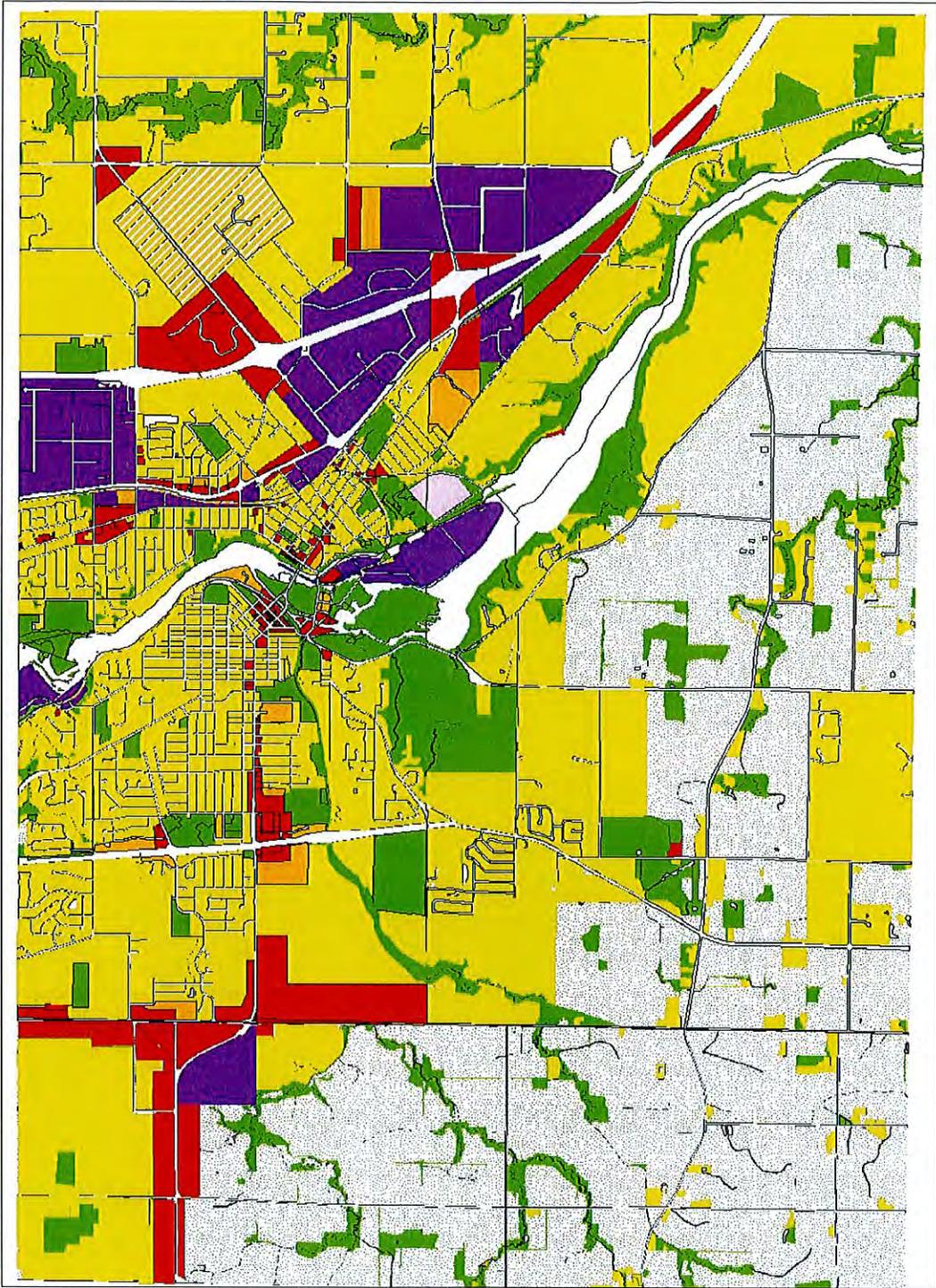
- Adding approximately 300 acres of industrial land along the US Highway 41 corridor (soon to be Interstate 55) along with 150 acres in the CTH “KK” and State Highway 55 corridors.
- Adding approximately 60 acres of commercial highway service to the US Highway 41 corridor.

The remaining acreage is residential or agricultural in use and subject to market trends. These areas are also impacted by influence of noise and odor such as Thilmany mill discharge or events at Wisconsin International Raceway.

In all situations, the City should strive to infill existing vacancies including building remediation and use of remediated landfill or reclaimed ground.

GOAL, STRATEGIES, AND RECOMMENDATIONS – LAND USE

- Establish Kaukauna as a premier location to raise a family and find quality jobs in a safe environment through a policy of appropriate land use designations, accommodates of infrastructure and services, and establishment of public facilities.
 - Fix land use designations to accommodate growth based on transportation corridors, infrastructure, ability to serve, existing land uses, and projected demand.
 - Encourage in-filling of dedicated land uses that have available infrastructure.
 - Encourage downtown redevelopment and historic preservation of downtown buildings.
 - For the efficient use of infrastructure and utilities, encourage redevelopment of older industrial buildings.
 - Mitigate adverse land uses through future designations to alter densities, change land use, create buffers, or preserve sensitive areas.
 - Establish necessary land use tools to guide development within the City and within the City's growth area.
-



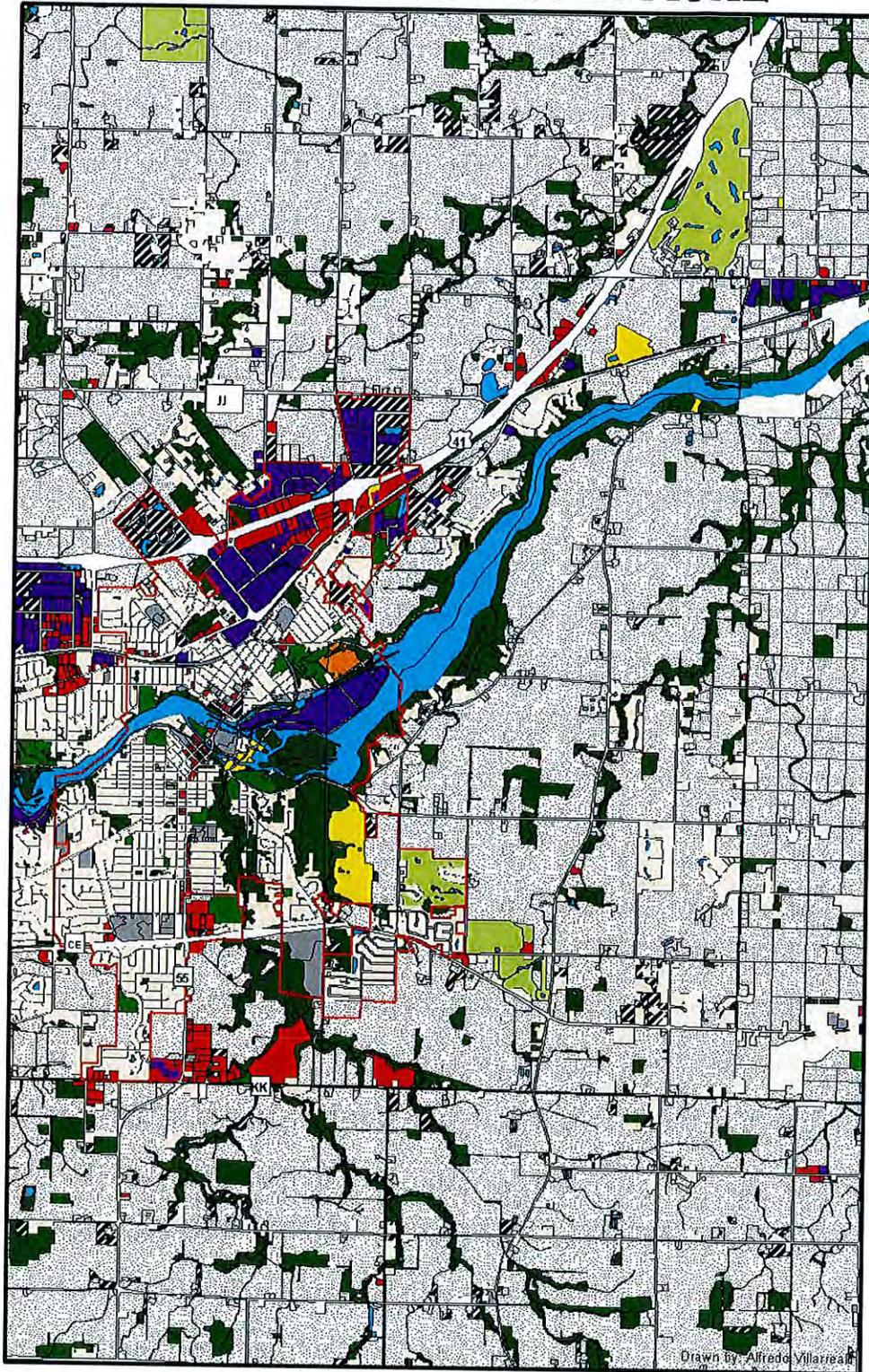
Map Legend

- | | |
|--|--|
|  Multi Family |  Agriculture |
|  Public |  Commercial |
|  Industrial |  Single Family |
|  Mining |  Green Designed Housing |



City of Kaukauna Future Land Use Map

KAUKAUNA LAND USE BY ACRE

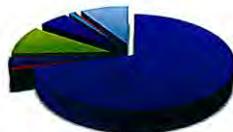


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Legend

- Roadways
- City Limits
- ▨ Agriculture
- Golf Course
- Woodlands
- Commercial
- Residential
- ▨ Undeveloped
- Utilities
- Water
- Parks & Rec.
- Industrial
- Rail
- Mining
- Institutional

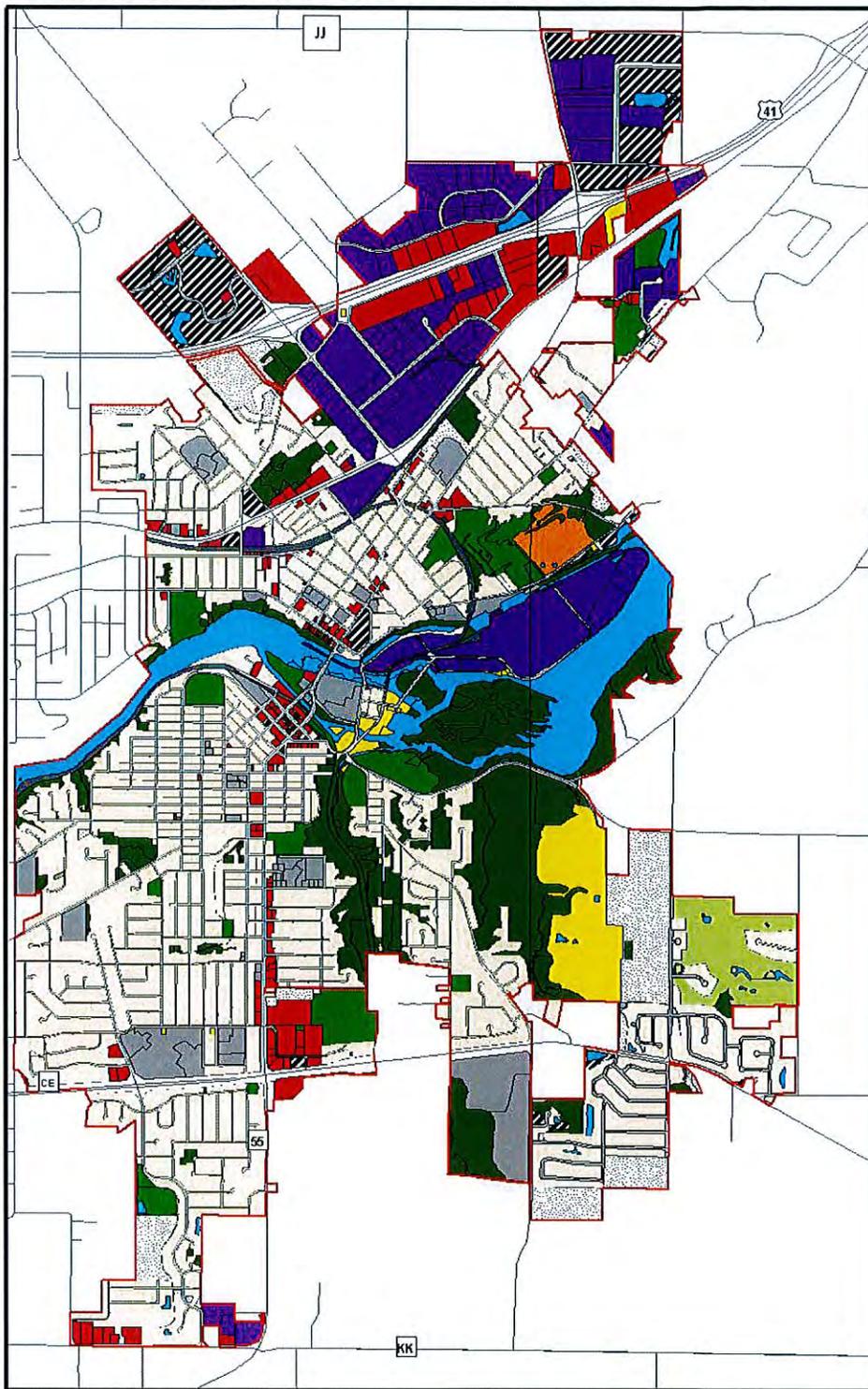
Land Use by Acre



■ 70.32% Agriculture	■ 0.74% Commercial
■ 0.006% Golf Course	■ 1.5% Industrial
■ 0.4% Institutional	■ 0.026% Mining
■ 0.58% Parks & Rec.	■ 0.22% Rail
■ 9.98% Residential	■ 5.61% Roads
■ 0.98% Undeveloped	■ 0.23% Utilities
■ 9.26% Woodlands	

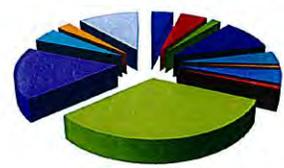
Drawn by Alfredo Villareal

KAUKAUNA LAND USE BY ACRE



- Legend**
- Roadways
 - City Limits
 - ▨ Agriculture
 - ▨ Golf Course
 - Woodlands
 - Commercial
 - Residential
 - ▨ Undeveloped
 - Utilities
 - Water
 - Parks & Rec.
 - Industrial
 - Rail
 - Mining
 - Institutional

Land Use by Acre



■ 4.21% Agriculture	■ 5.16% Commercial
■ 1.81% Golf Course	■ 10.21% Industrial
■ 4.23% Institutional	■ 0.57% Mining
■ 4.37% Parks & Rec.	■ 0.93% Rail
■ 32.30% Residential	■ 17.20% Roads
■ 4.78% Undeveloped	■ 2.60% Utilities
■ 11.63% Woodlands	

INTERGOVERNMENTAL COOPERATION

Intergovernmental Cooperation Vision Statement

In 2030, the City of Kaukauna is a community which has built strong working relationships with neighboring municipalities, districts, and government bodies. The City embraces and builds upon these cooperative relationships to ensure that the most cost effective and highest quality municipal services are delivered, that related efforts can be combined, and that intergovernmental issues are addressed before problems arise.

Inventory and Analysis

The relationship a municipality has with school districts, neighboring communities, the county, the regional planning commission, the State, and the federal government can impact residents in terms of taxation, planning, service provision, and siting of public facilities. An examination of these relationships and the identification of existing or potential conflicts can help a municipality address these situations in a productive manner.

Governmental Units and Relationships

- **Adjacent Communities.** The City of Kaukauna shares its borders with the Village of Combined Locks, Town of Kaukauna, Town of Vandebroek, Town of Buchanan and the Village of Little Chute in Outagamie County and the Town of Harrison in Calumet County. The western border between the City of Kaukauna and the Town of Buchanan is fixed through an inter-municipal boundary agreement.
- **School Districts.** The City of Kaukauna is served by the Kaukauna Area School District. The City and school district should continue to establish methods of communication and explore ways to work together. Joint cooperation will allow the goals of the comprehensive plan to be met while provide safe, efficient transportation, community services, and related amenities.

The City is also served by the Fox Valley Technical College (FVTC). The FVTC main campus is located in the Town of Grand Chute, approximately nine miles west of the City.

- **Special Districts and Systems.**
 - **Garner's Creek Stormwater Utility.** This regional (watershed-based) utility was created in 1998 and serves the Garner's Creek watershed which partially lies in the Kaukauna Storm Water Utility. The City has no representation on the Utility District Board and therefore no direct avenue to communicate recommendations within this plan that may impact the City Stormwater Utility.
 - **Heart of the Valley Metropolitan Sewerage Commission.** This regional entity governs the use and maintenance of the regional sewerage collection and treatment facility, of which the City's system discharges to. The City has a representative on the HOVMSD Board of Commissioners which makes short and long-term decisions affecting the regional system. Communication on local land use and future growth issues is a must

with this entity as it and the WDNR can affect aspects related to plant operation, capacity, and financing.

- OWLSnet Library System. The City maintains its own library, however, residents can utilize any library within the OWLSnet system. Residents have access to any of the 52 libraries in the consortium. Continued communication with OWLSnet, regarding desired service levels will help ensure adequate library service for the City.
- County. The City of Kaukauna is located in Outagamie County and Calumet County. The City presently has its own zoning ordinance under which decisions are not subject to the review and approval of either county. However, the City must interact and cooperate regarding special zoning (e.g. including shoreland-wetland, floodplain areas) and matters pertaining to County highways which run through, or are adjacent to the City. The City works with the various county departments to coordinate road construction and maintenance, solid waste and recycling efforts, and other social services. The City and Outagamie County continue to maintain open communications with one another that work to foster good working relationships and mutual respect.
- Regional. The City of Kaukauna is a member of the East Central Wisconsin Regional Planning Commission (ECWRPC). ECWRPC provides planning and technical assistance to counties, communities, businesses, interest groups, and individuals within the region. These services include environmental management, housing, demographics, economic development, transportation, community facilities (including SSA planning responsibilities), land use, contract planning, and others. ECWRPC had worked with the City on several projects over the years including the preparation of local plans, Fox Wisconsin Heritage Parkway, transportation plans, and this current comprehensive plan. The City should maintain communication with ECWRPC and contact them as the need arises to assist in dealing with land use and transportation issues.
- State.
 - Wisconsin Department of Natural Resources (WDNR). The WDNR is responsible for the regulation, protection, and sustained management of natural resources within the state. The WDNR operates various programs in water and air quality management, habitat preservation, recreational trail development, urban forestry, and other programs. The WDNR also maintains environmental corridors which enhance surface water quality and stream habitat throughout the planning area. The WDNR is strongly associated with the Fox River Navigation Authority who is responsible for the restoration, maintenance, and operation of the river's navigation locks. There are five locks in the City of Kaukauna.
 - Department of Agriculture, Trade, and Consumer Protection (DATCP). The overall mission of DATCP is multi-fold. The agency oversees programs which ensure the safety and quality of food, fair business practices for buyers and sellers, consumer protection, efficient use of agricultural resources in a quality environment, healthy animal and plant populations, and the vitality of Wisconsin agriculture and commerce.
 - Wisconsin Department of Transportation (WDOT). WDOT deals with issues related to all transportation uses in the planning area. WDOT evaluates existing transportation

infrastructure for bicycle and pedestrian trails as well as assists in planning efforts for future trails. The City of Kaukauna should continue to collaborate with WDOT to address current and future transportation issues within the community as well with future opportunities for “Park & Ride” lots.

- **Intergovernmental Cooperation Planning Efforts.**

- The City of Kaukauna worked closely with the East Central Wisconsin Regional Plan Commission and Outagamie County Planning Department and UW Extension throughout the planning process. This helped ensure consistency and concurrence between the City’s Comprehensive Plan, and pertinent county and regional plans and studies.

- **Laws, Ordinances and Regulations**

- Cooperative Boundary Plans and Agreements. Cooperative boundary plans and agreements are joint planning efforts in which two or more municipalities establish a mutually agreeable plan to establish boundary lines, provide public services and facilities, share revenue, and establish land use criteria. The majority of the municipal boundary agreements are conducted between a town and an incorporated village or city. Cooperative boundary plans, which are subject to a minimum ten-year period, must be approved by the Wisconsin Department of Administration. Currently the City of Kaukauna has a cooperative boundary agreement with the neighboring Town of Buchanan that established the City’s western growth area.
- Extraterritorial Subdivision Regulation. Incorporated cities can exercise plat review authority in unincorporated areas adjacent to their communities. This allows incorporated areas the same authority to approve or reject a specific plat or CSM as if it were within its own jurisdiction. This authority extends to a distance of three miles from the corporate limits. The incorporated area must have a subdivision ordinance in place in order to exercise this authority.
- Extraterritorial Zoning. Incorporated cities have been given authority to practice extraterritorial zoning authority if they have developed a zoning ordinance for the incorporated areas. This authority extends to a distance of three miles. Extraterritorial zoning allows for smooth transitions between suburban and rural areas, reduces conflicting land uses, and promotes intergovernmental cooperation in planning for future community needs. The City has not established extraterritorial zoning into any adjoining town however, consideration of such action should be considered in the future.

GOAL, STRATEGIES, AND RECOMMENDATIONS – INTERGOVERNMENTAL COOPERATION

- Plan, coordinate, and monitor urban development activities with potentially affected agencies and entities.
 - Ensure that short and long-term development plans are shared with other governmental entities.
 - Accept annexation petitions that expand the City's municipal boundaries in a manner which increases its efficiency for providing services.
 - Work with and coordinate sewer service area planning, transportation planning, economic development activities, and other development matters as appropriate with the East Central Wisconsin Regional Planning Commission or other appropriate agencies.
 - Ensure that future planning and development activities are shared and coordinated with the Heart of the Valley Metropolitan Sewerage Commission, Valley Transit, Outagamie County, neighboring communities, and other appropriate agencies.
 - The City should coordinate and participate in periodic intergovernmental cooperation meetings with neighboring and overlapping jurisdictions so as to review progress on plan implementation and identify current and upcoming land use and transportation issues.
 - Continue to work cooperatively with adjoining governmental jurisdictions when considering an annexation and servicing adjoining lands.
-

PLAN IMPLEMENTATION

Plan Implementation Vision Statement

Planning is recognized by the City of Kaukauna as their best and most consistent tool to ensure the type of community desired by their residents.

Introduction

A Smart Growth Comprehensive Plan serves a community by establishing priorities for the future, evaluating available resources, and providing a means for dealing with change. The purpose of the planning effort is to develop a plan that will guide both public and private decisions. In order to follow the plan as described in the previous chapters, it is necessary to implement the goals, strategies, and objectives as outlined on a continual basis. If a plan is to be successful, it must be implemented meaningfully and aggressively. This chapter prescribes a series of actions to be completed by the City of Kaukauna.

Role of the Plan

All land controls governing the City must be consistent with the adopted Comprehensive Plan. The City's Plan Commission is responsible for ensuring that this plan is used as a guide to update and/or replace ordinances and regulations to reflect the goals of the plan. In reviewing any petitions for development, the proposal should be reviewed against the plan's identified goals, strategies, recommendations, visions, and proposed land use patterns. If the Plan Commission determines inconsistencies with the plan, then consideration for a plan amendment must be made to reflect any change in policy.

Responsibility

City Common Council. Common Council members will have to make complex land use decisions based upon the Comprehensive Plan, the goals of the applicant, technical advice from staff, citizen input, and their own judgment on the specific development. This Comprehensive Plan will provide some of the information a Council member will need for decision making. Council members are encouraged to familiarize themselves with the contents and overall goals of this plan.

Plan Commission. The powers and duties of plan commissions have been established by Wisconsin Statutes. The City of Kaukauna Plan Commission is the primary entity responsible for implementing and updating this Comprehensive Plan.

As such, the Plan Commission must promote good planning practices within the City. Commission members should be knowledgeable about the content, visions, goals, strategies and recommendations of the Comprehensive Plan. Moreover, the Plan Commission must promote active citizen participation in future planning efforts, and should strive to keep the citizens and elected officials informed of any technical issues and proceedings regarding current planning issues. The Plan Commission is responsible for periodic amendments to the Comprehensive Plan so that regulations and ordinances are in compliance with the plan. Likewise, the Plan Commission must review all new and existing ordinances to verify that they are compliant with goals, strategies and recommendations of the Comprehensive Plan.

Consistency

Internal Consistency. The Comprehensive Plan was developed sequentially with supportive goals, strategies and recommendations. Using factual information regarding natural features, housing data, population and housing projections, and an analysis of existing infrastructure, a desired overall vision and visions for each comprehensive planning element were developed. To maintain internal consistency, any amendment to the plan should be accompanied by an overall review of all elements and their associated goals, objectives, and strategies.

Beginning January 1, 2010, all local governments in the State of Wisconsin engaging in any of the following actions must ensure that these actions are consistent with their local Comprehensive Plan: official mapping, local subdivision regulation, City and/or county zoning ordinances, and zoning of shore lands or wetlands in shore land areas.

External Consistency. Not only is it important to maintain internal consistencies, but the City should also be aware of other planning documents and their relevance to the City's comprehensive plan. An attempt should be made to maintain consistency with these plans if possible.

- State plans including the Fox River Navigation Authority
- Regional Plans
 - East Central Wisconsin Regional Plan Commission Comprehensive Plan, 2030
 - Fox Wisconsin Heritage Parkway
- County Plans
 - Outagamie, Calumet and Brown
- Local Plans
 - Village of Kimberly
 - Village of Little Chute
 - Village of Combined Locks
 - Village of Wrightstown
 - Town of Buchanan
 - Town of Harrison
 - Town of Kaukauna
 - Town of Vandenbroek

Monitoring Plan Progress

It is the Plan Commission's responsibility to monitor the progress of implementation. Additionally, the Plan Commission should annually review the goals, objectives, and strategies and address any conflicts which may arise between the elements of the plan. While it is the Plan Commission's responsibility to monitor progress, others may also check progress including community members, staff, zoning administrators, planners and citizen groups.

