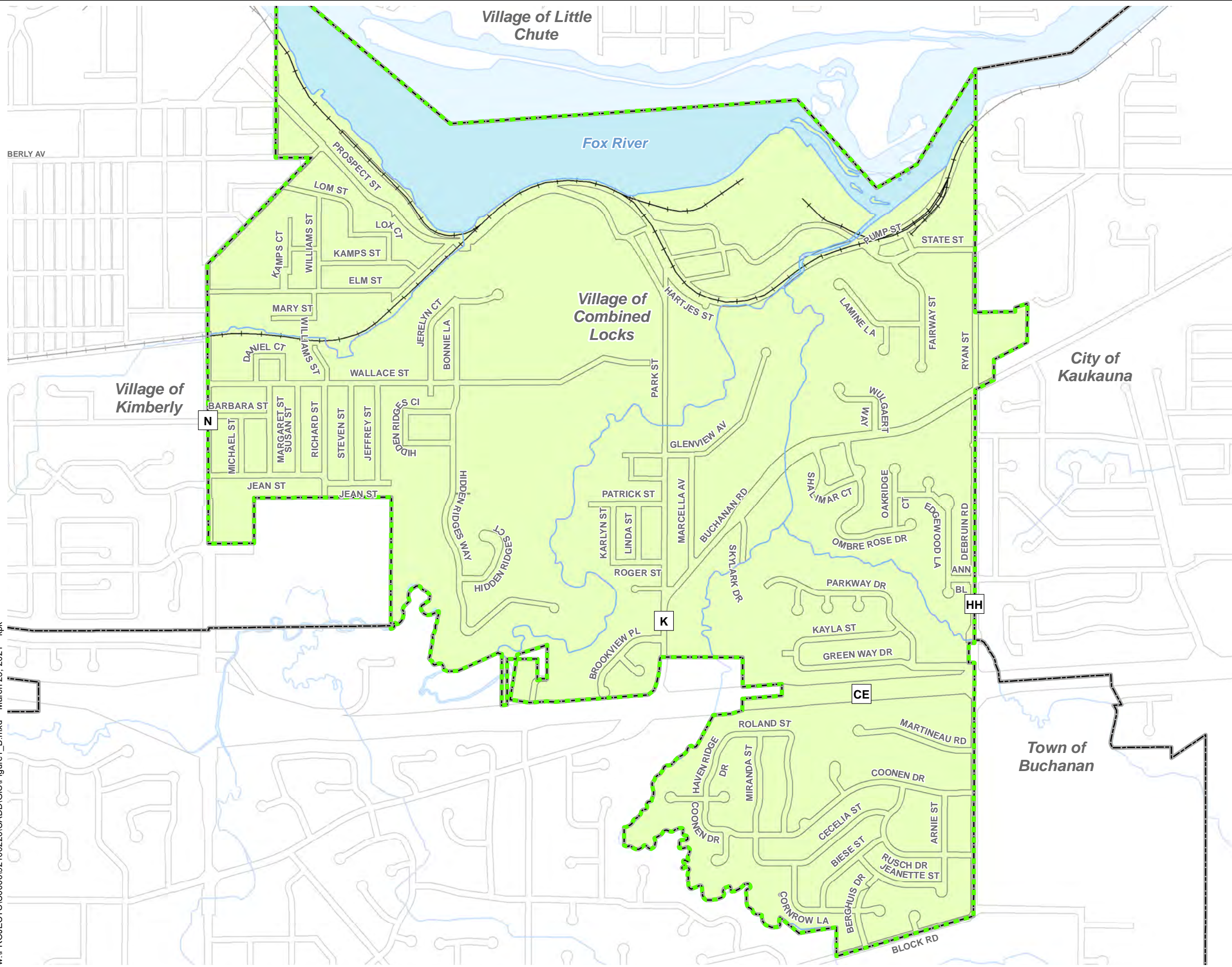



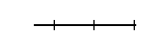




APPENDIX B

Figures



-  Study Area
- Mapped Features**
-  Municipal Boundary
-  Right-of-Way Line
-  Railroad Centerline
-  Streams
-  Surface Water

Source: Outagamie County, 2015-21.

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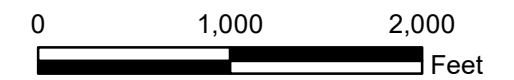


FIGURE 1
STUDY AREA
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN



Municipal Jurisdiction

- Village of Combined Locks
- Village of Kimberly
- Village of Little Chute
- Town of Buchanan
- City of Kaukauna

Highway Jurisdiction

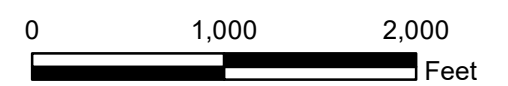
- County Trunk Highway
- Connecting Highway (NA)
- State Trunk Highway (NA)
- State Freeway (NA)

Other Mapped Features

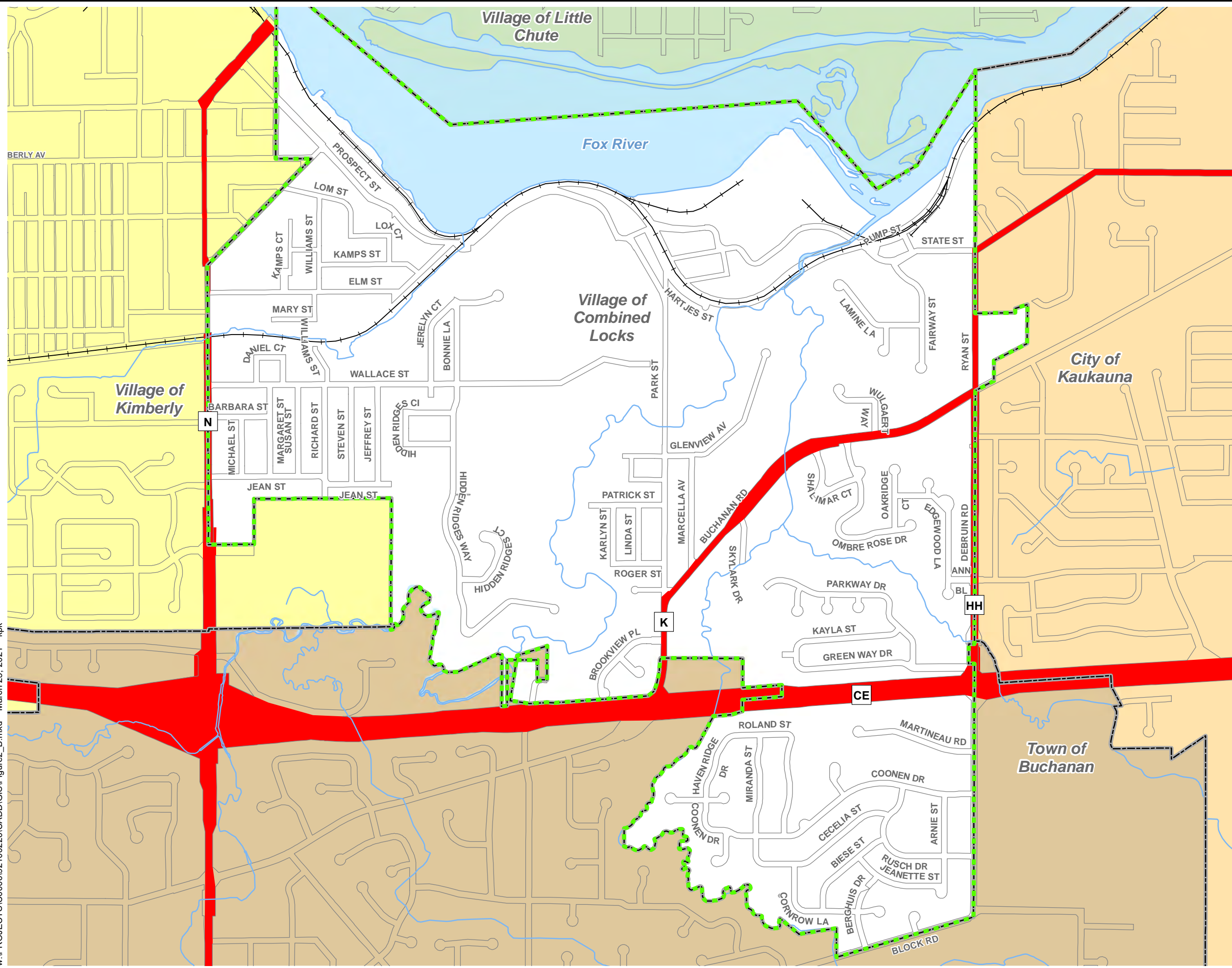
- Study Area Boundary
- Right-of-Way Line
- Railroad Centerline
- Streams
- Surface Water

Source: Outagamie County, 2015-21.

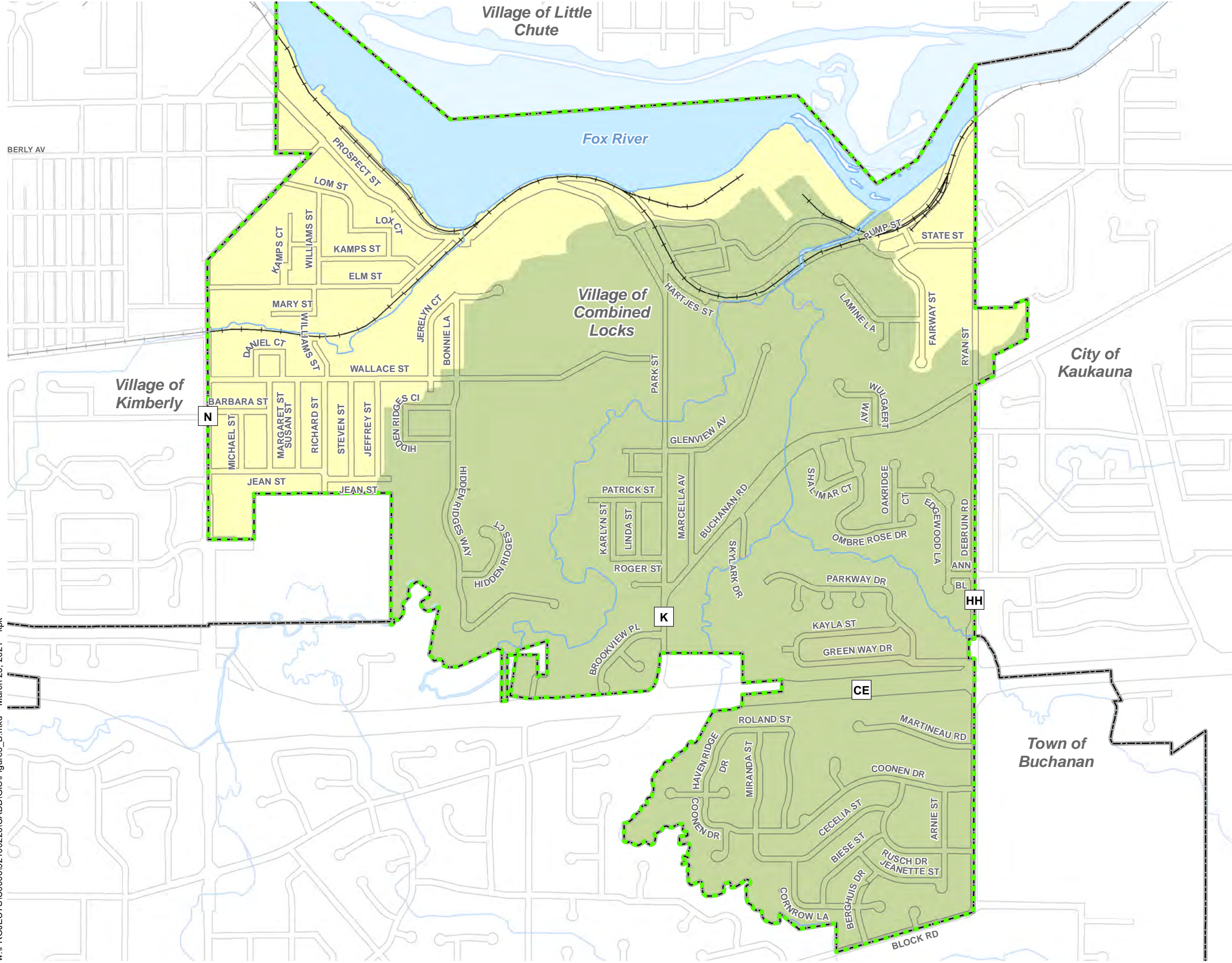
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**FIGURE 2
MS4 JURISDICTION
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN**






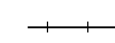


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Sub-Watersheds

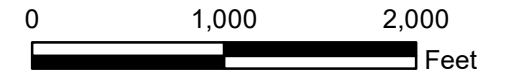
-  Fox River
-  Garners Creek

Other Mapped Features

-  Study Area Boundary
-  Municipal Boundary
-  Right-of-Way Line
-  Railroad Centerline
-  Streams
-  Surface Water

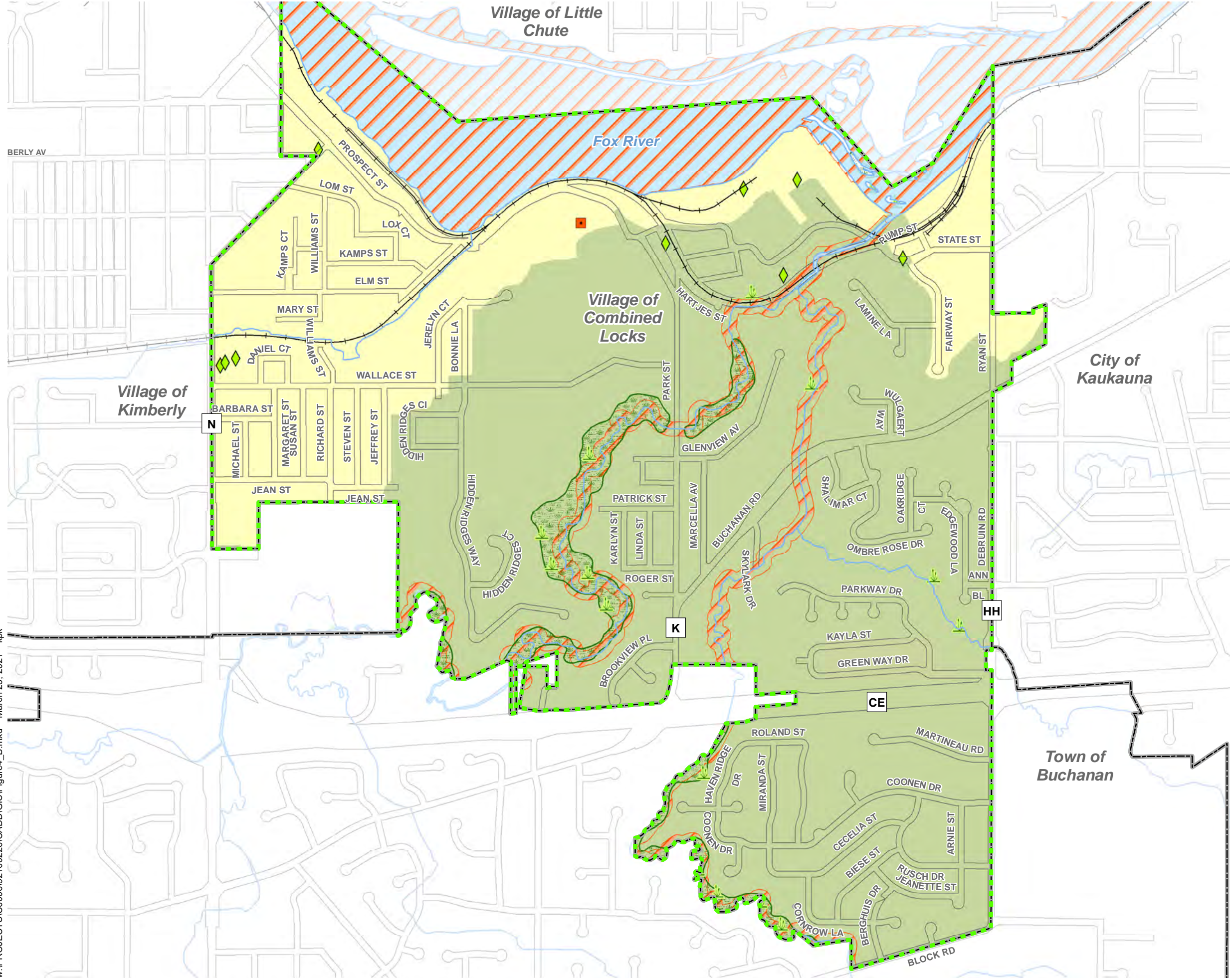
Source: Outagamie County, 2015-21.

Disclaimer: The property lines, right-of-way lines, and other property information on this drawing were developed or obtained as part of the County Geographic Information System or through the County property tax mapping function. McMAHON ASSOCIATES, INC. does not guarantee this information to be correct, current, or complete. The property and right-of-way information are only intended for use as a general reference and are not intended or suitable for site-specific uses. Any use to the contrary of the above stated uses is the responsibility of the user and such use is at the user's own risk.



**FIGURE 3
SUB-WATERSHEDS
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN**

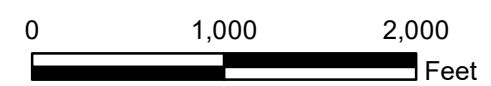
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- Natural Resources**
- WDNR Wetland Inventory (Less Than 2 Acres)
 - WDNR Wetland Inventory (2 Acres and Greater)
 - 303(d) Impaired Waters
 - Stream
 - Surface Water
- Sub-Watersheds**
- Fox River
 - Garners Creek
- Other Mapped Features**
- 1 Registered Historic Site (NA)
 - Waste Disposal Site (Not Archived)
 - DNR Remediation Site - Open (NA)
 - DNR Remediation Site - Closed
 - Study Area Boundary
 - Municipal Boundary
 - Right-of-Way
 - Railroad Centerline

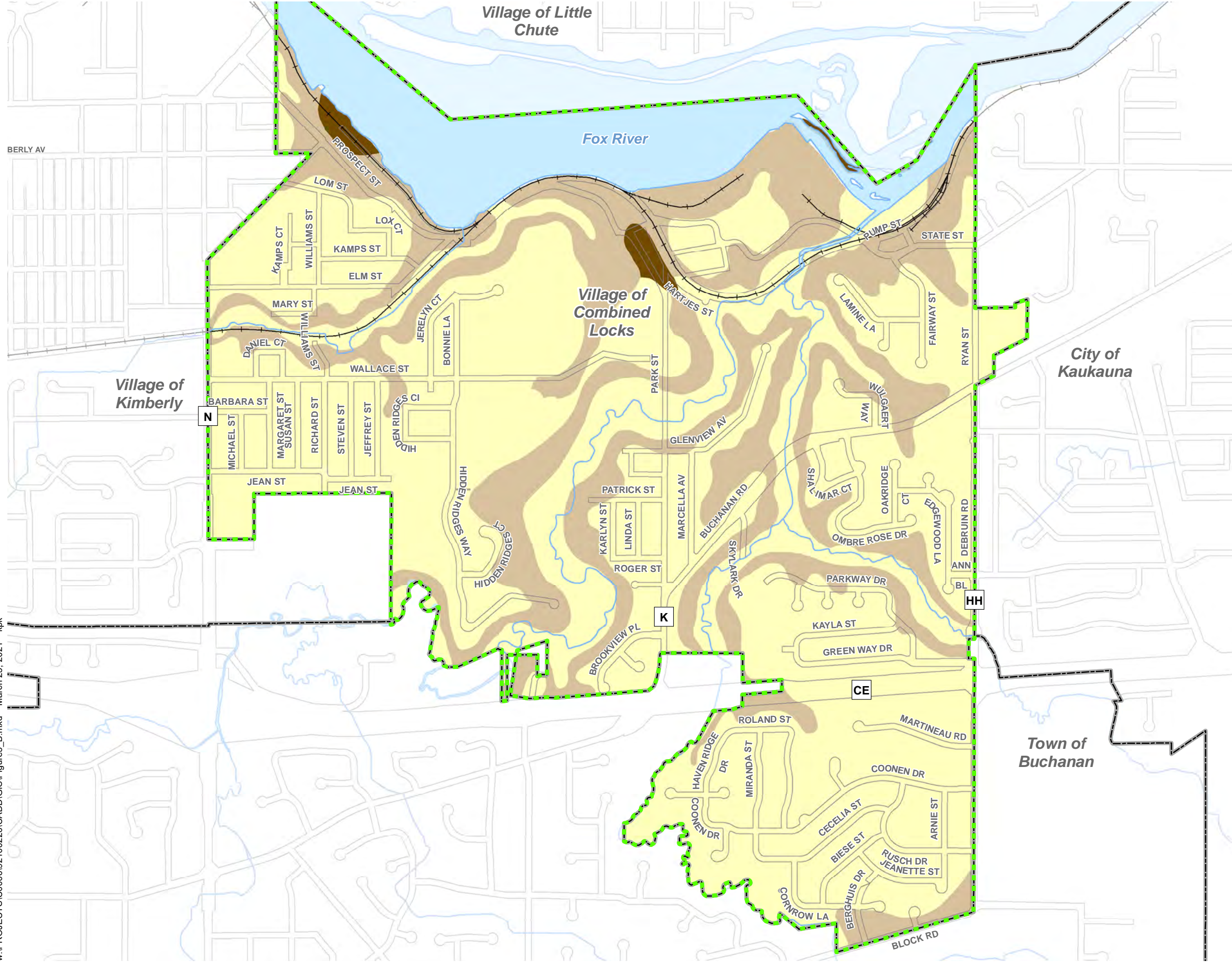
Source: Outagamie County, 2015-21.

