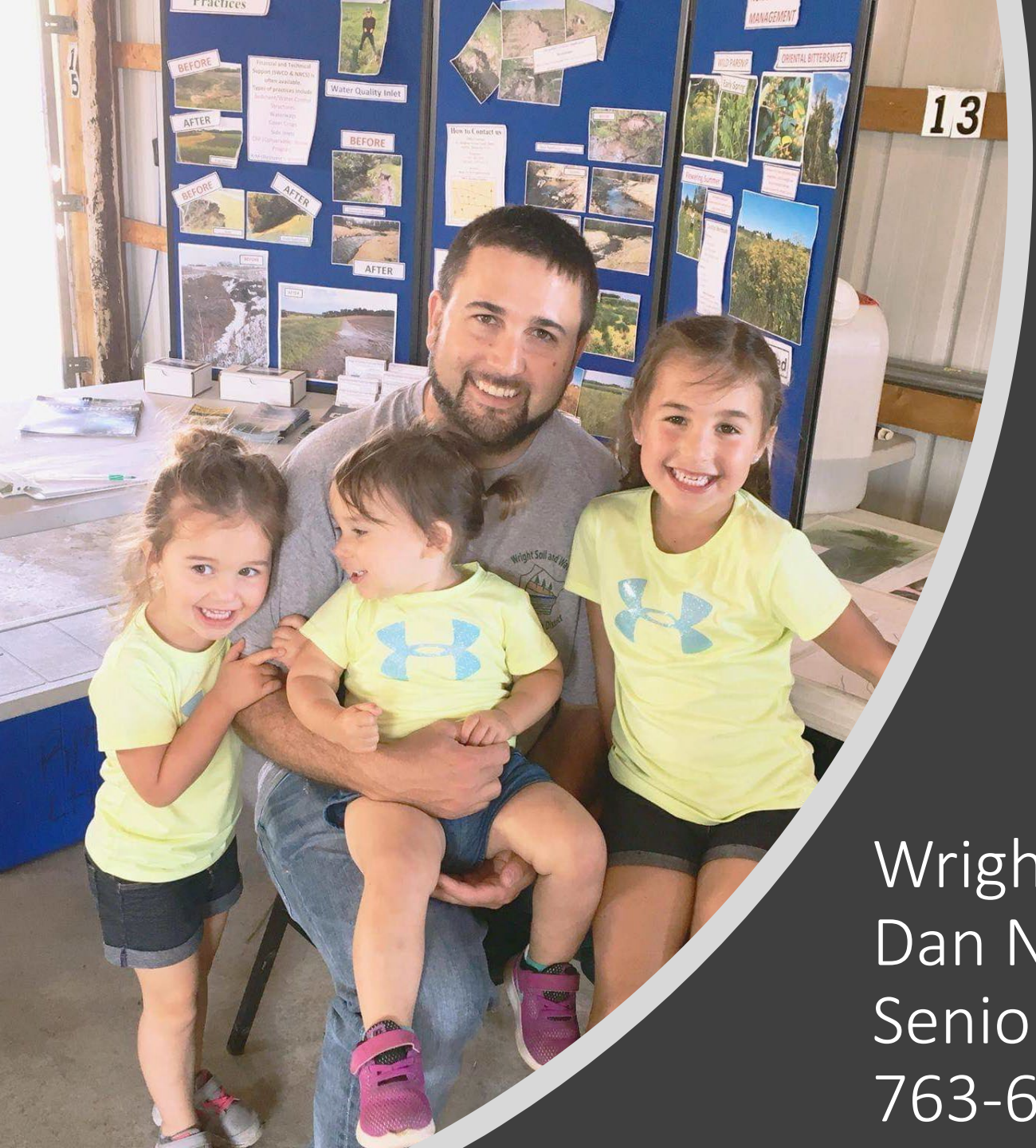


WRIGHT SOIL & WATER CONSERVATION DISTRICT

311 BRIGHTON AVENUE SOUTH, SUITE C • BUFFALO, MN 55313
PHONE: 763-682-1970 OR 763-682-1933 (EXT. 3) • FAX: 763-682-0262
OFFICE HOURS: MONDAY - FRIDAY • 8:00 A.M. - 4:30 P.M.

Wright Soil and Water
Dan Nadeau
Senior Resource Conservationist
763-682-1933 Ex 3