In order to assist the Plan Commission with monitoring of the plan and achievement of its visions, it may be necessary to develop and implement a variety of informal tools and techniques. Items for consideration may include:

- Creation of development review “checklists” to assist in determining a proposal’s consistency with the comprehensive plan.
- Integration of plan recommendations into a “performance-based budgeting” initiative.
- Development of an annual “work plan” for the Plan Commission.
- Continue to place the comprehensive plan as an item on the Plan Commission meeting agenda so that either the public or Plan Commission members can discuss items related to the plan, or to use the time to evaluate implementation progress.
- Developing articles for the community newsletter which focus on certain recommendations or strategies of the plan and calling for public input.

Updating the Plan

A Comprehensive Plan must be updated at least once every ten years. However, it is strongly recommended that the Plan Commission annually review the current planning decision to ensure compliance with the overall goals of the plan and continued consistency with the overall vision of the community. This annual review should also be used to determine if a major plan amendment is required. This comprehensive plan is a dynamic document and is an update of the Y2Kaukauna, the City’s Comprehensive Plan of 2000.

As directed by s.66.1001(4), any Plan Commission or other body of a local governmental unit authorized to prepare or amend a comprehensive plan shall adopt written public participation procedures that foster public participation, adopt a resolution by a majority vote of the entire commission or governmental unit (vote shall be recorded in the official minutes of the plan commission, the resolution shall refer to maps and other descriptive materials that relate to one or more elements of the comprehensive plan). One copy of the recommended plan shall be sent to the following:

- Every governmental body that is located in whole or in part within the boundaries of the local governmental unit (county, utility districts, school districts, sanitary districts, drainage districts).
- The clerk of every local governmental unit that is adjacent to the local governmental unit that is the subject of the plan or update.
- The Wisconsin Department of Administration.
- East Central Wisconsin Regional Plan Commission.
- The public library that serves the area in which the local governmental unit is located.
- Others identified in the adopted public participation procedures.

The Common Council and Plan Commission may spend time reviewing, revising, and requesting revisions to the recommended plan. The Common Council shall draft an ordinance adopting the plan and publish a Class I public notice 30 days prior to the hearing on the proposed ordinance to adopt the final “recommended plan”. The Common Council must provide an opportunity for written comments to be submitted by the public and there must be a response to those comments. In addition, a public hearing must be held on the ordinance. By majority vote, the Common Council must approve the ordinance. Finally, the adopted plan and the ordinance must be re-distributed to the list of entities above.

Land Use Planning Controls

Although zoning and subdivision ordinances are the two most common land use planning tools, there are several key tools which can be used to ensure that new development occurs in an organized and desired fashion. The City may modify or establish new ordinances which regulate new development. Zoning. The Plan Commission and Common Council must continually ensure that any future zoning changes are consistent with the Comprehensive Plan. Several actions can be taken to ensure that zoning decisions are made that accommodate the preferred future land uses as indicated on the Future Land Use Map.

- Compare intended future land uses with existing zoning. Amend current zoning to reflect the intended future uses for all areas within the City.
- Encourage local citizens and elected officials to actively participate in ongoing City meetings regarding all zoning and planning issues.
- Cooperate with Outagamie and Calumet Counties as necessary to amend existing ordinances and develop new ordinances which are reflective of the goals, strategies, and recommendations of all elements of the City's Comprehensive Plan.

Official Map. The City of Kaukauna maintains an official map. An official map is a diagram which delineates the current and future roadways such as local streets, highways, historic districts, parkways, and parks. Additionally, an official map may delineate railroad rights-of-way, waterways (only if included on a comprehensive surface water drainage plan) and public transit facilities. Furthermore, the map may establish exterior lines of future streets, highways, historic districts, parks, parkways, and public transit facilities, waterways, and playgrounds. Once an official map is adopted by ordinance, no building permits may be issued to construct or enlarge any building within the limits of the features listed above.

Official maps serve several important functions which ensure that future land use decisions will remain compliant with the comprehensive plan, including:

- Future costs for land acquisitions for streets and other delineated features are lowered or minimized because the land will remain vacant.
- Future subdivisions of land will be streamlined because future streets have already been established. Developers will be required to adhere to guidelines set forth within the official map unless it is amended by an ordinance.
- Potential home and land buyers can be readily informed that land has been designated for specific public uses.
- Acceptable route(s) for a potential bypass for a major state highway can also be delineated.

Subdivision Ordinance. Wisconsin State Statutes and the City of Kaukauna Subdivision Ordinance regulate the division of land into lots for the purpose of sale for building development. The subdivision ordinance is related to the zoning ordinance in that it regulates the platting, or mapping, of newly created lots, streets, easements and open areas. A subdivision ordinance can help implement the comprehensive plan and must be consistent with and conform to the goals of the Comprehensive Plan. Furthermore, subdivision ordinances can incorporate construction standards and timelines for completion of community facilities such as transportation networks or curb and gutter systems.

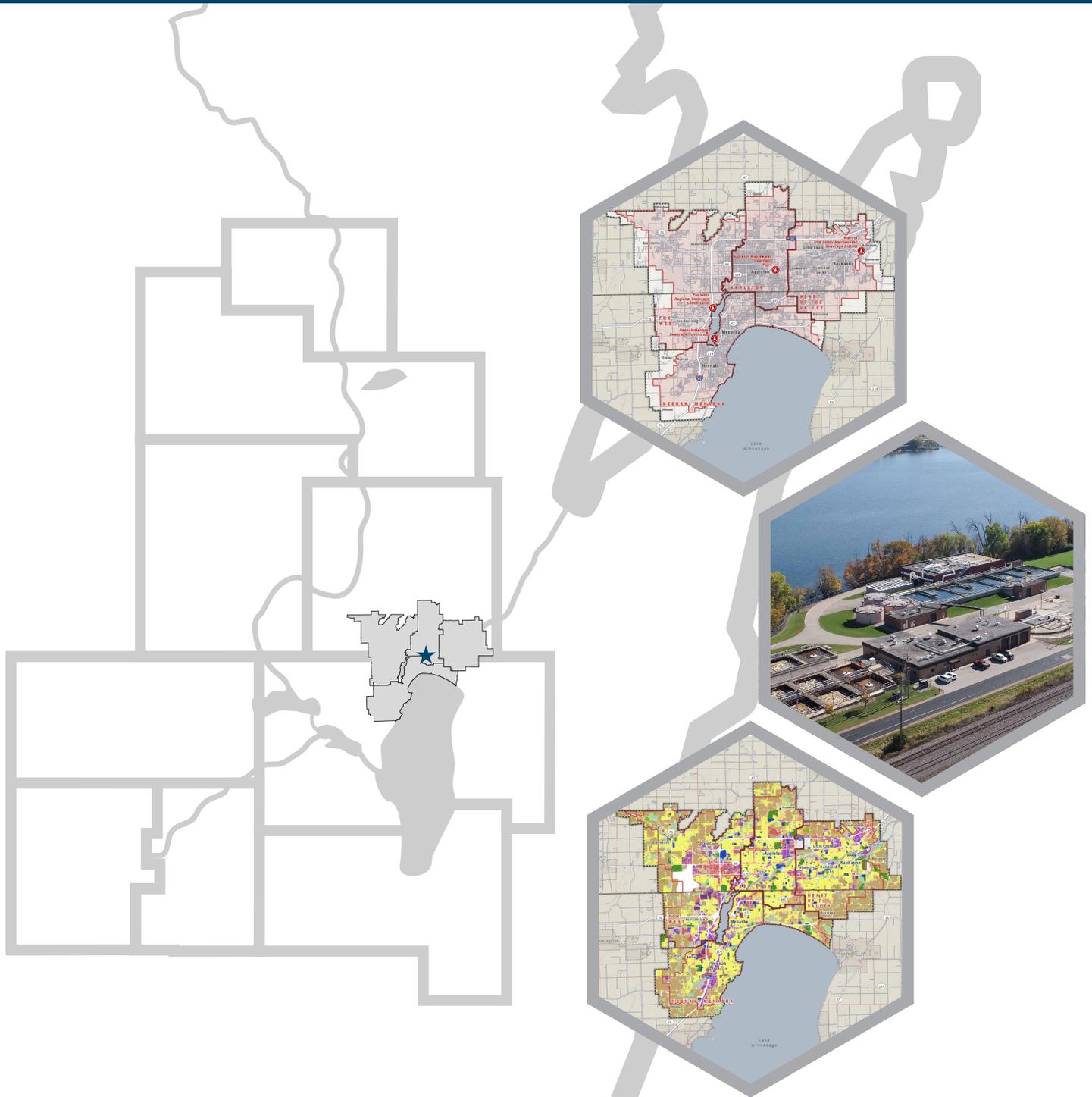
GOAL, STRATEGIES, AND RECOMMENDATIONS – PLAN IMPLEMENTATION

- Consider the Year 2030 Comprehensive Plan to be flexible in nature so as to reflect changes in current conditions and community values.
 - Periodically review aspects of the Comprehensive Plan.
 - Evaluate/review progress of plan implementation, major growth targets and changes in market conditions on an annual basis.
 - Every ten years, conduct a comprehensive update on the Comprehensive Plan policy and background elements as necessary.
-

APPENDIX D

Fox Cities Sewer Service Area Plan

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.

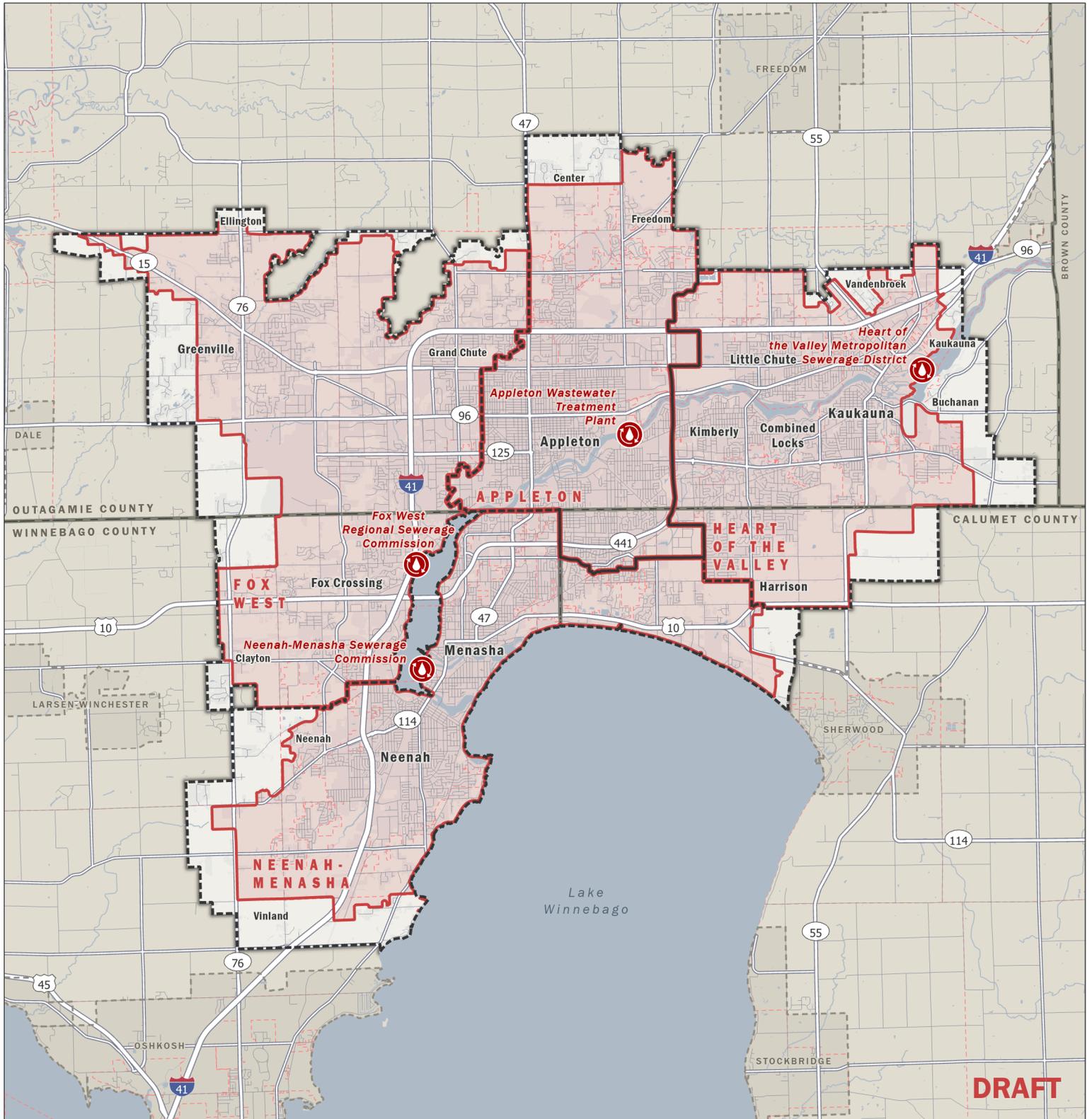
The 2040 Fox Cities SSA Plan is the fifth update of the Fox Cities SSA Plan (1985, 1991, 1997, 2006, and 2023, which is an element of the State of Wisconsin Areawide Water Quality Management (AWQM) Plan. The East Central Wisconsin Regional Planning Commission (ECWRPC) prepared the 2040 Plan and the Wisconsin 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 sewered 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.

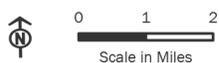
Description of the Study Area

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



PREPARED JUNE 2023 BY:

 East Central Wisconsin
 Regional Planning Commission
 Calumet • Fond du Lac • Menominee • Outagamie
 Shawano • Waupaca • Winnebago

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

This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

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 G)**
- Sewer Service Area Information Meetings **(Appendix G)**
 - 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 – May 7, 2023 **(Appendix C)**
 - Public Comments Received during 30-Day Notice **(Appendix J)**
 - ECWRPC’s Westridge Golf Course Cost-Effectiveness Evaluation
 - Mapping Edits from Communities
 - Boardman and Clark Comment Letter
- Public Hearing June 14, 2023 at the Environmental Management Committee (EMC) Meeting
 - Environmental Management Committee Meeting Minutes **(Appendix E)**
 - Public Guest Attendee Sign-In Sheet **(Appendix E)**
 - Fox Crossing Document submitted during public comment at EMC Meeting **(Appendix I)**
 - East Central met with WDNR on June 21, 2023 to discuss the EMC Public Comments and Committee’s request for clarification from the WDNR on Track 164.
 - WDNR issued comment letter on July 14, 2023 **(Appendix H)**
- East Central Wisconsin Regional Planning Commission Resolution 23-23 Approval – July 28, 2023 **(Appendix B)**
 - Letter of Support from the City of Neenah during public comment at Quarterly Meeting **(Appendix D)**
 - Quarterly Commission Meeting Minutes **(Appendix D)**
- Wisconsin Department of Natural Resources Approval - **Enter Date (Appendix A: WDNR Decision Letter)**

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.

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

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;
 - (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

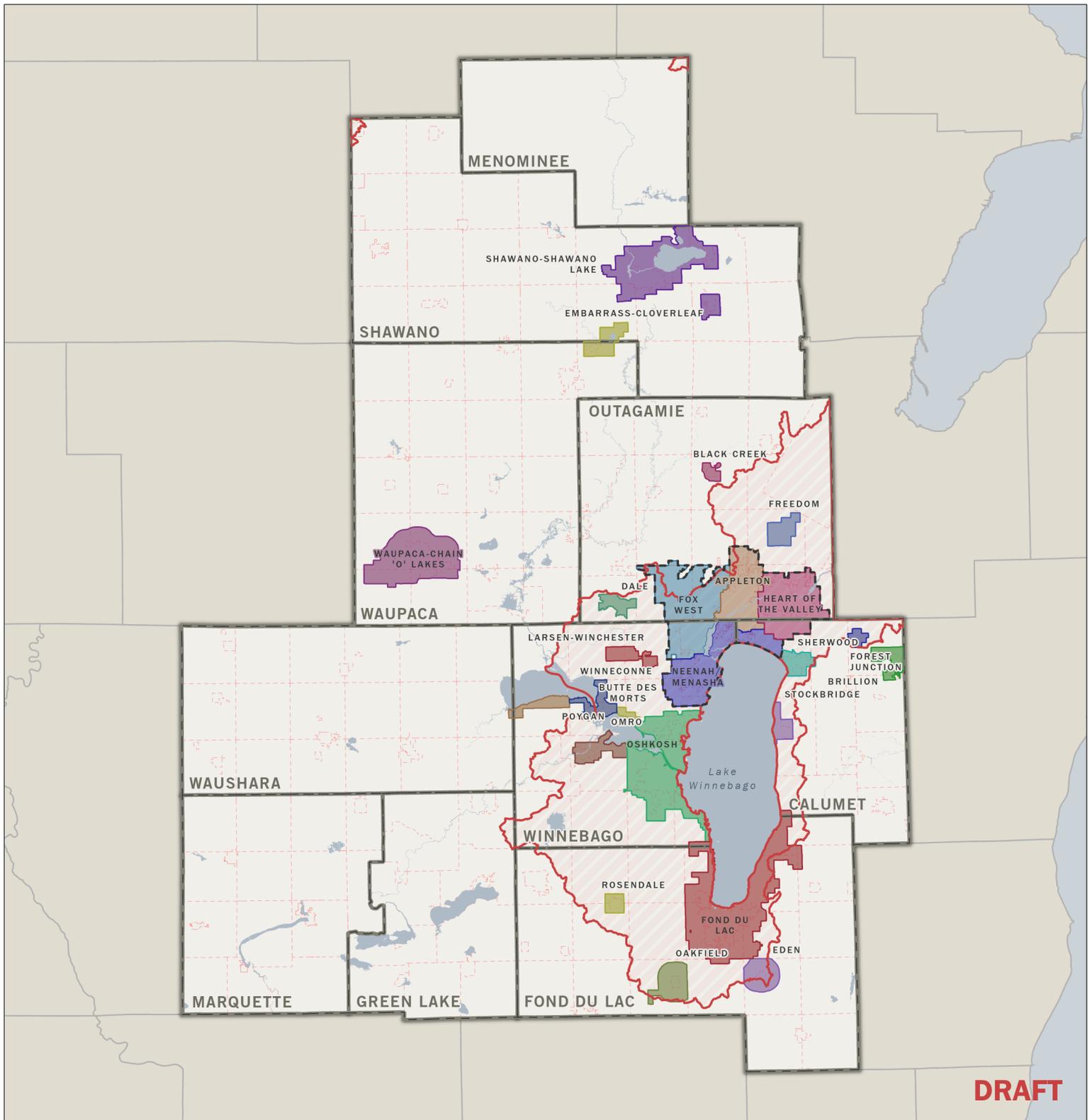
Sewer Service Area Planning

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

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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.

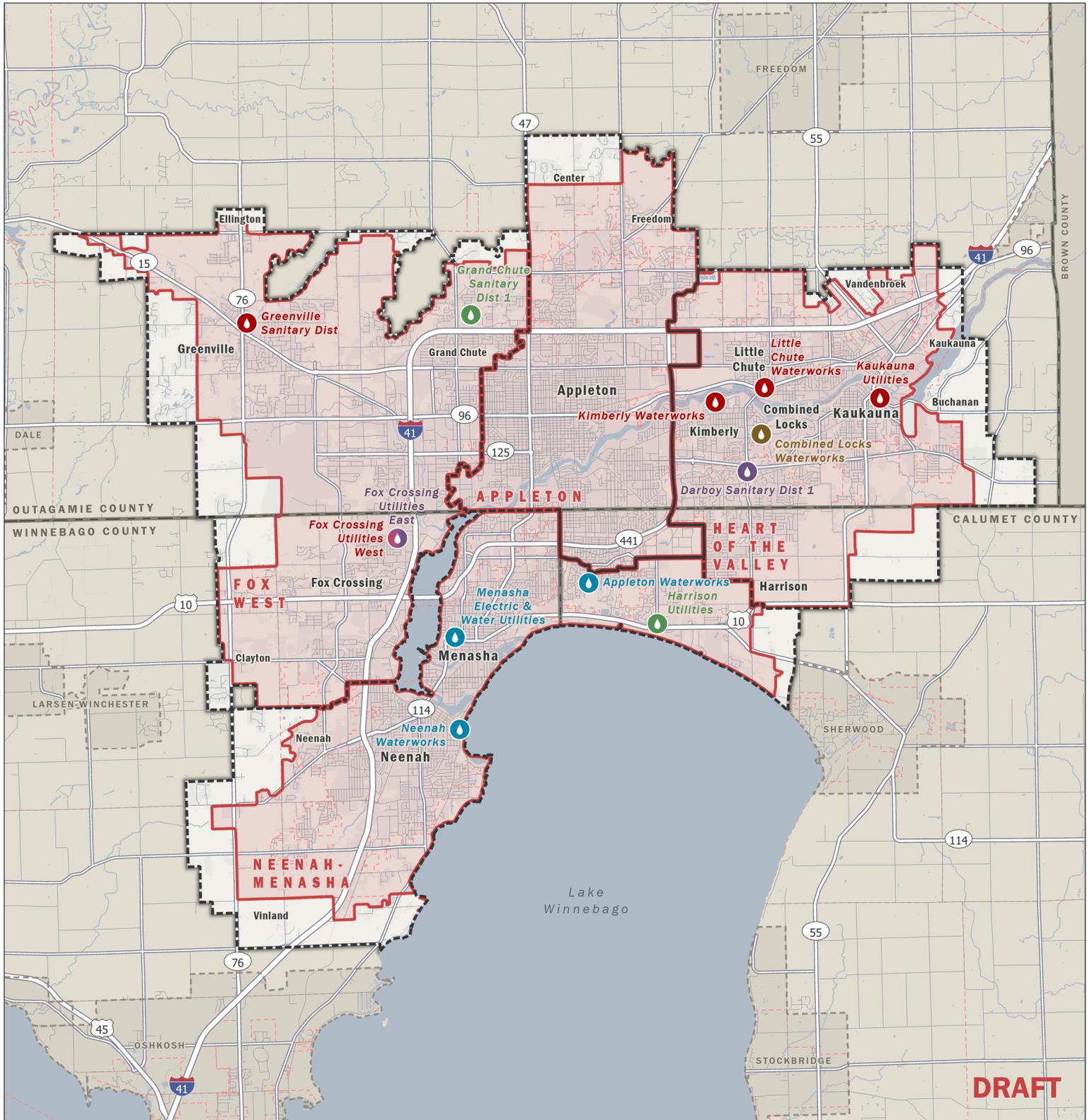
The main steps to the treatment of public water supply consist of coagulation and flocculation of dissolved particles in the water; sedimentation of the floc; filtration of the clean water to remove dissolved particles; and disinfection to kill any bacteria, viruses, parasites, and other germs.¹³ These 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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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

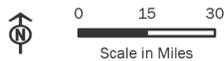
²⁷ “Wolf River Basin”, Wisconsin DNR, <https://dnr.wisconsin.gov/topic/Watersheds/basins/wolf>

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://ben.boulder.co.us/basin/data/NEW/info/TSS.html>



 2040 Fox Cities SSA Planning Area Boundary
 State Boundary



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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

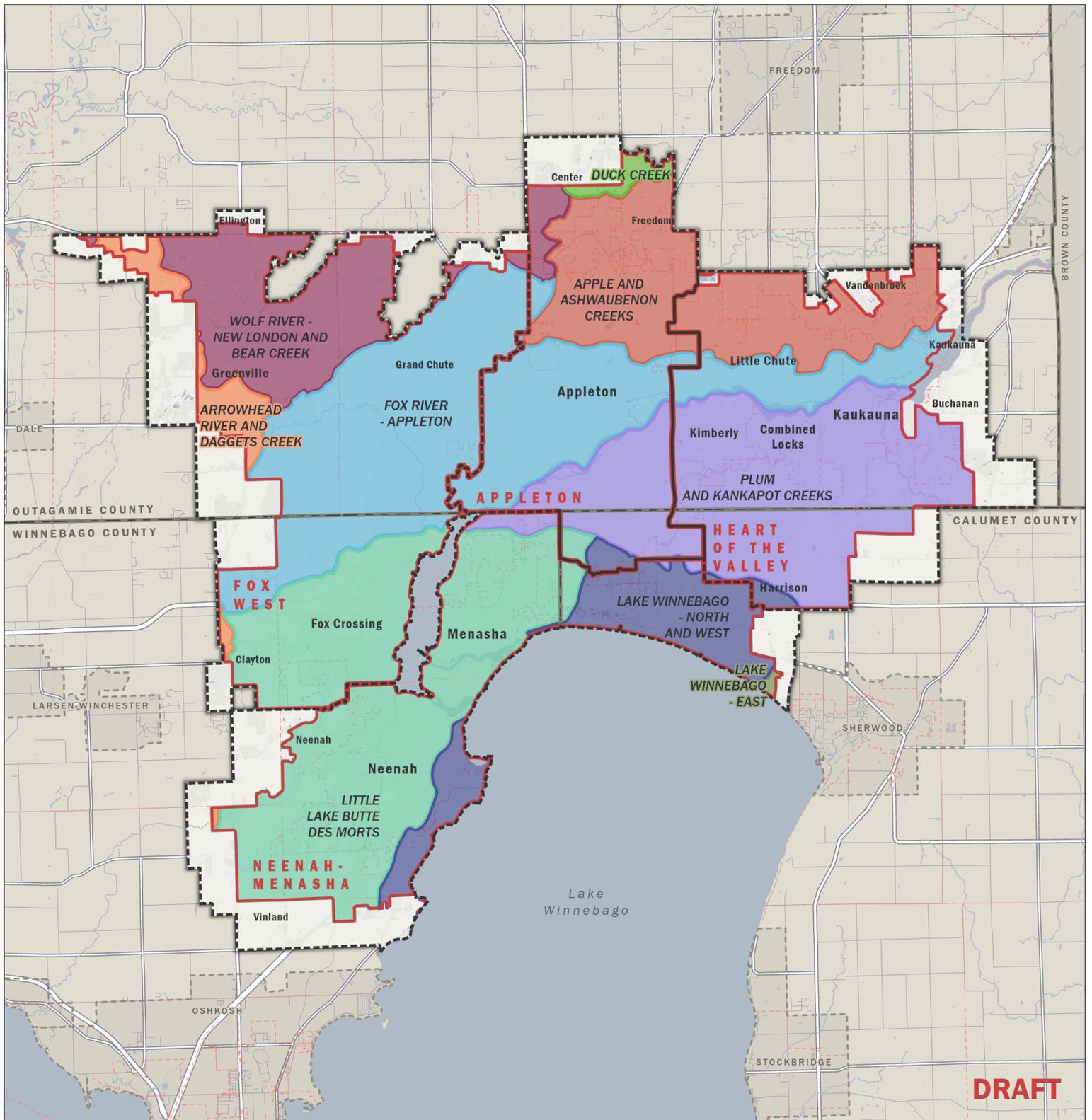
Wis. Statute NR 120.08 outlines the assessment, program implementation, and program evaluation guidelines for watershed plans. Watershed plans shall be prepared for all priority watersheds in Wisconsin.³⁰ Active Watershed Plans address nine key elements that are determined by the EPA to be critical for 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