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**FIGURE 4
NATURAL RESOURCES
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN**







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Hydrologic Soil Group (HSG)

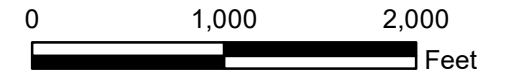
-  HSG A
-  HSG B (NA)
-  HSG C
-  HSG D

Other Mapped Features

-  Study Area Boundary
-  Municipal Boundary
-  Right-of-Way Line
-  Railroad Centerline
-  Streams
-  Surface Water

Source: Outagamie County, 2015-21; USDA, 2020.

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**FIGURE 5
SOILS
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN**

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- MS4 Drainage System**
- Storm Sewer System
 - Culvert
 - Major Outfall and ID
 - Minor Outfall and ID
- Sub-Watersheds**
- Fox River
 - Garners Creek
- Other Mapped Features**
- Study Area Boundary
 - Municipal Boundary
 - Right-of-Way
 - Railroad Centerline
 - Stream
 - Surface Water
 - 303(d) Impaired Waters

Source: Outagamie County, 2015-21.

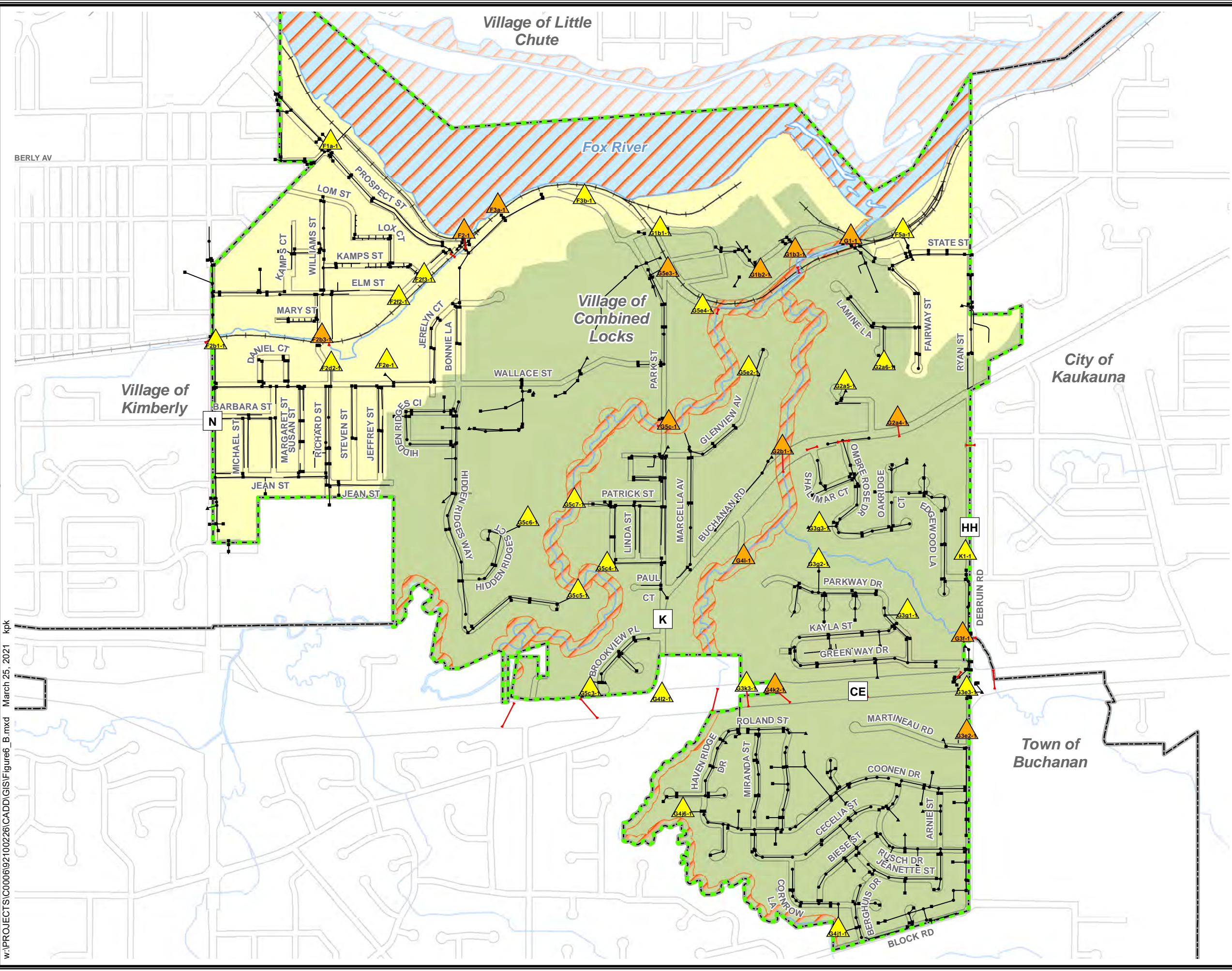
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0 1,000 2,000 Feet



**FIGURE 6
MS4 SYSTEM
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN**



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MS4 Drainage System

- C1 Structural BMP ID
- Storm Sewer System
- Culvert

Sub-Watersheds

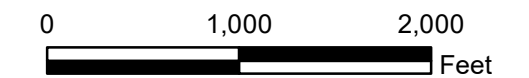
- Fox River
- Garners Creek

Other Mapped Features

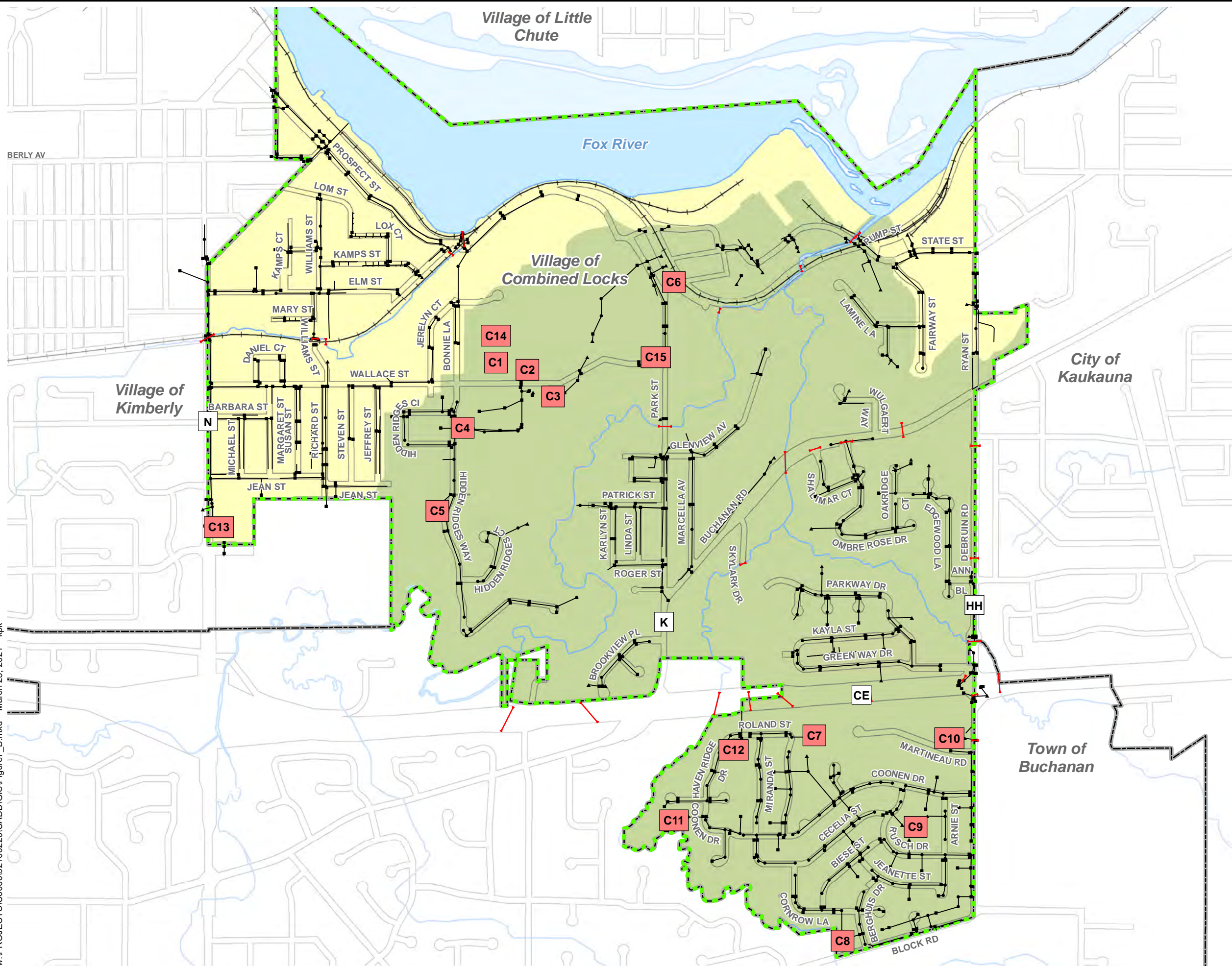
- Study Area Boundary
- Municipal Boundary
- Right-of-Way
- Railroad Centerline
- Stream
- Surface Water

Source: Outagamie County, 2015-21.

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**FIGURE 7
STRUCTURAL BMPs
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN**



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Surface Drainage

- Curb and Gutter
- No Control
- Grass Swale

Other Mapped Features

- Study Area Boundary
- Storm Sewer System
- Culvert
- Municipal Boundary
- Right-of-Way Line
- Railroad Centerline
- Streams
- Surface Water
- Riparian Area

Source: Outagamie County, 2015-21.

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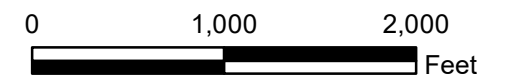
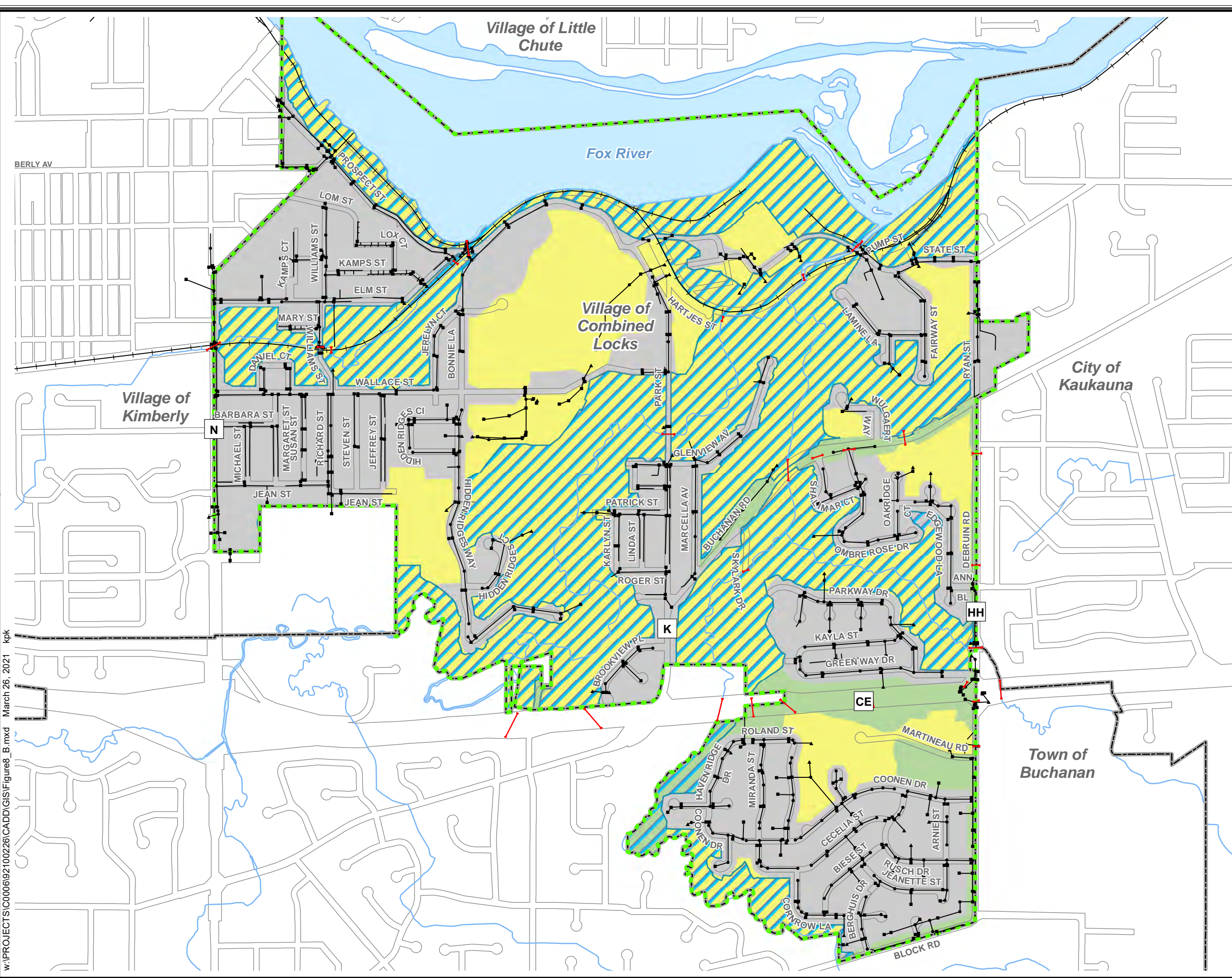
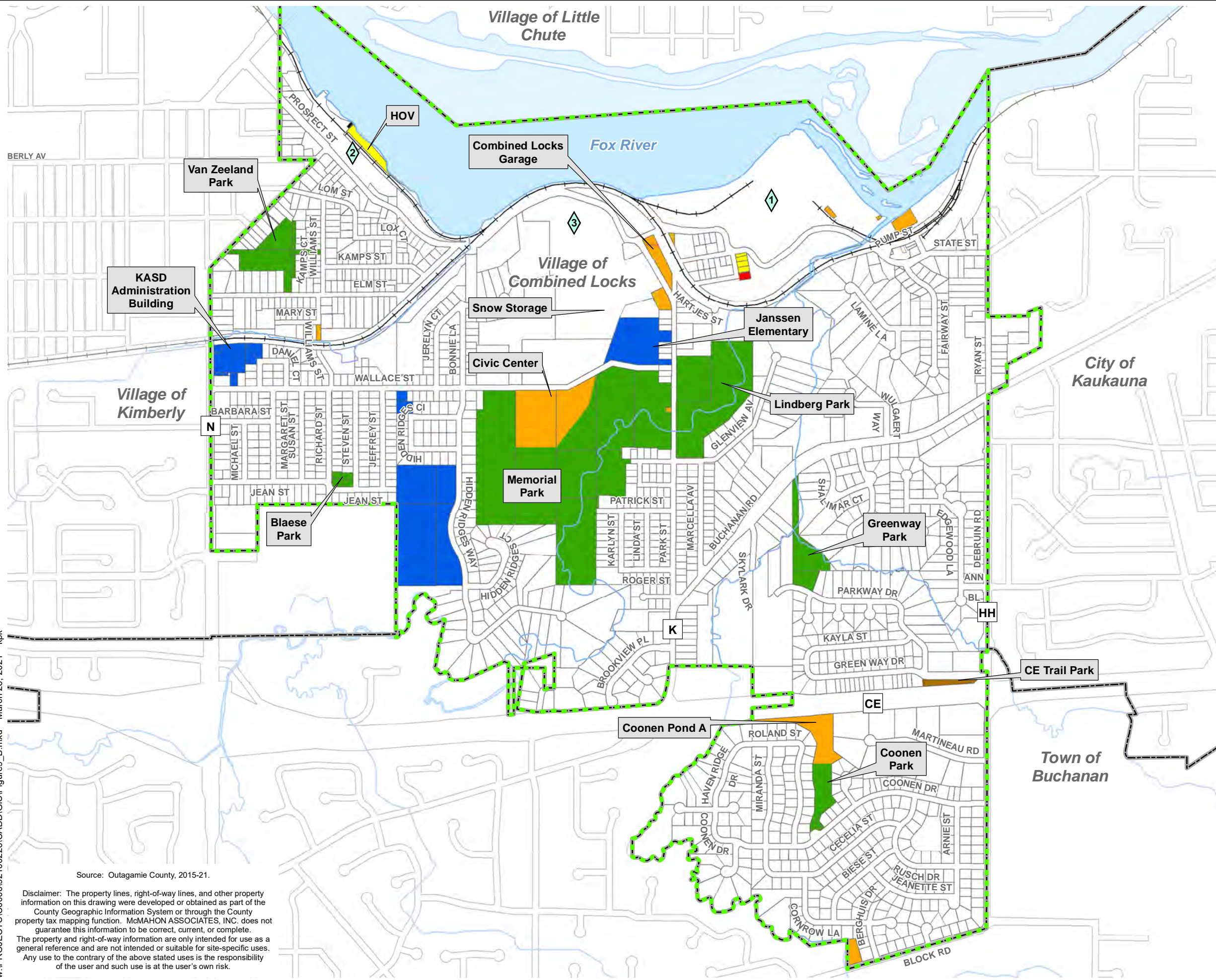


FIGURE 8
SURFACE DRAINAGE
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN



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WPDES Industrial Permits

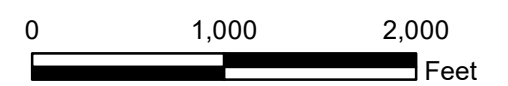
- WPDES Industrial Permit I.D.