Someone

Who

Cares

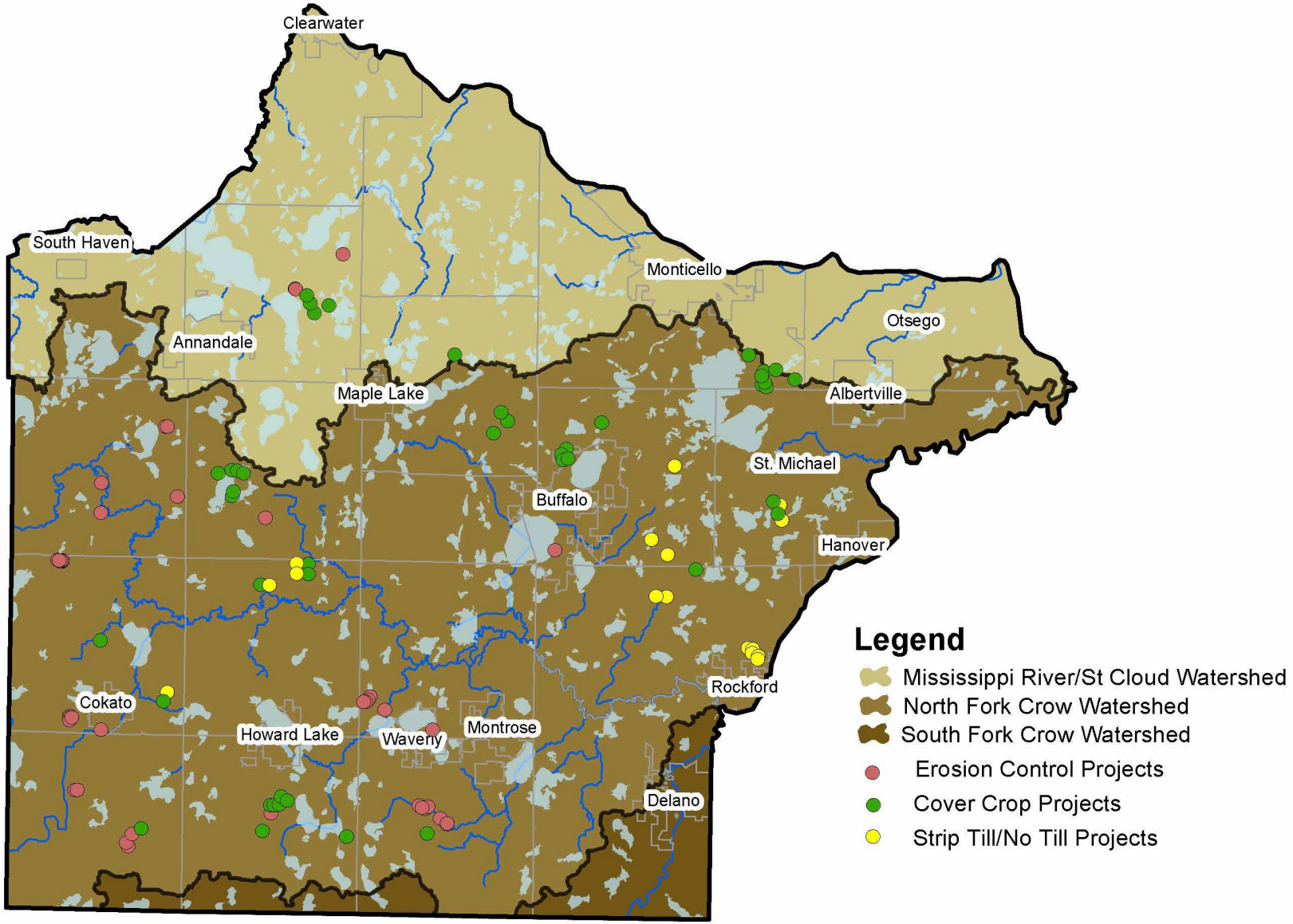
Department

2024 Construction Projects

To Be The Trusted Leader In Natural Resources Conservation In Wright County

Boots On The Ground


Flight folder
YS FLIGHT DATA
FOLDE
LEVER
ARM1



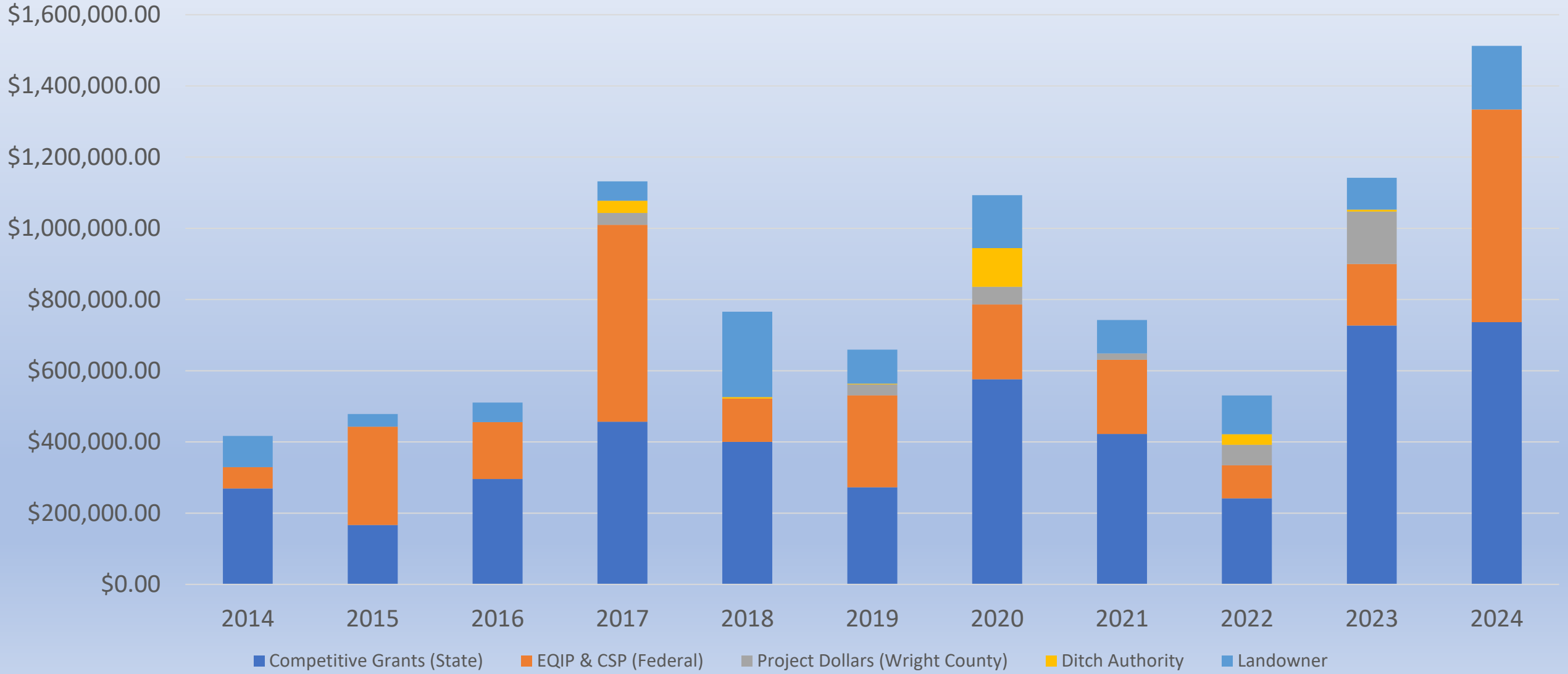
2024 Project Cost-Share

- Leveraged Federal Assistance: $180,236
- Competitive State Grants: $710,008
- Local: $344,250

Total: $1,234,495

20 - Water and Sediment Control Basins
9 - Grade Stabilization Structures
4 – Terraces
2 – Grassed Waterways
1 – Shoreline Restoration
1 – Wetland Creation
14 Contracts - Cover Crops – 994 acres
3 Contracts – Strip Til – 421 acres
1 Contract – No Till – 54 acres

Project Cost-Share 2014-2024



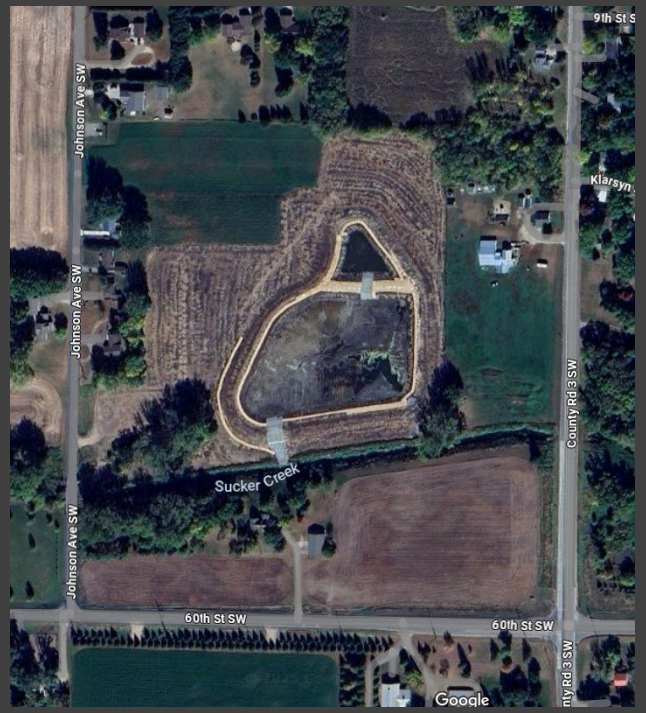
City of Cokato

3.65 Acre Wetland Creation
0.5 Acre Sediment Forebay

0.4 Acres – Previous Pond

Total Project Cost: $865,124

- BWSR Grant: $495,000
- Wright County Grant: $250,000
- Wright County ARP: $70,124
- FY22 1W1P: $50,000



Indian Lake Gully Repair

- Total Project Cost: $198,148
- Wright County Grant: $148,611
- Indian Lake Improvement District: $49,537