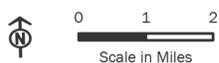
Source: ECWRPC, Wisconsin DNR Total Maximum Daily Loads data

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



DRAFT

- 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:

 East Central Wisconsin Regional Planning Commission
 Calumet • Fond du Lac • Menominee • Outagamie
 Shawano • Waupaca • Winnebago

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><i>Acipenser fulvescens</i></u>	Lake Sturgeon	SC/H	Fish	T21N, R17E - T20N, R17E
<u><i>Alasmidonta viridis</i></u>	Slippershell Mussel	THR	Mussel	T22N, R18E
<u><i>Asclepias ovalifolia</i></u>	Dwarf Milkweed	THR	Plant	T19N, R16E
<u><i>Bombus fervidus</i></u>	Yellow Bumble Bee	SC/N	Bee	T19N, R16E - T19N, R17E
<u><i>Carex formosa</i></u>	Handsome Sedge	THR	Plant	T20N, R16E - T20N, R17E
<u><i>Chlidonias niger</i></u>	Black Tern	END	Bird	T20N, R16E
<u><i>Chlosyne gorgone</i></u>	Gorgone Checker Spot	SC/N	Butterfly	T20N, R16E - T19N, R16E
<u><i>Cypripedium arietinum</i></u>	Ram's-head Lady's-slipper	THR	Plant	T20N, R17E
<u><i>Cypripedium candidum</i></u>	White Lady's-slipper	THR	Plant	T19N, R16E
<u><i>Eclipta prostrata</i></u>	Yerba-de-tajo	SC	Plant	T21N, R17E
<u><i>Eleocharis compressa var. compressa</i></u>	Flat-stemmed Spike-rush	SC	Plant	T19N, R16E
<u><i>Emergent marsh</i></u>	Emergent Marsh	NA	Community	T20N, R16E
<u><i>Emydoidea blandingii</i></u>	Blanding's Turtle	SC/P	Turtle	T21N, R17E
<u><i>Falco peregrinus</i></u>	Peregrine Falcon	END	Bird	T21N, R18E - T21N, R19E – T21N, R17E - T20N, R17E
<u><i>Floodplain forest</i></u>	Floodplain Forest	NA	Community	T20N, R18E
<u><i>Hydrophyllum appendiculatum</i></u>	Great Water-leaf	SC	Plant	T20N, R18E
<u><i>Migratory Bird Concentration Site</i></u>	Migratory Bird Concentration Site	SC	Other	T21N, R16E -T20N, R 6E - T21N, R18E - T21N, R18E - T21N, R19E - T20N, R18E - T21N, R17E - T20N, R17E
<u><i>Platanthera leucophaea</i></u>	Eastern Prairie White Fringed Orchid	END	Plant	T20N, R16E - T19N, R16E
<u><i>Rallus elegans</i></u>	King Rail	SC/M	Bird	T20N, R16E
<u><i>Ruellia humilis</i></u>	Hairy Wild Petunia	END	Plant	T21N, R19E
<u><i>Southern dry-mesic forest</i></u>	Southern Dry-mesic Forest	NA	Community	T21N, R18E - T21N, R19E
<u><i>Southern sedge meadow</i></u>	Southern Sedge Meadow	NA	Community	T20N, R16E
<u><i>Sterna forsteri</i></u>	Forster's Tern	END	Bird	T20N, R16E
<u><i>Talus forest</i></u>	Talus Forest	NA	Community	T20N, R18E
<u><i>Thalictrum revolutum</i></u>	Waxleaf Meadowrue	SC	Plant	T20N, R16E - T19N, R16E
<u><i>Trillium nivale</i></u>	Snow Trillium	THR	Plant	T21N, R18E - T20N, R18E - T20N, R17E
<u><i>Valeriana edulis var. ciliata</i></u>	Hairy Valerian	SC	Plant	T19N, R16E
<u><i>Valeriana uliginosa</i></u>	Marsh Valerian	THR	Plant	T20N, R17E
<u><i>Wet-mesic prairie</i></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						
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

Sveral 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 Hortonia. 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, Vandebroek, 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.

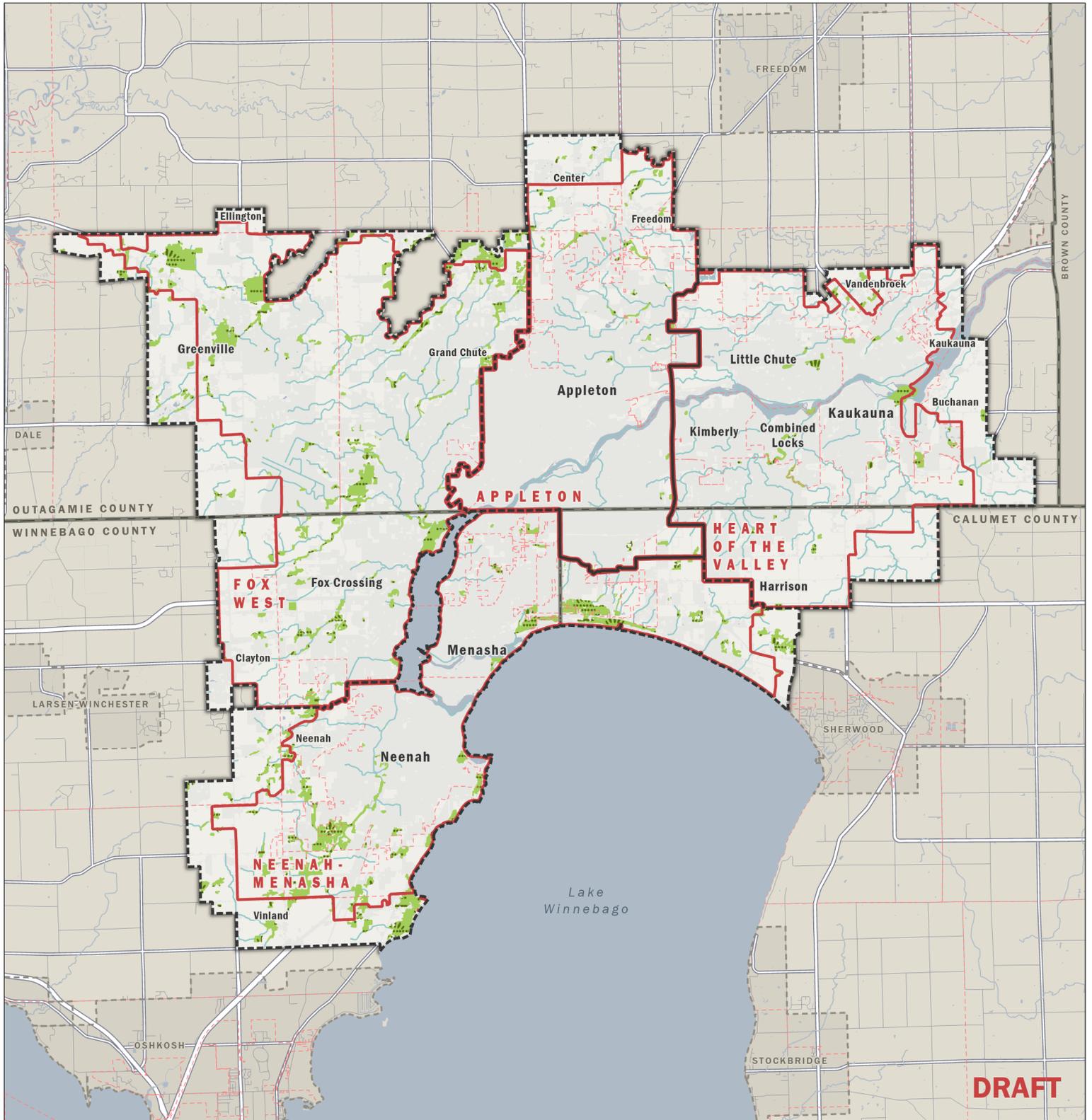
Environmentally Sensitive Areas

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

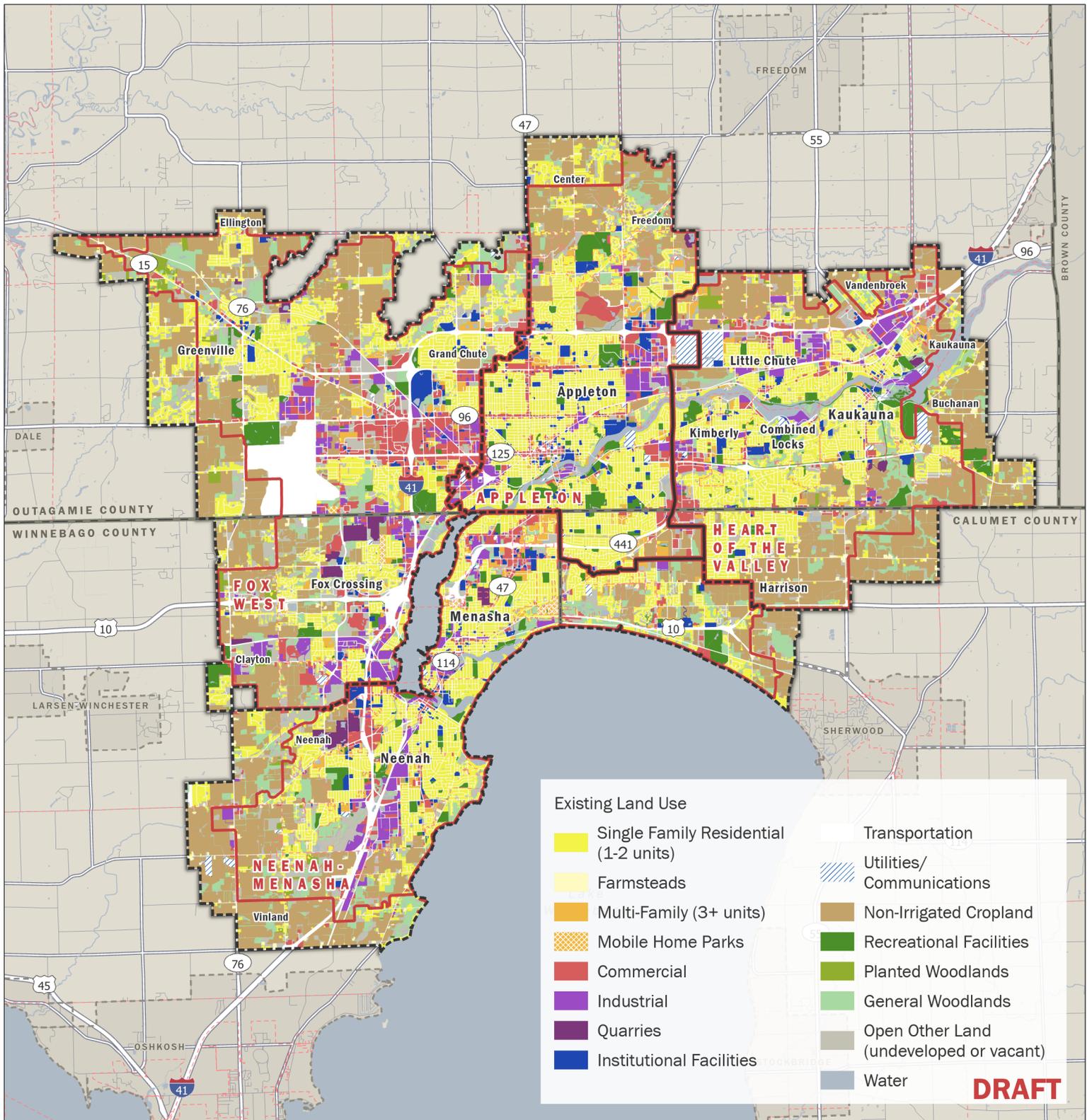


PREPARED JUNE 2023 BY:



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

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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

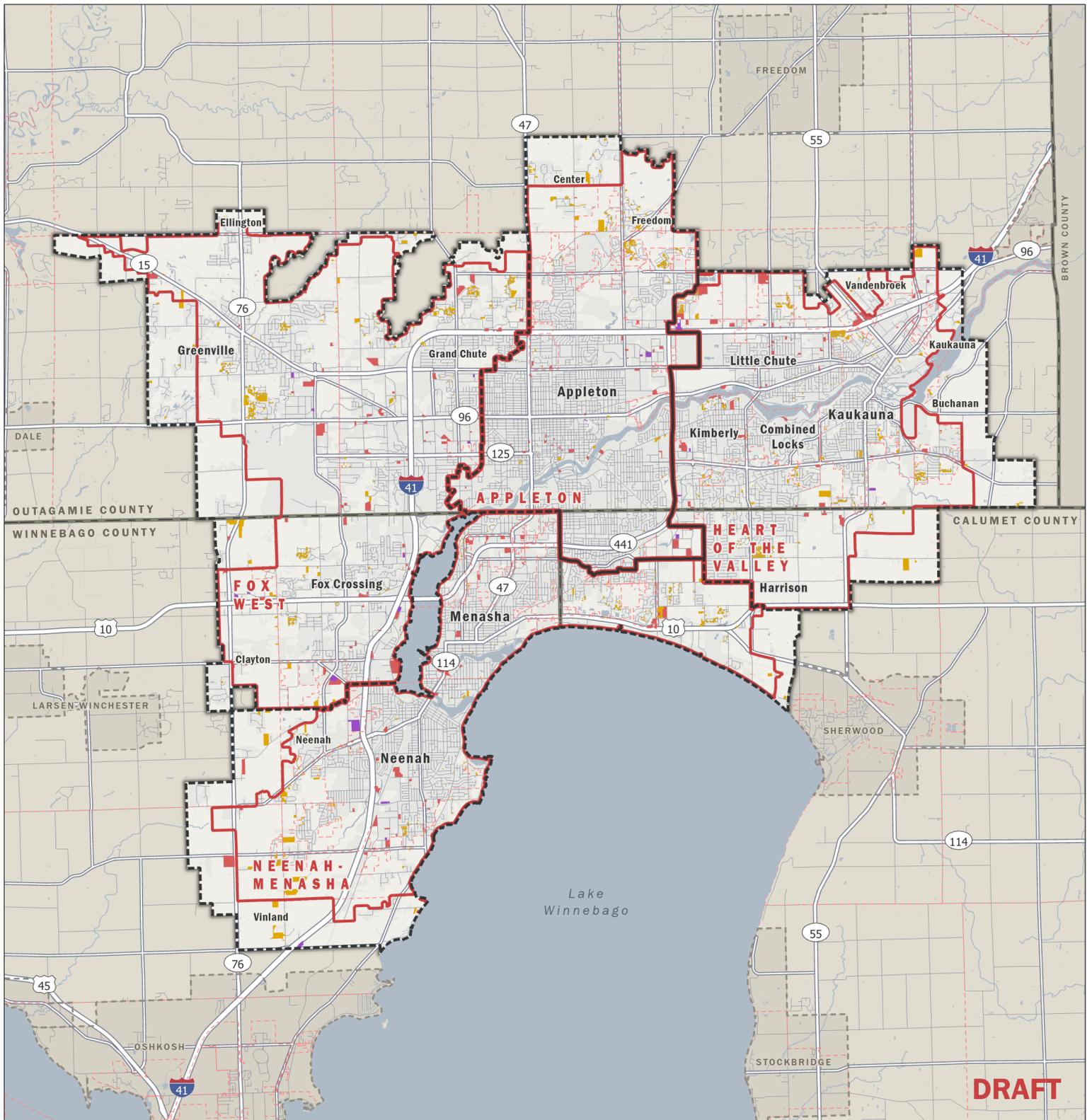


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PREPARED JUNE 2023 BY:





- 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



PREPARED JUNE 2023 BY:



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

Municipality	Census	Census	Projected				
	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. Vandebroek	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)					
Total Increased Households (Dwelling Units) (Change 2020 Census to 2040 Projected) x Percentage Split of Unit Type = Projected Units by Type							
1)	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	
Projected Units by Type / Development Densities = SSA Acreage Needs for Residential Uses (Baseline)							
2)	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
Application of 20% Market Factor = Adjusted Gross Acreage Needs for Residential Uses							
3)	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
Application of 15% Infrastructure Factor = Adjusted Gross Acreage for Residential Uses							
4)	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
Total Acreage Needs for Residential Uses (Adjusted with 20% Market Factor and 15% Infrastructure)							
5)	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.

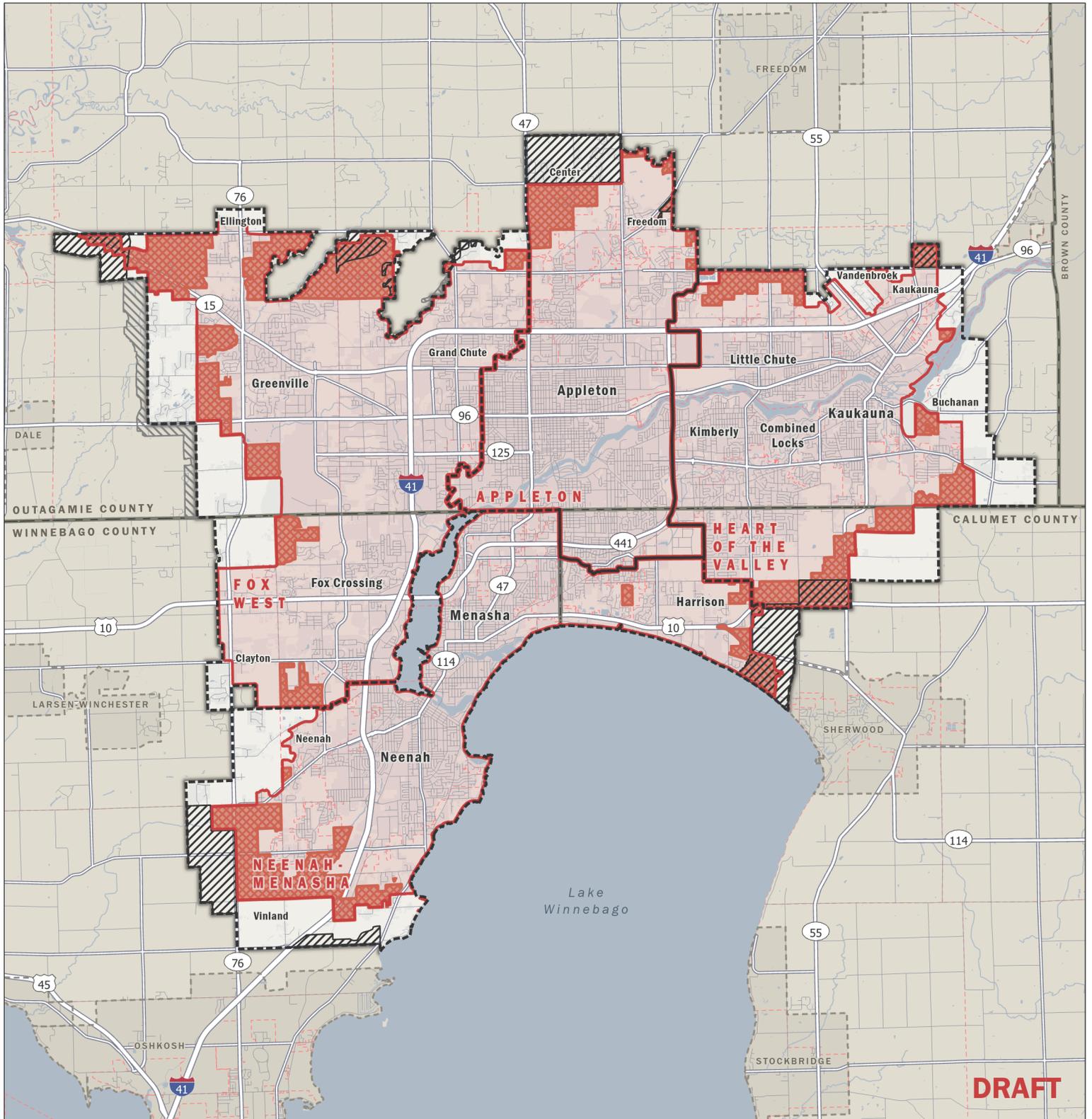
This means that overall, the 2040 SSA boundary will have an excess of 16,251 acres of vacant, developable land, after subtracting the projected residential and non-residential development. For this SSA Plan, the vacant, developable land use category includes woodlands, agriculture, and vacant land. It 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						
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	

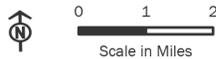
Source: ECWRPC Existing Land Use Data, 2040 SSA Boundaries



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

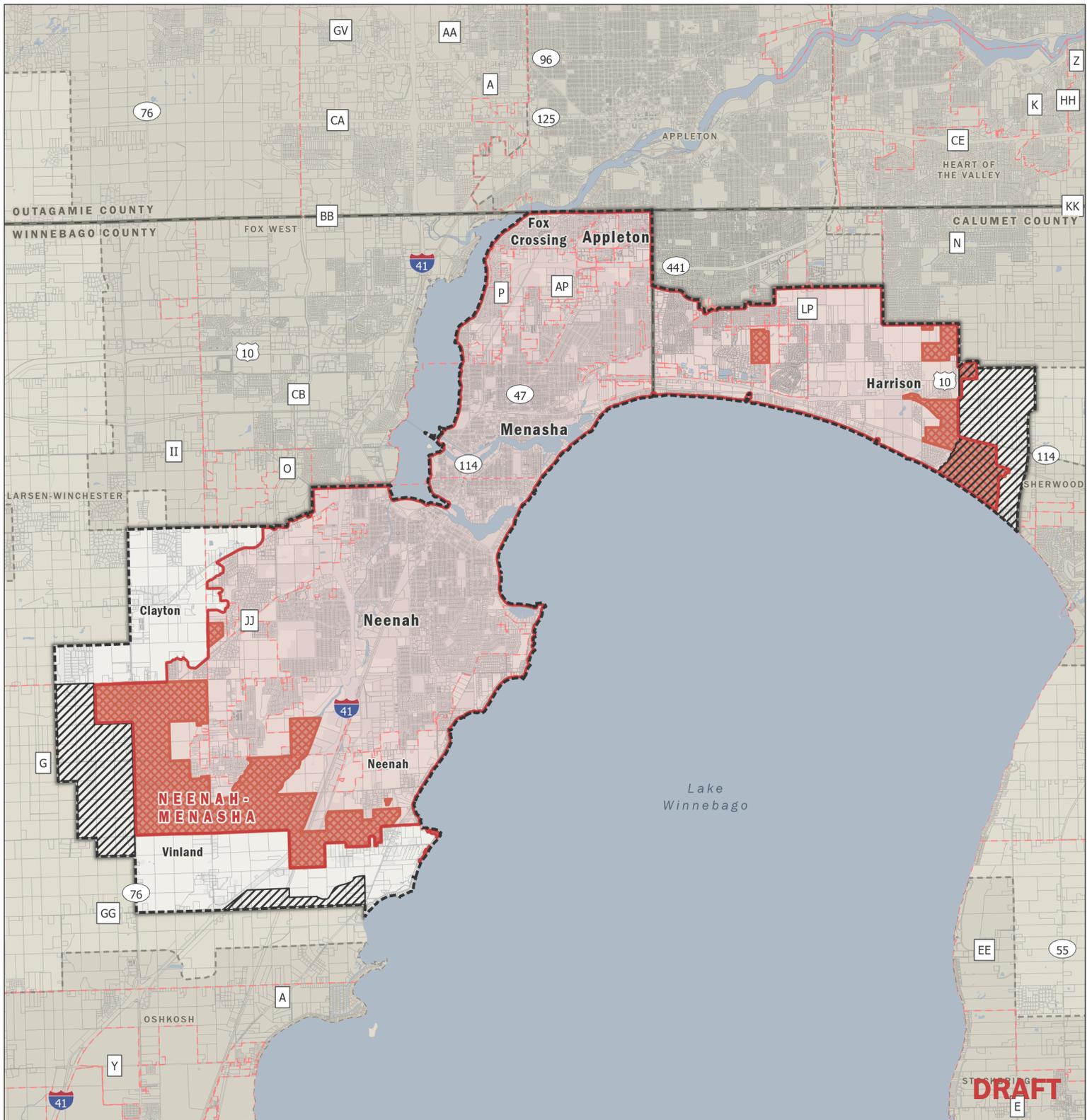


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2040 Neenah-Menasha SSA Allocations