Publicly Owned Property

- City of Kaukauna
- Heart of the Valley Sewerage Commission
- Kaukauna Electric and Water Utility
- Kimberly Area School District
- Park and Recreation Area
- Outagamie County
- Village of Combined Locks

Other Mapped Features

- Study Area Boundary
- Municipal Boundary
- Right-of-Way Line
- Railroad Centerline
- Streams
- Surface Water

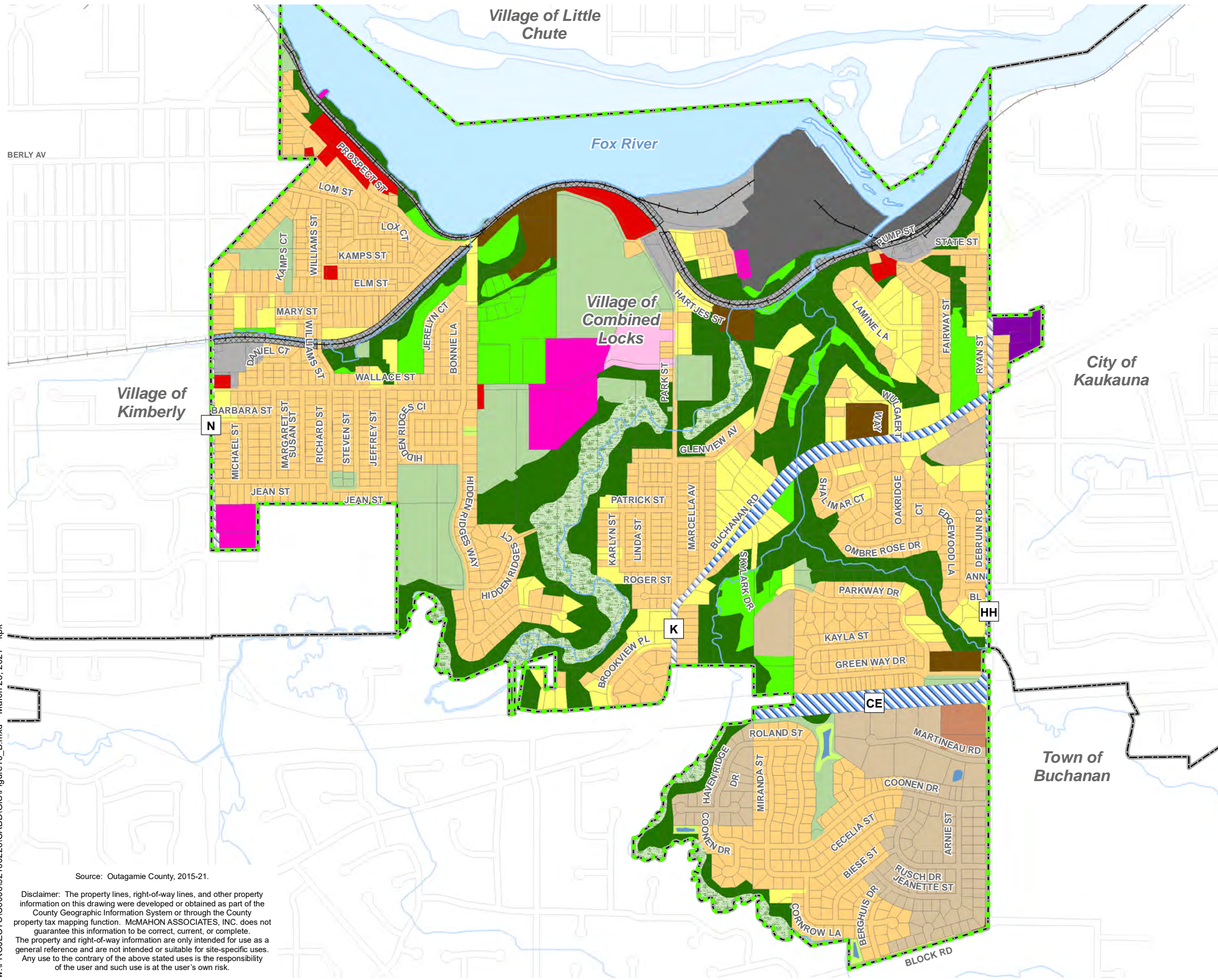


**FIGURE 9
WPDES INDUSTRIAL PERMITS
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN**

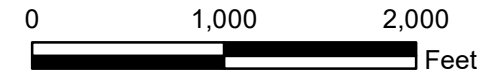
Source: Outagamie County, 2015-21.

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- SLAMM Standard Land Uses**
- Residential**
- LDR - Low Density Single Family Residential (0.5 acre to 1.5 acre lots)
 - MDR - Medium Density Single Family Residential (0.25 acre to 0.5 acre lots)
 - MDRA - Medium Density Single Family Residential w/Alleys (0.25 acre to 0.5 acre lots)
 - HDR - High Density Single Family Residential (0.125 acre lots or smaller)
 - HDR - High Density Single Family Residential w/Alleys (0.125 acre lots or smaller)
 - MFR - Multi-Family Residential (3 or more families, 1-3 story height)
 - HRR - High Rise Residential (1.5 acre to 5 acre lots, > 3 story)
 - SUBR - Suburban Residential (1.5 acre to 5 acre lots)
 - MOBR - Mobile Home or Trailer Park Residential
- Institutional**
- SCHOOL - Public or Private School
 - UNIV - University, College, Technical School, etc.
 - HOSP - Medical Facilities including Nursing Homes, Hospitals, etc.
 - MISC - Miscellaneous Facilities (Churches, Institutional Property)
- Commercial**
- CDNTN - Downtown Commercial and Institutional Areas
 - CSTRIP - Strip Commercial Areas (Courthouses, Police Stations, etc.)
 - SHCNTR - Shopping Centers (parking lot is 2.5 times building area)
 - OFFPRK - Office Parks (non-retail, multi-story, insurance, government)
- Industrial**
- LIGHTI - Light Industrial Areas (storage and distribution of goods for retail or sale)
 - MEDI - Medium Industrial Areas (lumber, junk, or auto salvage yard, ag., co-op, oil tank farm, coal and salt storage, slaughter house)
 - AIRPRT - Airport Facilities
- Open Space**
- CEM - Cemeteries, including grounds, roads, and buildings
 - PARK - Outdoor Recreational Areas (golf course, arboretums, botanical gardens, municipal playgrounds, and natural areas)
 - RAIL - Railroad ROW (Excludes road ROW, storage yards)
 - FRMSTD - Farmsteads, including limited houses, buildings, driveways and parking areas
 - AGRIC - Agriculture fields
 - GRASS - Undeveloped land that is vegetated (Excludes road ROW)
 - GRASS_SWPOND - Vegetated land around a stormwater pond (Excludes road ROW)
 - WOODS - Forested or Wooded Areas with Leaf Litter
 - WETLND - DNR Wetland Inventory Map
 - WATER - Waters of the State and Other Open Waters
 - WATER_SWPOND - Open water associated with stormwater pond
- Transportation**
- FREE - Limited Access Highways and Interchanges, including vegetated ROW
 - HWY - State or County Highway
- Other Mapped Features**
- Municipal Boundary
 - Parcel Line
 - Stream
 - Study Area Boundary

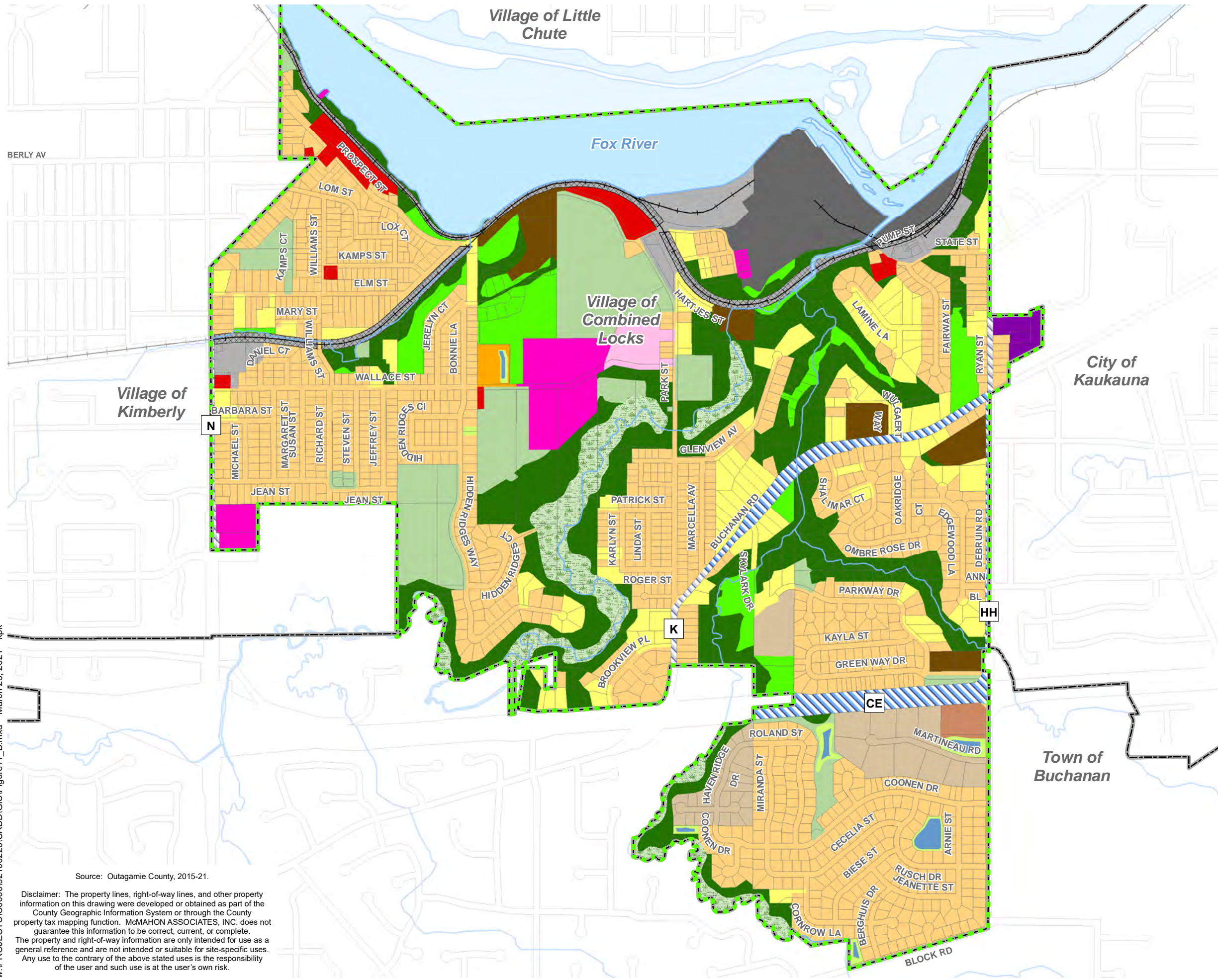


**FIGURE 10
2004 LAND USE
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN**

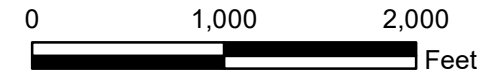
Source: Outagamie County, 2015-21.

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- SLAMM Standard Land Uses**
- Residential**
- LDR - Low Density Single Family Residential (0.5 acre to 1.5 acre lots)
 - MDR - Medium Density Single Family Residential (0.25 acre to 0.5 acre lots)
 - MDRA - Medium Density Single Family Residential w/Aleys (0.25 acre to 0.5 acre lots)
 - HDR - High Density Single Family Residential (0.125 acre lots or smaller)
 - HDR A - High Density Single Family Residential w/Aleys (0.125 acre lots or smaller)
 - MFR - Multi-Family Residential (3 or more families, 1-3 story height)
 - HRR - High Rise Residential (1.5 acre to 5 acre lots, > 3 story)
 - SUBR - Suburban Residential (1.5 acre to 5 acre lots)
 - MOBR - Mobile Home or Trailer Park Residential
- Institutional**
- SCHOOL - Public or Private School
 - UNIV - University, College, Technical School, etc.
 - HOSP - Medical Facilities including Nursing Homes, Hospitals, etc.
 - MISC - Miscellaneous Facilities (Churches, Institutional Property)
- Commercial**
- CDNTN - Downtown Commercial and Institutional Areas
 - CSTRIP - Strip Commercial Areas (Courthouses, Police Stations, etc.)
 - SHCNTR - Shopping Centers (parking lot is 2.5 times building area)
 - OFFPRK - Office Parks (non-retail, multi-story, insurance, government)
- Industrial**
- LIGHTI - Light Industrial Areas (storage and distribution of goods for retail or sale)
 - MEDI - Medium Industrial Areas (lumber, junk, or auto salvage yard, ag., co-op, oil tank farm, coal and salt storage, slaughter house)
 - AIRPRT - Airport Facilities
- Open Space**
- CEM - Cemeteries, including grounds, roads, and buildings
 - PARK - Outdoor Recreational Areas (golf course, arboretums, botanical gardens, municipal playgrounds, and natural areas)
 - RAIL - Railroad ROW (Excludes road ROW, storage yards)
 - FRMSTD - Farmsteads, including limited houses, buildings, driveways and parking areas
 - AGRIC - Agriculture fields
 - GRASS - Undeveloped land that is vegetated (Excludes road ROW)
 - GRASS_SWPOND - Vegetated land around a stormwater pond (Excludes road ROW)
 - WOODS - Forested or Wooded Areas with Leaf Litter
 - WETLND - DNR Wetland Inventory Map
 - WATER - Waters of the State and Other Open Waters
 - WATER_SWPOND - Open water associated with stormwater pond
- Transportation**
- FREE - Limited Access Highways and Interchanges, including vegetated ROW
 - HWY - State or County Highway
- Other Mapped Features**
- Municipal Boundary
 - Parcel Line
 - Stream
 - Study Area Boundary

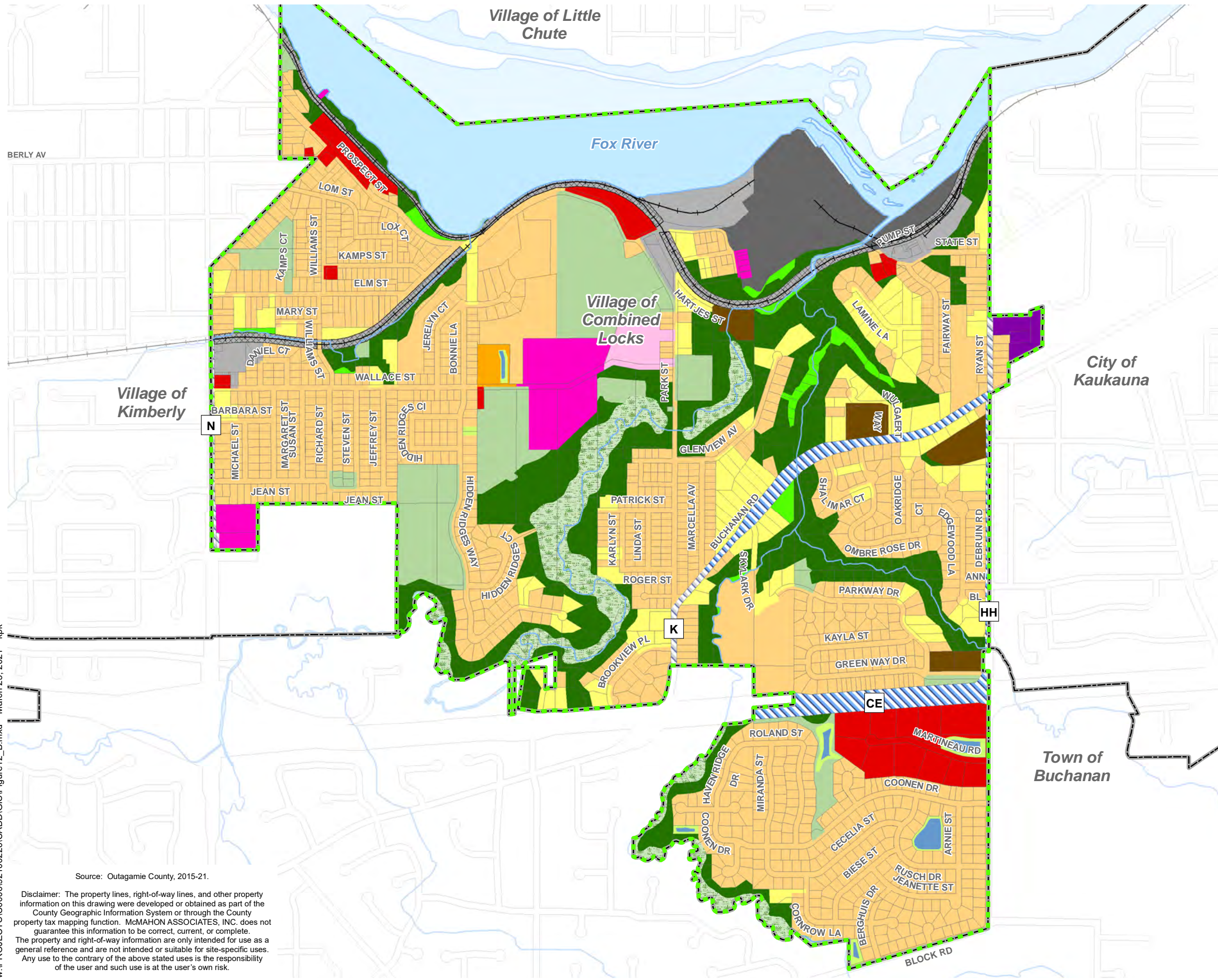


**FIGURE 11
2012 LAND USE
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN**

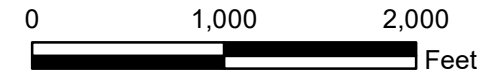
Source: Outagamie County, 2015-21.

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- SLAMM Standard Land Uses**
- Residential**
- LDR - Low Density Single Family Residential (0.5 acre to 1.5 acre lots)
 - MDR - Medium Density Single Family Residential (0.25 acre to 0.5 acre lots)
 - MDRA - Medium Density Single Family Residential w/Aleys (0.25 acre to 0.5 acre lots)
 - HDR - High Density Single Family Residential (0.125 acre lots or smaller)
 - HDRA - High Density Single Family Residential w/Aleys (0.125 acre lots or smaller)
 - MFR - Multi-Family Residential (3 or more families, 1-3 story height)
 - HRR - High Rise Residential (1.5 acre to 5 acre lots, > 3 story)
 - SUBR - Suburban Residential (1.5 acre to 5 acre lots)
 - MOBR - Mobile Home or Trailer Park Residential
- Institutional**
- SCHOOL - Public or Private School
 - UNIV - University, College, Technical School, etc.
 - HOSP - Medical Facilities including Nursing Homes, Hospitals, etc.
 - MISC - Miscellaneous Facilities (Churches, Institutional Property)
- Commercial**
- CDNTN - Downtown Commercial and Institutional Areas
 - CSTRIP - Strip Commercial Areas (Courthouses, Police Stations, etc.)
 - SHCNTR - Shopping Centers (parking lot is 2.5 times building area)
 - OFFPRK - Office Parks (non-retail, multi-story, insurance, government)
- Industrial**
- LIGHTI - Light Industrial Areas (storage and distribution of goods for retail or sale)
 - MEDI - Medium Industrial Areas (lumber, junk, or auto salvage yard, ag., co-op, oil tank farm, coal and salt storage, slaughter house)
 - AIRPRT - Airport Facilities
- Open Space**
- CEM - Cemeteries, including grounds, roads, and buildings
 - PARK - Outdoor Recreational Areas (golf course, arboretums, botanical gardens, municipal playgrounds, and natural areas)
 - RAIL - Railroad ROW (Excludes road ROW, storage yards)
 - FRMSTD - Farmsteads, including limited houses, buildings, driveways and parking areas
 - AGRIC - Agriculture fields
 - GRASS - Undeveloped land that is vegetated (Excludes road ROW)
 - GRASS_SWPOND - Vegetated land around a stormwater pond (Excludes road ROW)
 - WOODS - Forested or Wooded Areas with Leaf Litter
 - WETLND - DNR Wetland Inventory Map
 - WATER - Waters of the State and Other Open Waters
 - WATER_SWPOND - Open water associated with stormwater pond
- Transportation**
- FREE - Limited Access Highways and Interchanges, including vegetated ROW
 - HWY - State or County Highway
- Other Mapped Features**
- Municipal Boundary
 - Parcel Line
 - Stream
 - Study Area Boundary



McMAHON
ENGINEERS ARCHITECTS
McMAHON ASSOCIATES, INC.