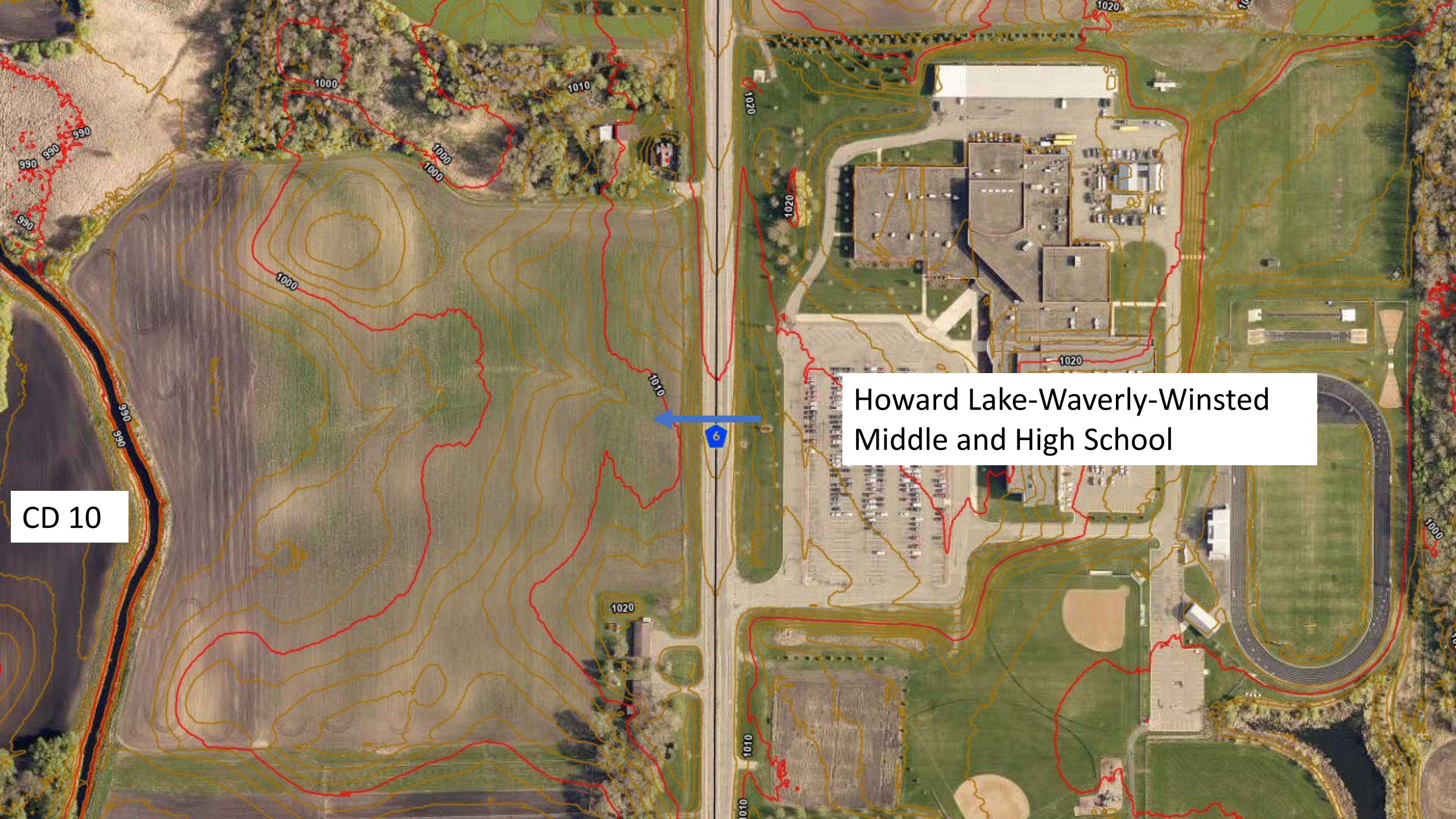
Carey and Christina Kittock

- Cost
  - Total Project Cost: $37,530
  - MPCA 319: $31,638
  - CWF 12 Mile: $5,892
- Reductions
  - 4.48 tons/year of Sediment
  - 0.30 lbs./yr of Phosphorus
  - 5.78 lbs./yr of Total Nitrogen


Waverly
MAPLE AVE
1ST ST N
9
990
980
970
1000
1020
10101010

Sean and Linda Groos

- Cost
  - Total Project Cost: $58,553
  - MPCA 319: $40,209
  - CWF 12 Mile: $9,499
  - Howard Lake School District: $8,845
- Reductions
  - 2.3 tons/year of Sediment
  - 0.15 lbs./yr of Phosphorus
  - 2.89 lbs./yr of Total Nitrogen

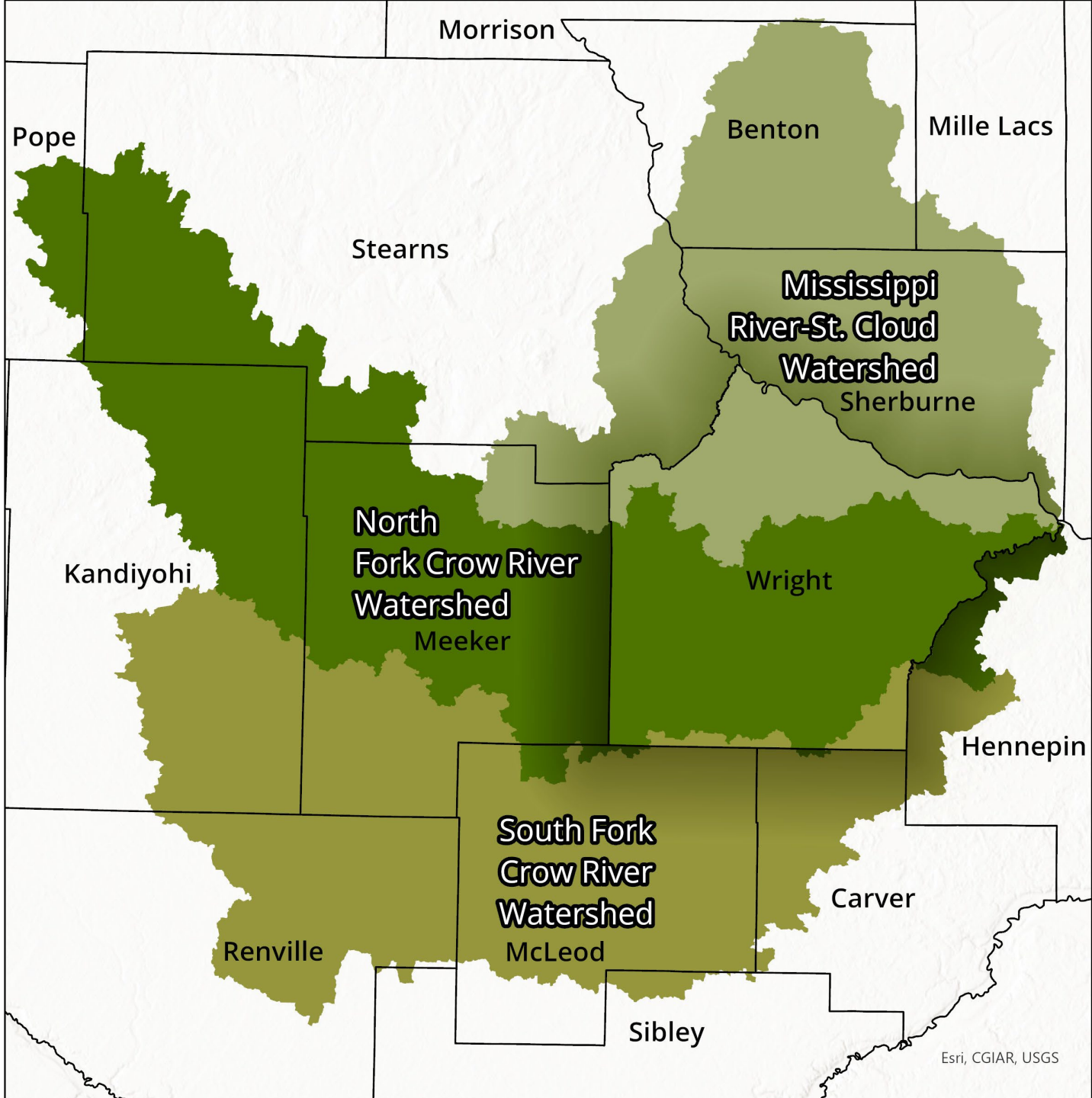

Howard Lake-Waverly-Winsted
Middle and High School
CD 10
6
1000
1010
1020
990

Watershed Funding

- 1W1P Funding

- Mississippi-River St. Cloud
  - 2025 - Funding Will Start This Summer
- North Fork Crow River
  - FY 2018: $266,628
  - FY 2020: $501,512
  - FY 2022: $213,304
    - 88,025 – 2025 Construction
  - FY 2024: $68,150
    - $44,000 – 2025 Construction
- South Fork Crow River
  - FY 2024
    - $74,923 – 2025 Construction