-  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

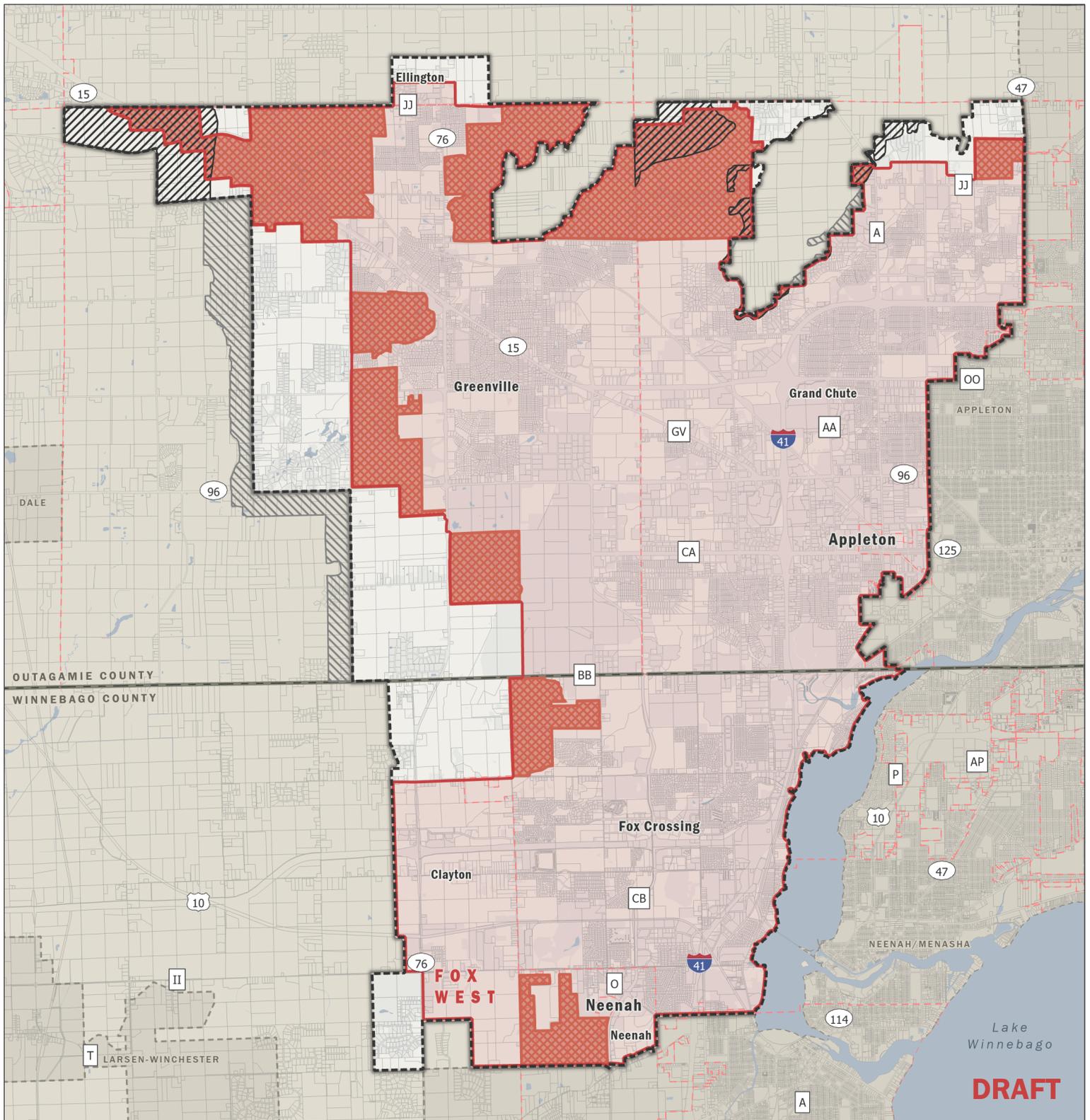


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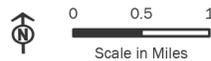
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2040 Fox West SSA Allocations

-  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

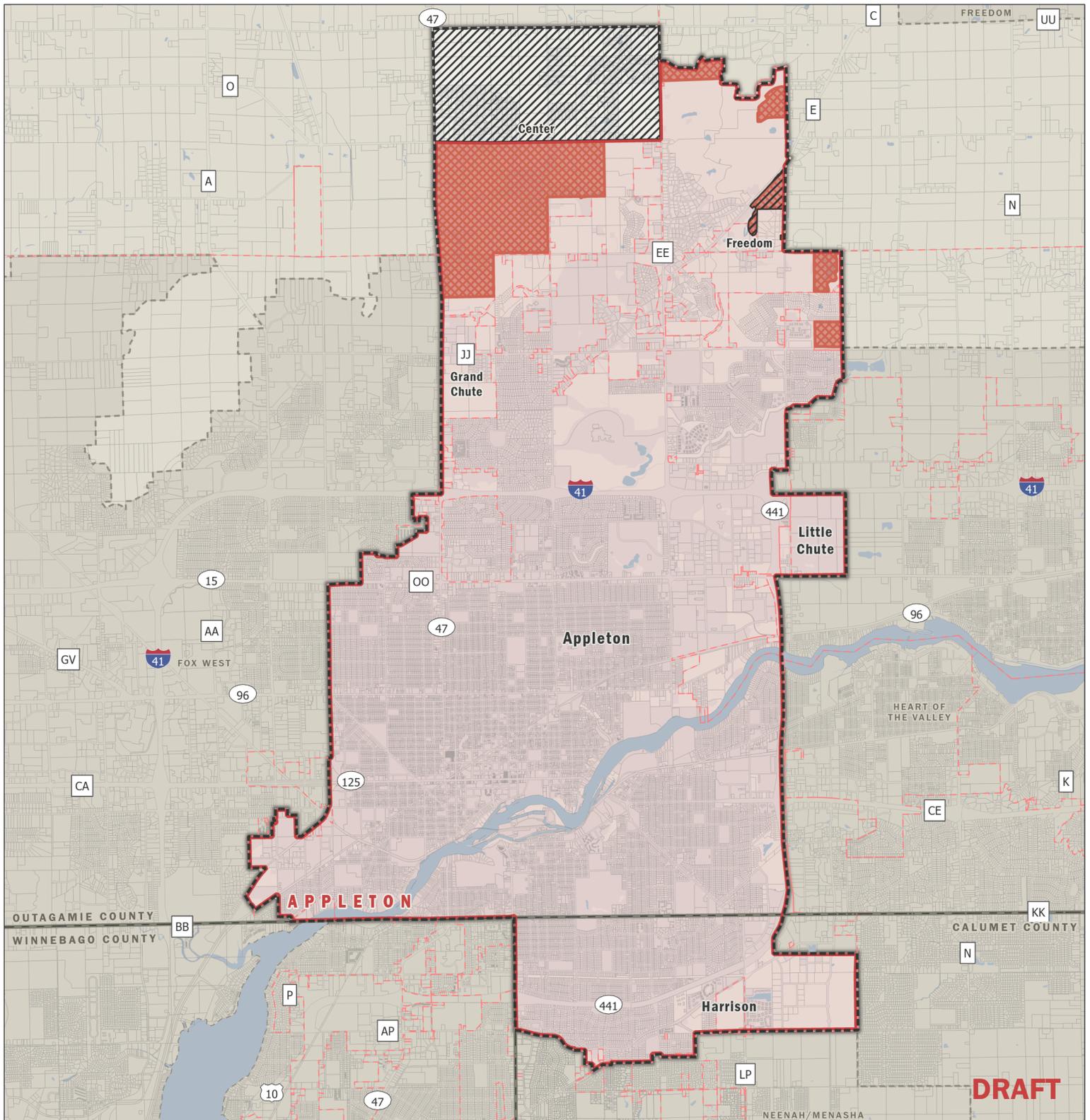


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2040 Appleton SSA Allocations

-  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

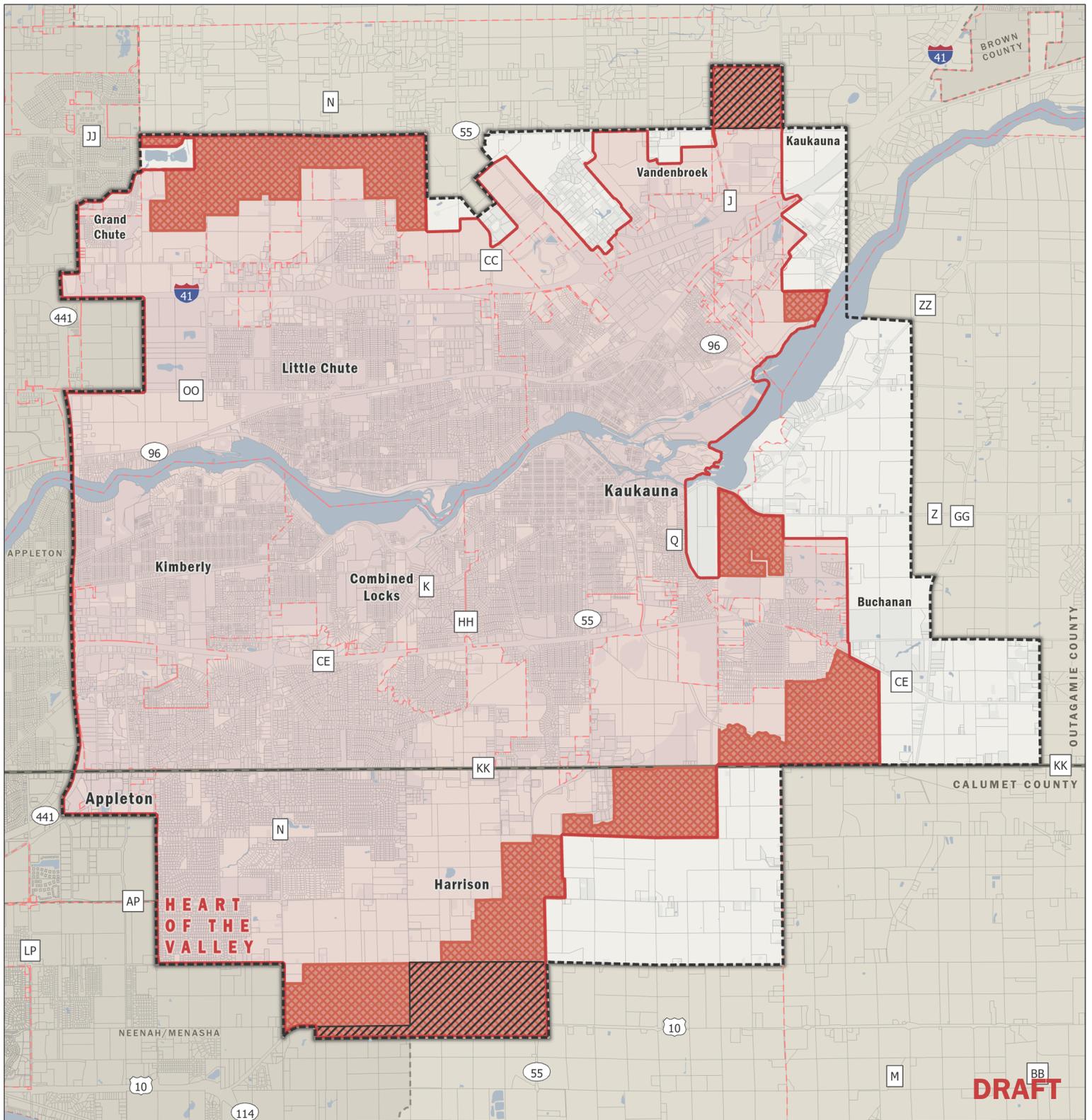


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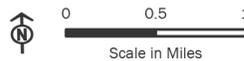
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2040 HOV SSA Allocations

-  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)

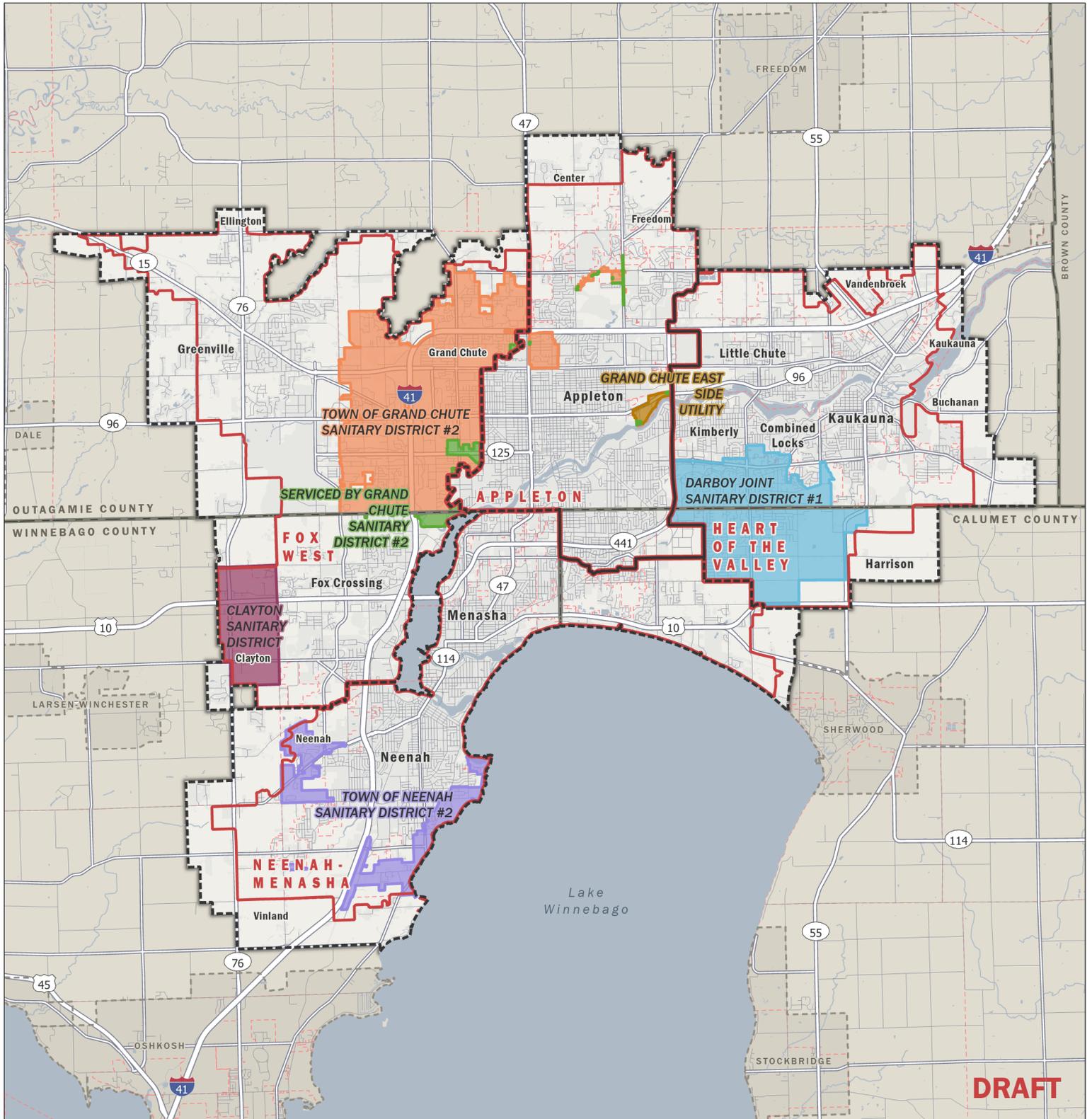
Private Onsite Wastewater Treatment Systems (POWTS) are wastewater systems for the underground disposal of wastewater. POWTS are regulated primarily by the Wisconsin Department of Safety and Professional Services (DSPS), but will also be reviewed by the WDNR for large systems or industrial wastewater. 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>

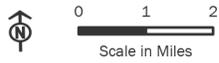
⁴⁹ "Wastewater State Statutes and Codes", Wisconsin DNR, 2022, <https://dnr.wisconsin.gov/topic/Wastewater/WastewaterRules.html>

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



DRAFT

- 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:

 East Central Wisconsin
 Regional Planning Commission
 Calumet • Fond du Lac • Menominee • Outagamie
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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 Regional 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 sewer 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 sewer 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 sewer 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 sewer 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, <i>ESRI Business Analyst, 2022</i>
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.nmscwtp.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 impact 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

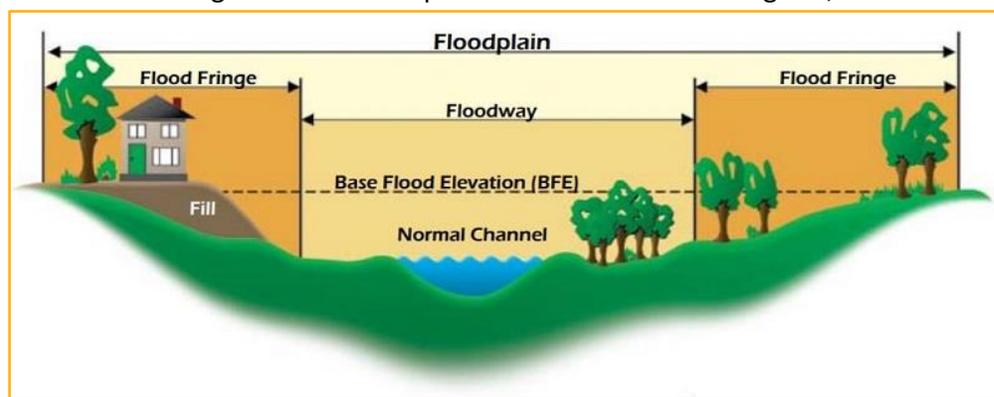


Figure 2. Characteristics of a Floodplain

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

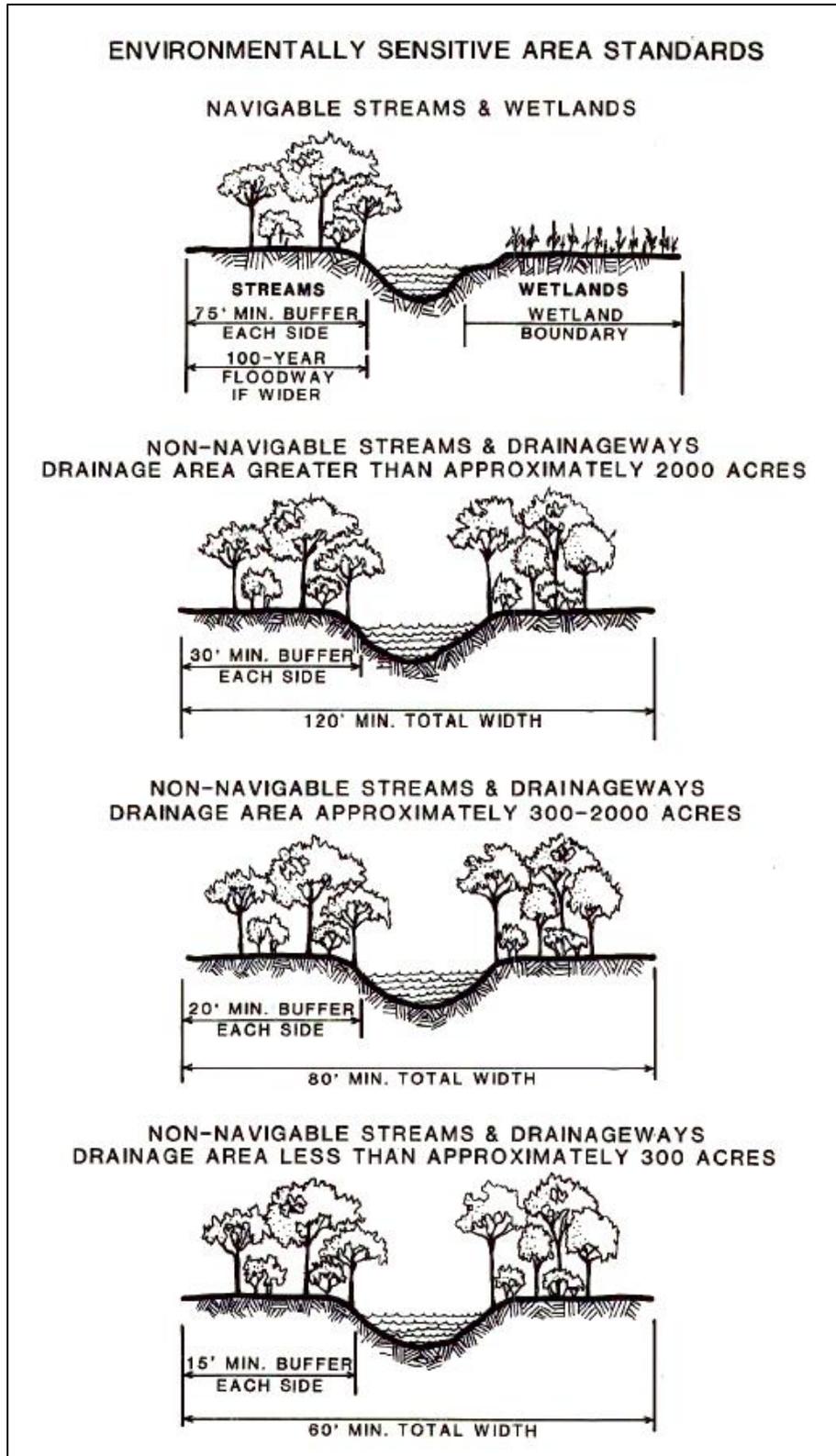


Figure 3. Environmentally Sensitive Areas

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 SSA Plan Decision Letter

Appendix B: Resolution 23-23: SSA Plan Adoption

RESOLUTION NO. 23-23

APPROVING THE UPDATED FOX CITIES 2040 SEWER SERVICE AREA PLAN

WHEREAS, the East Central Wisconsin Regional Planning Commission has been designated by the Wisconsin Department of Natural Resources as the sewer service area management agency for the member counties in the East Central region, and;

WHEREAS, the East Central Wisconsin Regional Planning Commission has entered into a memorandum of agreement with the Wisconsin Department of Natural Resources to develop, update, and manage sewer service area plans for the designated area and select non-designated areas, and;

WHEREAS, the East Central Wisconsin Regional Planning Agency is preparing updated sewer service area plans for communities through the year 2040, and;

WHEREAS, the East Central Wisconsin Regional Planning Commission held public participation and community meetings for those areas affected during the planning process, and;

WHEREAS, the Sewer Service Area Plans will be submitted to the Wisconsin Department of Natural Resources and certified as part of the Wisconsin Areawide Water Quality Management Plan;

NOW THEREFORE BE IT RESOLVED BY THE EAST CENTRAL WISCONSIN REGIONAL PLANNING COMMISSION:

Section 1. That the Commission adopt the updated plan for the Fox Cities 2040 Sewer Service Area Plan Update and recommend Wisconsin Department of Natural Resources certification of the plan update.

Section 2. That the Commission provides continuing sewer service area planning and management functions including sewer service area amendments, review of wastewater and sewer plans and the review of sewer extension requests for the Fox Cities 2040 Sewer Service Area Plan.

Effective Date: July 28, 2023

Submitted By: Environmental Management Committee

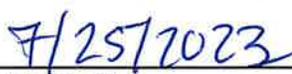
Prepared By: Wilhelmina Paustian, Senior Planner



Jeff Nooyen – Outagamie County



Melissa Kraemer Badtke – ECWRPC Executive Director



Date Approved

Appendix C: Public Notice



**STATE OF WISCONSIN
BROWN COUNTY**

**NOTICE OF PUBLIC COMMENT and
PUBLIC HEARING
FOX CITIES 2040 SEWER SERVICE
AREA PLAN UPDATE**

EAST CENTRAL WI PLANNING COMM

400 AHNAIP ST STE 100

MENASHA WI 549523388

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:

Account Number: GWM-N5251
Order Number: 0005693507
Total Ad Cost: \$37.63
Published Dates: 05/07/2023

The East Central Wisconsin Regional Planning Commission (ECWRPC), as a contracted agency of the Wisconsin Department of Natural Resources (WDNR), is the Areawide Coordinating Agency under Wisconsin's Areawide 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 WNAXLP

Legal Clerk

State of Wisconsin
County of Brown
Subscribed and sworn to before on May 7, 2023

Notary Public State of Wisconsin, County of Brown

4-6-23

My Commission Expires

of Affidavits 1
This is not an invoice

DENISE ROBERTS
Notary Public
State of Wisconsin



EAST CENTRAL WI PLANNING COMM

Appendix D: Quarterly Commission Meeting Minutes and Letter of Support



211 Walnut St. • P.O. Box 426 • Neenah WI 54957-0426
Phone 920-886-6104 • Fax: 920-886-6109 • e-mail: jlang@neenahwi.gov

JANE B. LANG
Mayor



July 27, 2023

Members of the Commission,

I am writing on behalf of the City of Neenah to express our full support for Resolution 23-23 – the Updated Fox Cities 2040 Sewer Service Area Plan. Additionally, we respectfully request the Commission's endorsement of the recommendation from the Environmental Management Committee to approve this plan. We extend our appreciation to Executive Director Kraemer-Bradke, Senior Planner Paustian, and the entire team at ECWRPC for their dedicated efforts in developing this plan. Their objectivity, consistent communication, and transparent approach throughout the entire process have been commendable.

Regrettably, due to an unavoidable scheduling conflict, our designated representative will be unable to attend the Commission meeting on July 28, 2023. Nonetheless, we formally convey our unwavering support for the plan as presented to the Commission. We kindly request the Commission to refrain from making any alterations to the plan that would result in modifications to either the 2040 Sewer Service Area boundary or the 2040 Planning Area boundary for the Neenah-Menasha sewer service area or the Fox West sewer service area.

Once more, the City of Neenah wholeheartedly supports the Updated Fox Cities 2040 Sewer Service Area plan. If you require any further information or have inquiries, please do not hesitate to contact me directly at JLang@NeenahWI.gov or (920) 886-6105.

Thank you for your attention to this matter.