**FIGURE 12
FUTURE LAND USE
STORMWATER
MANAGEMENT PLAN
VILLAGE OF COMBINED LOCKS
OUTAGAMIE COUNTY, WISCONSIN**

Source: Outagamie County, 2015-21.

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APPENDIX C

Public Education & Outreach

DRAFT WEB PAGE
VILLAGE OF COMBINED LOCKS

Stormwater Pollutants

When it rains or snow melts, stormwater runoff flows across the surface of streets, parking lots, driveways, sidewalks, roofs, lawns, and other surfaces. As the water flows, stormwater runoff collects and carries away pollutants such as sediment, fertilizer, pesticides, grass clippings, leaf debris, litter, pet waste, soap, motor oil, and antifreeze. Some pollutants are partially removed by pollutant reduction practices, such as wet detention ponds. Other pollutants are not reduced before discharging into local streams, rivers, and lakes.



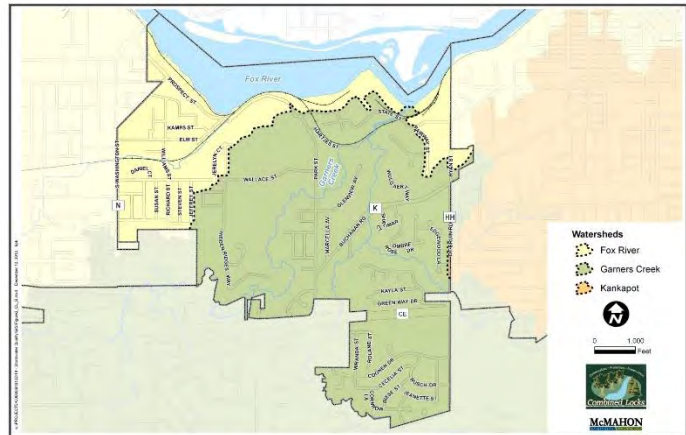
How Can I Help Reduce Stormwater Pollutants?

Stormwater pollution occurs from a wide variety of activities. Each of us can contribute to the problem without fully realizing. You can help reduce pollution by keeping potential pollutants away from storm drains, ditches, and waterways. Actions that landowners and businesses can take to help reduce the amount of stormwater pollutants discharged into local water bodies are described in the following materials:

- Pet Waste [Topic 2 \(Good-Dog-Good-Owner.pdf\)](#)
- Kids Can Help Too [Topic 3 \(Kids-can-help-too.pdf\)](#)
- Vehicle Washing [Topic 2 \(Vehicle-Maintenance.pdf\)](#)
- Lawn Care & Fertilizers [Topic 3 \(The-Perfect-Lawn.pdf\)](#)
- Leaves & Yard Waste [Topic 3 \(Leave-Your-Leaves-on-Land.pdf\)](#)
- Residential Infiltration [Topic 5 \(The-Perfect-Landscape-7-9-19.pdf\)](#)
- Streams & Shorelines [Topic 4 \(Restore-Your-Shore-extended-margins.pdf\)](#)
- Green Infrastructure [Topic 6 & 8 \(Green_Infrastructure_brochure_final.pdf\)](#)
- Construction [Topic 6 \(Construction-BMPs-Erosion-Sediment-Control.pdf\)](#)
- Household Waste [Topic 2 \(Household-Hazardous-Waste.pdf\)](#)
- Pool / Spa Discharge [Topic 1 \(Pool-Spa-Discharge.pdf\)](#)
- Power Washing [Topic 1 \(Power-Washing.pdf\)](#)
- Carpet Cleaning [Topic 1 & 7 \(Carpet-Cleaning.pdf\)](#)

Stormwater Pollutants Are Regulated in the Village

The U.S. Environmental Protection Agency (EPA) and Wisconsin Department of Natural Resources (DNR) require the Village to operate its stormwater system in conformance with the WPDES Municipal Stormwater Discharge Permit. The purpose of the MS4 Permit is to regulate and reduce pollutants discharged into local water bodies. The Village discharges into the Fox River and Garners Creek. Each year, the Village submits an annual report to the Wisconsin DNR, which summarizes its permit activities from the prior calendar year. A copy of the Village's most recent MS4 Annual Report is provided below.



- Village's 2020 MS4 Annual Report

In 2012, the EPA approved a Total Maximum Daily Load (TMDL) or "pollution diet" for the Fox River and Garners Creek. The TMDL requires the Village and other local municipalities to develop programs and construct improvements in order to reduce discharges of sediment and phosphorus into the Fox River and Garners Creek, with the goal of improving water quality. As part of the process, the Wisconsin DNR requires each regulated municipality to develop a TMDL Action Plan to reduce pollutants in urban stormwater runoff, including the Village. For additional information on Wisconsin's TMDL process and the TMDL report for the Lower Fox River Basin, please visit the following DNR webpage link.

- <https://dnr.wisconsin.gov/topic/TMDLs/TMDLReports.html>



**Renew
Our Waters**
Every choice counts.

GOOD DOG, GOOD OWNER

You can be a responsible pet owner and protect our waters.

Your dog brings a lot of joy to your life. Enjoying your four legged friend doesn't need to come at the price of clean water. We can have both. But to make it happen, we all need to think a little differently.

MORE TO WASTE THAN MEETS THE EYE

Pet waste is not only an unpleasant find on a yard or sidewalk, it carries bacteria that causes beach closings in the summer.

Pet waste is not only an unpleasant find on yard or sidewalk, it carries bacteria that make beach closing necessary in the summer.

Campylobacteriosis and salmonellosis are often the cause of the "24-hour bug". They're transferred through fecal material from an infected person or animal.

Toxoplasmosis is carried by a single-cell parasite that lives in infected animal feces (typically cats). In pregnant women, it can pass through the umbilical cord to the unborn fetus, causing serious abnormalities.

WASTE DISPOSAL

Prevent bacteria in our streams by carrying small plastic bags when walking your dog. Collect droppings, tie a knot in the bag, and dispose of it properly. Do not throw pet waste down the sewer.

At home, pick up pet waste often. Even waste in your backyard can pollute local waterways. You can flush the waste down the toilet, put it in your trash can (be sure to check your local ordinances first!) or bury it in your yard.

Stormwater is rain or snowmelt and water from things people do, like overwatering the lawn. As water makes its way to the storm drain it picks up pollutants like oil from car leaks and bacteria from pet waste. When we choose products carefully and dispose of products properly, we can greatly reduce the amount of pollution that enters our local waters through runoff.

Untreated runoff is the biggest threat to our nation's water quality, according to the U.S. Environmental Protection Agency. Let's make the small, important changes that will reduce that threat and improve water quality and our lives!

Realize

What touches the ground enters the water



Renew Our Waters

Every choice counts.

KIDS CAN HELP TOO!

There are lots of things kids can do to help keep our rivers and lakes clean.

Have you ever thought about where rain goes after it lands on your house or driveway? Rain drops roll down your driveway and into the road. Once in the road, rain enters the storm drain - the grates that are in city streets.

Do you know what happens to things that enter the storm drain? Water or any thing else that enters those drains travel through pipes that empty right into our rivers and lakes!

You can help clean up our local rivers and lakes by making sure that only rain goes down the storm drain.

You can help clean up our local rivers and lakes by making sure that only rain goes down the storm drain!

CLEAN UP AFTER YOUR PET!

Pet waste is not only gross to find in yards or on sidewalks, it carries bacteria and germs that cause beach closings in the summer. To keep our waters clean, pick up after your pet often. Even waste in your backyard can pollute local waters. Bring a small plastic bag with you on walks and pick up after your dog.

HELP WITH THE YARD

Grass clippings and leaves from our yards are causing our lakes and rivers to turn green! You can help by sweeping grass clippings off your driveway and sidewalk back onto your lawn after your mom or dad mows the grass. You can also help your dad and mom rake up the leaves in your yard in the fall!

GET SOME EXERCISE

You may have heard that cars and trucks can cause air pollution but did you know that driving cars and trucks can also affect water? Oil, grease and dirt that fall from our vehicles when we are driving are washed into storm drains and into our rivers and lakes. One way to help clean up water is to drive less. Instead of asking for a ride, ask your mom or dad if you can walk or bike with them to a friend's house or the park!

**Most importantly, never put anything down the storm drain. The fish and frogs and especially your friends don't like to swim with garbage!
Only rain should go into the drain!**

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VEHICLE MAINTENANCE

Get where you need to go and minimize the impact on local waters.

We don't think much of jumping in the car and running to the store. You may have heard that air quality is affected by vehicle emissions but have you realized that our quick trips affect our area waters? Read these tips. Help us change one habit at a time so that we can enjoy good fishing, swimming, paddling and waterskiing when our running about is done.

WASHING

When you wash a car in a driveway or street, wash water flows into the storm sewer system and directly to local rivers - along with dirt, emissions and detergent.

When you're tempted to put off repairs or the six-month maintenance check, think again. When your car performs better, our waters fare better, too.

You can avoid this by using a commercial car wash, where systems direct wash water to the local wastewater treatment facility and oil, grease, detergent, sand, and grime are removed.

If you must wash your car at home, use biodegradable soap, wash it on your lawn

or on other unpaved areas to keep runoff out of storm sewers or ditches, and dispose of leftover washwater in the toilet or sink.

MAINTENANCE

From time to time, we've all noticed an oily sheen on water in streets and parking lots. It's the result of small leaks, accumulated residues, and fuel overfills from our cars. When a vehicle is maintained, fewer leaks spill onto streets and highways and fewer contaminants enter our streams.

So when you're tempted to put off repairs or the six-month maintenance check, think again. When your car performs better, our waters fare better, too.

MINDFUL DRIVING

We all know air quality is affected by vehicle emissions. But did you know emissions can also affect water quality? Tiny particles emitted from tail pipes settle on roadways, wash into storm sewer systems, then flow into rivers and streams. Their impact may seem small, but when you consider all the vehicles traveling on our roads, the impact is clear.

Street sweeping can minimize the impact of this pollution but rain and melting snow still carry contaminants to storm sewers. One way we can reduce this pollution is to drive less. Plan trips so you accomplish several things at once. Use public transportation. Even better, walk or ride your bike.

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THE PERFECT LAWN

You can create a beautiful outdoor space and protect our waters.

A gorgeous home landscape doesn't need to come at the price of clean lakes and streams. We can have both. But to make it happen, we all need to think a little differently. Read these tips. Post this sheet in your garage near the lawnmower and garden tools. This will help us change one habit at a time, so we have good fishing, swimming, paddling and waterskiing when the work is done.

MOWING

Mow often, when the grass is 3.5 inches or shorter. Set your mower blade at 2.5 inches and let cuttings fall. Cuttings keep the soil moist and restore nutrients over time. Any mower works, but a mulching mower shreds grass finely, so you don't have to be as careful about grass height.

A healthy, mulched lawn outcompetes weeds for light, nutrients, and water. In areas where it's hot, consider prairie grasses or wild flowers instead of turf grass.

Make an effort not to blow cuttings onto pavement. If you do, sweep them up, then lay them around the roots of shrubs or vegetable plants where they help retain moisture.

If grass gets long and you decide to collect clippings, put them in a pile with other yard waste and let them decompose. Turn the pile now and

then, and in 3-6 months you'll have rich organic matter that will make almost anything in your yard grow better.

FERTILIZING & WEED CONTROL

Chemicals and weed killers are not needed for a healthy lawn, and they're one of the main reasons we have green algae in our lakes and streams.

Think before you buy. Get a soil test so you know if your lawn needs more nutrients. Mulch to keep the lawn healthy, so it can outcompete weeds for light, nutrients and water. If you must fertilize, do it in the fall. Sweep up fertilizer that falls in the street and dispose of it properly—water and fertilizer that go into the street go directly to the river or lake.

WATERING

When watering is needed, use a sprinkler that shoots low to the ground. Sprinkle soil, not the street. Shape soil so water will sink in, rather than run off. When you mow, mulch cuttings to retain moisture.

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LEAVE YOUR LEAVES ON LAND

Fall leaves provide beautiful color on trees, but in local waters they contribute to algal blooms. Leaves are a leading contributor of phosphorus in our waters.

Properly cleaning up your yard in the fall will help keep our local waters clean too! Read these tips. Post this sheet in your garage near your rakes. Working together to keep leaves out of the storm drain and out of local waters will help keep green on the land and out of the water.

KEEP YOUR LEAVES ON YOUR PROPERTY

A great way to make sure leaves do not end up in local waters is to keep them on your property!

Mulch leaves in place by making several passes over the leaves with a mulching mower. This will keep leaves on your lawn and provide it with nutrients it needs for healthy grass next spring.

Collect mulched leaves and spread them in garden beds or under shrubs. Leaves provide valuable protection for plants through the winter and also provide nutrients for spring growth.

Composting is recycling your lawn trimmings and turning them into a valuable resource for your garden or houseplants!

COMPOSTING

Composting is recycling your lawn trimmings and turning them into a rich soil, known as compost - a valuable resource for your garden or houseplants.

Cold composting requires little

maintenance but can take up to 2 years to complete. To create a cold compost pile, mix non-woody yard wastes and let them sit.

Hot composting requires regular maintenance such as turning and watering, but can create compost in typically 1-3 months time. To create a hot compost pile, mix equal amounts of high nitrogen "greens" (wet and soft materials such as grass clippings) and high-carbon "browns" (dry and woody materials such as dead leaves) with 10% bulky materials such as wood chips. The mix should remain moist but not wet and should be turned often.

More information on Composting can be found on the internet.

RAKING & COLLECTION

If you decide to collect your leaves for removal from your yard, follow your community leaf collection policies and schedules. Put a tarp over leaf piles between pick-up times to prevent them from blowing away. Remove leaves and debris from the gutters and storm sewer inlets.

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Northeast Wisconsin Stormwater Consortium

P.O. Box 1861 Appleton, WI 54912 | 920.915-5767

Renewourwaters.org



Renew Our Waters

Every choice counts.

THE PERFECT LANDSCAPE

You can create a beautiful outdoor space and protect our waters.

A gorgeous home landscape doesn't need to come at the price of clean lakes and streams. We can have both. But to make it happen, we all need to think a little differently.

LESS HARD SURFACE

The more concrete or blacktop your property has, the more water will run off the property and into storm drains and ditches. Seventy-five percent more rain water

75% more rain water sinks into the ground in a natural vs. developed area.

sinks into the ground in a natural versus developed area. Stormwater that flows from developed areas also carries oil, grease, fertilizer, bacteria, exhaust particles, etc. Planning for minimal hard surface on your property makes good sense. Consider the amount of runoff that will be generated by roofs, pavement and sidewalks. Focus on

natural plantings to slow water so that it filters into the ground rather than runs off. Where needed, install pavement such as open bricks that allow water to sink into the ground.

Minimizing runoff reduces damage to your property and others down stream. It may also save you money if you live in a city that has a stormwater utility, since storm water utility fees are based on the amount of runoff your property sends to the storm sewer system.

RAIN GARDENS

Rain gardens are slight depressions in a yard that act as receiving areas for rain water that runs off your roof and downspouts. Rain gardens capture rainwater before it picks up oil, grease, fertilizer, pet waste or other contaminants. Rain gardens replenish groundwater by infiltrating runoff, rather than passing it into the stormwater system. Often they're planted with native plants that thrive on moisture, but can withstand a dry period, too.

RAIN BARRELS

A rain barrel captures water that flows from a roof through downspouts. Commonly, the rain barrel is a 55-gallon drum designed specifically to hold water without creating a mosquito breeding habitat. A tight fitting lid, seal for the downspout, and filtered overflow valve allow overflow water to move away from the rain barrel.

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Renew Our Waters

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Restore Your Shore

Redefining the “perfect” shoreline will provide beauty and color to the shoreland, increase habitat for wildlife and ultimately increase water quality.

The number of people living near and using Northeast Wisconsin’s waters is at an all time high and continues to increase. You may have purchased your water front property because you enjoy fishing, swimming, boating, bird watching or simply unwinding by dangling your feet in the water. As more and more of us buy or build homes on the shores of our lakes and rivers, we threaten the very qualities that brought us there.

“PERFECT SHORELAND LOT” - NOT SO PERFECT

Decades of traditional lawn maintenance have led to ideas about what the “perfect shoreland lot” should be. Large lawns mowed all the way to the water’s edges and no aquatic vegetation are seen at properties on lakes and rivers across Wisconsin. Creating this “perfect shoreland lot” has led to a serious loss of natural shoreland habitat and poor water quality on thousands of lakes.

To protect our waters and the recreation we enjoy, we must redefine our definition of the perfect shoreland lot and begin to landscape for wildlife and water quality.

WHAT’S THE PROBLEM?

Plants that were a natural part of the water’s edge prior to development provided more than beauty and color to the shoreland. Plants, both living and dead, provided habitat for wildlife both in and out of the water. Water quality is improved when the plant and animal community on the water’s edge thrives. Native plants on the shore and in the water filter pollutants entering the water. By altering the water’s edge of our lakes and rivers, we have destroyed habitat, disrupted the natural balance and decreased water quality.

BRINGING “NATURAL” BACK TO NATURE

To protect our waters and the recreation we enjoy we need to redefine our definition of the perfect shoreland lot and begin to landscape for wildlife and water quality. Create a buffer zone, which is a natural strip of vegetation along your property’s frontage. The goal of a bufferstrip is to restore the shoreline, both on shore and in the water, with the vegetation that occurred there naturally. This includes, trees, shrubs, wildflowers, shoreline plants, grasses and submersed aquatic vegetation. For more information on shoreland restoration visit our website RenewOurWaters.org.

Northeast Wisconsin Stormwater Consortium

P.O. Box 1861 Appleton, WI 54912 | 920.858.4246

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RenewOurWaters.org



Different
SHADES
of *green*



GREEN INFRASTRUCTURE RESEARCH
at the U.S. Environmental Protection Agency

The Problem with *Water Runoff*

Conventional stormwater infrastructure, or gray infrastructure, is largely designed to move stormwater away from urban areas through pipes and conduit. Runoff from these surfaces can overwhelm sewer systems and end up contaminating local waterways. When stormwater runs off impervious streets, parking lots, sidewalks, and rooftops, it moves pollutants such as motor oil, lawn chemicals, sediments, and pet waste to streams, rivers, and lakes. Runoff flows can also cause erosion and flooding that can damage property, infrastructure, and wildlife habitat. In addition to runoff problems, impervious surfaces also prevent water from penetrating the soil and recharging groundwater supplies.



What is *Green Infrastructure*?

Green infrastructure uses plants, soils, landscape design, and engineered techniques to retain, absorb, and reduce polluted stormwater runoff. Green infrastructure prevents or reduces the amount of runoff that flows directly into storm drains and can be a vital tool for cities to address combined sewer overflows and nutrient impairment. It provides many environmental, social, and economic benefits that promote urban livability, such as improved surface water quality, water conservation, and improved aesthetic and property value. EPA is developing innovative tools for communities to use for planning and installing green infrastructure for achieving its many benefits.





Types of *Green Infrastructure Practices*

Permeable Pavements are porous paved surfaces that allow rain to infiltrate into soils. Permeable pavements can be constructed from various materials such as pervious concrete, porous asphalt, and permeable interlocking pavers.

Rain Gardens are depressed areas in the landscape, planted with grasses, flowers, and other plants, that collect rain water from a roof, driveway, or street and allows it to infiltrate into the ground. Rain gardens can also help filter out pollutants in runoff and provide food and shelter for butterflies, song birds, and other wildlife. More complex rain gardens with drainage systems and amended soils are often referred to as bioretention cells.