Total: $1,256,542

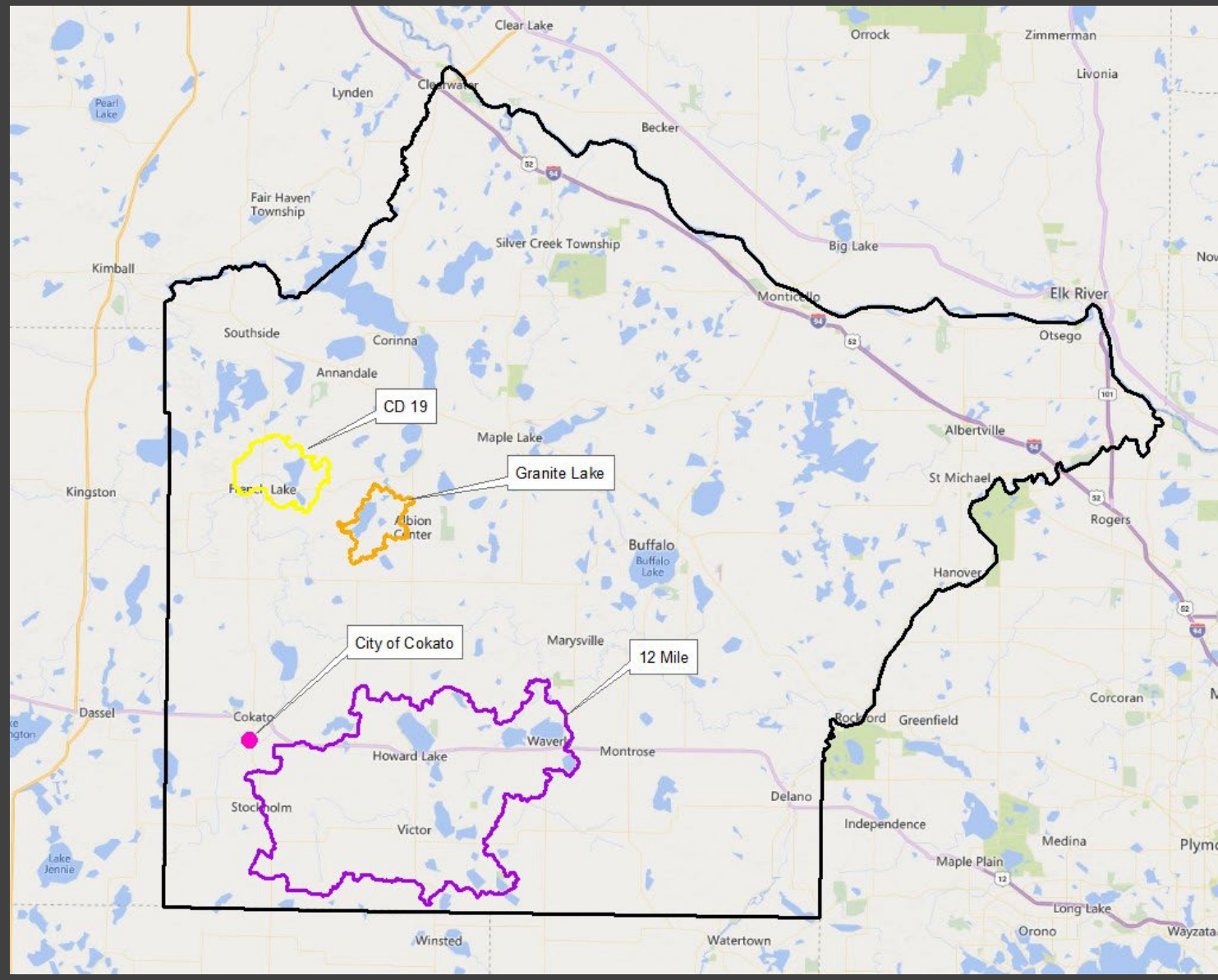


Grant Funding

BWSR Grants

- Granite Lake
  - FY 22: $140,000
- 12 Mile
  - FY 23: $286,000
- CD 19
  - FY 23: $215,000
- City of Cokato
  - FY 24: $500,000