Sincerely,

Mayor Jane B. Lang

City of Neenah

**MEETING NOTICE
QUARTERLY COMMISSION MEETING
East Central Wisconsin Regional Planning Commission**

Date: Friday, July 28, 2023
Time: 10:00 a.m.
Place: New London Municipal Building - Council Chambers 215 N. Shawano St., New London, WI 54961

1. **Call to Order** – Chair Nooyen called the meeting to order with the time noted at 10:00 a.m.
2. **Roll Call**
 - A. Introduction of Alternates and Guests –

Commission Members Present:

Alice Connors	Calumet County
Nick Kesler.....	Calumet County
Ronald McDonald	Ex-Officio Member
Scott Nelson (Virtual).....	Ex-Officio Member
Steve Abel	Fond du Lac County
Jeremy Johnson (Alt. for Elizabeth Moses)	Menominee County
Eugene Caldwell.....	Menominee County
Kevin Englebert (Alt. for Thomas Nelson)	Outagamie County
Jake Woodford.....	Outagamie County
Nadine Miller (Virtual)	Outagamie County
Lee Hammen	Outagamie County
Jeff Nooyen.....	Outagamie County
Ken Capelle	Shawano County
Steve Gueths	Shawano County
Tom Kautza	Shawano County
Aaron Jenson (Alt. for Brian Smith)	Waupaca County
Dick Koeppen (Virtual).....	Waupaca County
David Albrecht (Alt. for Tom Egan).....	Winnebago County
Jerry Bougie (Alt. for Jon Doemel)	Winnebago County
Mark Rohloff (Alt for Matt Mugerauer)	Winnebago County
Robert Schmeichel	Winnebago County

Commission Members Excused:

David DeTroye (Alt. for Tom Reinl)	Calumet County
Sam Kaufman	Fond du Lac County
Joe Moore (Alt. for Keith Heisler)	Fond du Lac County
Brenda Schneider	Fond du Lac County
Jane Comstock.....	Menominee County
DuWayne Federwitz	Waupaca County
Robert Keller.....	Winnebago County

ECWRPC Staff and Guests:

Melissa Kraemer Badtke	Executive Director
Sara Otting.....	Controller
Wilhelmina Paustian	Senior Planner
Colin Kafka	Associate Planner
Leann Buboltz.....	Administrative Coordinator
Brenna Root.....	Associate Planner
Craig Moser.....	Deputy Director

2. **Approval of Agenda / Motion to Deviate** - A motion was made by Vice Chair Connors and second by Mr. Albrecht to approve of the agenda as presented. Motion carried unanimously.
3. **Public Comment** – There was no one in attendance for public comment. Chair Nooyen acknowledged a Letter of Support received from the City of Neenah regarding the Fox Cities SSA Plan regarding Agenda Item 7. (C)(4). Letter on file.
4. **Approval of the Minutes of the April 28, 2023 Quarterly Commission Meeting.** A motion was made by Mr. Woodford and second by Mr. Schmeichel to approve of the minutes as presented. Motion carried.
5. **Announcements and Reports**
 - A. Director’s Report – Ms. Kraemer-Badtke shared with the members Project(s) status and highlights from the following areas; *list not all inclusive*.
 - i. **Title VI Questionnaire** - Demographic data. Ms. Kraemer-Badtke shared that staff is updating the Title VI Plan for the Appleton/Oshkosh Metropolitan Planning Organization (MPO). The commission serves as the MPO for both Appleton and Oshkosh. She stated that in order to complete this Plan, staff is requesting the Commissioners complete a short questionnaire regarding information regarding the Board.
 - ii. **Staffing Updates:**
 - a. Associate Planner, Tanner Russell accepted a planner position with the Town of Grand Chute. Also, Associate Planner, Adam BellCorelli accepted a position with Winnebago County Office of Administration and staff will be looking to refill this position.
 - b. East Central staff hired Tom Walsh as an LTE Special Projects Planner to work with communities and WisDOT in the MPOs on projects.
 - c. East Central staff hired Becky Olejniczak, a part time human resources consultant to assist with staff recruitment, leadership training and assisting with updates on the employee manual.
 - d. Chris Colla has been hired for the Associate Transportation Planner position and will be starting in mid-August. Ms. Kraemer-Badtke acknowledged and thanked Commissioner, Brenda Schneider for assisting to recruit for the Associate Planner position.
 - iii. **Economic Development:**
 - a. **Comprehensive Economic Development Strategy (CEDS):** East Central staff hosted multiple County Focus Group meetings to discuss with administrators, community development professionals and other partner organizations economic development challenges and opportunities within their County. Ms. Kraemer-Badtke shared that East Central staff has conducted focus groups at Outagamie, Waupaca, Shawano, Marquette, Green Lake, and Winnebago Counties along with Calumet, Fond du Lac and Waushara Counties. Input from the County focus groups will be included in the Comprehensive Economic Development Strategy. Associate Planner, Colin Kafka will be presenting the findings at the October Quarterly meeting.
 - b. **CARES Act Funding:** The CARES Act Grant award period expired on June 30, 2023. The Continuity Plan for the Commission along with the Disaster Recovery and Economic Development Resiliency Plan are completed. Ms. Kraemer-Badtke noted that having all the program deliverables completed, East Central staff will be working with the Economic Development Administration staff to close out the grant award. It was noted that \$43,852.35 was remaining in the CARES Act grant and will be returned to the U.S. Department of Treasury. In discussions with the staff from the Economic Development Administration, this will not impact the Commission in receiving future funding for the three-year planning partnership grant.
 - iv. **Transportation Program** –
 - a. **Appleton TMA Certification Review:** Ms. Kraemer-Badtke shared that every 4 years the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) must review and certify the metropolitan transportation planning processes for metropolitan planning organizations that have a population over 200,000 in accordance with 23 U.S.C. 134(k)(5) and 49 U.S.C. 5303(k). She noted that the review focuses on compliance with Federal regulations, challenges, successes, and experiences of the

cooperative relationship between the MPO(s), the Wisconsin Department of Transportation, and public transportation operators throughout the metropolitan transportation planning processes.

The Review will consist of four primary activities: • *Review of planning products* (desk audit/review) • *Site Visit* on Wednesday, August 23rd and Thursday, August 24th at East Central Offices • *Preparation of a Certification Review Report*: The report is issued 60 days following the site visit and summarizes the process and finding of the review as well as if the process is certified. • *Certification Review Closeout Presentation* (Quarterly Commission Board Meeting in October)

- b. **Agricultural Road Improvement Program (ARIP)**: Ms. Kraemer-Badtke reported that this new program is authorized to begin in the 2023-2025 Biennial Budget. She noted that there is a \$150 million dollars to be award in the 2023-25 Biennium. The Projects may be reimbursed at a maximum 90% state/10% local cost share. It is anticipated that application materials will be released in early calendar year 2024. The initial review of the legislation indicates that ARIP project eligibility is restricted to an improvement project on a county, town, city or village highway functionally classified by DOT as a local road or minor collector or a bridge or culvert on a highway that provides access to agricultural lands or facilities used for the production of agricultural goods, including forest products, and used by at least one agricultural producer and is designed as a class “B” highway under Wis. State Stats. 349.15 due to structural deficiencies or has been subject to posted weight limitation for at least one month during the previous year.
- c. **Local Contracts: Comprehensive Plans**: East Central staff received notice from the Wisconsin Department of Administration that they are sending out letters to communities whose comprehensive plan has not been updated in the last 10 years. East Central staff is able to work with communities on updating their comprehensive plan through a contract that covers the Commission staff time and costs to complete the project. As part of the Commission’s reorganization plan which was approved in 2020, local contracts are considered based on staff capacity and are considered, in part, as backfill for additional revenue for the budget as necessary.

7. Business -

- A. Executive Committee –Chairperson Nooyen requested that the motion combine and include the three listed meeting minutes. The Commission members concurred.
 1. Meeting Minutes from April 19, 2023
 2. Meeting Minutes from May 17, 2023
 3. Meeting Minutes from June 14, 2023

A motion was made by Vice Chair Connors and second by Mr. Kautza to approve of the minutes from the April 19, 2023, May 17, 2023, June 14, 2023 Executive Committee meetings as presented. Motion carried unanimously.

4. 2nd Quarter – 2023 Financial report presented by Sara Otting-Controller. An overview was given to the members of the 2023 Financial Report for the Second Quarter. One of the items noted is that with the GASB changes it shows that the Commission could be released from the building lease earlier than expected with the timeframe of July of 2023.

A motion was made by Mr. Rohloff and a second by Mr. Jensen to accept 2nd Quarter – 2023 Financial Report as presented and to place on file. Motion carried unanimously.

5. 2nd Quarter, 2023 Work Program Performance Report. Ms. Otting gave an overview of the 2023 Work Program Performance Report. Amongst other items, she noted that the accounts are all on track. Report on file.

A motion was made by Mr. Gueths and a second by Mr. Koeppen to approve of the 2nd Quarter, 2023 Work Program Performance Report as presented and be placed on file. Motion carried unanimously.

6. **Resolution 20-23:** Authorizing Commission Staff to Destroy Public Records According to the Adopted “Records Retention Policy and Destruction Schedule” – Ms. Otting reported that every year staff follows East Central’s Records Retention Policy and Destruction Schedule for the destruction of East Central’s public records. East Central has completed 2022 financial and single audit. Calendar Year 2012 Records will be destroyed by August 31, 2023 once the resolution is approved.

A motion was made by Mr. Capelle and a second by Mr. Hammen to approve of Resolution 20-23: Authorizing Commission Staff to Destroy Public Records According to the Adopted “Records Retention Policy and Destruction Schedule”. Motion carried unanimously.

7. **Reaffirmation Resolution 21-23:** Discussion and action on the Transportation Alternative Set-aside Program (TA Set-aside) FFY 2023-2026 applications within the Appleton (Fox Cities) Metropolitan Planning Organization (MPO). (*being addressed under the full authority of the Commission*). Ms. Kraemer-Badtke reported that the Commission serves as the Policy Board for the Appleton (Fox Cities) Metropolitan Planning Organization which is designated as a Transportation Management Area (TMA). She noted that the Appleton (Fox Cities) MPO receives an annual apportionment for the Transportation Alternatives Set Aside Program. East Central staff worked with WisDOT staff to work with communities for the new program cycle. It was reported that the Appleton (Fox Cities) MPO received five projects, the selection committee reviewed and ranked the projects and is recommending four of the five projects to be awarded TA-Set aside funding as outlined in the Resolution 21-23. This was approved by the Executive Committee on behalf of the full Commission.

A motion was made by Mr. Albrecht and a second by Mr. Kautza to approve **Reaffirmation Resolution 21-23:** Discussion and action on the Transportation Alternative Set-aside Program (TA Set-aside) FFY 2023-2026 applications within the Appleton (Fox Cities) Metropolitan Planning Organization (MPO) (*being addressed under the full authority of the Commission*). Motion carried unanimously.

8. **Reaffirmation Resolution 22-23:** Discussion and action on the Carbon Reduction Program (CRP) FFY 2022 and FFY 2023 applications within the Appleton (Fox Cities) Metropolitan Planning Organization (MPO). (*being addressed under the full authority of the Commission*). Ms. Kraemer-Badtke reported that the Commission serves at the Policy Board for the Appleton (Fox Cities) Metropolitan Planning Organization which is designated as a Transportation Management Area (TMA). The Appleton (Fox Cities) MPO receives an annual allocation for the Carbon Reduction Program. She noted that East Central staff and WisDOT staff worked with communities for the new carbon reduction program cycle. The Appleton (Fox Cities) MPO carbon reduction program received 4 applications, which were all awarded based on the funding allocation the Appleton (Fox Cities) MPO received. This was approved by the Executive Committee on behalf of the full Commission.

A motion was made by Mr. Abel and a second by Mr. Englebert to approve of **Reaffirmation Resolution 22-23:** Discussion and action on the Carbon Reduction Program (CRP) FFY 2022 and FFY 2023 applications within the Appleton (Fox Cities) Metropolitan Planning Organization (MPO). (*being addressed under the full authority of the Commission*). Motion carried unanimously.

9. **Reaffirmation of Resolution 25-23:** Amending the Transportation Improvement Program for the Appleton (Fox Cities) Transportation Management Area – 2023 (*being addressed under the full authority of the Commission*) Ms. Kraemer-Badtke reported that the Commission serves as the Policy Board for the Appleton (Fox Cities) Metropolitan Planning Organization which is designated as a Transportation Management Area (TMA). She noted that the WisDOT requested that a number of projects including the Carbon Reduction Program projects, the 5311 program projects and the TA – Set-aside projects be provided a TIP number and amended into the TIP. The projects were under review for the 15 days and no

public comment was received. This was approved by the Executive Committee on behalf of the full Commission.

A motion was made by Vice Chair Connors and a second by Mr. Bougie to approve of **Reaffirmation of Resolution 25-23:** Amending the Transportation Improvement Program for the Appleton (Fox Cities) Transportation Management Area – 2023 *(being addressed under the full authority of the Commission)* Motion carried unanimously.

10. **Reaffirmation of Resolution 26-23:** Amending the Transportation Improvement Program for the Oshkosh Metropolitan Planning Organization – 2023 *(being addressed under the full authority of the Commission)* Ms. Kraemer-Badtke reported that the Commission serves as the Policy Board for the Oshkosh Metropolitan Planning Organization. She noted that the WisDOT requested that a number of projects including the 5311 program projects and WisDOT project to be provided a TIP number and amended into the TIP. The projects were under review for the 15 days and no public comment was received. This was approved by the Executive Committee on behalf of the full Commission.

A motion was made by Mr. Caldwell and a second by Mr. Hammen to approve of **Reaffirmation of Resolution 26-23:** Amending the Transportation Improvement Program for the Oshkosh Metropolitan Planning Organization – 2023 *(being addressed under the full authority of the Commission)* Motion carried unanimously.

11. **Reaffirmation of Resolution 27-23:** Amending the Transportation Improvement Program for the Appleton (Fox Cities) Transportation Management Area – 2023 *(being addressed under the full authority of the Commission)* Ms. Kraemer-Badtke reported that the Commission serves as the Policy Board for the Appleton (Fox Cities) Metropolitan Planning Organization which is designated as a Transportation Management Area (TMA). She noted that the WisDOT requested that a number of projects including projects for the National Highway Performance Program be provided a TIP number and amended into the TIP. The projects were under review for the 15 days and no public comment was received. This was approved by the Executive Committee on behalf of the full Commission.

A motion was made by Mr. Woodford and a second by Mr. Capelle to approve of **Reaffirmation of Resolution 27-23:** Amending the Transportation Improvement Program for the Appleton (Fox Cities) Transportation Management Area – 2023 *(being addressed under the full authority of the Commission)* Motion carried unanimously.

12. **Reaffirmation of Resolution 28-23:** Amending the Surface Transportation Block Grant (STBG) – Urban Program funding levels for the previously selected projects from 2023-2027 within the Appleton (Fox Cities) MPO - *(being addressed under the full authority of the Commission)* Ms. Kraemer-Badtke reported that a number of communities that received Surface Transportation Block Grant Funding in 2019. During the 2022 program cycle unanticipated increases in project costs were occurring and the communities were requesting additional funds. She shared that STBG funding is typically 80% federal funding/20% local match, however when these projects were awarded funds, they were not awarded at the full 80%. With the new Bipartisan Infrastructure Law, the Appleton (Fox Cities) MPO, has additional funding to add to these projects and we are able to add additional funding to these projects to bring them up to the full 80%. This was approved by the Executive Committee on behalf of the full Commission.

A motion was made by Mr. Johnson and a second by Mr. Albrecht to approved of the **Reaffirmation of Resolution 28-23:** Amending the Surface Transportation Block Grant (STBG) – Urban Program funding levels for the previously selected projects from 2023-2027 within the Appleton (Fox Cities) MPO - *(being addressed under the full authority of the Commission)* Motion carried unanimously.

13. **Reaffirmation of Resolution 29-23:** Approving the draft 2024 Indirect Cost Rate with U.S. Department of Interior for the 2024 Cost Allocation Plan and Certificate of Lobbying for the East Central Wisconsin Regional Planning Commission and Authorizing the Executive Director and East Central staff to begin the process of negotiating the 2024 Indirect Cost Rate with the U.S. Department of Interior (*being addressed under the full authority of the Commission*) Ms. Otting noted that each year staff is required to submit the draft cost allocation plan to the Department of Interior, to begin conversations to negotiate the indirect cost rate. This was approved by the Executive Committee on behalf of the full Commission.

A motion was made by Vice Chair Connors and a second by Mr. Englebert to approve of the **Reaffirmation of Resolution 29-23:** Approving the draft 2024 Indirect Cost Rate with U.S. Department of Interior for the 2024 Cost Allocation Plan and Certificate of Lobbying for the East Central Wisconsin Regional Planning Commission and Authorizing the Executive Director and East Central staff to begin the process of negotiating the 2024 Indirect Cost Rate with the U.S. Department of Interior (*being addressed under the full authority of the Commission*) Motion carried unanimously.

14. **Resolution 31-23:** Adoption of the Preliminary Year 2024 Budget, Final Tax Levy and Staffing Plan for the East Central Wisconsin Regional Planning Commission. Ms. Kraemer-Badtke presented the 2024 preliminary budget and levy options for the Commission based on the recommendations from the June Executive Committee meeting. She shared with the members that based on the reorganization plan, the budget focused on the core program areas with significant funding increases in the transportation program. It was noted that each budget and levy option rely on the following information; Equalized Property Values 2018 through 2022, Levy Amounts 2020-2023 and Proposed 2024 Levy Options, Preliminary 2024 Budget Summary with Levy Options Comparison, Programs & Grants – (These amounts remain the same for all levy options), and Overhead Budget – (These amounts remain the same for all levy options).

Staff presented the four options

Option 1: 2024 Budget and Proposed Levy Amount - \$575,000

Option 2: 2024 Budget and Proposed Levy Amount - \$600,000

Option 3: 2024 Budget and Proposed Levy Amount - \$625,000 (recommended by Executive Committee at their June meeting)

Option 4: 2024 Budget and Proposed Levy Amount - \$702,443

A motion was made by Mr. Schmeichel and a second by Mr. Rohloff to approve of **Resolution 31-23:** Adoption of the Preliminary Year 2024 Budget, Final Tax Levy and Staffing Plan for the East Central Wisconsin Regional Planning Commission – Option 3: 2024 Budget and Proposed Levy Amount - \$625,000.00. Discussion provided clarification that the Indirect Cost Rate was determined prior to the known costs of healthcare for employees. Motion carried unanimously.

15. **Resolution 32-23:** Amending the 2023 Work Program, Budget and Staffing Plan for East Central Wisconsin Regional Planning Commission. Ms. Kraemer-Badtke presented the three components to the amendment for the 2023 Work Program, Budget and Staffing plan. She noted the following:
- The first is an update to the economic development program to reflect the funding that is being utilized for the Small Community Technical Assistance Project.
 - The second is the additional funding for the New North Broadband Mapping project and the inclusion of \$40,000 to complete the mapping for this project.
 - The third is to amend the 2023 staffing plan. Included in the 2024 work program, budget and staffing plan, is an additional associate planner position for the transportation department. Due to staff turnover and capacity current capacity challenges, East Central staff would like to hire that individual in the third and fourth quarter prior to 2024 to assist with program deliverables.

A motion was made by Mr. Bougie and a second by Mr. Hammen to approve of **Resolution 32-23**: Amending the 2023 Work Program, Budget and Staffing Plan for East Central Wisconsin Regional Planning Commission as presented. Motion carried unanimously.

16. **Resolution 33-23**: Authorizing the Executive Director of the Commission to Enter into a Contract with Ayres Associates for the Economic Development Small Community Technical Assistance Project. Mr. Kafka gave a brief overview. He noted that staff anticipated that there would be funding remaining from the Economic Development Administration (EDA) 3 Year Planning Partnership Grant, which will conclude at the end of 2023. He shared that East Central staff submitted a request for proposals and worked with the selection team to review the proposals and selected a consultant, Ayres Associates. It is expected that the project would commence in August and then begin meetings with local communities in October.

A motion was made by Vice Chair Connors and a second by Mr. Abel to approve of **Resolution 33-23**: Authorizing the Executive Director of the Commission to Enter into a Contract with Ayres Associates for the Economic Development Small Community Technical Assistance Project. Motion carried unanimously.

17. **Resolution 34-23**: Authorizing the Executive Director of the Commission to Enter into a Contract with SRF Consulting Group to develop the Electric Vehicle Readiness Plan for the Oshkosh Metropolitan Planning Organization (MPO). Ms. Kraemer-Badtke shared that one of the work program deliverables outlined in the 2023 work program was to develop an Electric Vehicle Readiness Plan for the Oshkosh MPO. She noted that East Central staff released a request for proposals and received proposals from six firms. The selection committee reviewed the submittals and selected SRF Consulting Group to develop the Electric Vehicle Readiness Plan. Ms. Kraemer-Badtke stated that the purpose of the plan will be to work with community stakeholders including, but not limited to, City staff, economic development professionals, chambers of commerce, local fire departments, and others.

A motion was made by Mr. Abel and a second by Mr. Caldwell to approve of **Resolution 34-23**: Authorizing the Executive Director of the Commission to Enter into a Contract with SRF Consulting Group to develop the Electric Vehicle Readiness Plan for the Oshkosh Metropolitan Planning (MPO). Motion carried unanimously.

Resolution 35-23: Approving the East Central Wisconsin Regional Planning Commission Disaster Recovery and Economic Development Resiliency Plan. Mr. Kafka reported to the Commission that this was a deliverable of the CARES Act funding. He noted that many sectors were impacted by the Covid Pandemic. East Central staff conducted one-on-one interviews with stakeholders within each of the sectors that were impacted. Once the interviews were completed staff analyzed data for each of the Counties and also at the Regional level. The results of the findings can be found in the Plan. Link available to review: <https://www.ecwrpc.org/wp-content/uploads/2023/07/ECWRPC-Disaster-Recovery-and-Economic-Resiliency-Plan.pdf>

A motion was made by Mr. Jensen and second by Mr. Kautza to approve of **Resolution 35-23**: Approving the East Central Wisconsin Regional Planning Commission Disaster Recovery and Economic Development Resiliency Plan. Discussion took place commending Rachel Roth-GIS Analyst I and Colin Kafka-Associate Planner on the great job compiling the information and the presentation as it is a tremendous resource that is now available. Motion carried unanimously.

18. **Resolution 36-23**: Authorizing the Executive Director of the Commission to Enter into a Contract with New North, Inc. for the Regional Broadband Mapping Project. Ms. Kraemer-Badtke reported that the Public Service Commission of Wisconsin announced that 77 entities had opted into the Broadband Equity, Access, and Deployment (BEAD) Local Planning Grant Program. She noted that the BEAD Local Planning Grant Program supports locally informed analysis of broadband needs that will provide information for Wisconsin's Five-Year Action Plan. New North, Inc. as the Regional Economic Development Organization (REDO) has

been working with counties within East Central Wisconsin to begin the process to develop each of the County plans. Ms. Kraemer-Badtke shared that during the initial conversations with the New North Broadband Alliance, it was communicated that there was a need to have GIS data analysis and visualization services provided as part of the plan development. Staff from New North, Inc. and the participating counties requested the GIS and data analysis services from East Central Wisconsin Regional Planning Commission and Bay Lake Wisconsin Regional Planning Commission. East Central staff has continued to work with staff from the Wisconsin Public Service Commission and several other Regional Planning Commissions from across the state to develop statewide and regionwide GIS datasets for broadband data. The Broadband Equity, Access and Deployment (BEAD) Local Planning Grant Project will begin August 1, 2023 and will be completed by December 31, 2023. East Central Wisconsin Regional Planning Commission will be provided \$40,000 to develop the regional broadband dataset along with conducting data analysis. At the completion of the project, the GIS data and information will be provided back to the counties.

A motion was made by Mr. Gueths and a second by Mr. Woodford to approve of **Resolution 36-23**: Authorizing the Executive Director of the Commission to Enter into a Contract with New North, Inc. for the Regional Broadband Mapping Project. Motion carried unanimously.

B. Economic Development Committee

1. Approval of the January 4, 2023 Minutes for Meeting. A motion was made by Vice Chair Connors and a second by Mr. Rohloff to approve of the minutes as presented. Motion carried unanimously.

C. Environmental Management Committee

1. Approval of the Community Facilities Committee (Dissolved) Minutes for the March 8, 2023 Meeting. A motion was made by Mr. Albrecht and a second by Mr. Jensen to approve of the minutes as presented. Motion carried unanimously.
2. Approval of the Open Space/Environmental Management Committee (Dissolved) Minutes for the April 12, 2023 Meeting. A motion was made by Mr. Schmeichel and a second by Mr. Johnson to approve of the minutes as presented. Motion carried unanimously.
3. Approval of the Environmental Management Committee June 14, 2023 Meeting. A motion was made by Mr. Englebert and a second by Mr. Schmeichel to approve of the minutes as presented. Motion carried unanimously.
4. **Resolution 23-23**: Final Approval of the Updated Fox Cities 2040 Sewer Service Area Plan. Wilhelmina Paustian – Senior Planner presented an overview of the Fox Cities 2040 Sewer Service Area Plan update. She reported that this is the fifth update of the Fox Cities Plan which was certified by the WDNR in 2006.

Ms. Paustian shared that the 2040 SSA Plan is comprised of four separate sewer service areas spanning three counties and 20 municipalities. The SSAs are associated with the 4 wastewater treatment plants 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 in Kaukauna. Approximately 12,800 acres of land were added to the entire Fox Cities area spread out over the 4 SSAs. A public hearing was held at the Environmental Management Committee on June 14, 2023. The public comments included documentation from the Village of Fox Crossing objecting to the boundaries of the Neenah-Menasha SSA Map 9 in the draft Plan relating specifically a previous SSA Amendment in 2020.

Upon further discussion, the Environmental Management Committee directed ECWRPC staff to reach out to the WI Department of Natural Resources (WDNR) for clarification on what the WDNR's final administrative decision was regarding the SSA Amendment (Track 164 in 2020). Ms. Paustian shared that ECWRPC is a contracted agency with the WDNR, who is the final authority on all SSA Amendments and Plan Updates. The WDNR submitted a final decision letter on Friday, July 14th, 2023.