Bioretention Cells (or Bioswales) are depressions that contain vegetation grown in an engineered soil mixture placed above a gravel drainage bed which slow, infiltrate, and filter runoff. They provide storage, infiltration, and evaporation of both direct rainfall and runoff captured from surrounding areas. As linear features, bioretention cells are particularly well suited to being placed along streets and parking lots.

Vegetative Swales are channels or depressed areas with sloping sides covered with grass and other vegetation. They slow down the conveyance of collected runoff and allow it more time to infiltrate the native soil beneath it.

Infiltration Trenches are narrow ditches filled with gravel that intercept runoff from upslope impervious areas. They provide storage volume and additional time for captured runoff to infiltrate the native soil below.

Green Roofs are a variation of a bioretention cell. Green roofs have a soil layer laying atop a special drainage mat material that conveys excess percolated rainfall off of the roof. They contain vegetation that enable rainfall infiltration and evapotranspiration of stored water. Green roofs are particularly cost-effective in dense urban areas where land values are high and on large industrial or office buildings where stormwater management costs are likely to be high.

Planter Boxes are structures with vertical walls and open or closed bottoms filled with gravel, soil, and vegetation that collect and absorb runoff. They are ideal for space-limited sites in dense urban areas.

Rainwater Harvesting systems, such as rain barrels and cisterns, collect and store rainfall for later use. These systems provide a renewable water supply and can slow and reduce runoff. Rainwater harvesting can reduce demands on increasingly limited water supplies in arid regions.

Rooftop (Downspout) Disconnection allows rooftop rainwater to discharge to pervious landscaped areas and lawns instead of directly into storm drains. You can use it to store stormwater and/or allow stormwater to infiltrate into the soil. Downspout disconnection could be especially beneficial to cities with combined sewer systems.

Urban Tree Canopies intercept rain in their leaves and branches, thereby reducing and slowing stormwater runoff.





Integrating *Green Infrastructure Practices*

Green Parking integrates green infrastructure elements such as permeable pavements and rain gardens into a parking lot design. Such structures manage stormwater on site, mitigate urban heat islands, and create a more pedestrian-accessible environment.

Green Streets and Alleys integrate green infrastructure elements such as bioswales, planter boxes, and trees into street and alley design. Green streets and alleys are designed to store, infiltrate, and evaporate and transpire stormwater while adding aesthetics to landscapes.

Protecting Existing Green Spaces

In addition to green infrastructure practices, communities can also address water quality and flooding impacts of urban stormwater by protecting open spaces and sensitive natural areas within and adjacent to a city while providing recreational opportunities for city residents. Natural areas that should be a focus of these land conservation efforts include riparian areas, wetlands, and steep hillsides.



Environmental and Economic Benefits of Green Infrastructure

Introducing green infrastructure to communities has many environmental and economic benefits. Green infrastructure can be a cost-effective approach to improve water quality and help communities stretch their infrastructure investments further by providing multiple environmental, economic, and community benefits.

Examples of environmental benefits:

- Improved water quality and increased water supply
- Reduced flooding
- Improved air quality
- Greater resilience to climate change
- Increased habitat improvement and connectivity
- Healthier communities

Examples of economic benefits:

- Increased property values
- Reduced filtration costs
- Infrastructure cost savings
- Reduced private and public costs



Green Infrastructure Research

EPA's green infrastructure research supports the increased adoption of both constructed and natural green infrastructure into communities.

Models and decision support tools

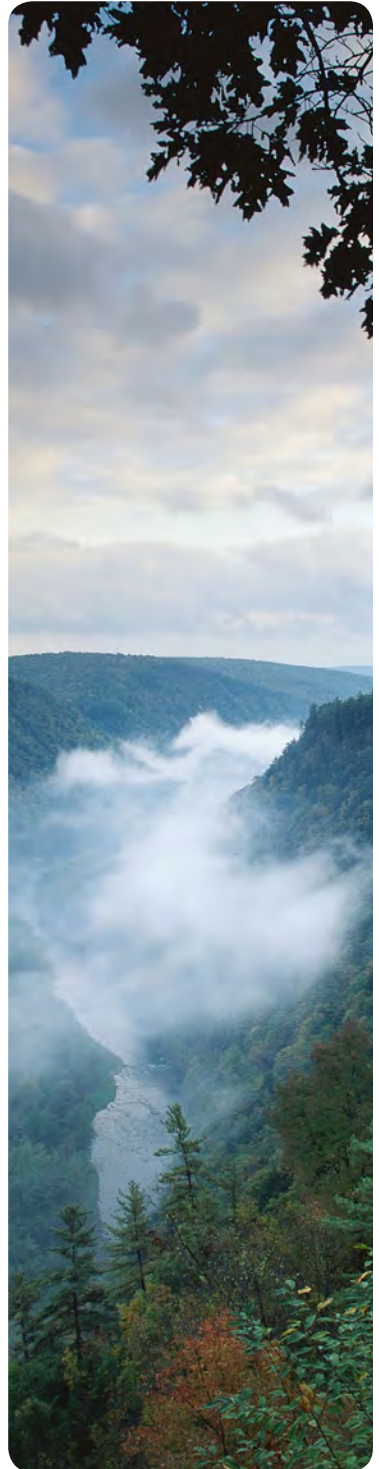
EPA researchers are analyzing and refining existing models and tools designed to increase green infrastructure practices in communities. This research will support decision-makers and allow further inclusion of green infrastructure practices into management plans that support sustainability goals.

Impacts of green infrastructure on groundwater resources

EPA is researching the impacts of green infrastructure on groundwater resources to provide the basis for long-term research on the efficacy of green infrastructure as a best management practice for water resources enhancement, particularly in arid and semiarid regions.

Assessment of risks posed to natural wetlands used for wastewater and stormwater management

EPA is reviewing the impacts of wastewater and stormwater on natural wetlands and riparian areas. This research will help guide decisions by regions, states, tribes, and local municipalities when incorporating green infrastructure with natural wetlands and riparian areas as part of stormwater and wastewater management plans.





EPA Research *in Action*

Urban Soil Assessment

Sewer system overflows can put cities in violation of the Clean Water Act. EPA researchers developed soil survey assessment protocol to identify the urban imprint on major US soils. The research helps urban planners, land managers, and sewer districts understand the potential for soils to support green infrastructure applications. It provides an overview of urban soils and offers recommendations for how soils can be rehabilitated to support green infrastructure or urban agriculture.

Transforming Cleveland's Vacant Lots

Based on technical guidance from EPA experts, Cleveland, Ohio has incorporated a green infrastructure pilot program into their CSO control plan. This program takes advantage of the city's excess vacant land, turning that land into green spaces that can soak up stormwater and keep excess water out of the sewer system.

The transformation of urban vacant lots into park-like gardens that catch stormwater runoff not only helps remedy the CSO problem, but also improves the social and economic fabric of neighborhoods lacking green spaces.

Daylighting Streams to Improve Water Quality

Researchers compared the effectiveness of buried streams (streams that are paved over or routed into underground pipes during urban development) and open-air or daylighted streams at removing harmful nitrogen. The research

shows daylighted streams are more effective at removing nitrates due to interactions with plants and other organic matter that feed on nitrates. Daylighting streams could prove to be a sustainable method for removing nitrogen and improving water quality.

Green Infrastructure at Fort Riley

Researchers with EPA's Net Zero Program are working with the U.S. Army, U.S. Army Corps of Engineers, Kansas Unified School District 475, and other partners to demonstrate and assess green infrastructure technologies and performance at Fort Riley, an Army base in Kansas. EPA researchers are testing a permeable parking lot at Seitz Elementary School, which is located on Fort Riley. Researchers will measure how much rainwater passes through the pavement, how fast the permeable pavement clogs with debris, and changes in groundwater chemistry. They are also monitoring the school's existing stormwater-capture-use system, which is a set of storage tanks that capture rain runoff. For this part of the study, researchers are measuring the amount of rooftop runoff that is captured and the chemistry of the water stored in the tanks.

Cincinnati Green Infrastructure Efforts

The Lick Run stream in Cincinnati, Ohio is a part of a combined sewer system that spills its polluted mixture into the nearby Mill Creek during storm events. EPA researchers collaborated with the local sewer district to monitor and adjust several green infrastructure early success projects that are designed to reduce the amount of stormwater entering combined sewers and put it to good use elsewhere.



Images above: vacant lot before and after transformation to green space and pervious pavement.

EPA *Models and Tools*

EPA is developing innovative tools, technologies, and strategies for communities to manage water resources with green infrastructure to move toward more natural hydrology and increased resilience to future changes such as climate and extreme events.

Green Infrastructure Wizard (GIWiz)

GIWiz is an interactive web application that connects communities to EPA green infrastructure tools and resources. GIWiz provides users with customized reports containing EPA tools and resources they select, direct links, and overview information about each.

Watershed Management Optimization Support Tool (WMOST)

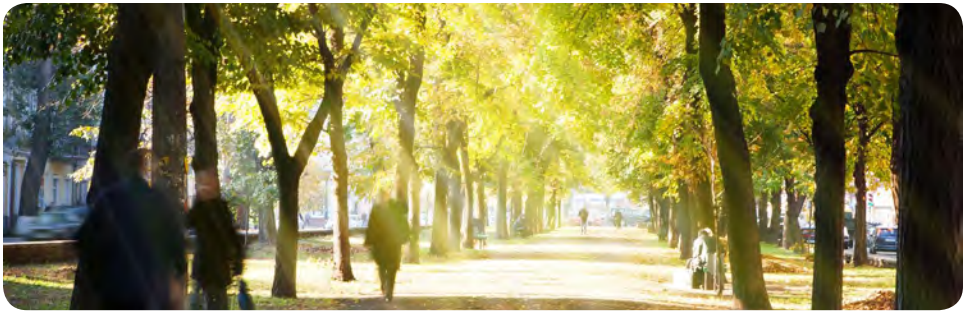
WMOST is a software application designed to facilitate integrated water resource management across wet and dry climate regions. The tool allows water-resource managers and planners to screen a wide range of practices, including low impact development or green infrastructure, across a watershed for cost-effectiveness as well as environmental and economic sustainability.

Visualizing Ecosystems for Land Management Assessment (VELMA)

VELMA is a computer software eco-hydrological model used to quantify the effectiveness of natural and engineered green infrastructure management practices for reducing nonpoint sources of nutrients and contaminants in streams, estuaries, and groundwater.

Storm Water Management Model (SWMM)

SWMM models hydrology and hydraulics to simulate the movement of water through the landscape and into and through sewer systems. A green infrastructure module was added to SWMM in 2010 to simulate the integration of green infrastructure practices, ranging from green roofs to permeable parking lots, into a community's stormwater management plan. SWMM is widely used throughout the world and considered the "gold standard" in the design of urban wet-weather flow pollution abatement approaches, and allows users to include any combination of low impact development/green infrastructure controls to determine their effectiveness in managing stormwater and sewer overflows.



SWMM Climate Adjustment Tool (SWMM-CAT)

SWMM was updated to include a software utility that allows future climate change projections to be incorporated into modeling. SWMM-CAT provides a set of location-specific adjustments derived from World Climate Research Programme global climate change models. SWMM-CAT accepts monthly adjustment factors for climate-related variables that could represent the potential impact of future climate changes.

National Stormwater Calculator (SWC)

SWC is a desktop application that estimates the annual amount of stormwater runoff from a specific location in the United States (including Puerto Rico), based on local soil conditions, land cover, and historic rainfall records. It is used to inform site developers on how well they can meet a desired stormwater retention target with and without the use of green infrastructure. It also allows users to consider how runoff may vary based both on historical weather and potential future climate. SWC is a resource for all Rainwater Management Credits in LEED by the U.S. Green Building Council for all project types in all rating systems.

Greening EPA

EPA has buildings in over 40 locations across the country that are committed to promoting the Agency's mission to protect human health and the natural environment by incorporating sustainability wherever possible. To support this commitment and provide an opportunity for needed research, EPA constructed an experimental parking lot with rain gardens as part of a long-term research project to quantify the effects of different permeable surfaces on stormwater runoff and the ability of rain gardens to accept, store and infiltrate stormwater.

Additional Information:

Green Infrastructure Research:

<https://www.epa.gov/water-research/green-infrastructure-research>

Green Infrastructure Overview:

<https://www.epa.gov/green-infrastructure>

Greening EPA:

<https://www.epa.gov/greeningepa>

Contact:

EPA's Office of Research & Development, Safe and Sustainable Water Resources Research Program, sswr@epa.gov

Stormwater and the Construction Industry

Protect Natural Features



Bad



Good

- Minimize clearing.
- Minimize the amount of exposed soil.
- Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
- Protect streams, stream buffers, wild woodlands, wetlands, or other sensitive areas from any disturbance or construction activity by fencing or otherwise clearly marking these areas.

Construction Phasing



Bad



Good

- Sequence construction activities so that the soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Install key sediment control practices before site grading begins.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the land has been graded to its final contour.

Vegetative Buffers



Bad



Good

- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by mowing or replanting periodically to ensure their effectiveness.

Silt Fencing



Bad



Good

- Inspect and maintain silt fences after each rainstorm.
- Make sure the bottom of the silt fence is buried in the ground.
- Securely attach the material to the stakes.
- Don't place silt fences in the middle of a waterway or use them as a check dam.
- Make sure stormwater is not flowing around the silt fence.

Site Stabilization



Bad



Good

- Vegetate, mulch, or otherwise stabilize all exposed areas as soon as land alterations have been completed.

Maintain your BMPs!

www.epa.gov/npdes/menuofbmps

Construction Entrances



Bad



Good

- Remove mud and dirt from the tires of construction vehicles before they enter a paved roadway.
- Properly size entrance BMPs for all anticipated vehicles.
- Make sure that the construction entrance does not become buried in soil.

Slopes



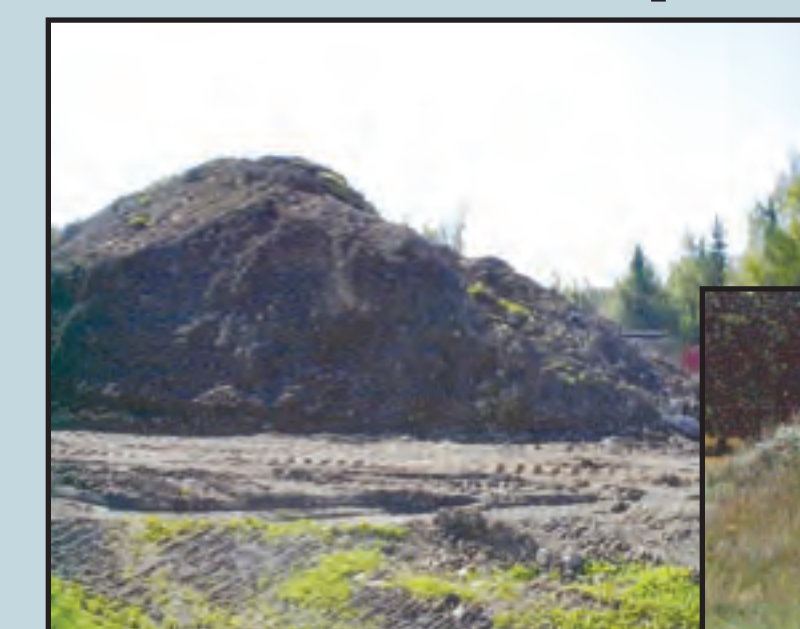
Bad



Good

- Rough grade or terrace slopes.
- Break up long slopes with sediment barriers, or under drain, or divert stormwater away from slopes.

Dirt Stockpiles



Bad



Good

- Cover or seed all dirt stockpiles.

Storm Drain Inlet Protection



Bad



Good

- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the rock size is appropriate (usually 1 to 2 inches in diameter).
- If you use inlet filters, maintain them regularly.

Stormwater and the Construction Industry

Planning and Implementing Erosion and Sediment Control Practices

The construction industry is a critical participant in the nation's efforts to protect streams, rivers, lakes, wetlands, and oceans. Through the use of best management practices (BMPs), construction site operators are the key defense against erosion and sedimentation.

As stormwater flows over a construction site, it picks up pollutants like sediment, debris, and chemicals. High volumes of stormwater can also cause stream bank erosion, and destroy downstream aquatic habitat. Preventing soil erosion and sedimentation is an important responsibility at all construction sites.

In addition to the environmental impact, uncontrolled erosion can have a significant financial impact on a construction project. It costs money and time to repair gullies, replace vegetation, clean sediment-clogged storm drains, replace poorly installed BMPs, and mitigate damage to other people's property or to natural resources.

Best Management Practice (BMP)

A BMP is a method used to prevent or control stormwater runoff and the discharge of pollutants, including sediment, into local waterbodies. Silt fences, inlet protection, and site-stabilization techniques are typical BMPs on a construction site.

Operator

An operator is someone who has control over and the ability to modify construction plans and specifications (e.g. owner, general contractor)

or

Someone who has control over the day-to-day operations at a site (e.g., owner, general contractor) that are necessary to ensure compliance with the permit requirements. It is the responsibility of a construction site owner or operator to contain stormwater runoff and prevent erosion during all stages of a project.

There may be more than one person at a site who meets these definitions and must apply for permit coverage. (States may have different definitions of the term "operator.")

So what's being done about polluted runoff?

The Clean Water Act includes the National Pollutant Discharge Elimination System (NPDES) permitting program. As of January 2003, 44 states and territories are authorized to issue NPDES stormwater permits. If your state isn't authorized to operate the NPDES stormwater permit program, EPA issues the permits. Permits vary from state to state, so contact your state or EPA for specific information. Your permitting authority has specific information on your state's NPDES stormwater permit program. In general, construction permits require construction operators to do all of the following:

- Develop and implement a stormwater pollution prevention plan
- Submit a permit application or notice of intent (NOI)
- Comply with the permit, including maintaining BMPs and inspecting the site

Under the NPDES program, construction activities that disturb 1 or more acres are required to obtain stormwater permit coverage. States have different names for the plans that construction operators must develop, such as

- Stormwater pollution prevention plan
- Erosion and sediment control plan
- Erosion control and stormwater management plan
- Stormwater management plan
- Water pollution control plan
- Pollution prevention plan

This document uses the term "*Plan*."

I think I need a permit... Where do I start?

All land-disturbing activities, including clearing, grading, and excavation, that disturb **1 or more acres** are required to be covered under a state or EPA-issued NPDES construction stormwater permit **prior to land disturbance**. Permit requirements vary by state. Begin by researching the specific requirements in your state. You might already be subject to local erosion and sediment control requirements, but that doesn't release you from the requirements of the NPDES program at the state or EPA level. Although you must comply with both sets of requirements, in most cases they have been designed to be complementary. Contact your permitting authority to find out exactly what you need to do. A good place to start your search is the Construction Industry Compliance Assistance web site at <http://www.envcap.org/cica>.

The NPDES permit requirements include small construction activities that are part of a larger common plan of development or sale, such as a single lot within a larger subdivision. For developments with multiple operators, all operators must have permit coverage for their individual parts of the larger development, no matter how large or small each operation happens to be. When there are multiple operators at one site, they're encouraged to develop and share one comprehensive Plan and obtain permit coverage as co-permittees.

The **owner or operator** of the construction site is responsible for complying with the requirements of the permit. Responsibilities include developing a Plan, obtaining permit coverage, implementing BMPs, and stabilizing the site at the end of the construction activity.

Determine your eligibility

All construction activity that disturbs 1 or more acres of land, as well as activity that disturbs less than 1 acre but is part of a larger common plan of development, must obtain permit coverage.

Read and understand your stormwater permit requirements

Get a copy of the permit for construction activities and a permit application (or notice of intent form) from your state or EPA permitting authority.

Develop a Plan

Most states do not require you to submit your Plan. However, you do need to keep the Plan on site. If that's impractical, you may post a notice that tells where the Plan is kept so it can be accessed by the permitting authority and other interested parties.

You'll need to post a copy of your completed application on site. Put it in a place where the public can see it so they'll know your site is covered by an NPDES permit!