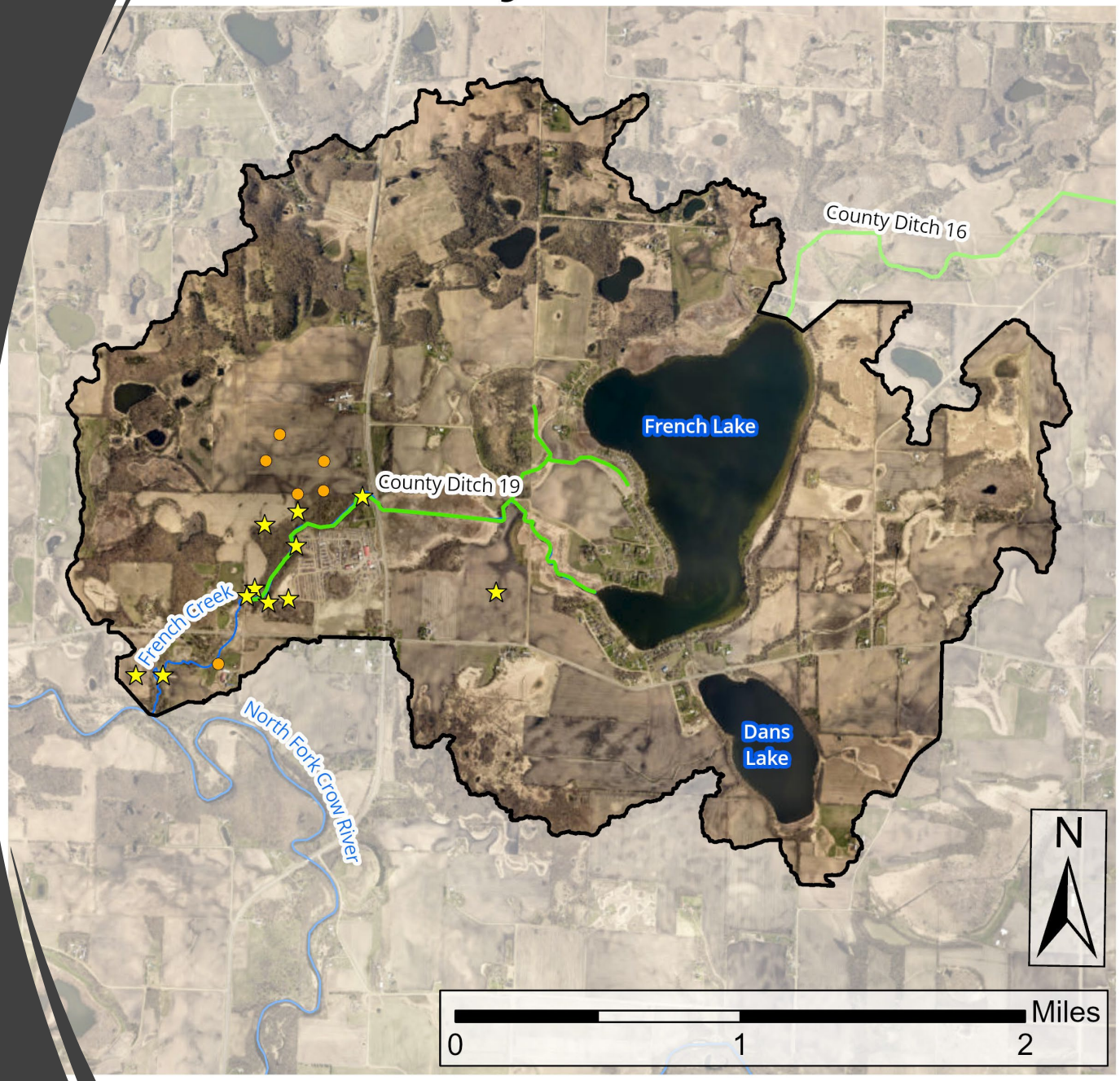
Total: $1,141,000



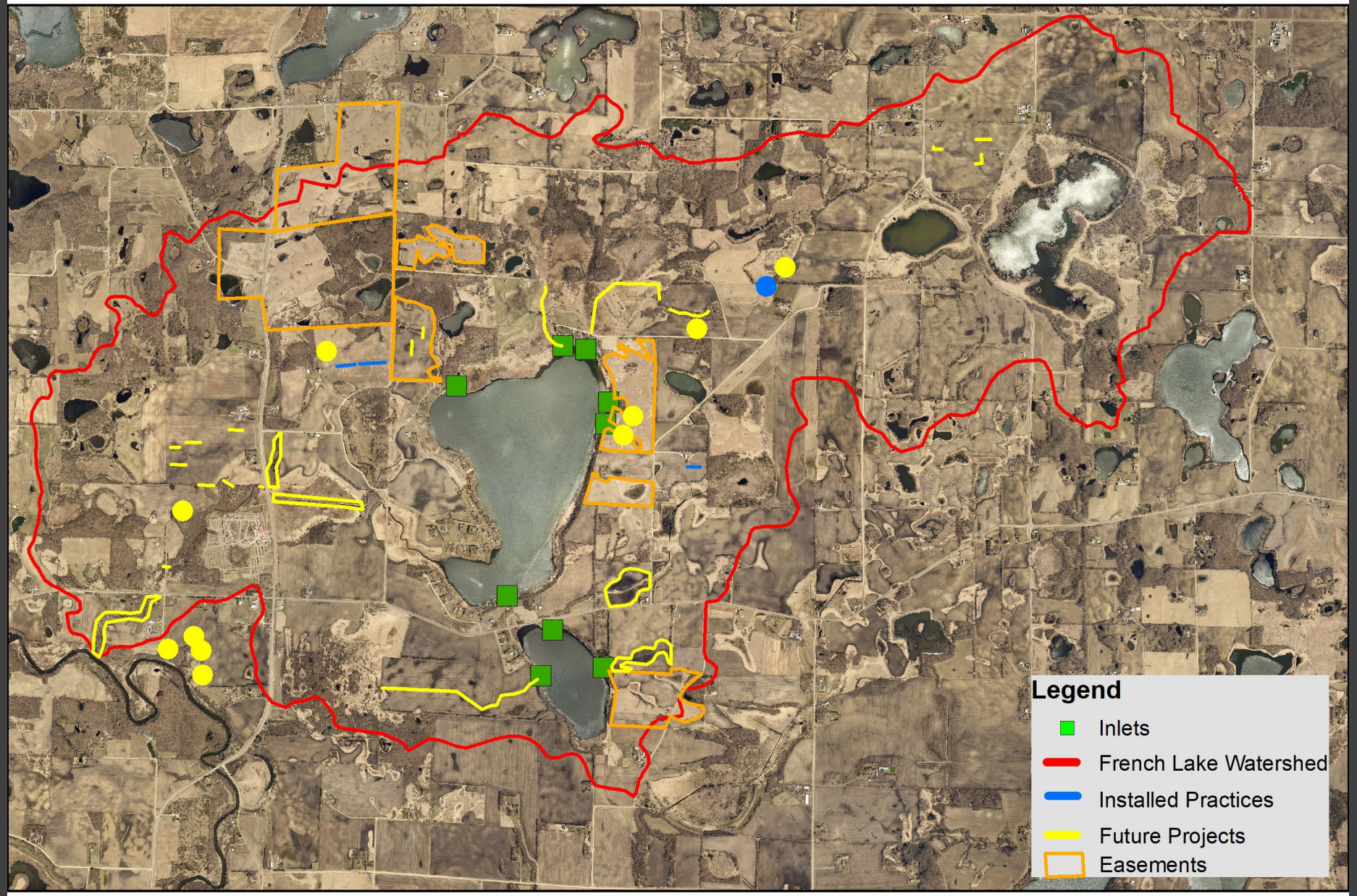
County Ditch 19 Grade Stabilization Structures

- Desktop Review: October 2023
- Site Visit: November 2023
- MDM Grant Due: December 2023
- Awarded Grant: March 2024
  - Grant Amount: $215,000
- Survey/Design
  - Randy Reinert – June 2024
  - Skip Nolan – June 2024
  - Margaret Groop – February 2025
- Contracts: Spring 2025
- Construction: Summer – Fall 2025
- Grant End Date: December 2026

County Ditch 19

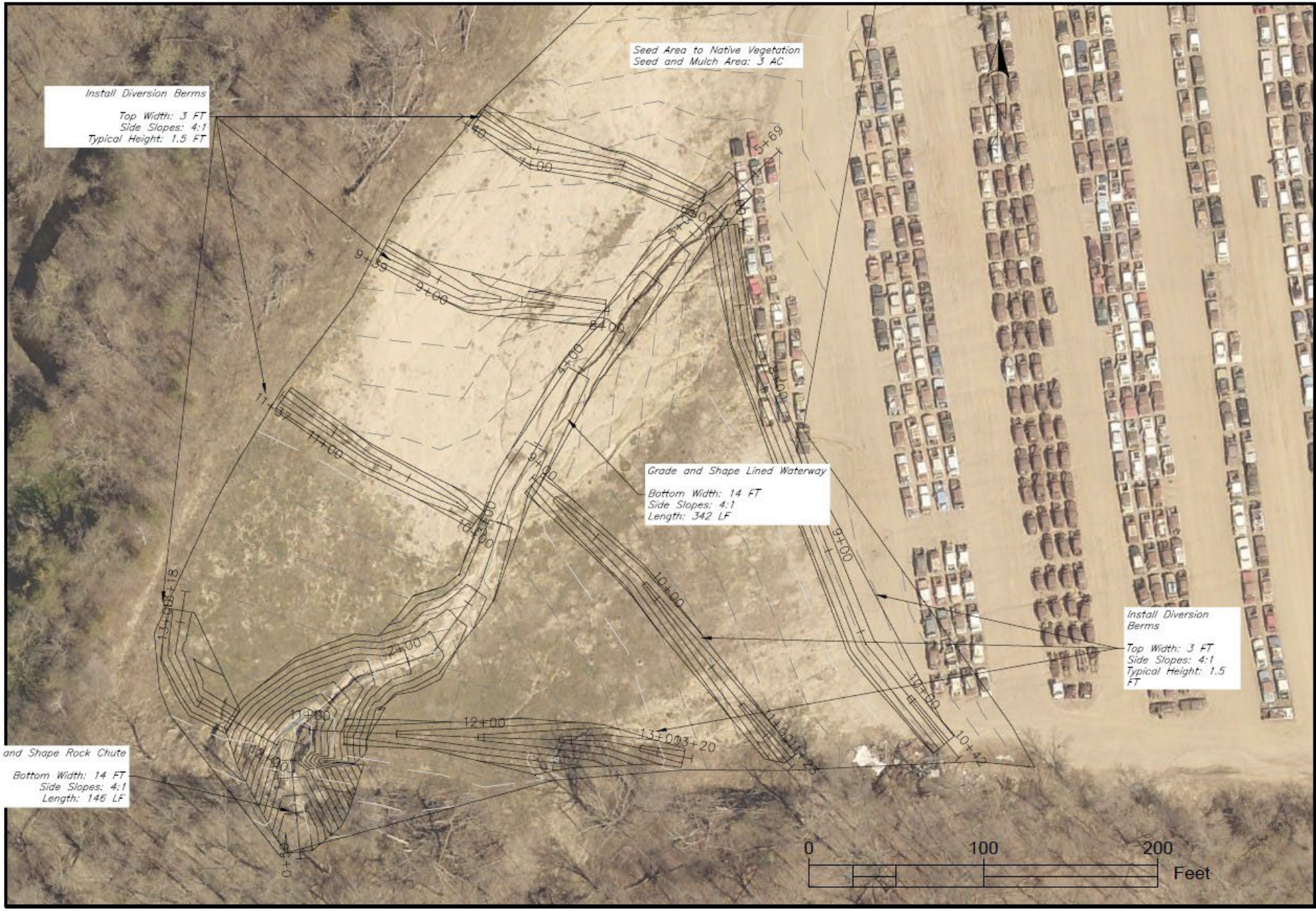


French Lake - Project Assessment



Source: MGC & 2018 Aerial Photo
Disclaimer: Data provided may differ from actual survey proof of records

Produced By: Wright SWCD June 16, 2021



Date
Designed Mike Candler 7/2/2024
Drawn Mike Candler 7/2/2024
Checked
Approved

SITE LAYOUT
French Lake Auto 410
Wright SOIL & WATER CONSERVATION DISTRICT
Wright County, Minnesota