Ms. Paustian reported that the 2020 SSA Amendment in question had two phases. Phase one was to bring in 2,001 acres and Phase two would bring in the remainder of area in the Town of Clayton's Sanitary District at a future date. The WDNR approved modifying the SSA boundary to include Phase one (2,001 acres). However, the WDNR did not approve or deny phase two or the "proposed long term addition" since they expected an additional SSA amendment would be submitted at a future date. This determination is consistent with the current draft SSA Plan maps. It was noted that staff also reached out to the interested parties in this area to discuss a long-term plan for who should service the area. Ms. Paustian stated that upon approval, staff will send the draft Plan to the WDNR for final review and administrative decision. It is required to be reviewed and certified by the WDNR in order to be included in the formal Wisconsin Areawide Water Quality Plan (which the WDNR oversees). Note - All of the Public Comments are included in the Appendix of the Plan. Link available to review: <https://www.ecwrpc.org/wp-content/uploads/2023/07/Fox-Cities-SSA-Plan-2040-FINAL-DRAFT-JULY-2023.pdf>

A motion was made by Mr. Schmeichel and a second by Mr. Abel to approve of Resolution 23-23: Final Approval of the Updated Fox Cities 2040 Sewer Service Area Plan as presented. Commissioners briefly discussed the draft Map 1 in the Plan and reviewed the location of the SSA Amendment Area (Track 164). Motion carried unanimously.

Ms. Kraemer-Badtke went on record commending Ms. Paustian for her diligent efforts and transparent processes throughout the Plan update.

D. Transportation Committee

1. Approval of the Minutes for April 11, 2023 Meeting

Resolution 30-23: Amending the Transportation Improvement Program for the Appleton (Fox Cities) Transportation Management Area – 2023. Ms. Kraemer-Badtke reported that the Commission serves as the Policy Board for the Appleton (Fox Cities) Metropolitan Planning Organization which is designated as a Transportation Management Area (TMA). She noted that this amendment is to provide TIP numbers to the TA Set Aside and Surface Transportation Block Grant Projects and amend the TIP to include these projects. These projects were posted for a 15 day review period and no public comment was received.

A motion was made by Mr. Kautza and a second by Mr. Jensen to approve of **Resolution 30-23:** Amending the Transportation Improvement Program for the Appleton (Fox Cities) Transportation Management Area – 2023. Motion carried unanimously.

E. Regional Comprehensive Planning Committee

1. No Business Items

8. **Other Business**

9. **Establish Time and Place for Next Commission Meeting.**

A. The next Quarterly Commission Board meeting will be 10:00 a.m. on Friday, October 27, 2023. Additional meeting details will be forthcoming.

10. **Adjourn** – A motion was made by Mr. Abel and second by Mr. Koeppen to adjourn with the time noted at 11:09 a.m.

Respectfully submitted by

Leann Buboltz – Administrative Coordinator
ECWRPC

Appendix E: Environmental Management Committee Meeting Minutes and Guest Attendee Sign-In Sheet



**DRAFT
MINUTES
ENVIRONMENTAL MANAGEMENT COMMITTEE
East Central Wisconsin Regional Planning Commission
Wednesday, June 14, 2023 (In-Person)**

COMMITTEE MEMBERS: *David DeTroye (Perm. Alt for Tom Reinl), Brenda Schneider, Jeremy Johnson (Perm. Alt. for Elizabeth Moses), Jeff Nooyen, Kevin Englebert (Perm. Alt. for Thomas Nelson), Ken Capelle, Aaron Jenson (Perm. Alt for Brian Smith), David Albrecht (Perm. Alt. for Tom Egan), Bob Schmeichel*

1. Welcome and Introductions - The meeting was called to order by ECWRPC Executive Director-Melissa Kraemer-Badtke with the time noted at 10:12 a.m.

2. Roll Call

Committee Members Present:

David DeTroye (perm alt. for Tom Reinl) Calumet County
 Jeremy Johnson (perm alt. for Elizabeth Moses) Call-In Menominee County
 Kevin Englebert-Chair (perm alt. for Thomas Nelson) Outagamie County
 Jeff Nooyen Outagamie County
 Ken Capelle Shawano County
 Bob Schmeichel..... Winnebago County

Committee Members Excused:

Brenda Schneider-Vice Chair Fond du Lac County
 Aaron Jenson (perm alt. for Brian Smith) Waupaca County
 David Albrecht (perm alt. for Tom Egan) Winnebago County

ECWRPC Staff Present:

Melissa Kraemer-Badtke Executive Director
 Craig Moser Deputy Director
 Wilhelmina Paustian Senior Planner
 Scott Konkle Senior Planner
 Mike Zuege GIS Manager
 Rachel Roth GIS Analyst I
 Leann Buboltz..... Administrative Coordinator

Guests Present:

Kelly Wisnefske Town Administrator – Town of Clayton
 Russ Geise Chairman – Town of Clayton
 George Dearborn..... Village of Fox Crossing
 Jeff Sturgell..... Village of Fox Crossing
 David Tracey..... Utilities – Village of Fox Crossing
 Trevor Thompson Real Estate Investor

3. Approval of Agenda / Motion to Deviate Mr. DeTroye motioned to approve the agenda Mr. Englebert seconded the motion. The motion passed unanimously.

4. Special Order of Business/Action Item
 - A. Presentation and Committee Overview – East Central staff members; Ms. Wilhelmina Paustian and Mr. Scott Konkle presented to the (newly consolidated) Environmental Mgt Committee members an overview regarding the SSA Program as well as the NR135 Mining Reclamation Program.
 - B. Election of Chair and Vice Chair of the Environmental Mgt Committee –
 1. Election of Chair – directed by ECWRPC Commission Chairman Nooyen. Nominations of Chair. Chair Nooyen opened the floor up to nominations for Committee Chair.
 - a. Mr. Schmeichel nominated Mr. Englebert who accepted the nomination.

A motion by Mr. Schmeichel and second by Mr. DeTroy to approve of Mr. Englebert as Chair of the Environment Mgt Committee. Motion carried unanimously.
 2. Election of Vice Chair – Nominations of Vice Chair. Environmental Mgt Chair Englebert opened the floor up to nominations for Committee Vice Chair.
 - a. Mr. Nooyen nominated Brenda Schneider to serve as Committee Vice Chair

A motion by Mr. Nooyen and second by Mr. Schmeichel to approve of Ms. Schneider as Vice Chair. Motion carried unanimously.
5. Public Comment – Chairperson Englebert
 - A. Public Comments – General. These were no general public comments.
 - B. Public Hearing – Draft Fox Cities 2040 Sewer Service Area Plan (individual speakers are limited to five minutes per speaker). Chairperson Englebert ask the guests that were speaking to limit their comments to five minutes per speaker.
 - i. Mr. Jeffrey Sturgell – Fox Crossing Village Manager took the floor and submitted a written statement to the members. (Copy on file). Mr. Sturgell summarized two points on behalf of V. Fox Crossing as it relates to the Fox West SSA boundaries. He voiced his confusion where he felt that the Westridge Golf Course Territory had already been accepted and approved to be included in Fox West SSA or at least the Planning Area and also approved by the WI DNR in April 2020. Second Point – Mr. Sturgell shared that if the Westridge Golf Course territory was not included, he feels it should be in the most recent review of the Fox West SSA based on the merits of the engineering study provided by the Town of Clayton/Village of Fox Crossing. He feels that they best prove they would be able to service the area. For the record it is noted that Chair Geise – Town of Clayton requested that his allotted time to speak be forwarded to Mr. Sturgell.
 - ii. David Tracey – Fox Crossing Utilities. Established that the comments that were sent on behalf of Fox Crossing by Attorney Lawrie Kobza from Boardman & Clark LLP were received and made a part of the record. He noted that this particular documentation explained what Mr. Sturgell summarized above.
 - iii. Russ Geise – Chairman of Town of Clayton. Acknowledged that Lawrie Kobza from Boardman & Clark LLP submitted our comments on June 5 for the record. He stated that it mirrors what Mr. Sturgell shared prior. It is our understanding that the territory was already included within the SSA.
 - iv. Mr. Trever Thompson – Real Estate Investor in SFR, went on record to speak in favor of the proposed SSA territory. He noted that he has an interest in land located in the Village of Greenville.

- v. George Dearborn - Village of Fox Crossing. He shared that this area was understood to be already within the SSA.
 - vi. Chair Englebert – Hearing of no further comments, the public hearing of the Draft Fox Cities 2040 Sewer Service Area Plan was closed with the time noted at 10:40 a.m.
6. Announcements and Discussion Items
- A. Water Quality Management – Wilhelmina Paustian, Senior Planner
 - 1. Program Update: Staff reported that from January through May of 2023 they conducted sanitary sewer reviews for conformance with the approved SSA Plan and Areawide Water Quality Management Program: 17 Sanitary Sewer Extensions, three Sanitary Sewer Mainline Replacements, five Private Laterals, three Wastewater Treatment Plant Facilities Plan Updates (Oshkosh WWTP, Omro WWTP, and Larsen-Winchester WWTF) and one SSA Plan Amendment to the Fox Cities – Fox West SSA. Ms. Paustian also reported that the next scheduled SSA Plan Updates are the Village of Sherwood SSA Plan and the Village of Stockbridge SSA Plan. She stated that staff will tentatively schedule introduction meetings in the 4th quarter.
 - B. NR135 – Scott Konkle, Senior Planner
 - 1. Program Update. Staff reported that typically during the period of April 1st through June 30th he reviews any associated updates to financial assurance documents and site inspection scheduling. Mr. Konkle noted that no acreage has been certified as reclaimed this year and that there are no non-compliance issues to address at this time.
 - C. Approval of the 2023-2024 Environmental Management Committee Meeting Schedule. A motion was made by Mr. Nooyen and a second by Mr. Schmeichel to approve of the 2023 2024 Environmental Management Committee Meeting Schedule as presented. Motion carried unanimously.
7. Old Business – Past Meeting Minute Approvals
- A. Community Facilities Committee, March 8, 2023. A motion by Mr. Capelle and second by Mr. Nooyen to approve of the minutes as presented. Motion carried unanimously.
 - B. Open Space/Environmental Management Committee, April 12, 2023. A motion by Mr. Schmeichel and second by Mr. Johnson to approve of the minutes as presented. Motion carried unanimously.
8. New Business/Action Items
- A. Water Quality Management – Wilhelmina Paustian, Senior Planner
 - 1. Proposed Resolution 23-23: Approving the Updated Fox Cities 2040 Sewer Service Area Plan: <https://www.ecwrpc.org/wp-content/uploads/2023/06/Fox-Cities-SSA-Plan-2040-FINAL-DRAFT-JUNE-2023.pdf>;
- Ms. Paustian shared with the members that the Fox Cities 2040 Sewer Service Area (SSA) Plan Update process began in 2020, noting that this is the fifth update of the Fox Cities SSA Plan (1985, 1991, 1997, 2006, and 2023). Staff summarized that the 2040 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.

It was reported that there were several delays in the update process due to the pandemic and staff turnover. At the end of 2022 draft chapters/maps were shared with communities and in the beginning of 2023, the commission hosted informational meetings. It was noted that several communities had small edits and requests following the January informational meetings. Final draft maps and the draft Plan were then completed in the beginning of May. Ms. Paustian noted for the record that a Notice for Public Comment and Public Hearing was published in the Appleton Post Crescent on Sunday, May 7th, and was posted on the online version of the paper for the next 30 days. The Public Hearing was held pursuant to Wisconsin Administrative Code NR 121.07(1)(b).

A completed breakdown of the area was presented which totaled approximately 12,852 acres of land that was added to the entire Fox Cities SSA; 3,228 acres in the Neenah-Menasha SSA; 5,433 acres in the Fox West SSA; 1,149 acres in the Appleton SSA; and 3,042 acres in the Heart of the Valley SSA. Ms. Paustian shared that according to the residential and non-residential land use projections, approximately 10,867 acres of land will need to be included in the SSA to accommodate the projected population in the year 2040. Acreage added to the SSA was requested by the communities for a variety of reasons:

- Parcels included that are ready or anticipated for development in the next 5-20 years
- Parcels included along roadway construction projects, i.e. STH 15 in Greenville
- Boundaries may follow a Community's Sanitary Sewer Master Plan
- Parcels included that are in a lift station's service area
- Boundaries shifted to include/exclude existing development based on perceived/anticipated need for connection to sanitary sewer in the future
- Boundaries cleaned up so they do not bisect parcels, parcels with the same owner included

Public Comments/Edits: Ms. Paustian noted the following:

- New Cover Page
- Appendix G outlines the Public Comments, which were incorporated into the Final Plan:
 - o Mapping Correction: Update the Fox West & Appleton SSA boundary to reflect the existing Town of Grand Chute Sanitary District #2 Boundary. Maps and associated existing SSA acreage Table 4 and Table 15 were updated with the corrected parcels.
 - o Mapping Correction: The Greenville Sanitary District was dissolved after the Village of Greenville was incorporated in 2021. The Greenville Sanitary District was removed from Map 10.
 - o Supporting Documents: ECWRPC's Westridge Golf Course Cost-Effectiveness Analyses Evaluation from May 3, 2023 to support the Undefined Planning Area determination.
 - o Comments submitted by Lawrie Kobza from Boardman & Clark LLP on behalf of the Town of Clayton and Clayton Sanitary District No. 1.

Ms. Paustian indicated that staff has reviewed the public comments received and discussed those issues with WDNR staff. She indicated that the confusion is regarding what was approved at the 2020 Community Facilities Committee meeting. The original amendment request from the Town of Clayton was for about 3,000 acres. If you review the map that was handed out at that meeting and review the minutes, which indicate the map was approved as presented, it is the hashed line that is a smaller area than the original request. That smaller area of approximately 2,000 acres was approved by the CFC and sent, per process, to the WDNR, which they approved. Those 2,000 acres that were previously approved are included in the SSA Plan. In terms of the broader area in question, the Commission has expressed the involved communities need to have more conversation to ensure there is consensus moving forward prior to making a broader change.

In terms of the Westridge Golf Course area, in the 2006 plan it is labeled as an undefined planning area. The Commission has proposed, and what is included in the plan, is to keep that area as an undefined planning area until communities can have further conversations regarding the broader area. Discussion with WDNR has occurred regarding this issue and one option is to amend the plan after conversations have taken place and cost effectiveness can be further evaluated.

Ms. Paustian outlined the steps upon approval that are anticipated, Staff will bring the proposed Fox Cities 2040 SSA Plan to the full Commission in July 2023. If the Commission approves the SSA Plan, it will be sent to the Wisconsin Department of Natural Resources for final review and administrative decision to be certified as part of the Wisconsin Areawide Water Quality Management Plan. Staff recommends that the Environmental Management Committee approve Proposed Resolution 23-23: Approving the Updated Fox Cities 2040 Sewer Service Area Plan.

Chair Englebert noted for the record, he would like to acknowledge and thank ECWRPC staff; more specifically SSA Program Lead - Ms. Wilhelmina Paustian, the ECWRPC GIS Manager-Mike Zuege and GIS Analyst I - Rachel Roth, along with the Executive Director – Melissa Kraemer-Badtke for preparing this Plan for this public hearing presentation and getting it to this point.

A motion was made by Mr. Nooyen and a second by Mr. Schmeichel to open this agenda item up for discussion. Ms. Paustian addressed Member-Mr. Schmeichel's question if all communities were informed of this public hearing. She responded that all 20 communities were informed.

Discussion continued with Committee member – Jeff Nooyen who reiterated staff's recommendation for approval of the Final Draft Fox Cities 2040 SSA Plan as presented, noting that the plan does not include the Golf Course at this time. He acknowledged staff's notation, which encouraged the municipalities involved, to engage in conversation(s) regarding said acreage and who could best serve that area. Chair Englebert shared that there remains a question of what was actually approved in the 2020 SSA Amendment (Track 164) and noted that ultimately the determination was made by the Department of Natural Resources. Having no DNR representation at this meeting, ECWRPC staff was directed to reach out to them. Chair Englebert also stated that it is not the intent of this Committee to hold up the Plan approval. He continued by sharing that when clarification, of their determination, is received from the Department of Natural Resources and if it is found that the long-term planning area/Westridge Golf

Course was not included in the approved 2020 SSA Plan Amendment (Track 164), an amendment request can be submitted for review at a future date.

A motion was made reaffirming the action by Mr. Nooyen and a second by Mr. Schmeichel to approve the Resolution 23-23 - Final Draft Fox Cities 2040 SSA Plan as presented, noting that the area a/k/a Westridge Golf Course is not included in the Plan at this time. Motion was carried unanimously.

NOTE: Please find links to Final Draft Fox Cities 2040 SSA Plan (including SSA Maps and Comment Letter)

Neenah-Menasha SSA Map: https://www.ecwrpc.org/wp-content/uploads/2023/06/Neenah_Menasha_SSA_22x34.pdf;

Fox West SSA Map: https://www.ecwrpc.org/wp-content/uploads/2023/06/Fox_West_SSA_22x34.pdf;

Appleton SSA Map: https://www.ecwrpc.org/wp-content/uploads/2023/06/Appleton_SSA_22x34.pdf;

Heart of the Valley SSA Map: https://www.ecwrpc.org/wp-content/uploads/2023/06/HOV_SSA_22x34.pdf;

Boardman Clark Comment Letter on behalf of Town of Clayton and Clayton Sanitary District No. 1: https://www.ecwrpc.org/wp-content/uploads/2023/06/BoardmanClark_Clayton_Comments_6-5-23_reduced.pdf

9. Informational/Discussion Items

A. County Roundtable Discussion (*as time permits*)

1. Calumet County lead sponsor to \$1 million EPA Brownfield Assessment Grant.

10. Establish Time and Place for Next Meeting

- A. The next Environmental Management Committee meeting will be at 10:00 a.m. on Wednesday, September 13, 2023 at the Commission Office (400 Ahnaip Street, Suite 100; Menasha).
- B. The next Quarterly Commission Board meeting will be at 10:00 a.m. on Friday, July 28, 2023 –City of New London City Hall, 215 N. Shawano St., New London, WI. Additional meeting details will be forthcoming.

11. Adjourn. A motion was made by Mr. Schmeichel and a second by Mr. Nooyen to adjourn with the time noted at 11:15 a.m.

Respectfully Submitted

Leann S Buboltz – Administrative Coordinator
East Central WI Regional Planning Commission

MEETING OF: Env. Mgt. 6-14-23

MEETING SIGN IN SHEET

NAME	TITLE/ORGANIZATION	PHONE	EMAIL
Bobby Wisniewski	Town Administrator Town of Clayton	920-886-2007	
Russ Greise	CHAIRMAN TOWN OF CLAYTON	920-427-4126	
GURCO DIOBRUNY	Village of Fox Crossing	920-720-7140	
JEFF SWEENEY	Village of Fox Crossing	920-720-7101	jsturgell@foxcrossingwi.gov
David Tracey	FOX CROSSING UTILITIES	920 720 7175	dtracey@foxcrossingwi.gov
DAVID DETROYE	City of Clinton	920 849-2451	ddetroye@clintonwi.gov
Trevor Thompson	Real Estate Investor	920-205-4384	tjthomps5629@gmail.com
Bob Schmickle	Ta Means Chair		

FACILITATOR: _____ LOCATION: _____ DATE: _____

Appendix F: Sewer Service Area Amendments 2006-2022

Table 23 through Table 26 on the next pages list the SSA Amendments that were submitted since the 2030 SSA Plan was last approved in 2006. The SSA Amendments are listed by each SSA.

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 G: Plan Update Meeting Log and Sign-In Sheets

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	City of New London City Hall

**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	DAVE.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
Kesley Wisne fsic	Town of Clayton	administratortownofclayton.net
Lindsey Kemnitz	Town of Grand Chute	Lindsey.Kemnitz@grandchutewi.gov
Katie Schwartz	" "	katie.schwartz@grandchutewi.gov
Travis Parisik	Village of Greenville	tparisik@greenvillewi.gov
Michael Brown	Village of Greenville	mbrown@greenvillewi.gov
Dale Yungquist	Village of Fox Crossing	dyungquist@foxcrossing.gov
Brandon Kaufman	Fox West WWTP	bkaufman@mco-us.com
GRACE DEARBORN	FOX CROSSING	G.D.DEARBORN@FOXCRUSSEW.MI.COX
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
Coey Gordon	CITY OF MENASHA	CGORDON@CI.MENASHA.WI.US
Ellen Skerke	Town of Neenah / SanZ	ESkerke@townofneenahwi.gov
Chris Chase	Neenah	chase@ci.neenah.wi.us
Mack Mommaerts	V. Harrison	mmommaerts@harrison-wi.org
Dale Yungquist	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 H. Schmidt	Darby Sanitary	gschmidt@darbywi.com
BRUCE GORNING	DARBY SANITARY	BOGORNING2020@Gmail.com
Pat Hennessey	Darby Sanitary	phennessey@DarbySanitary.com
Bruce Siebers	Hovmsd	Bmsiebers@gmail.com
DAVID CASPER	HOVMSD	djc3x@gmail.com
KENT TAYLOR	VILLAGE OF LITTLE CHUTE	Kent@Littlechutewi.org
Brian Helming	HOVMSD	brian.helming@hovmsd.org
Chad Giacchino	" "	Chad.giacchino@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 H: WDNR Track 164 Comment Letter



July 14, 2023

EC0149A

Ms. Wilhelmina Paustian, Principal Planner
East Central Wisconsin Regional Planning Commission (ECWRPC)
400 Ahnaip Street, Suite 100
Menasha, WI 54952-3100

Subject: Determination of Track 164-[Amendment Request to the 2030 Grand Chute-Menasha West Sewer Service Area \(SSA\)](#)

Dear Ms. Paustian,

ECWRPC is in the process of updating the Fox Cities 2040 Sewer Service Area (SSA) Plan. This process includes a public comment period, and on June 5, 2023, ECWRPC received a comment from the attorney from the Town of Clayton. The public comment stated, “Map 9.2 [in the Fox Cities 2040 Plan update] 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.” This previous request and approval being referred to is documented by ECWRPC Track 164 and DNR No. EC0149.

On June 22, 2023, the Department of Natural Resources (DNR or department) received a request for clarification regarding Track 164 from ECWRPC. At the June 14, 2023, Environmental Management Committee Meeting, committee members directed ECWRPC staff to reach out to the DNR for clarification on the department’s administrative decision regarding Track 164: SSA Amendment to the Fox West (formerly Grand Chute-Menasha West) SSA. The Amendment was originally submitted by ECWRPC staff to the DNR dated March 16, 2020, and the DNR issued an [administrative decision letter](#) on April 14, 2020, to ECWRPC.

The department has reviewed the amendment request submitted by ECWRPC on March 16, 2020, and the administrative decision letter issued on April 14, 2020.

The amendment was submitted under East Central’s unique facilities amendment policy (Policy I, C) and requested to provide sewer to the Town of Clayton Sanitary District #1. The proposed SSA boundary amendment was split into two phases. Phase One encompassed approximately 2,001 acres. According to the submittal, Phase Two would bring in the remaining portion of Clayton’s Sanitary District at some future date. Based on this understanding, the department approved modifying the SSA boundary to include the proposed Phase One, 2,001 acres. The department anticipated that an additional amendment would be submitted to bring Phase Two into the SSA. Department approval of an SSA amendment only approves a modification to the boundary of the SSA, not the planning area.

The map submitted to the department by ECWRPC with the amendment request has the Phase One Addition area to the SSA boundary identified by red diagonal/hatch lines (see below). The department confirmed with ECWRPC in a meeting on June 21, 2023, that the area on the map identified in the legend as the Phase One Addition equals 2,001 acres. The department’s administrative decision letter approves the amendment and states “this amendment adds 2,001 acres to provide sewer to the Town of Clayton Sanitary District #1.” The

department's letter does not approve nor deny the Phase Two or 'Proposed Long Term Addition' (as identified on the map) addition, as it was expected that an additional amendment would be submitted to include that area in the SSA as more definitive plans developed.

The department approval, dated April 14, 2020, added 2,001 acres to the Grand Chute Menasha West (currently Fox West) SSA. The addition of these 2,001 acres was a formal update to the state's Areawide Water Quality Management Plan and the 2030 Grand Chute-Menasha West Sewer Service Area Plan (currently the Fox West SSA Plan).

Sincerely,

A handwritten signature in black ink, appearing to read "Tim Asplund". The signature is fluid and cursive, written in a professional style.