Apply for permit coverage

Once you understand your permit requirements and have developed a Plan, you can submit a stormwater permit application (or notice of intent) to your permitting authority. This must be done before beginning any land disturbance on the site. Some states require a few days of lead time, so check with your permitting authority. Once you've submitted the application, you must satisfy the conditions of the permit.

Implement the Plan

Be prepared to implement the BMPs in your Plan before construction begins. Ensure that BMPs are properly maintained, and upgrade and repair them as necessary.

Developing and Implementing a Plan

You must have a Plan that includes erosion and sediment control and pollution prevention BMPs. These Plans require

- Advance planning and training to ensure proper implementation of the BMPs
- Erosion and sediment control BMPs in place until the area is permanently stabilized
- Pollution prevention BMPs to keep the construction site "clean"
- Regular inspection of the construction site to ensure proper installation and maintenance of BMPs

Fortunately, the practices and measures that must be included in your Plan are already part of the standard operating procedures at many construction sites.

Six steps are associated with developing and implementing a stormwater Plan. There's a wealth of information available on developing pollution prevention plans. Please contact your permitting authority for help in finding additional guidance materials, or visit www.epa.gov/npdes/stormwater. A sample construction plan is available at www.epa.gov/npdes/pubs/sample_swppp.pdf.

1. Site Evaluation and Design Development

- Collect site information
- Develop site plan design
- Prepare pollution prevention site map

The first step in preparing a Plan is to define the characteristics of the site and the type of construction that will occur. This involves collecting site information, identifying natural features that should be protected, developing a site plan design, describing the nature of the construction activity, and preparing a pollution prevention site map.

2. Assessment

- Measure the site area
- Determine the drainage areas
- Calculate the runoff coefficient

The next step is assessing the impact the project will have on stormwater runoff. Determine the drainage areas and estimate the runoff amounts and velocities. For more information on calculating the runoff coefficient, go to www.epa.gov/npdes/pubs/chap02_conguide.pdf, page 11.

3. Control Selection and Plan Design

- Review and incorporate state or local requirements
- Select erosion and sediment controls
- Select other controls
- Select stormwater management controls
- Indicate the location of controls on the site map
- Prepare an inspection and maintenance plan
- Coordinate controls with construction activity
- Prepare sequence of major activities

In the third step you'll actually document your procedures to prevent and control polluted stormwater runoff. You must delineate areas that will not be disturbed, including critical natural areas like streamside areas, floodplains, and trees. You must also identify the measures (or BMPs) you'll use to protect these areas.

Soil erosion control tips...

- Design the site to infiltrate stormwater into the ground and to keep it out of storm drains. Eliminate or minimize the use of stormwater collection and conveyance systems while maximizing the use of stormwater infiltration and bioretention techniques.
- Minimize the amount of exposed soil on site.
 - To the extent possible, plan the project in stages to minimize the amount of area that is bare and subject to erosion. The less soil exposed, the easier and cheaper it will be to control erosion.
 - Vegetate disturbed areas with permanent or temporary seeding immediately upon reaching final grade.
 - Vegetate or cover stockpiles that will not be used immediately.
- Reduce the velocity of stormwater both onto and away from the project area.
 - Interceptors, diversions, vegetated buffers, and check dams are a few of the BMPs that can be used to slow down stormwater as it travels across and away from the project site.
 - Diversion measures can also be used to direct flow away from exposed areas toward stable portions of the site.
 - Silt fences and other types of perimeter filters should never be used to reduce the velocity of runoff.
- Protect defined channels immediately with measures adequate to handle the storm flows expected.
 - Sod, geotextile, natural fiber, riprap, or other stabilization measures should be used to allow the channels to carry water without causing erosion. Use softer measures like geotextile or vegetation where possible to prevent downstream impacts.
- Keep sediment on site.
 - Place aggregate or stone at construction site vehicle exits to accommodate at least two tire revolutions of large construction vehicles. Much of the dirt on the tires will fall off before the vehicle gets to the street.
 - Regular street sweeping at the construction entrance will prevent dirt from entering storm drains. Do not hose paved areas.
 - Sediment traps and basins are temporary structures and should be used in conjunction with other measures to reduce the amount of erosion.
- Maintaining all BMPs is critical to ensure their effectiveness during the life of the project.
 - Regularly remove collected sediment from silt fences, berms, traps, and other BMPs.
 - Ensure that geotextiles and mulch remain in place until vegetation is well established.
 - Maintain fences that protect sensitive areas, silt fences, diversion structures, and other BMPs.

Other BMPs and Activities to Control Polluted Runoff

You'll need to select other controls to address potential pollutant sources on your site. Construction materials, debris, trash, fuel, paint, and stockpiles become pollution sources when it rains. Basic pollution prevention practices can significantly reduce the amount of pollution leaving construction sites. The following are some simple practices that should be included in the Plan and implemented on site:

- Keep potential sources of pollution out of the rain as practicable (e.g., inside a building, covered with plastic or tarps, or sealed tightly in a leak-proof container).
- Clearly identify a protected, lined area for concrete truck washouts. This area should be located away from streams, storm drain inlets, or ditches and should be cleaned out periodically.
- Park, refuel, and maintain vehicles and equipment in one area of the site to minimize the area exposed to possible spills and fuel storage. This area should be well away from streams, storm drain inlets, or ditches. Keep spill kits close by and clean up any spills or leaks immediately, including spills on pavement or earthen surfaces.
- Practice good housekeeping. Keep the construction site free of litter, construction debris, and leaking containers. Keep all waste in one area to minimize cleaning.
- Never hose down paved surfaces to clean dust, debris, or trash. This water could wash directly into storm drains or streams. Sweep up materials and dispose of them in the trash. Never bury trash or debris!
- Dispose of hazardous materials properly.

4. Certification and Notification

- Certify the Plan
- Submit permit application or notice of intent

Once the Plan has been developed, an authorized representative must sign it. Now is the time to submit the permit application or notice of intent. Your permit might require that the Plan be kept on site, so be sure to keep it available for the staff implementing the Plan.

Erosion and sedimentation control practices are only as good as their installation and maintenance.

5. Implementing and Maintaining a Plan

- Implement controls
- Inspect and maintain controls
- Update/change the Plan
- Report releases of hazardous materials

A Plan describes the practices and activities you'll use to prevent stormwater contamination and meet the NPDES permit requirements. Make sure that the Plan is implemented and that the Plan is updated as necessary to reflect changes on the site.

Erosion and sedimentation control practices are only as good as their installation and maintenance. Train the contractors that will install the BMPs and inspect immediately to ensure that the BMPs have been installed correctly.

Regularly inspect the BMPs (especially before and after rain events) and perform any necessary repairs or maintenance immediately. Many BMPs are designed to handle a limited amount of sediment. If not maintained, they'll become ineffective and a source of sediment pollution.

It's also important to keep records of BMP installation, implementation, and maintenance. Keep track of major grading activities that occur on the site, when construction activities cease (temporarily or permanently), and when a site is temporarily or permanently stabilized.

If construction plans change at any time, or if more appropriate BMPs are chosen for the site, update the Plan accordingly.

6. Completing the Project: Final Stabilization and Termination of the Permit

- Final stabilization
- Notice of Termination
- Record retention

Many states and EPA require a Notice of Termination (NOT) or other notification signifying that the construction activity is completed. An NOT is required when

- Final stabilization has been achieved on all portions of the site for which the permittee is responsible.

- Another operator has assumed control over all areas of the site that have not been finally stabilized. That operator would need to submit a new permit application to the permitting authority.

- For residential construction only, temporary stabilization of a lot has been completed prior to transference of ownership to the homeowner, with the homeowner being made aware of the need to perform final stabilization.

Permittees must keep a copy of their permit application and their Plan for at least 3 years following final stabilization. This period may be longer depending on state and local requirements.

Preconstruction Checklist

- A site description, including
 - Nature of the activity
 - Intended sequence of major construction activities
 - Total area of the site
 - Existing soil type and rainfall runoff data
- A site map with:
 - Drainage patterns
 - Approximate slopes after major grading
 - Area of soil disturbance
 - Outline of areas which will not be disturbed
 - Location of major structural and nonstructural soil erosion controls
 - Areas where stabilization practices are expected to occur
 - Surface waters
 - Stormwater discharge locations
- Name of the receiving water(s)
- A description of controls:
 - Erosion and sediment controls, including
 - Stabilization practices for all areas disturbed by construction
 - Structural practices for all drainage/discharge locations
 - Stormwater management controls, including
 - Measures used to control pollutants occurring in stormwater discharges after construction activities are complete
 - Velocity dissipation devices to provide nonerosive flow conditions from the discharge point along the length of any outfall channel
 - Other controls, including
 - Waste disposal practices that prevent discharge of solid materials
 - Measures to minimize offset tracking of sediments by construction vehicles
 - Measures to ensure compliance with state or local waste disposal, sanitary sewer, or septic system regulations
- Description of the timing during the construction when measures will be implemented
- State or local requirements incorporated into the Plan
- Inspection and maintenance procedures for control measures identified in the Plan
- Contractor certification and Plan certification

Implementation Checklist

- Maintain records of construction activities, including
 - Dates when major grading activities occur
 - Dates when construction activities temporarily cease on the site or a portion of the site
 - Dates when construction activities permanently cease on the site or a portion of the site
 - Dates when stabilization measures are completed on the site
- Prepare inspection reports summarizing
 - Name of person conducting BMP inspections
 - Qualifications of person conducting BMP inspections
 - BMPs/areas inspected
 - Observed conditions
 - Necessary changes to the Plan
- Report releases of reportable quantities of oil or hazardous materials
 - Notify the National Response Center at 800-424-8802 immediately
 - Report releases to your permitting authority immediately, or as specified in your permit. You must also provide a written report within 14 days.
- Modify the Plan to include
 - The date of release
 - Circumstances leading to the release
 - Steps taken to prevent reoccurrence of the release
- Modify Plan as necessary
 - Incorporate requests of the permitting authority to bring the Plan into compliance
 - Address changes in design, construction operation, or maintenance that affect the potential for discharge of pollutants

An ounce of prevention is worth a pound of cure! It's far more efficient and cost-effective to prevent pollution than it is to try to correct problems later. Installing and maintaining simple BMPs and pollution prevention techniques on site can greatly reduce the potential for stormwater pollution and can also save you money!

Visit www.epa.gov/npdes/stormwater for more information.



Renew Our Waters

Every choice counts.

HOUSEHOLD HAZARDOUS WASTE

Cleaning out the garage and keeping our waters clean

We all have the opportunity - and the responsibility - to dispose of waste materials properly. The rule of thumb is: If you wouldn't dump it in the river, don't let it touch parking lots, soil, or any other place where it can be washed into a stream or storm drain. Post this sheet in your garage storage area as a reminder. This will help us change one habit at a time, so we have good fishing, swimming, paddling and waterskiing when the work is done.

HARMFUL SUBSTANCES

Certain household chemicals, when not used up properly, become household hazardous waste. These products can contain the same chemicals as strictly regulated industrial wastes. These products include: cleaning products and wash water, food oils and grease, automotive oil, grease and waste fluids, paint, petroleum-based solvents, rodent baits, batteries, herbicides, pesticides, concrete wash water and sidewalk salt.

If you wouldn't dump it in the river, don't let it touch parking lots, soil or any other place where it can be washed into a stream or storm drain.

HANDLE WITH CARE

To avoid the potential risks associated with household wastes, always monitor the use, storage and disposal of products with potentially hazardous substances.

PROPER DISPOSAL

All of the counties in Northeast Wisconsin have Household Hazardous Waste drop off programs or collection days. Contact your local environmental, health or solid waste agency for instructions on proper use and disposal.

USING LESS

The quantity of waste from a single household may be small, but that quantity adds up fast considering the number of households in Northeast Wisconsin. Consider reducing your purchase of products that contain hazardous ingredients.

Stormwater is rain or snowmelt and water from things people do, like overwatering the lawn. As water makes its way to the storm drain it picks up pollutants like oil from car leaks and improperly disposed of waste. When we choose products carefully and dispose of products properly, we can reduce the amount of pollution that enters our local waterways through runoff.

Untreated runoff is the biggest threat to our nation's water quality, according to the U.S. Environmental Protection Agency. Let's make the small, important changes that will reduce that threat and improve water quality and our lives!

Realize

What touches the ground enters the water



Renew Our Waters

Every choice counts.

FISH DON'T SWIM IN CHLORINE

Following a few simple steps will prepare your pool water for entering local waterways.

Taking the time to follow the proper procedures when discharging water from your pool or spa will help keep our local waters a healthy place for fish and other aquatic life.

DECHLORINATE THE WATER

Water from swimming pools and spas must be dechlorinated prior to discharging water. Let the water in the pool or spa sit for at least one week to reduce the chlorine or bromine level until it is undetectable and water temperature is at air temperature. Measure the pH. It should fall within a range of 6.5 - 8.5 prior to discharge.

DISCHARGE WATER TO GRASS OR LANDSCAPING

Discharging pool and spa water onto grass or landscaping will allow water to soak into the earth, where the water will be naturally cleansed prior to entering local waterways.

If irrigation on site is not possible, water may be discharged off your property - provided it is directed through a grassed surface prior to entering a curblin gutter or a paved street.

Do not fertilize prior to discharging pool water.

Discharging water onto grass or landscaping will allow water to soak into the earth.

MONITOR THE DISCHARGE

Do not let water discharge onto your neighbor's property. Monitor water as it is discharging to ensure it does not cause erosion or flooding. Discharge the water in a manner that will prevent nuisance conditions (such as creation of odors and fly and mosquito breeding conditions) due to ponding of water for a prolonged period.

PROTECT LOCAL WATERWAYS

If a pool or spa has been acid washed, the water may not be discharged off the pool/spa owner's property. Water from back flushing pool filters should only be discharged to the sanitary sewer (down a sink or toilet) or on-site septic tank system where it will be treated prior to entering local waters.

Remember it is illegal in all communities to discharge pollutants, including chlorinated pool water, into a storm drain. As a pool or spa owner, you are responsible for following your municipality's ordinance for pool and spa discharge. Contact your municipality for regulations.

Stormwater is rain or snowmelt and water from things people do, like overwatering the lawn or discharging pool water into the street drain. We can choose products carefully and shape our lawns and pavement so water sinks in. When we do, runoff is reduced, pollutants filter out and streams and groundwater are protected.

Untreated runoff is the biggest threat to our nation's water quality, according to the U.S. Environmental Protection Agency. Let's make the small, important changes that will reduce that threat and improve water quality and our lives!

Realize

What touches the ground enters the water



Renew Our Waters

Every choice counts.

POWER WASHING

To keep our waters clean keep your dirty water out.

Wash water from power washing activities may contain a large amount of oil, grease, chemicals, dirt and detergents. Disposing of these materials into storm drains causes serious ecological problems and is PROHIBITED by law. You could be given a citation or fined for discharging pollutants to the storm drain system.

TRY IT DRY

Instead of pressure washing, use dry methods such as mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible.

Before you start, set up sandbags or other barriers to direct wash water onto grass or gravel.

PREPARING FOR POWER WASHING

Before you start, set up sandbags or other barriers to direct wash water onto grassy or gravel areas where the water will soak into the ground instead of run off into the road.

JUST ENOUGH FOR THE JOB

Minimize water by using high pressure, low volume nozzles. Use the minimal amount and least toxic detergents and degreasers you will need to get the job done. Use a mop or rags to clean heavily soiled areas before power washing.

UNDERSTANDING "BIODEGRADABLE"

"Biodegradable" is a popular marketing term that can be misleading. Because a product is labeled as biodegradable does not mean that it is non-toxic. Some products are more toxic than others, but NONE are harmless to aquatic life. Soapy water entering the storm drain system will impact the aquatic environment in our local lakes, streams and rivers.

WASHING YOUR VEHICLE

Wash vehicles and equipment on grassy or gravel areas so that the wash water can seep into the ground. If the ground is very dry, wet it first so the wash water soaks in and does not run off into the storm drain.

Stormwater is rain or snowmelt and water from things people do, like overwatering the lawn or letting fertilizer fall into the street drain. We can choose products carefully and shape our lawns and pavement so water sinks in. When we do, runoff is reduced, pollutants filter out and streams and groundwater are protected.

Untreated runoff is the biggest threat to our nation's water quality, according to the U.S. Environmental Protection Agency. Let's make the small, important changes that will reduce that threat and improve water quality and our lives!

Realize

What touches the ground enters the water



Renew Our Waters

Every choice counts.

CARPET CLEANING

To keep our waters clean, keep your dirty water out.

Nothing feels better than walking across clean carpet, except maybe wading through clean water on a warm summer day. Unfortunately, far too often dirty wash water from carpet cleaning is dumped down the driveway and finds its way through the storm drain system to our local waters. Disposing of these materials into storm drains causes serious ecological problems and is PROHIBITED by law. By following the tips on this sheet, you can clean your home and keep our local waters clean too.

DISPOSE OF WASTEWATER PROPERLY

Wash water from carpet, drapery or upholstery cleaning must be discharged to a sink, toilet or other drain connected to the sanitary sewer system. Never discharge

Using biodegradable soap does not lessen its immediate environmental impact - it simply means that the soap will degrade in time.

to a street, gutter, parking lot, ditch or storm drain. This applies even when you use cleaning products labeled “nontoxic” or “biodegradable.” Using biodegradable soap does not lessen its immediate environmental impact - it simply means that the soap will degrade in time.

FILTER WASTEWATER

Before dumping your dirty water into the sanitary sewer, filter the water to make sure that any fiber or debris does not go down the drain. Debris in the wash water can clog the pipes. Dispose of the filtered material in the garbage, provided that the carpet was not contaminated with hazardous materials.

HIRING A PROFESSIONAL CLEANER

Check with the carpet cleaner you hire to ensure the used wash water is emptied into a utility sink or other indoor sanitary sewer connection. Just like you, professional cleaners should never dispose of dirty water in a street, gutter, parking lot, ditch or storm drain.

If you contract with a carpet cleaner regularly, arrange an appropriate location for the contractor to discharge wash water such as a utility sink, toilet or sewer outlet.

Stormwater is rain or snowmelt and water from things people do, like washing the car or watering the lawn. As water makes its way to the storm drain it picks up pollutants like oil from car leaks and bacteria from pet waste. When we choose products carefully and dispose of products properly, we can greatly reduce the amount of pollution that enters our local waters through runoff.

Untreated runoff is the biggest threat to our nation’s water quality, according to the U.S. Environmental Protection Agency. Let’s make the small, important changes that will reduce that threat and improve water quality and our lives!

Realize

What touches the ground enters the water

CONNECTING THE DROPS

Realize what touches the ground can enter our waters



SWEEP UP GRASS CLIPPINGS

Keep lawn waste out of storm drains to prevent green algae blooms and improve water clarity. Grass clippings can be easily swept back onto the lawn.

CLEAN UP AFTER YOUR PET

Pet waste carries bacteria that makes people sick and causes beach closings. Remember to scoop the poop.



WASH VEHICLES ON GRASS

Washing vehicles in a grassy area or at a car wash facility prevents soapy water and chemicals from our cars from entering our water bodies.

Let the Water Soak In

Planning for minimal hard surface on your property makes good sense. Focus on natural plantings to slow water so that it filters into the ground rather than runs off.