PRELIMINARY
NOT FOR
CONSTRUCTION

File Name
CD19_French Lake Auto.dwg

Eng. Job Class
NA

7/2/2024
Sheet 2 of 7

Designed Mike Candler 7/2/2024
Drawn Mike Candler 7/2/2024
Checked
Approved

SITE LAYOUT
WSCBS
Nolan
Wright SOIL & WATER CONSERVATION DISTRICT
Wright County, Minnesota

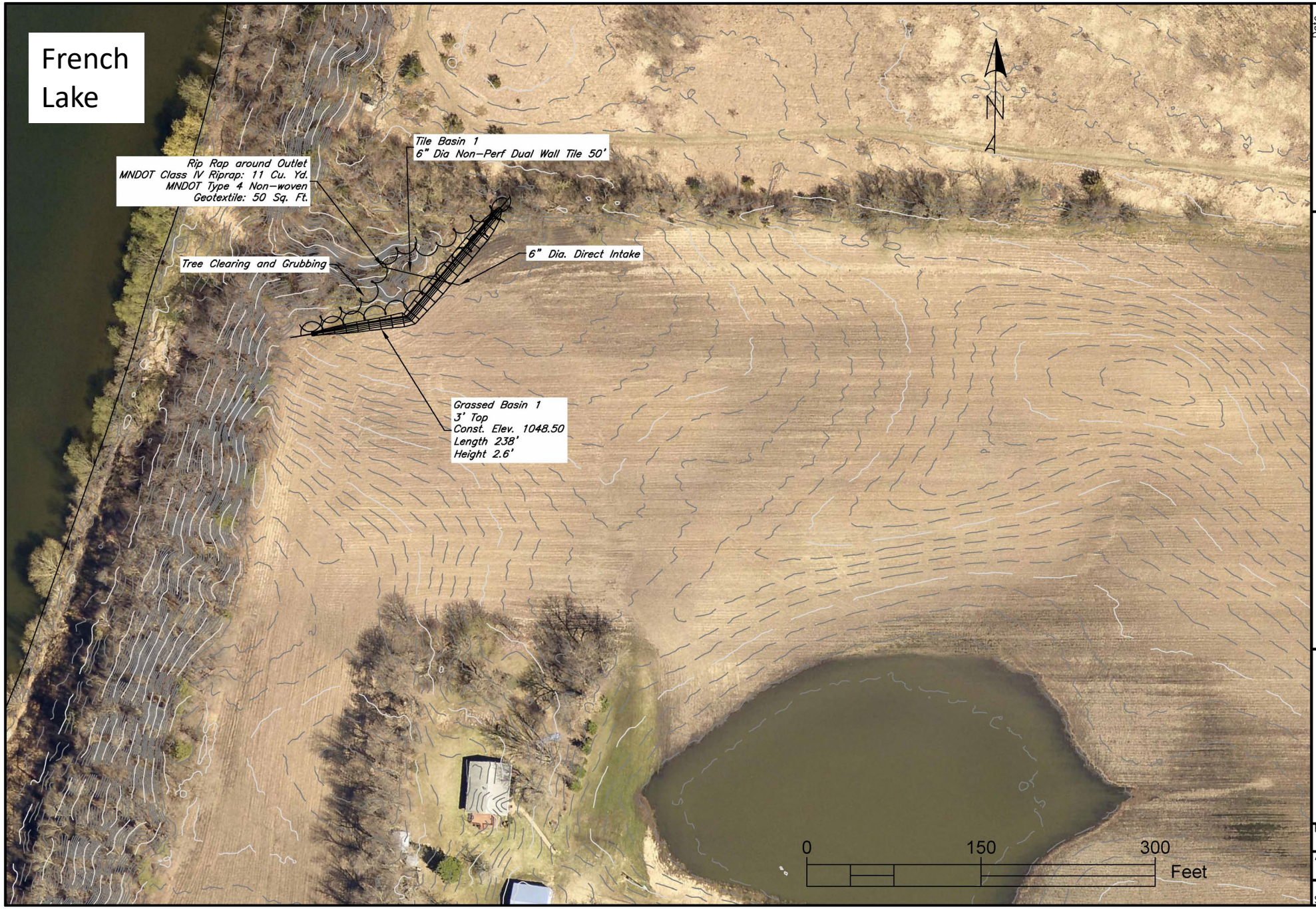
PRELIMINARY
NOT FOR
CONSTRUCTION

File Name
CD19.dwg

Eng. Job Class
NA

7/2/2024

Sheet 2 of 5



Date
Designed Samantha KamlDESIGN DATE
Drawn Samantha KamlDRAWN DATE
Checked
Approved

SITE LAYOUT
Margaret Groop WASCOB
Wright SOIL & WATER CONSERVATION DISTRICT
Wright County, Minnesota

PRELIMINARY
NOT FOR
CONSTRUCTION

File Name
Groop_Margaret.dwg

Eng. Job Class
II

2/25/2025
Sheet 2 of 5

Urban Projects

City of Howard Lake

Howard Lake Water Quality Planning

City of Howard Lake
August 8 2024

BOLTON & MENK
Real People. Real Solutions.

Submitted by:
Bolton & Menk, Inc.
111 Washington Avenue S, Suite 650
Minneapolis, MN 55401
P: 612-416-0220
F: 612-416-0222