Tim Asplund
Monitoring Section Chief
Bureau of Water Quality

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

e-cc:

BetsyJo Howe-Water Resources Management Specialist, DNR Madison
Alixandra Burke-Attorney, DNR Madison
Gunilla Goulding, P.E.- Wastewater Engineer, DNR Madison

Track 164 Sewer Service Area Amendment Proposal

-  Future Lift Station
-  Phase 1 Addition To Grand Chute - Menasha West SSA
-  Proposed Long Term Addition To Grand Chute - Menasha West SSA
-  Grand Chute Planning Area Boundary
-  Neenah/Menasha Planning Area
-  Sewer Service Area Boundary
-  Sanitary District Boundary
-  Fox Crossing Utilities Addition
-  Parcels

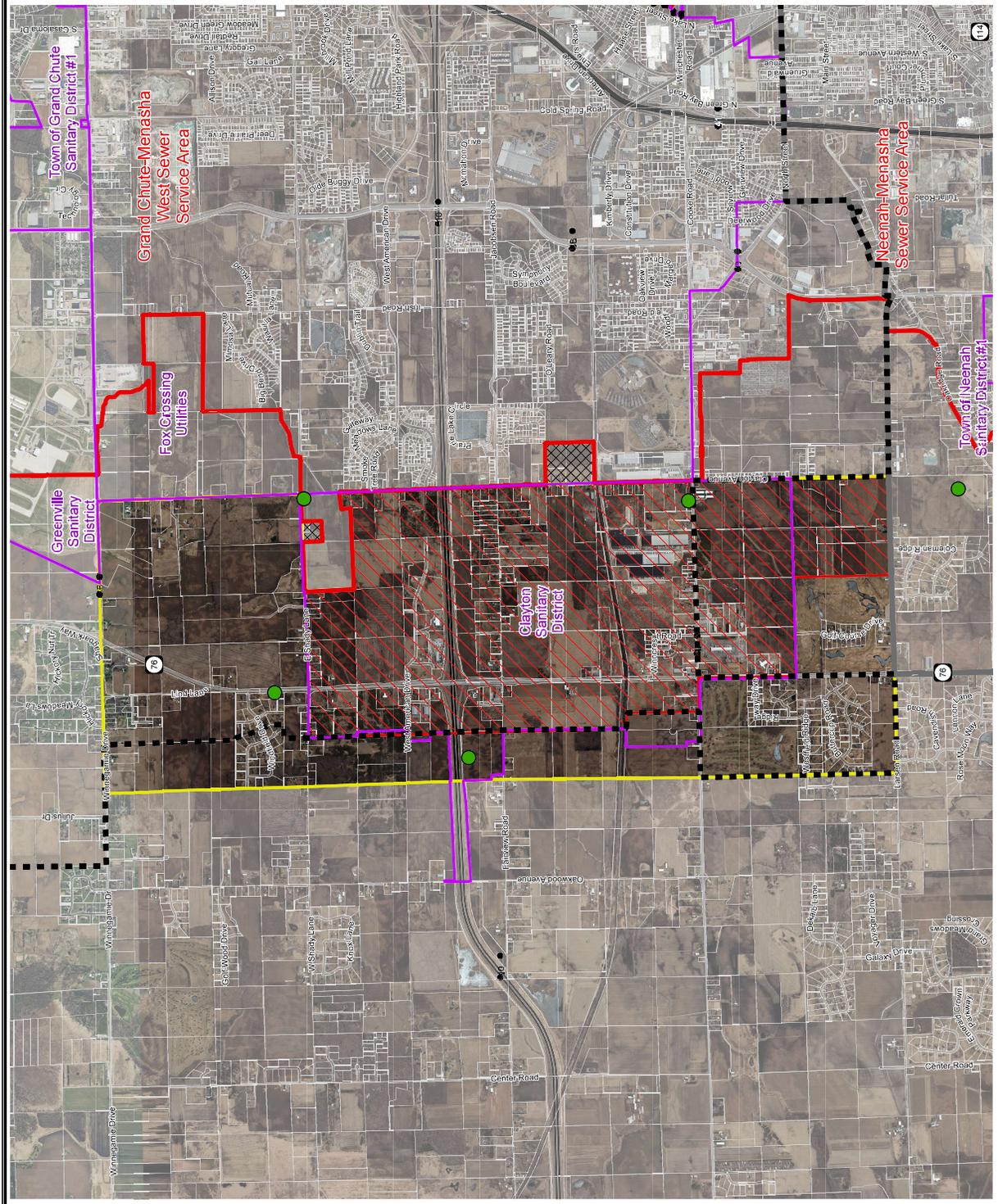


Sources:
Base data provided by Regional Counties, 2020.
SSA data provided by ECWRPC.

This data was created for use by the East Central Wisconsin Regional Planning Commission for the purpose of planning and engineering. The information is for informational purposes only and does not constitute a contract. The information is provided as is and the user assumes all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.



PREPARED MARCH 2020 BY:



Appendix I: Fox Crossing Public Hearing Handout

June 14, 2023

FOX CROSSING VILLAGE MANAGER JEFFREY STURGELL
COMMENTS FOR
FOX WEST SEWER SERVICE AREA (SSA) PUBLIC HEARING

I have two points that I would like to make this morning.

The first point is that there is confusion regarding the status of the Westridge golf course territory in relation to the Fox West Sewer Service Area (SSA). It is Fox Crossing's belief that the territory was included in the Fox West SSA when the Track 164 Amendment was approved by the Department of Natural Resources (DNR) in April 2020. If the territory was not directly placed in the SSA, then it was placed in the Fox West Long Term planning area.

Alternatively, my second point is that even if the Westridge golf course territory was not included in the Fox West SSA during the Track 164 Amendment approval, the territory should be included in this most recent review of the Fox West SSA based on the merits of the engineering study provided by the Town of Clayton and Village of Fox Crossing.

My first point is as follows:

- On March 11, 2020, the Community Facilities Committee held a meeting at the East Central Wisconsin Regional Planning Commission (ECWRPC) offices to review the Track 164 Sewer Service Area (SSA) Amendment proposal.
- Prior to the March 11, 2020 meeting, Principal Environmental Planner Todd Verboomen of the ECWRPC sent an e-mail on February 26, 2020, that included maps of the Track 164 Amendment (maps shown as Attachments 1 and 2).
- The maps clearly indicate the Westridge golf course area had been placed in the proposed Long Term Addition area of the Fox West SSA (the yellow boundary line included the golf course, and the golf course was fully colored on the map, not subdued).
- Less than five minutes before the start of the meeting, Todd Verboomen, and Executive Director Eric Fowle, approached former Town of Clayton Administrator Tori Straw, and placed a new map in front of her. Planner Verboomen informed Administrator Straw that the Track 164 Amendment included a portion of territory that was south of Larsen Road, and the portion had to be removed from the map as it was currently in the Neenah-Menasha SSA.
- I witnessed this exchange occur, as I was sitting directly next to Tori Straw at the time. Town of Clayton Chairman Russ Geise also witnessed the exchange, as he was sitting on the other side of Tori Straw. When I looked at the map, I could see that the small section

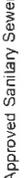
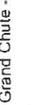
of the map that was located south of Larsen Road and colored on the map had been removed and subdued. However, the entire portion of the area to the north of Larsen Road remained colored.

- My immediate thought by quickly looking at the map was that the area to the south of Larsen Road was removed, but that everything north of Larsen Road remained unchanged (the Westridge golf course was still colored on the map).
- During the meeting, I recall Todd Verboomen explaining that an incorrect map had been sent out prior to the meeting, and that the territory south of Larsen Road had been removed from the Track 164 Amendment. I do not recall any comments from Todd Verboomen regarding the Westridge golf course being removed from the map.
- On April 27, 2020, Todd Verboomen sent an e-mail indicating that the DNR had approved the Track 164 Amendment, and a map was included in the e-mail (Attachment 3). In the map, the Westridge golf course is still colored. Hence, when I looked at the map, it was my thought that the entire area north of Larsen Road was either in the SSA area, or in the Long Term SSA area.
- After much closer examination, a gray line has been placed along the south border of the Westridge golf course (along Larsen Road). The gray line indicates the northern border of the Neenah-Menasha SSA, and was placed over the yellow line that previously existed on the earlier maps. Again, Westridge golf course is colored, not subdued, and there is no indication that the golf course was removed from the approved area of the map.
- Earlier this year, when I became aware that the newly updated SSA maps did not include the Westridge golf course, I was absolutely surprised. I have explained to ECWRPC staff that I truly believed that the golf course was already in the SSA area, as I was in attendance at the meeting when it was approved.

My second point is as follows:

- When the Town of Clayton requested that the Westridge golf course be added to the Fox West SSA during the upcoming SSA revision, ECWRPC requested that all communities having an interest in the territory submit an engineering report demonstrating how the territory would be serviced by each community/district.
- The Village of Fox Crossing and Town of Clayton submitted an extensive engineering study completed by McMahon & Associates that cost over \$7,000 to complete. The study was thorough, and clearly indicated how the Town of Clayton and Village of Fox Crossing would service the territory. The City of Neenah submitted a 5-6 page document that did not contain a great deal of detail. It is truly unclear how a decision could not be made based on the information provided by the Town of Clayton and Fox Crossing.

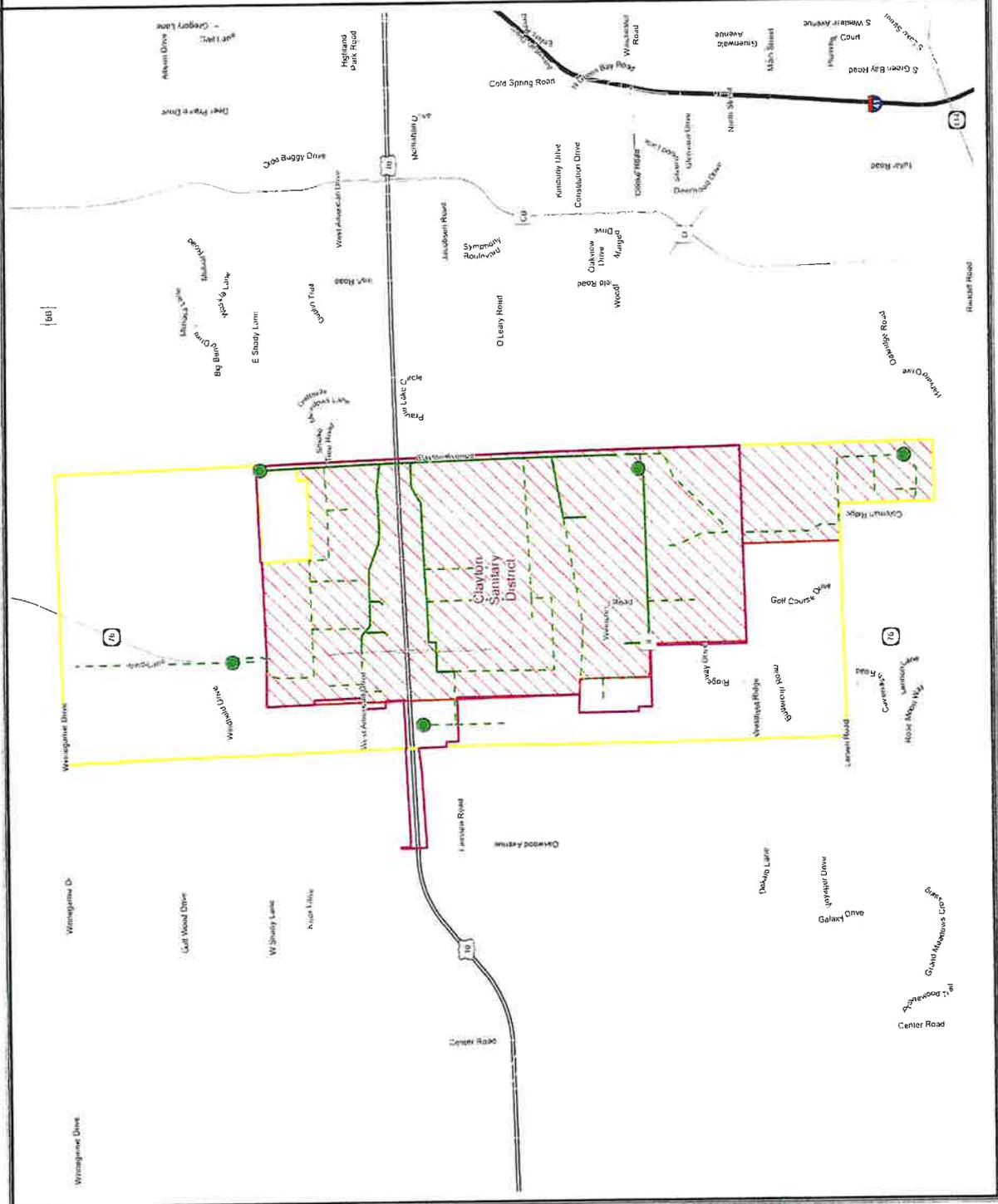
Town of Clayton Sanitary District #1 Preliminary Wastewater Collection System Layout

-  Lift Station
-  Future Sanitary Sewer
-  DNR-Approved Sanitary Sewer
-  Phase 1 Addition To Grand Chute - Menasha West SSA
-  Proposed Addition To Grand Chute - Menasha West SSA
-  Clayton Sanitary District #1
-  Parcels



SOURCE:
Base data provided by Regional Counties, 2020
SS Lines provided by KCRPFC.

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SENT 2/26/20
FOR 3/11/20 MEETING

Track 164 Sewer Service Area Amendment Proposal

-  Future Lift Station
-  Phase 1 Addition To Grand Chute - Menasha West SSA
-  Proposed Long Term Addition To Grand Chute - Menasha West SSA
-  Grand Chute Planning Area Boundary
-  Sewer Service Area Boundary
-  Sanitary District Boundary
-  Fox Crossing Utilities Addition
-  Parcels

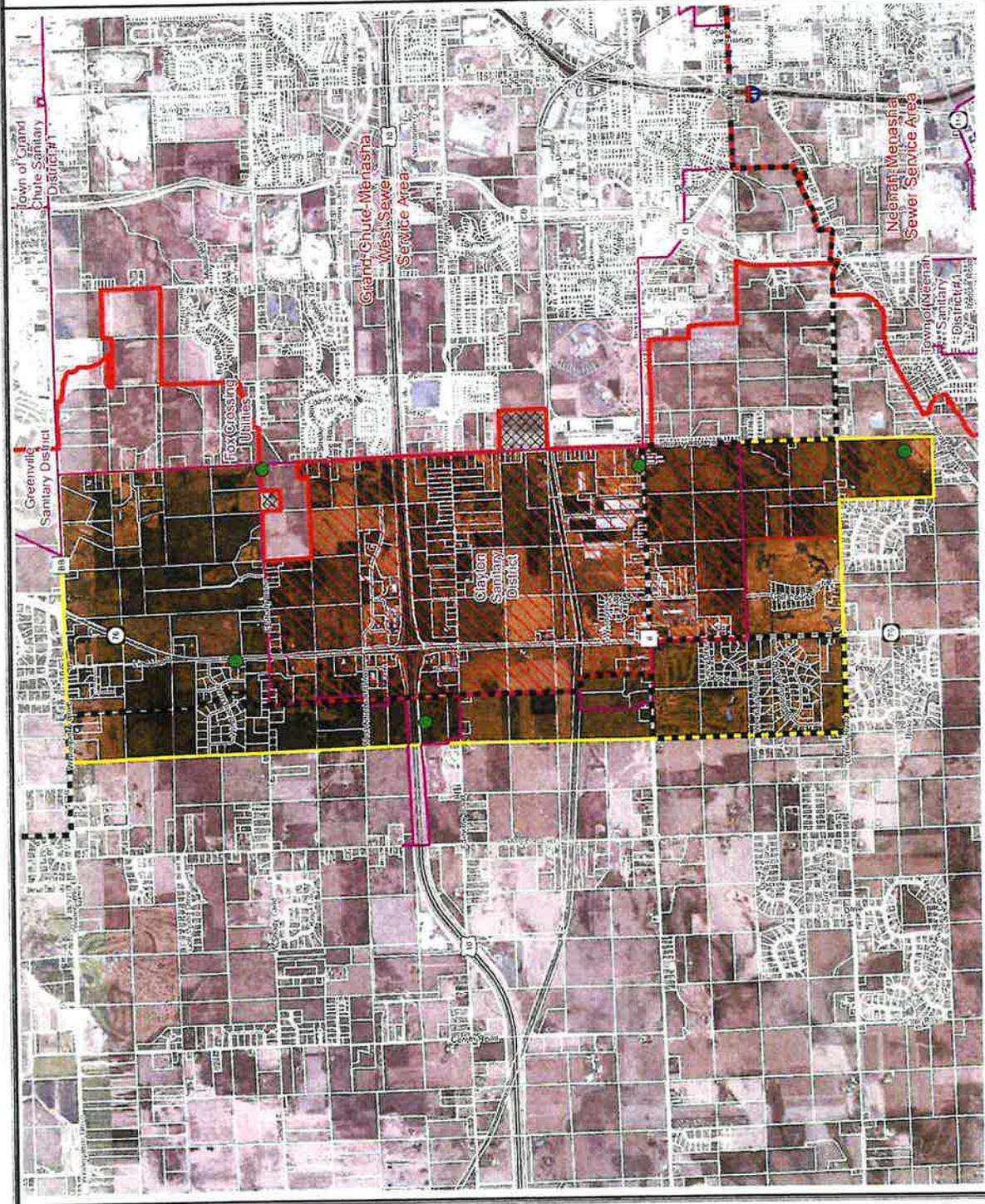


Source:
Data provided by Regional Councils, 2020
SSA's as provided by ECWRPC.

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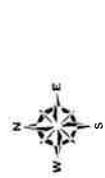
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SENT 2/26/20
FOR 3/11/20 MEETING

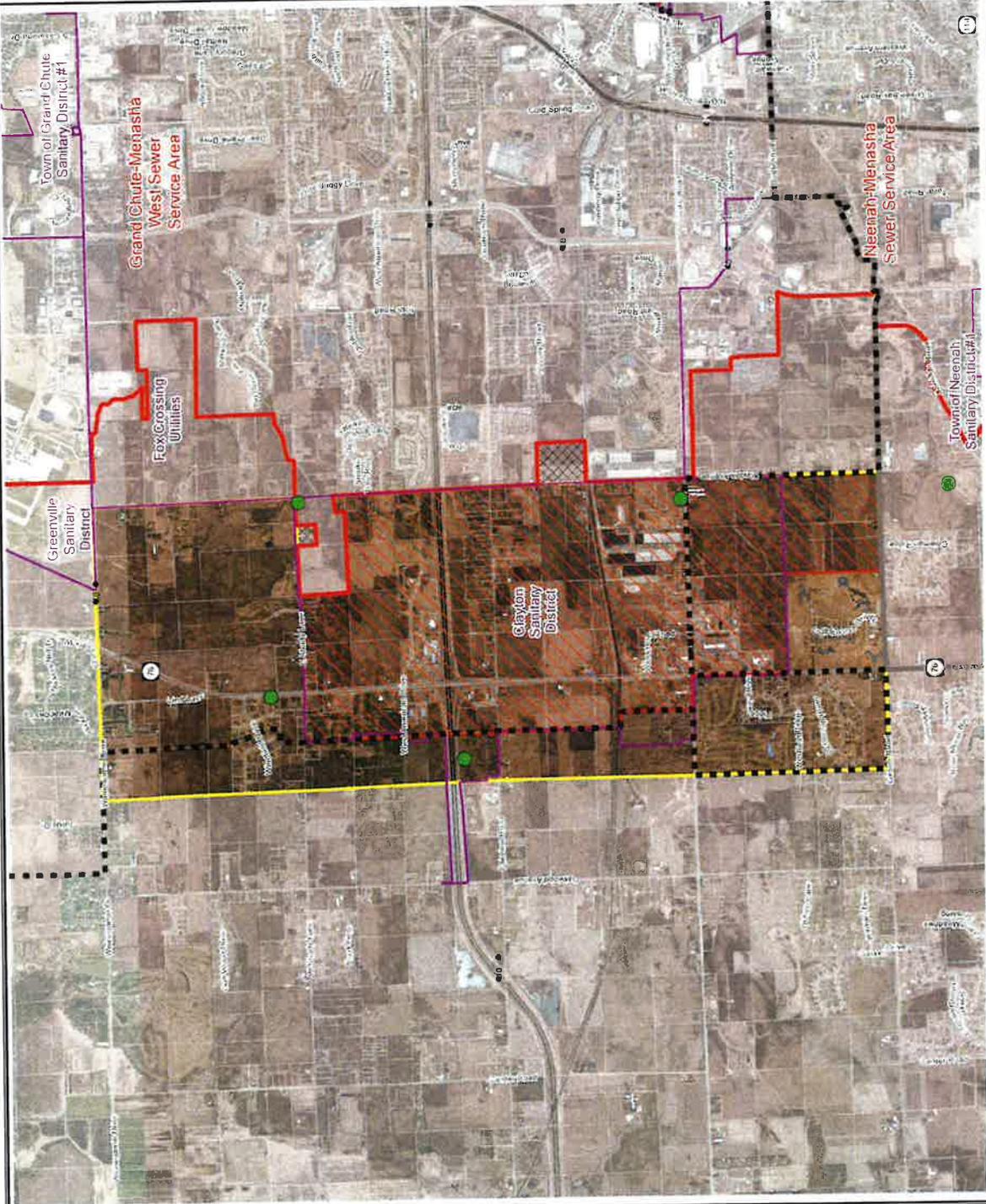
Track 164 Sewer Service Area Amendment Proposal

- Future Lift Station
- Phase 1 Addition To Grand Chute - Menasha West SSA
- Proposed Long Term Addition To Grand Chute - Menasha West SSA
- Grand Chute Planning Area Boundary
- Neenah/Menasha Planning Area
- Sewer Service Area Boundary
- Sanitary District Boundary
- Fox Crossing Utilities Addition
- Parcels



SOURCE:
Base data provided by Regional Counties, 2020
SSA data provided by ECWRPC

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SENT 4/27/20
WITH DNR APPROVAL
LETTER

Appendix J: Public Comments Received and Supporting Documents

Public Comments Received & Supporting Documentation Prior to the Public Hearing on June 14, 2023 at the Environmental Management Committee:

- 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.

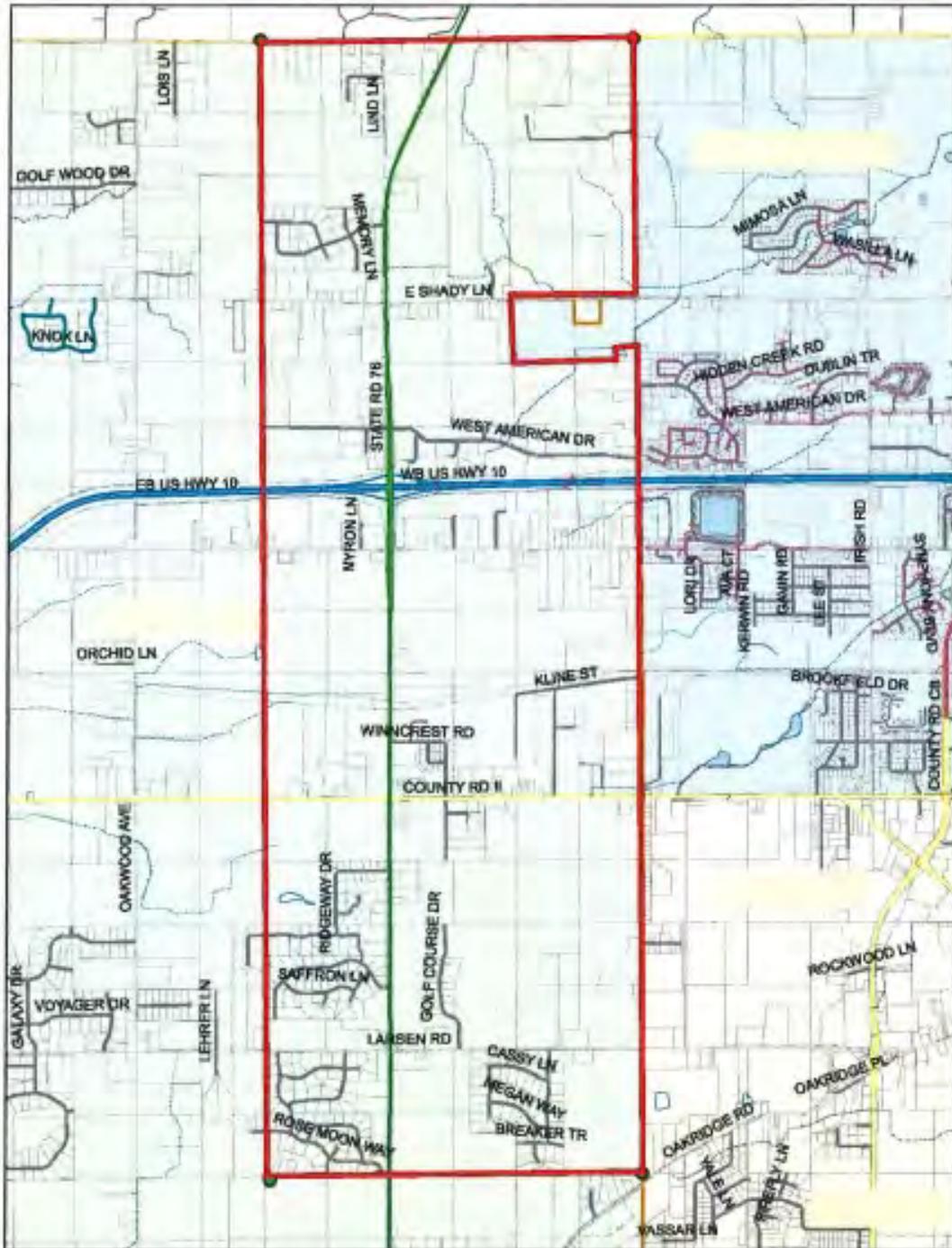
The Fox Cities 2040 Sewer Service Area Plan update includes a written report and four different sewer service area maps. These comments address the draft update and the Fox West Sewer Service Area Map – specifically Map 9.2, the Fox West Sewer Service Area – 2040 Allocation Areas.

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.