APPENDIX D

Public Involvement & Participation



Municipal Stormwater Permit

2020 Annual Report Summary to Wisconsin DNR

NICK VANDE HEY, PE
3/31/2021



1

Federal Clean Water Act



US Environmental Protection Agency requires each state to identify water bodies that are not 'fishable or swimmable'
Each state also needs to identify the pollutants causing the water body impairment



2

Pollutants Causing Impairment



Sediment



Phosphorus



3

Total Maximum Daily Load (TMDL)

Lower Fox River Basin TMDL for phosphorus and sediment pollutants was approved by US Environmental Protection Agency on May 18, 2012



4

Municipal Stormwater Permit

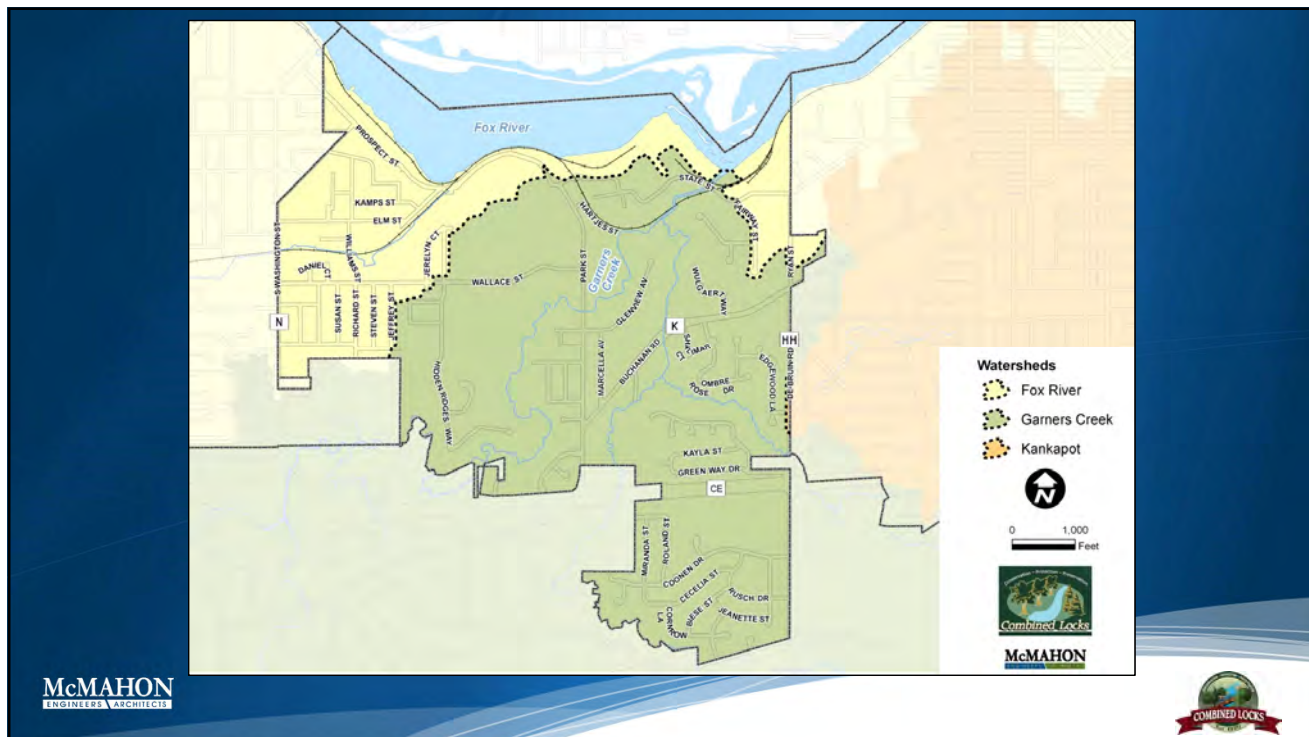
Village received its initial Municipal Stormwater Permit from Wisconsin DNR in late 2006

Wisconsin DNR renewed the Village's Municipal Stormwater Permit in 2019

TMDL phosphorus and sediment allocations implemented thru Municipal Stormwater Permit



5

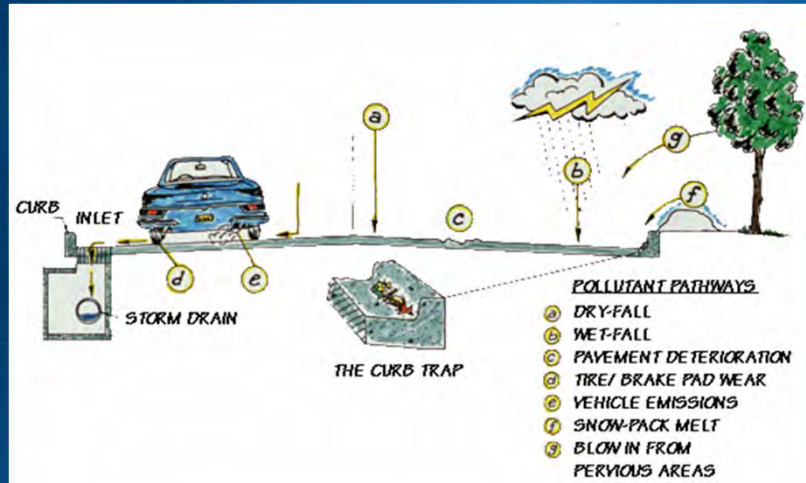


6

The **McMAHON** Way...values. culture. Relationships, since 1909.

1445 McMAHON DRIVE NEENAH, WI 54956
920 751 4200 mcm@mcmgrp.com mcmgrp.com
w:\PROJECTS\CD006\92100226\Dept\Storm\Report\nav

Stormwater Pollutant Pathways



KEY POLLUTANT DEPOSITION PATHWAYS ON THE STREET SURFACE



7

Permit Requirements

- Public Education
- Public Involvement
- Illicit Discharge Detection & Elimination
- Construction Site Pollutant Control
- Post-Construction Stormwater Management
- Municipal Pollution Prevention
- Stormwater Quality Management



8

Public Education

Required: 4 Topics, 4 Delivery Mechanisms (One Active)

| Measurable Goals | 2019 | 2020 |
|--|------|------|
| 1. Passive: Village Website (# hits) | | |
| 2. Passive: Brochures (# distributed / taken) | | |
| 3. Passive: Newsletter (# distributed each issue) | | |
| 4. Passive: Posters or Signs (# of posters / signs) | | |
| 5. Passive: Radio or TV (# of ads) | | |
| 6. Passive: Social Media (# of posts) | | |
| 7. Active: School Presentations / Exhibiting (# events, # attendees) | | |
| 8. Active: Training Events (# events, # participants) | | |
| 9. Active: Village Meetings / Bus Tours (# events, # attendees) | | |
| 10. Active: Volunteer Events (# events, # participants) | | |



9

Public Involvement

| Measurable Goals | 2019 | 2020 |
|--|------|------|
| 1. Public/Landowner Meetings (# meetings when stormwater was discussed). | | |
| 2. Public Meetings (# meetings when stormwater ordinance was discussed). | | |
| 3. Public Meetings (# attendees for MS4 Annual Report presentation). | | |
| 4. Volunteer Events (# participants). | | |



10

Illicit Discharges

| Measurable Goals | 2019 | 2020 |
|--|------|------|
| 1. Number of total MS4 outfalls. | | |
| 2. Number of MS4 outfalls evaluated during routine ongoing field screening. | | |
| 3. From routine field screening, number of confirmed illicit discharges. | | |
| 4. Number of illicit discharge complaints received. | | |
| 5. From complaints received, number of confirmed illicit discharges. | | |
| 6. Number of identified illicit discharges eliminated during reporting year. | | |
| 7. Number of verbal Warning Notices issued. | | |
| 8. Number of written Warning Notices issued. | | |
| 9. Number of Notices of Violation issued. | | |
| 10. Number of Civil Penalties / Citations issued. | | |



11

Construction Sites

| Measurable Goals | 2019 | 2020 |
|---|------|------|
| 1. Number of total active construction sites (> 1 acre) during reporting year. | | |
| 2. Number of constructions sites (> 1 acre) issued a permit. | | |
| 3. Number of construction site inspections performed by municipality. | | |
| 4. Number of sites with no enforcement authority. | | |
| 5. Number of verbal Warning Notices issued. | | |
| 6. Number of written Warning Notices issued. | | |
| 7. Number of Notices of Violation issued. | | |
| 8. Number of Stop Work Orders issued. | | |
| 9. Number of Civil Penalties / Citations issued. | | |
| 10. Number of Forfeitures of Deposit (cash escrow, bond, letter of credit, etc.). | | |



12

Post-Construction Sites

| Measurable Goals | 2019 | 2020 |
|---|------|------|
| 1. Number of sites that received approval for a new structural stormwater facility. | | |
| 2. Number of privately owned stormwater facilities inspected. | | |
| 3. Number of sites with no enforcement authority. | | |
| 4. Number of verbal Warning Notices issued. | | |
| 5. Number of written Warning Notices issued. | | |
| 6. Number of Notices of Violation issued. | | |
| 7. Number of Civil Penalties / Citations issued. | | |
| 8. Number of Forfeitures of Deposit (cash escrow, bond, letter of credit, etc.). | | |
| 9. Number of sites with completed stormwater facility maintenance. | | |
| 10. Number of sites that municipality performed maintenance & billed landowner. | | |

13

Pollution Prevention

| Measurable Goals | 2019 | 2020 |
|--|------|------|
| 1. Number of municipally operated structural stormwater facilities. | | |
| 2. Number of new municipally operated stormwater facilities installed. | | |
| 3. Number of municipally operated stormwater facilities inspected. | | |
| 4. Of municipal facilities inspected, number requiring maintenance. | | |
| 5. Number of municipal properties required to have a SWPPP. | | |
| 6. Number of inspections of municipal properties with a SWPPP. | | |
| 7. Frequency of street sweeping completed (March 29 to November 25). | | |
| 8. Tons of street sweeping waste collected. | | |
| 9. Number of catch basin sumps cleaned (March 29 to November 25). | | |
| 10. Tons of catch basin waste collected. | | |

14

Pollution Prevention

| Measurable Goals | 2019 | 2020 |
|--|------|------|
| 11. If collection is offered, frequency of curbside leaf collection. | | |
| 12. Number of lane-miles for snow and ice control. | | |
| 13. Tons of salt applied (October to March). | | |
| 14. Tons of sand applied (October to March). | | |
| 15. Tons of salt / sand mix applied (October to March). | | |
| 16. Gallons of brine applied (October to March). | | |
| 17. Gallons of chem-melt applied (October to March). | | |
| 18. Gallons of beet juice applied (October to March). | | |
| 19. Gallons of pre-wetting compound applied (October to March). | N/A | |
| 20. Number of municipal employees trained during reporting year. | | |



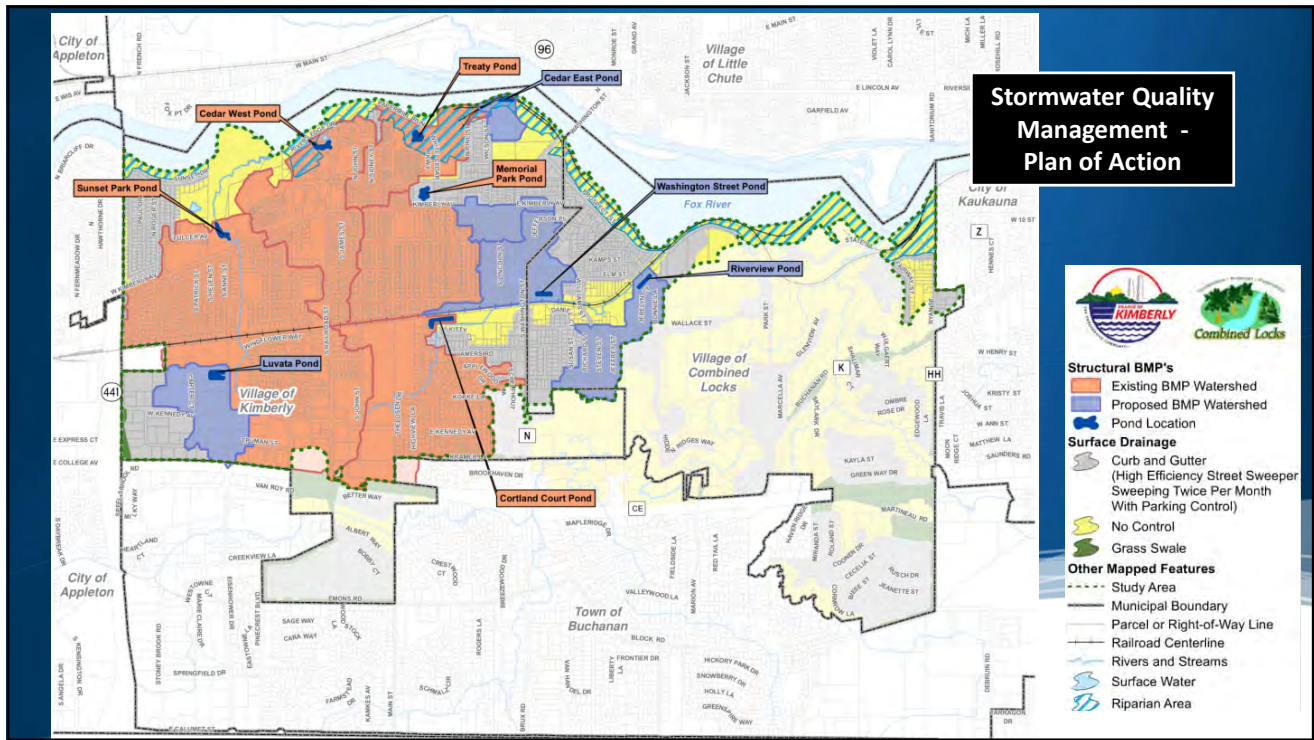
15

Best Management Practices

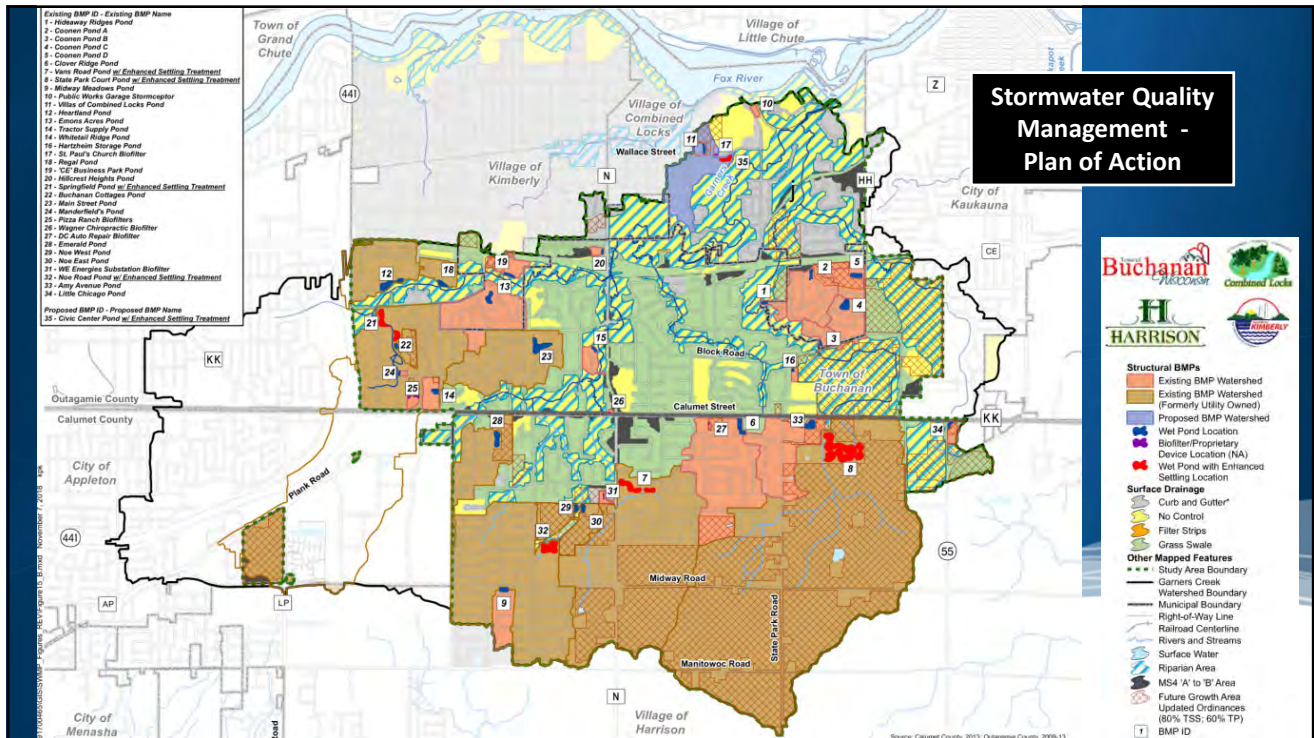
| | | |
|---|---|--|
|  |  |  |
| Street Sweeping | Proprietary Devices | Stream Stabilization |
|  |  |  |
| Grass Swales / Filters | Biofilters / Rain Gardens | Wetlands / Wet Ponds |



16



17



18



19

APPENDIX E

Illicit Discharge Detection & Elimination



Village of Combined Locks

405 Wallace Street
 Combined Locks, WI 54113
 Phone: 920.788.7740

INFORMATION SUBMITTED BY THE PUBLIC

| | |
|---|--|
| Complaint Submitted By: | |
| Name: | <input type="checkbox"/> Anonymous Date: |
| Address: | |
| Telephone: | E-Mail: |
| Should we contact you? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Location of Complaint: | |
| Site Name (Project): | Construction Site ID No: |
| Address / Location: | |
| Landowner Name: | |
| Description of Complaint: (check all that apply) | |
| <input type="checkbox"/> Automobiles (fluid leak, car washing) | <input type="checkbox"/> Storm Water Management (flooding, pond maintenance) |
| <input type="checkbox"/> Pet Waste | <input type="checkbox"/> Illicit Discharge (spill / hazardous material) |
| <input type="checkbox"/> Household Hazardous Waste (dumping) | <input type="checkbox"/> Illicit Discharge (improper waste disposal) |
| <input type="checkbox"/> Household Practices (garbage, recycling) | <input type="checkbox"/> Illicit Discharge (dry weather flow / discharge) |
| <input type="checkbox"/> Fertilizers & Pesticides | <input type="checkbox"/> Illicit Discharge (illegal plumbing connection) |
| <input type="checkbox"/> Leaves & Grass Clippings | <input type="checkbox"/> Illicit Discharge (failing lateral / septic system) |
| <input type="checkbox"/> Stream & Shoreline Management (erosion) | <input type="checkbox"/> Street Sweeping / Catch Basin Cleaning |
| <input type="checkbox"/> Residential (downspouts, sump pump) | <input type="checkbox"/> Municipal Road Salt & Other Deicers |
| <input type="checkbox"/> Construction Site Erosion Control | <input type="checkbox"/> Other: _____ |
| Describe complaint: | |
| | |
| Description of Follow-Up Actions: | |
| Describe follow-up actions: | |
| | |



FEE SCHEDULE
 For The
ILLICIT DISCHARGE DETECTION & ELIMINATION PROGRAM
VILLAGE OF COMBINED LOCKS, WISCONSIN

Effective Date: May 1, 2006

Forfeitures / Fines:

Forfeitures / fines for the illicit discharge detection and elimination program vary from a minimum of **\$25** to a maximum of **\$500** for each day of non-compliance and each occurrence. Issuance of a forfeiture / fine will depend on if the violator is non-responsive or if the violation is blatant, intentional, repetitive or severe. The forfeitures / fines are as follows:

| Notice of Violation | Home Owner | Other |
|--|-------------|--------------|
| Failure to properly dispose of a pollutant or illicit discharge | \$50 | \$500 |
| Failure to take reasonable actions to eliminate an illicit discharge | \$50 | \$500 |
| Failure to take reasonable actions to locate an undocumented drain | \$30 | \$300 |
| Failure to implement WPDES Industrial Discharge Permit | n/a | \$500 |
| Failure to allow reasonable access for inspecting or sampling | \$50 | \$500 |
| Failure to install, maintain or calibrate monitoring equipment | n/a | \$500 |
| Failure to install or maintain non-structural and structural BMPs | n/a | \$500 |
| Failure to notify Village of a spill or release of hazardous substance | \$25 | \$250 |
| Failure to take reasonable actions to prevent or contain a spill or release of a hazardous substance | \$50 | \$500 |

Mandatory training workshops and/or community service projects (e.g. stream cleanup, highway cleanup, etc.) could also be used to encourage behavior change if a violation is blatant, intentional, non-responsive, repetitive, or severe.