Figure 5: Study Area within Lake Watersheds

July 2024

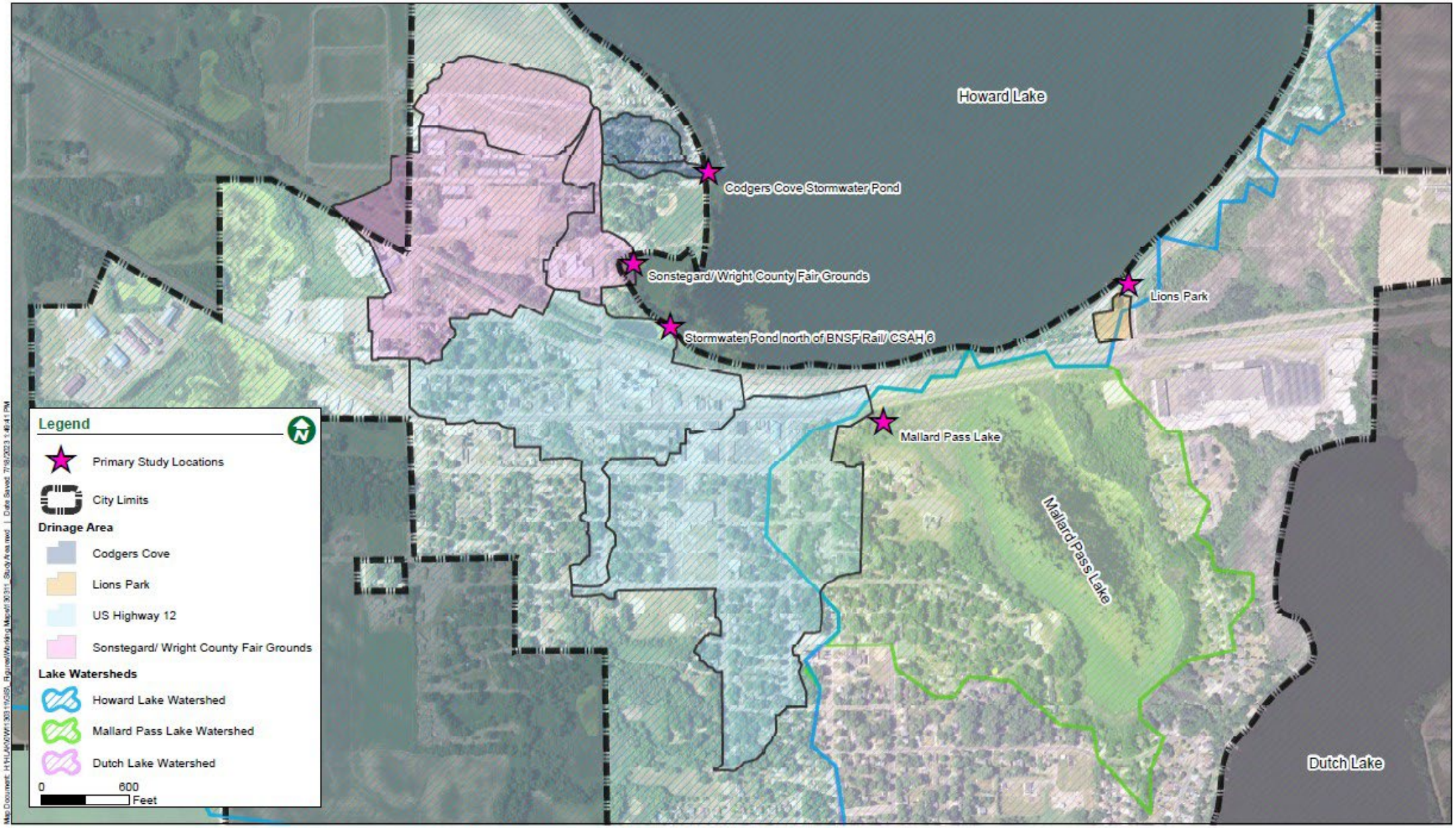
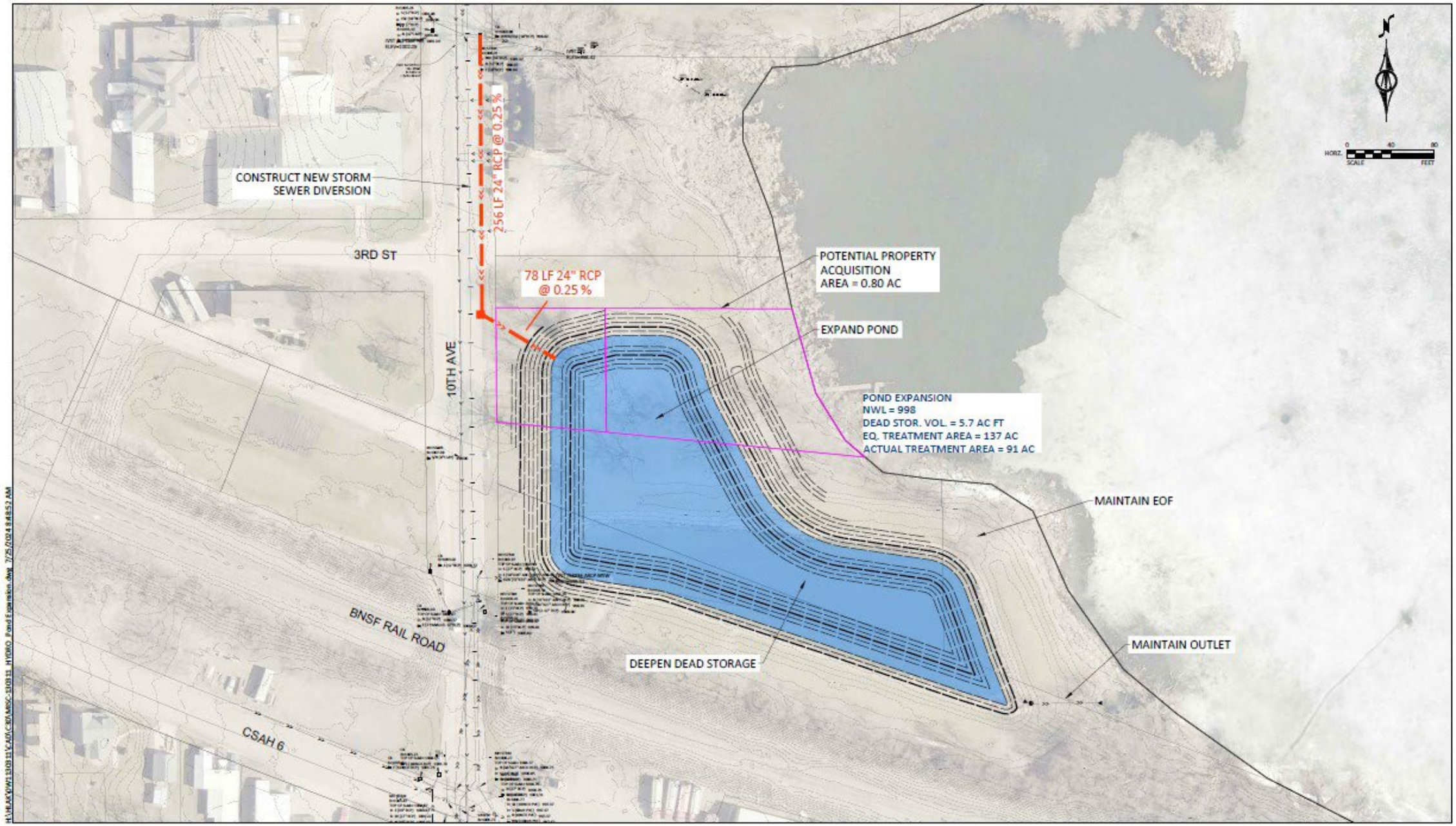


Figure 8: BNSF/CSAH 6 Pond Expansion Concept
July 2024

BOLTON & MENK



City of Waverly

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

Small Communities Planning Grants for Stormwater, Wastewater, and Community Resilience

Application

FY 2025

Doc Type: Grant Application

Instructions: Read the complete *Request for Proposal (RFP)* and other associated documents before submitting this application.

Check the SWIFT Supplier Portal and the Minnesota Pollution Control Agency (MPCA) Small Communities Planning Grants for SWC Resilience webpage for the most recent updates.

Applications are due no later than 4:00 p.m. Central Time (CT) on Friday, January 17, 2025.

Submit Application, Workplan, and Budget (as Microsoft Word and Excel documents) per the instructions listed in Section 7 and 8 of the RFP. **Projects submitted without all three documents will be deemed ineligible.**

1. Project information (All project information must be filled out for the project to be eligible.)

Organization name:	City of Waverly						
Organization address:	502 Atlantic Ave						
City:	Waverly	State:	MN	Zip code:	55390	County:	Waverly
Contact name:	Deb Ryks	Title:	City Clerk				
Phone:	763-658-4217	Email address:	waverlymn@gmail.com				
Organization type: (fill out Tribal OR Local/Regional information)	☐ Tribal government Population that Tribal Government has or serves:	☒ Local/Regional government (plus select one below) ☒ City ☐ County ☐ Town/Township ☐ Soil and Water Conservation District ☐ Watershed Management Organization ☐ Watershed District ☐ Regional Development Commission ☐ Metropolitan Planning Organization Population that Local Government has or serves: 2,121					
Project focus area (check all that apply):	☒ Stormwater Resilience Planning ☐ Wastewater Resilience Planning ☒ Community Resilience Planning						
Project Title:	Watershed Implementation Study & Improvement Plan						
Grant requested:	$ 62,184	+ Matching funds:	$ 52,500	= Total project cost:	$ 114,684		

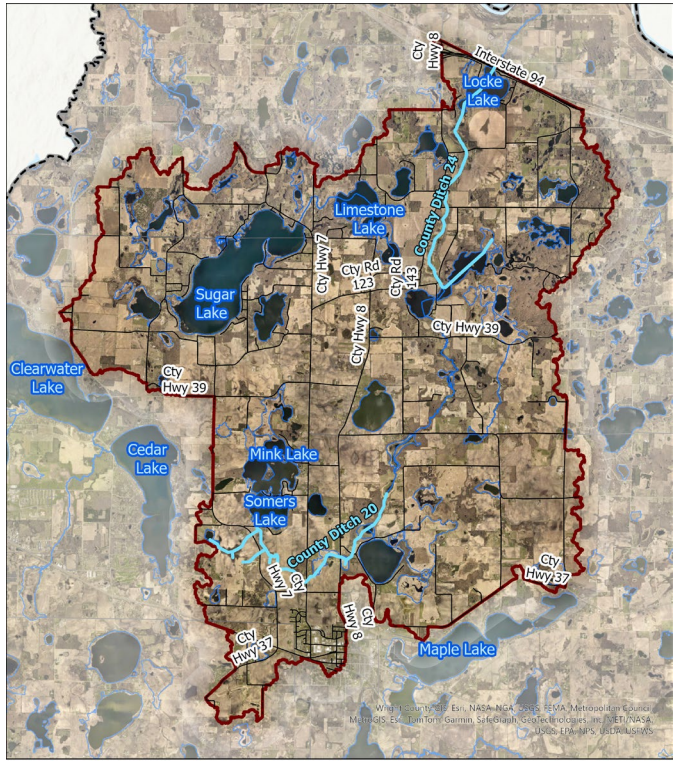
	Yes	No
Is applicant the sole source of matching funds for this project?	☐	x