EXHIBIT A



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

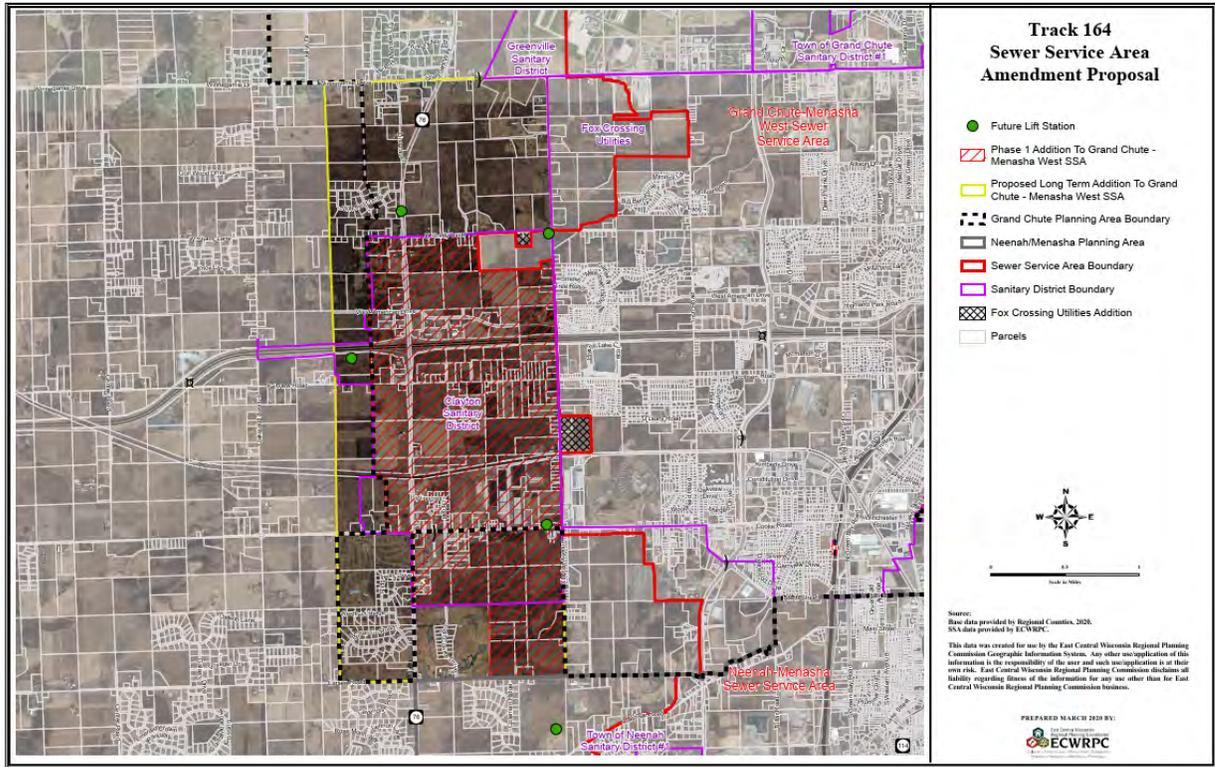
ECWRPC Staff prepared a February 26 memo recommending approval of Clayton's amendment request. The memo stated, "[b]ased on the review of this amendment submittal and our discussions with Town representatives, staff would recommend approval of this sewer amendment request. The information supplied by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



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.

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.

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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.

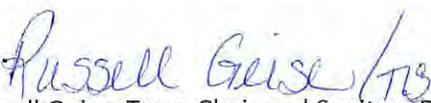
Based upon the unique facts and circumstances discussed above, the Town of Clayton and the Town of Clayton Sanitary District No. 1 request that the ECWRPC approve the expansion of the Fox West Sewerage Commission’s Service Area to include the portion of the Town of Clayton shown on Exhibit A.

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 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.

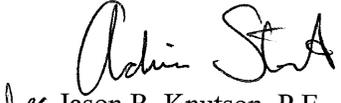
The department reserves the right to order changes or additions should conditions arise making this necessary.

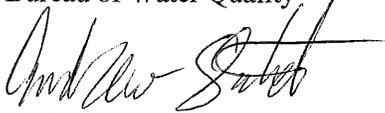
If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats.,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


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

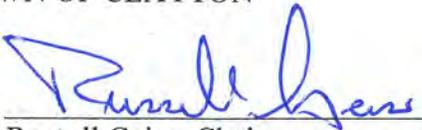
Commission within twenty-five (25) days of invoice. It is understood and agreed that Clayton's percentage will be reallocated in accordance with the Ordinance-Contract when it is an "on-line" user, which shall be defined as the conclusion of the first full fiscal year of the Commission when Clayton's 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.

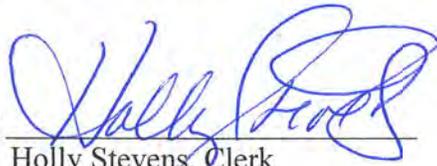
6. In addition to the forgoing, Clayton shall buy into the Commission's plant by paying a one-time buy-in charge of One Million Two Hundred Twenty Five Thousand Two Hundred Fifty One and 18/100 (\$1,225,251.18) Dollars within ninety-five (95) days of this Agreement. However, if said one-time buy-in charge 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.

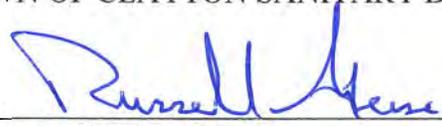
TOWN OF CLAYTON

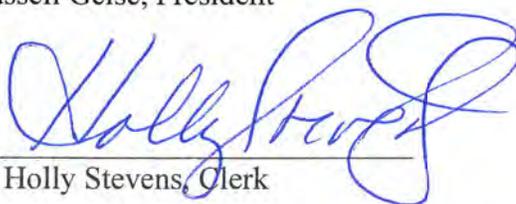
By: 
Russell Geise, Chair

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

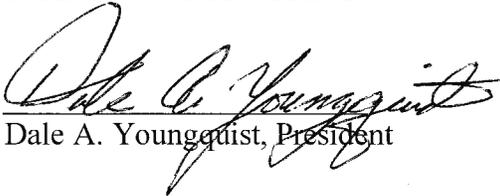
TOWN OF GRAND CHUTE SANITARY DISTRICT NO. 2

By: _____
David Schowalter, President

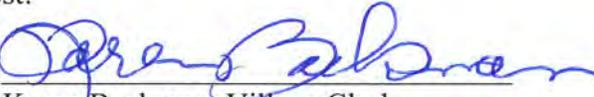
Attest: _____
Angie Cain, Clerk

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

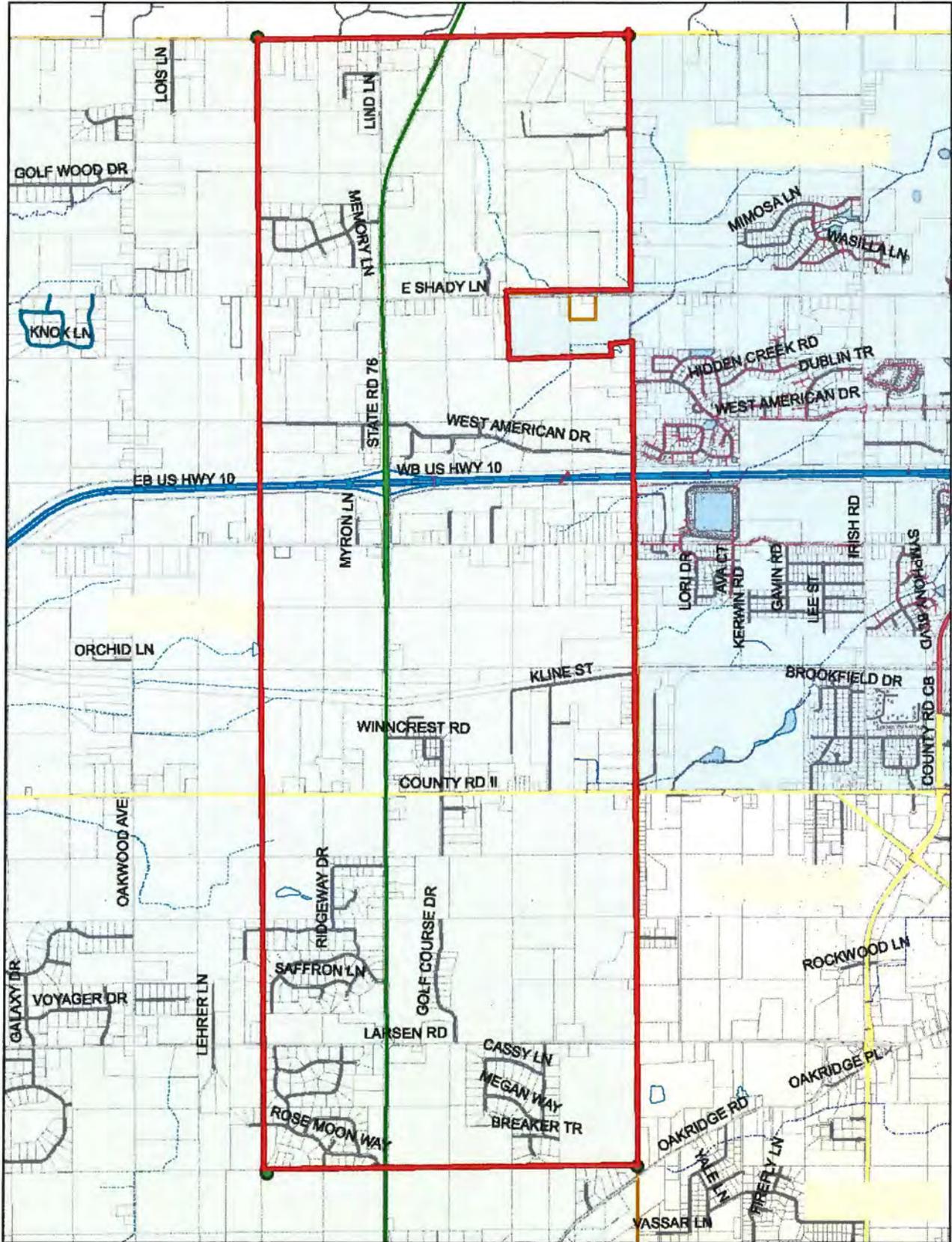


EXHIBIT B

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		Proposed Re-Allocation	
	Design	Loading	Flow & Loading Allocation	Design Loading Allocation
FLOW (mgd)	13.1			
BOO (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				
	52%			
Flow (mgd)	50.8%	6.6548	50.4%	6.6024
BOD (lbs./day)	54.0%	8138	53.2%	8017
TSS (lbs./day)	52.0%	4255	51.2%	8782
P (bs./day)	56.0%	197	54.7%	192
TOWN OF MENASHA (WEST)				
	38%			
Flow (mgd)	42.4%	5.5544	42.0%	5.5020
BOD (lbs./day)	35.0%	5275	34.2%	5154
TSS (lbs./day)	36.0%	6175	35.2%	6038
P (bs./day)	30.0%	105	28.7%	101
TOWN OF GREENVILLE				
	10%			
Flow (mgd)	6.8%	0.8908	6.4%	0.8384
BOD (lbs./day)	11.0%	1658	10.2%	1537
TSS (lbs./day)	12.0%	2058	11.2%	1921
P (bs./day)	14.0%	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.

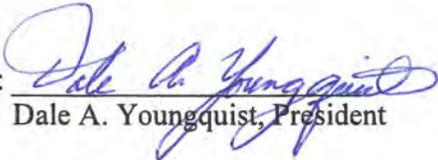
X. ANCILIARY AGREEMENTS

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

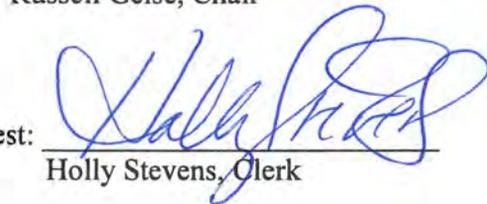
Attest:

By: 
Karen Backman, Village Clerk

DATED THIS 15TH DAY OF JANUARY, 2020

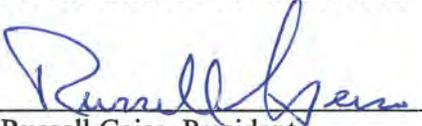
TOWN OF CLAYTON

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

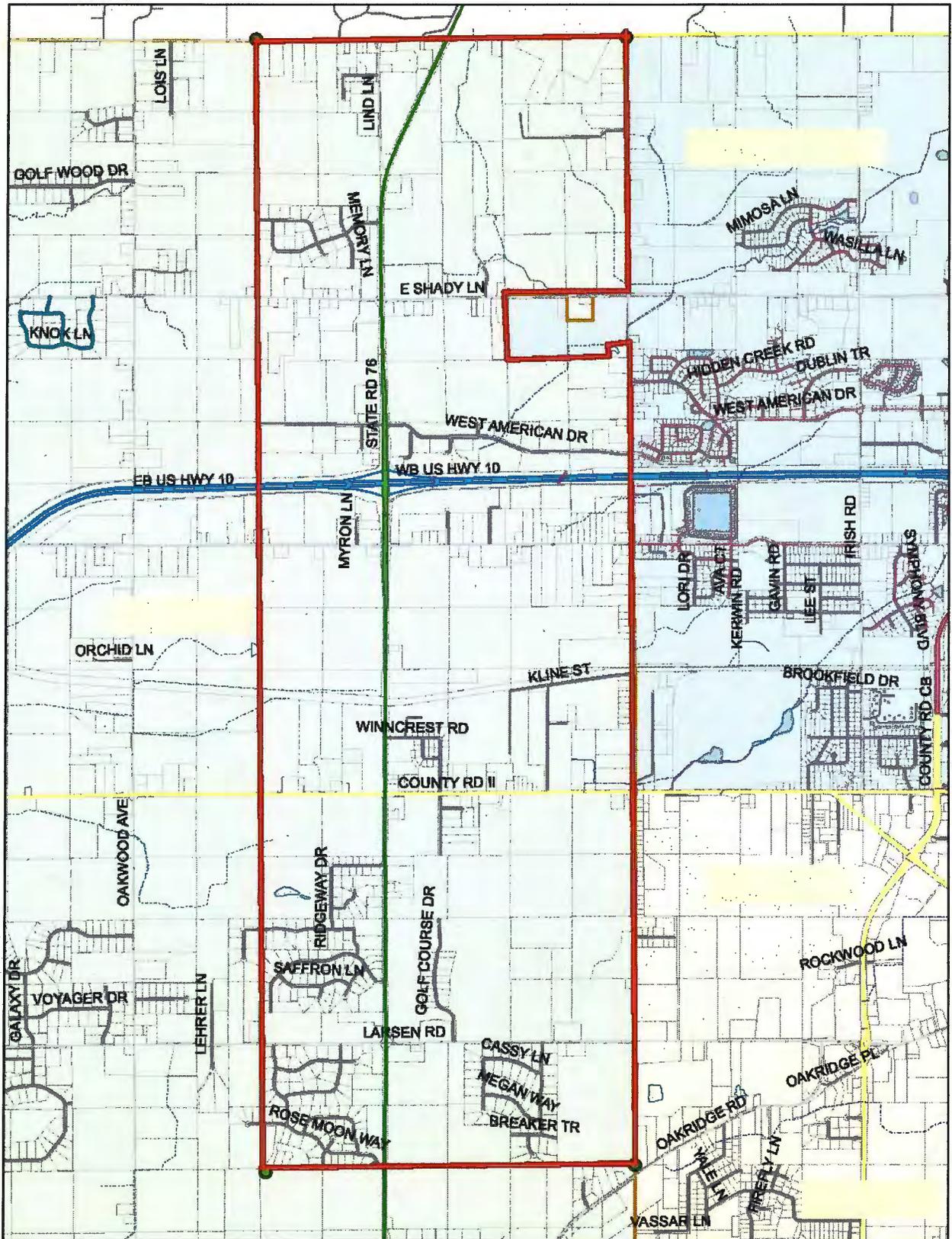
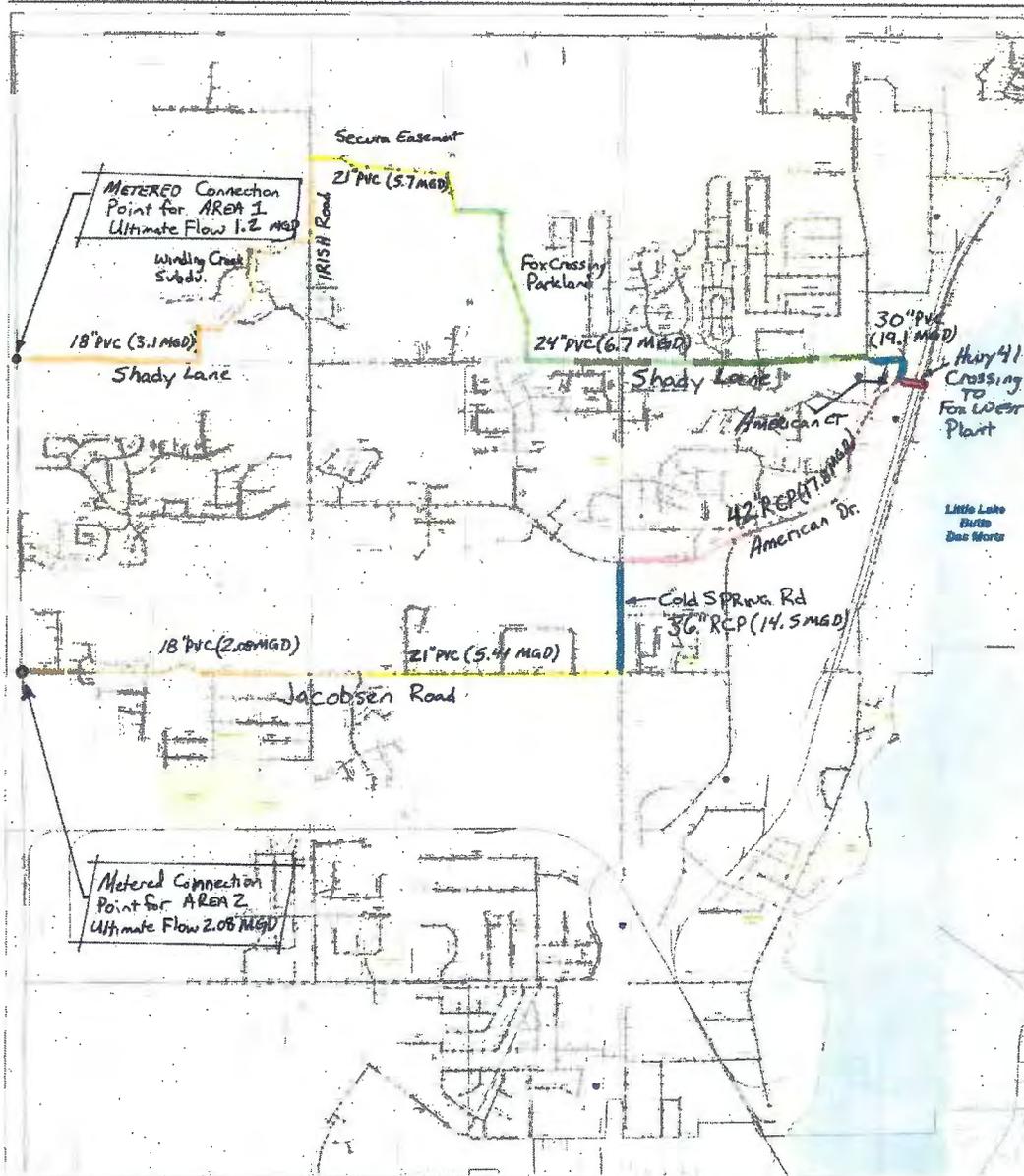


EXHIBIT B – CONNECTION POINTS AND COST-SHARING FORMULA

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

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:

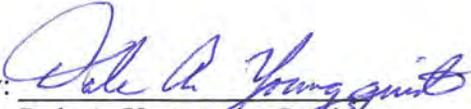
Village of Fox Crossing
Attn: Director of Public Works
Village of Fox Crossing
2000 Municipal Drive
Neenah, WI 54956

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

[SIGNATURE LINES ON NEXT PAGE]

DATED THIS 27 DAY OF January, 2020

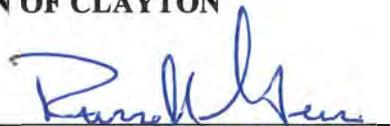
VILLAGE OF FOX CROSSING

By: 
Dale A. Youngquist, President

Attest:
By: 
Karen Backman, Village Clerk

DATED THIS 15TH DAY OF JANUARY, 2020

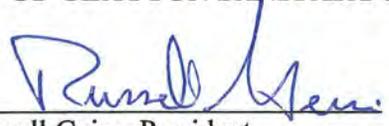
TOWN OF CLAYTON

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

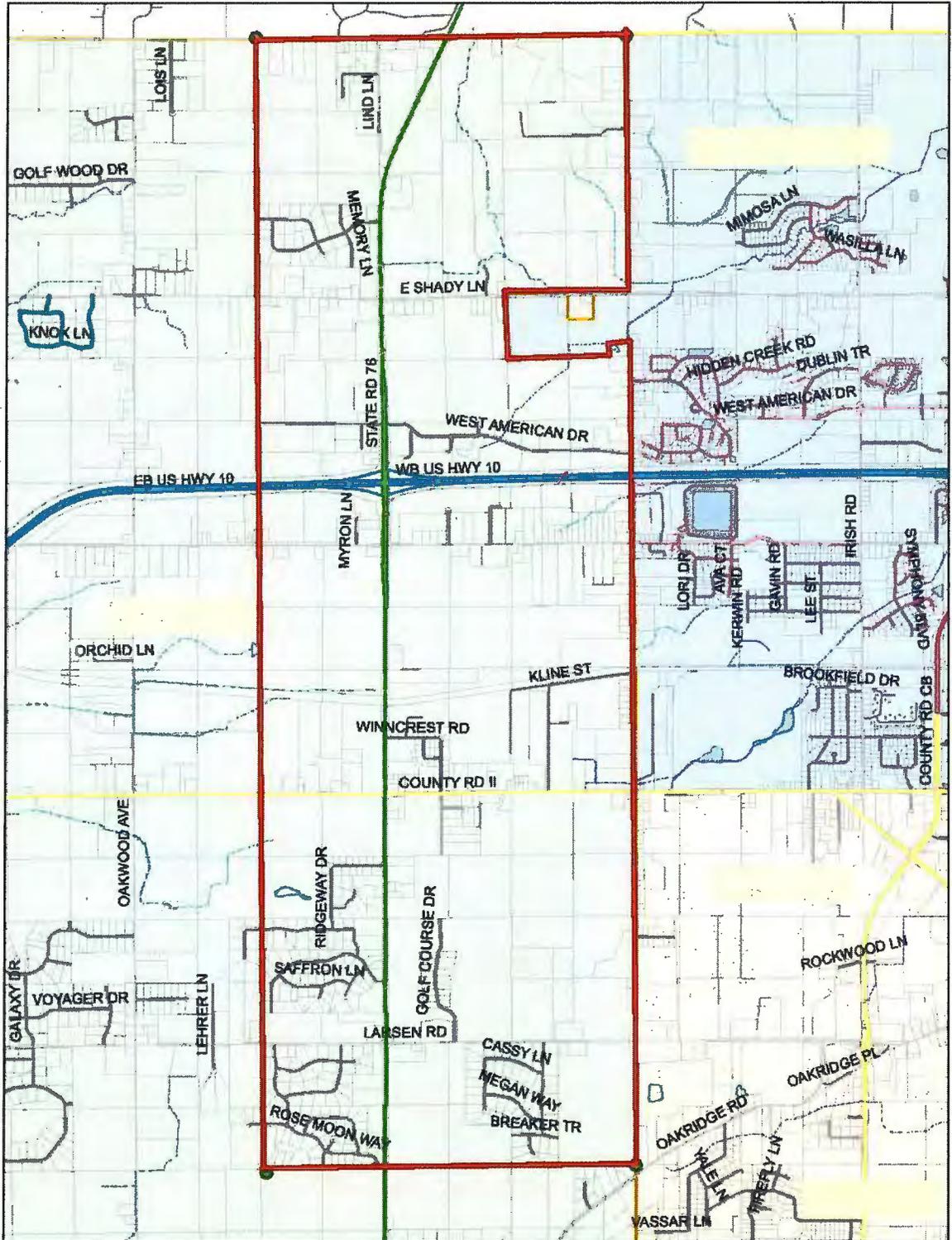


EXHIBIT B

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.A. 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: psc@psc.wisconsin.gov

RATE FILE

Sheet No. 1 of 2

Schedule No. PWAC-1

Public Service Commission of Wisconsin

Amendment No. 23

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

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

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

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

Sheet No. 2 of 2

Public Service Commission of Wisconsin

Schedule No. PWAC-1

Fox Crossing Utilities

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

Customers who are provided service under Schedules Mg-1, Ug-1, or Sg-1 shall be subject to the charges in this schedule according to the size of their primary meter.

Billing: Same as Schedule Mg-1.

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

Public Service Commission of Wisconsin

Amendment No. 23

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

Public Service Commission of Wisconsin

Schedule No. Mpa-1

Fox Crossing Utilities

Amendment No. 23

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 3/4-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

Public Service Commission of Wisconsin

Schedule No. Sws-1

Fox Crossing Utilities

Amendment No. 23

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

Amendment No. 23

Public Service Commission of Wisconsin

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

Public Service Commission of Wisconsin

Schedule No. R-1

Amendment No. 23

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-1.

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

RATE FILE

Sheet No. 1 of 1

Schedule No. Cz-1

Public Service Commission of Wisconsin

Amendment No. 23

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

Amendment No. 23

Fox Crossing Utilities

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

RATE FILE

Sheet No. 3 of 10

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

RATE FILE

Sheet No. 4 of 10

Public Service Commission of Wisconsin

Schedule No. X-1

Amendment No. 23

Fox Crossing Utilities

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

RATE FILE

Sheet No. 5 of 10

Public Service Commission of Wisconsin

Schedule No. X-1

Amendment No. 23

Fox Crossing Utilities

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

RATE FILE

Sheet No. 6 of 10

Public Service Commission of Wisconsin

Schedule No. X-1

Amendment No. 23

Fox Crossing Utilities

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

RATE FILE

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.

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

RATE FILE

Sheet No. 8 of 10

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

RATE FILE

Sheet No. 9 of 10

Schedule No. X-1

Public Service Commission of Wisconsin

Amendment No. 23

Fox Crossing Utilities

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

RATE FILE

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

Public Service Commission of Wisconsin

Schedule No. X-3

Fox Crossing Utilities

Amendment No. 23

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/Lynnann 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

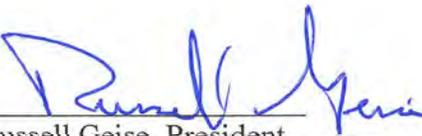
TOWN OF CLAYTON

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)