Chapter 8

Illicit Discharge and Connection to Storm Water Utility

- 15-8-1** Purpose and Intent
- 15-8-2** Definitions
- 15-8-3** Applicability
- 15-8-4** Responsibility for Administration
- 15-8-5** Compatibility With Other Regulations
- 15-8-6** Severability
- 15-8-7** Ultimate Responsibility
- 15-8-8** Discharge Prohibitions
- 15-8-9** Watercourse Protection
- 15-8-10** Compliance Monitoring
- 15-8-11** Requirement to Prevent, Control, and Reduce Storm Water Pollutants by the Use of Best Management Practices
- 15-8-12** Notification of Spills
- 15-8-13** Violations; Enforcement; Penalties
- 15-8-14** Appeals
- 15-8-15** Enforcement Measures After Appeal
- 15-8-16** Cost of Abatement of the Violation
- 15-8-17** Violations Deemed a Public Nuisance
- 15-8-18** Remedies Not Exclusive
- 15-8-19** Adoption of Chapter
- 15-8-20** Limitation on Municipality Responsibility

Sec. 15-8-1 Purpose and Intent.

The purpose of this Chapter is to provide for the health, safety, environment and general welfare of the citizens of the Village of Combined Locks through the regulation of non-storm water discharges into waters of the state or the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This Chapter establishes methods for controlling the introduction of pollutants into waters of the state or the MS4 in order

to comply with requirements of the Wisconsin Pollutant Discharge Elimination System (WPDES) permit process. The objectives of this Chapter are:

- (a) To regulate the contribution of pollutants into waters of the state or the MS4 by storm water discharges by any user.
- (b) To prohibit illicit connections and discharges into waters of the State of Wisconsin or the MS4.
- (c) To establish legal authority to carry out all inspection, surveillance, monitoring, and enforcement procedures necessary to ensure compliance with this Chapter.

Sec. 15-8-2 Definitions.

- (a) **Definitions Established.** For the purposes of this Chapter, the following shall mean:
 - (1) **Authorized Enforcement Agency.** Employees or designees of the Director of Public Works of the municipal agency designated to enforce this Chapter.
 - (2) **Best Management Practices (BMP's).** Structural or non-structural measures, practices, techniques or devices employed to avoid or minimize soil, sediment or pollutants carried in runoff to waters of the State of Wisconsin.
 - (3) **Construction Activity.** Activities subject to Village of Combined Locks construction permits per erosion control and stormwater management ordinances or WPDES construction permits per NR 216, Wis. Adm. Code, and Chapter 283, Wis. Stats.
 - (4) **Contaminated Storm Water.** Storm water that comes into contact with material handling equipment or activities, raw materials, intermediate products, final products, waste materials, byproducts or industrial machinery in the source areas listed in NR 216, Wis. Adm. Code.
 - (5) **Department (DNR).** The Wisconsin Department of Natural Resources.
 - (6) **Discharge.** As defined in Chapter 283, Wis. Stats., when used without qualification includes a discharge of any pollutant.
 - (7) **Discharge of Pollutant or Discharge of Pollutants.** As defined in Chapter 282, Wis. Stats., means any addition of any pollutant to the waters of this state from any point source.
 - (8) **Hazardous Materials.** Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.
 - (9) **Illicit Discharge.** Any discharge into waters of the state or a municipal separate storm sewer system that is not composed entirely of storm sewer. Non-storm water discharges that are not considered illicit discharges include water line flushing, landscape irrigation, diverted stream flows, uncontaminated groundwater infiltration,

- uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, fire fighting, and discharges authorized under a WPDES permit unless identified by the Director of Public Works as a significant source of pollutants to waters of the state.
- (10) **Illicit Connections.** An illicit connection is defined as either of the following:
- a. Any drain or conveyance, whether on the surface or subsurface, that allows an illicit discharge to enter waters of the state or the MS4 including, but not limited to, any conveyances that allow any non-storm water discharge including sewage, process wastewater, and wash water to enter waters of the state or the MS4 and any connections to waters of the state or the MS4 from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency, or
 - b. Any drain or conveyance connected from a commercial or industrial land use to waters of the state or the MS4 which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.
- (11) **Industrial Activity.** Activities subject to WPDES Industrial Permits per NR 216, Wis. Adm. Code and Chapter 283, Wis. Stats.
- (12) **Maximum Extent Practicable (MEP).** A level of implementing management practices in order to achieve a performance standard or other goal which takes into account the best available technology, cost-effectiveness and other competing issues such as human safety and welfare, endangered and threatened resources, historic properties and geographic features.
- (13) **Municipality.** Any city, town, village, county, county utility district, town sanitary district, town utility district, school district or metropolitan sewage district or any other public entity created pursuant to law and having authority to collect, treat or dispose of sewage, industrial wastes, storm water or other wastes.
- (14) **Municipal Separate Storm Sewer System (MS4).** As defined in NR 216, Wis. Adm. Code, means a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, construction channels or storm drains, which meets all of the following criteria:
- a. Owned or operated by a municipality.
 - b. Designed or used for collecting or conveying storm water.
 - c. Which is not a combined sewer conveying both sanitary and storm water.
 - d. Which is not part of a publicly-owned wastewater treatment works that provides secondary or more stringent treatment.
- (15) **Non-Storm Water Discharge.** Any discharge to the MS4 that is not composed entirely of storm water.
- (16) **Owner.** Any person holding fee title, an easement or other interest in property.
- (17) **Outfall.** The point at which storm water is discharged to waters of the state or to a storm sewer.
- (18) **Person.** An individual, owner, operator, corporation, partnership, association, municipality, interstate agency, state agency or federal agency.

- (19) **Pollutant.** As defined in Ch. 283, Wis. Stats., means any dredged spoil, solid waste, incinerator residue, sewage, garbage, refuse, oil, sewage sludge, munitions, chemical wastes, biological materials, radioactive substance, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water.
- (20) **Pollution.** As defined in Ch. 283, Wis. Stats., means any man-made or man-induced alteration of the chemical, physical, biological or radiological integrity of water.
- (21) **Pollution Prevention.** Taking measures to eliminate or reduce pollution.
- (22) **Premises.** Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.
- (23) **Storm Water.** Runoff from precipitation including rain, snow, ice melt or similar water that moves on the land surface via sheet or channelized flow.
- (24) **Storm Water Management Plan/Storm Water Pollution Prevention Plan.** A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to waters of the state or the MS4 to the maximum extent practicable.
- (25) **Wastewater.** Any water or other liquid, other than uncontaminated storm water, discharged from a facility.
- (26) **Watercourse.** A natural or artificial channel through which water flows. These channels include: all blue and dashed blue lines on the USGS quadrangle maps, all channels shown on the soils maps in the NRCS soils book for Outagamie County, all channels identified on the site, and new channels that are created as part of a development. The term watercourse includes waters of the state as herein defined.
- (27) **Waters of the State.** As defined in Ch. 283, Wis. Stats., means those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private within the state or under its jurisdiction, except those waters which are entirely confined and retained completely upon the property of a person.
- (28) **Wisconsin Pollutant Discharge Elimination System (WPDES) Storm Water Discharge Permit.** A Wisconsin pollutant discharge elimination system permit issued pursuant to Chapter 283, Wis. Stats.

Sec. 15-8-3 Applicability.

This Chapter shall apply to all water and discharges entering waters of the state or the MS4 generated on any lands unless explicitly exempted by the Director of Public Works.

Sec. 15-8-4 Responsibility for Administration.

The Director of Public Works shall administer, implement, and enforce the provisions of this Chapter. Any powers granted or duties imposed upon the Director of Public Works may be delegated in writing by the Director of Public Works to persons or entities acting in the beneficial interest of or in the employ of the agency.

Sec. 15-8-5 Compatibility With Other Regulations.

This Chapter is not intended to modify or repeal any other ordinance, rule, regulation, or other provision of law. The requirements of this Chapter are in addition to the requirements of any other ordinance, rule, regulation, or other provision of law, and where any provision of this Chapter imposes restrictions different from those imposed by any other ordinance, rule, regulation, or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

Sec. 15-8-6 Severability.

The provisions of this Chapter are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Chapter or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this Chapter.

Sec. 15-8-7 Ultimate Responsibility.

The standards set forth herein and promulgated pursuant to this Chapter are minimum standards; therefore this Chapter does not intend or imply that compliance by any person will ensure that there will be no contamination, pollution, or unauthorized discharge of pollutants.

Sec. 15-8-8 Discharge Prohibitions.

- (a) **Prohibition of Illicit Discharges.** No person shall throw, dump, spill, drain, or otherwise discharge, cause, or allow others under its control to throw, dump, spill, drain, or otherwise discharge into waters of the state or the MS4 any pollutants or waters containing any pollutants, other than storm water.
- (b) **Allowed Discharges.**
 - (1) Water line flushing, landscape irrigation, diverted stream flows, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from

potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, and discharges authorized under a WPDES permit unless identified by the Director of Public Works as a significant source of pollutants to waters of the state.

- (2) Discharges or flow from firefighting, and other discharges specified in writing by the Director of Public Works as being necessary to protect public health and safety.
- (3) Discharges associated with dye testing; however, this activity requires a verbal notification to the Director of Public Works and the Wisconsin Department of Natural Resources a minimum of one (1) business day prior to the time of the test.
- (4) Any non-storm water discharges permitted under a construction activity permit, industrial activity permit, or WPDES permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the Director of Public Works prior to allowing discharges to waters of the state or the MS4.

(c) **Prohibition of Illicit Connections.**

- (1) The construction, use, maintenance or continued existence of illicit connections to waters of the state or the MS4 is prohibited.
- (2) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection are permissible under law or practices applicable or prevailing at the time of connection.
- (3) A person is considered to be in violation of this Chapter if the person connects a line conveying sewage to waters of the state or the MS4, or allows such a connection to continue.
- (4) Improper connections in violation of this Chapter must be disconnected and redirected, if necessary, to an approved on-site wastewater management system or the sanitary sewer system upon approval of the Director of Public Works.
- (5) Any drain or conveyance that has not been documented in plans, maps or equivalent, and which may be connected to waters of the state or the MS4, shall be located by the owner or occupant of that property upon receipt of written notice of violation from the Director of Public Works requiring that such locating be completed. Such notice will specify a reasonable time period within which the location of the drain or conveyance is to be determined, that the drain or conveyance be identified as storm sewer, sanitary sewer or other, and that the outfall location or point of connection to the storm sewer system, sanitary sewer system or other discharge point be identified. Results of these investigations are to be documented and provided to the Director of Public Works.

Sec. 15-8-9 Watercourse Protection.

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of soil erosion, trash,

debris, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

Sec. 15-8-10 Compliance Monitoring.

- (a) **Right of Entry; Inspecting and Sampling.** The Director of Public Works shall be permitted to enter and inspect properties and facilities subject to regulation under this Chapter as often as may be necessary to determine compliance with this Chapter:
- (1) If a property or facility has security measures in force which require proper identification and clearance before entry into its premises, the owner or operator shall make the necessary arrangements to allow access to representatives of the Director of Public Works.
 - (2) Facility owners and operators shall allow the Director of Public Works ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records.
 - (3) The Director of Public Works shall have the right to set up on any property or facility such devices as are necessary, in the opinion of the Director of Public Works, to conduct monitoring and/or sampling of the facility's storm water discharge.
 - (4) The Director of Public Works has the right to require the owner or operator to install monitoring equipment as necessary, and make the monitoring data available to the Director of Public Works. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure storm water flow and quality shall be calibrated to ensure their accuracy.
 - (5) Any temporary or permanent obstruction to safe and easy access to the property or facility to be inspected and/or sampled shall be promptly removed by the owner or operator at the written or oral request of the Director of Public Works and shall not be replaced. The costs of clearing such access shall be borne by the owner or operator.
 - (6) Unreasonable delays in allowing the Director of Public Works access to a facility is a violation of this Chapter. A person who is the operator of a facility commits an offense if the person denies the Director of Public Works reasonable access to the facility for the purpose of conducting any activity authorized or required by this Chapter.
- (b) **Special Inspection Warrant.** If the Director of Public Works has been refused access to any part of the premises from which storm water is discharged, and the Director of Public Works is able to demonstrate probable cause to believe that there may be a violation of this Chapter, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this Chapter or any order issued

hereunder, or to protect the overall public health, safety, environment and welfare of the community, then the Director of Public Works may seek issuance of a special inspection warrant per Section 66.0119, Wis. Stats.

Sec. 15-8-11 Requirement to Prevent, Control and Reduce Storm Water Pollutants by the Use of Best Management Practices.

The owner or operator of any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into waters of the state or the MS4 through the use of structural and non-structural BMP's. Further, any person responsible for a property or premise, that is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMP's to prevent the further discharge of pollutants to waters of the state or the MS4. Compliance with all terms and conditions of a valid permit authorizing the discharge of storm water associated with industrial activity or construction activity, to the maximum extent practicable, shall be deemed compliance with the provisions of this Section.

Sec. 15-8-12 Notification of Spills.

- (a) Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illicit discharges or pollutants discharging into storm water, the MS4, or waters of the state, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release, so as to minimize the impacts of the discharge.
- (b) In the event of such a release of hazardous materials, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services, and shall also notify the Director of Public Works. In the event of a release of non-hazardous materials, said person shall notify the Director of Public Works in person or by telephone or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the Director of Public Works within forty-eight (48) hours of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site record of the discharge and the actions taken to prevent it recurrence. Such records shall be retained for at least five (5) years.
- (c) Failure to provide notification of a release as provided above is a violation of this Chapter.

Sec. 15-8-13 Violations; Enforcement; Penalties.**(a) Violations.**

- (1) **Violations of Chapter.** It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Chapter. Any person who has violated or continues to violate the provisions of this Chapter, may be subject to the enforcement actions outlined in this Section, or may be restrained by injunction or otherwise abated in a manner provided by law.
- (2) **Emergency Abatement.** In the event the violation constitutes an immediate danger to public health or public safety, the Director of Public Works is authorized to enter upon the subject private property, without giving prior notice, to take any and all measures necessary to abate the violation. The Director of Public Works is authorized to seek costs of the abatement as outlined in Section 15-8-16.

- (b) Warning Notice.** When the Director of Public Works finds that any person has violated, or continues to violate, any provision of this Chapter, or any order issued hereunder, the Director of Public Works may serve upon that person a verbal or written Warning Notice, specifying the particular violation believed to have occurred and requesting the discharger to immediately investigate the matter and to seek a resolution whereby any offending discharge will cease. Investigation and/or resolution of the matter in response to the Warning Notice in no way relieves the alleged violator of liability for any violations occurring before or after receipt of the Warning Notice. Nothing in this Subsection shall limit the authority of the Director of Public Works to take action, including emergency action or any other enforcement action without first issuing a Warning Notice.

(c) Notice of Violation.

- (1) **Compliance Order.** Whenever the Director of Public Works finds that a person has violated a prohibition or failed to meet a requirement of this Chapter, the Director of Public Works may order compliance by written notice of violation to the responsible person.
- (2) **Notice of Violation.** The Notice of Violation shall contain:
 - a. The name and address of the alleged violator;
 - b. The address when available or a description of the building, structure or land upon which the violation is occurring, or has occurred;
 - c. A statement specifying the nature of the violation;
 - d. A description of the remedial measures necessary to restore compliance with this Chapter and a time schedule for the completion of such remedial action;
 - e. A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;
 - f. A statement that the determination of violation may be appealed to the Director of Public Works by filing a written notice of appeal within three (3) business days of service of notice of violation; and

further termination proceedings are initiated against the discharger under this Chapter. A person that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful discharge and the measures taken to prevent any future occurrence, to the Director of Public Works within thirty (30) days of receipt of the prerequisite for, taking any other action against the violator.

- (2) **Suspension Due to Illicit Discharges in Emergency Situations.** The Director of Public Works may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or waters of the state. If the violator fails to comply with a suspension order issued in an emergency, the Director of Public Works may take such steps as deemed necessary to prevent or minimize damage to the MS4 or waters of the state, or to minimize danger to persons.
- (3) **Suspension Due to the Detection of Illicit Discharge.**
- a. Any person discharging to the MS4 in violation of this Chapter may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The Director of Public Works will notify a violator of the proposed termination of its MS4 access.
 - b. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the Director of Public Works.
- (e) **Prosecution and Penalties.**
- (1) **Forfeitures.** Any person violating any provision of this Chapter shall be subject to a forfeiture of not less than Twenty-Five Dollars (\$25.00) nor more than Five Hundred Dollars (\$500.00) and the costs of prosecution for each violation. Each day a violation exists shall constitute a separate offense.
 - (2) **Injunction.** Compliance with the provisions of this Chapter may also be enforced by injunction in any court with jurisdiction. It shall not be necessary to prosecute for forfeiture or a cease and desist order before resorting to injunctive proceedings.

Sec. 15-8-14 Appeals.

- (a) **Board of Appeals Authority.**
- (1) The Board of Appeals created pursuant to Section 2-4-2 of the Village of Combined Locks Code of Ordinances pursuant to Section 62.23(7)(e), Wis. Stats.:
 - a. Shall hear and decide appeals where it is alleged that there is error in any order, decision or determination made by the Director of Public Works in administering this Chapter except for cease and desist orders obtained under Sec. 15-8-13(e);

- b. Upon appeal, may authorize variances from the provisions of this Chapter which are not contrary to the public interest and where owing to special conditions a literal enforcement of the provisions of the Chapter will result in unnecessary hardship; and
 - c. Shall use rules, procedures, duties and powers authorized by statute in hearing and deciding appeals and authorizing variances.
- (2) This Section does not apply to determinations made regarding this Chapter in either municipal court or circuit court. In such circumstances, the appeals procedure shall be that set forth for appealing municipal court decisions and/or circuit court decisions as applicable.
- (b) **Who May Appeal.** Appeals to the Board of Appeals may be taken by any aggrieved person or by any office, department, board or bureau of the Village of Combined Locks affected by any decision of the Director of Public Works.

Sec. 15-8-15 Enforcement Measures After Appeal.

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, the appropriate authority upheld the decision of the Director of Public Works, then representatives of the Director of Public Works may issue a notice of intent to the responsible party of its intent to perform work necessary to comply with this Chapter. The Director of Public Works may go on the land and commence the work after issuing the notice of intent. The Director of Public Works is authorized to seek costs of abatement as outlined in Section 15-8-16. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

Sec. 15-8-16 Cost of Abatement of the Violation.

The costs of the work performed by the Director of Public Works pursuant to this Chapter, plus interest at the rate authorized by the Director of Public Works shall be billed to the responsible party. In the event a responsible party fails to pay the amount due, the Clerk shall enter the amount due on the tax rolls and collect as a special assessment against the property pursuant to Subch. VII of Chapter 66, Wis. Stats.

Sec. 15-8-17 Violations Deemed A Public Nuisance.

Any condition in violation of any of the provisions of this Chapter, and declared and deemed a nuisance, may be summarily abated or restored at the violator's expense.

Sec. 15-8-18 Remedies Not Exclusive.

- (a) The remedies listed in this Chapter are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the Director of Public Works to seek cumulative remedies.
- (b) The Director of Public Works may recover all attorney's fees, court costs and other expenses associated with enforcement of this Chapter, including sampling and monitoring expenses.

Sec. 15-8-19 Adoption of Chapter.

This Chapter shall be in force and effect from and after its adoption and publication. The above and foregoing Chapter was duly adopted by the Village Board of the Village of Combined Locks on the 18th day of December, 2007.

Sec. 15-8-20 Limitation on Municipality Responsibility.

Nothing in this Chapter creates or imposes, nor shall be construed to create or impose, any greater obligation or responsibility on the Village than those minimum requirements specifically required by the Wisconsin Statutes and Wisconsin Department of Natural Resources' regulations.