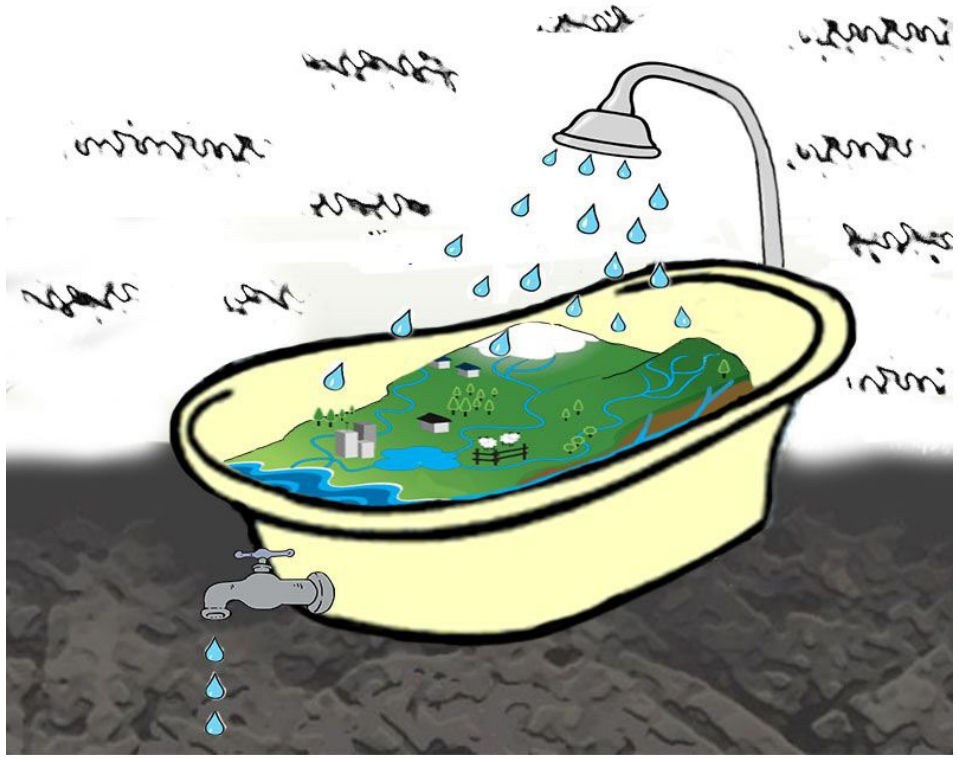
Grant Outcomes

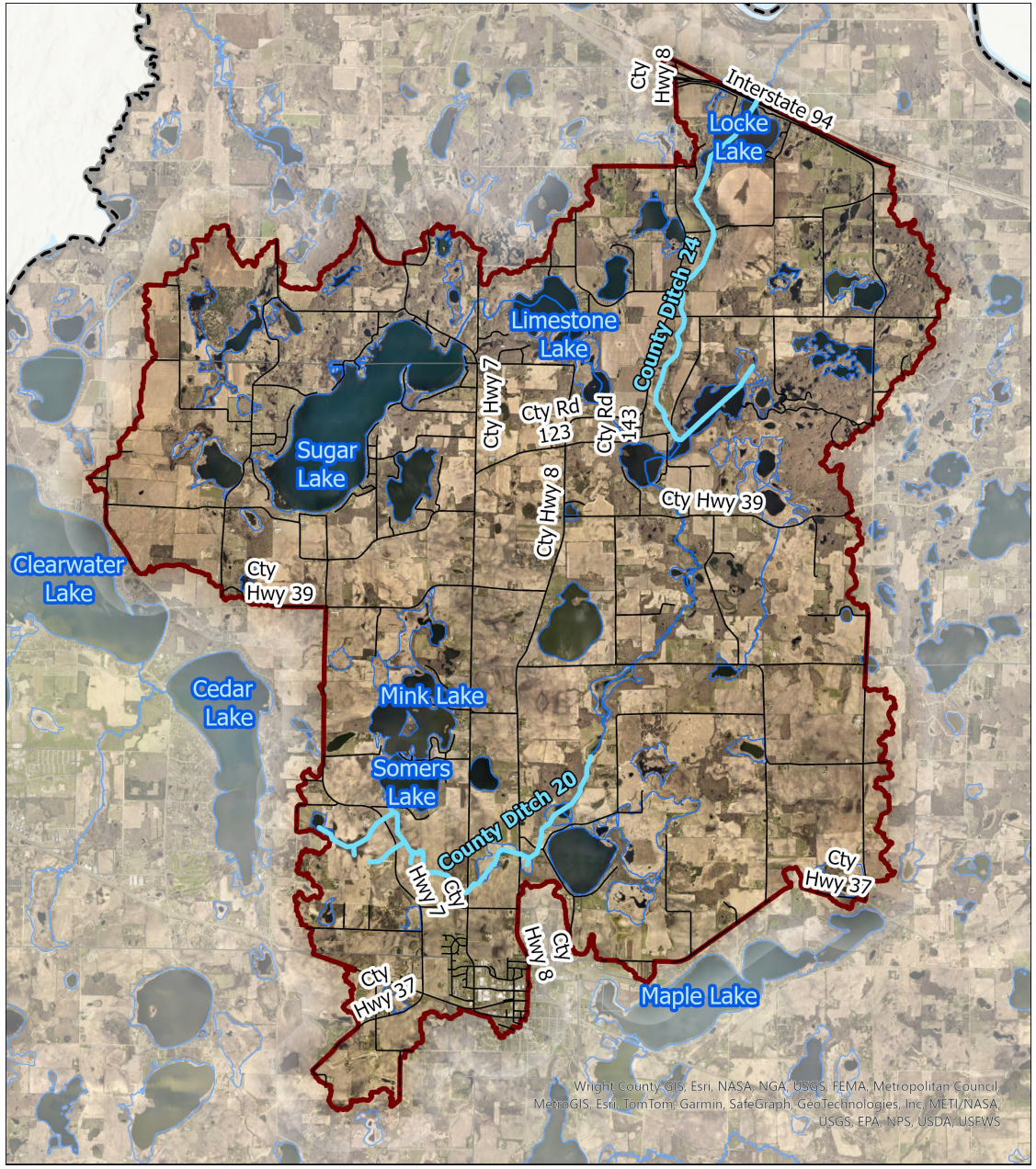
- Complete Understanding of the City's Current Drainage System
  - Inverts and Pipe Sizes
  - Create a Hydraulic Model
    - Assess Capacity
    - Identify Potential Flood Control
    - Identify Water Improvements

Connection

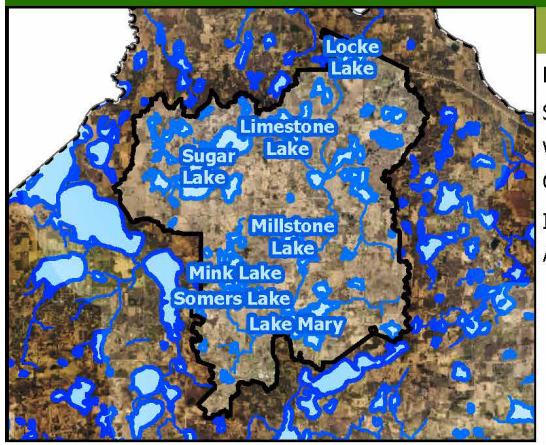
Locke Lake


Cty Hwy 8
Interstate 94
Locke Lake
County Ditch 24
Limestone Lake
Cty Hwy 7
Cty Rd 123
Cty Rd 143
Sugar Lake
Cty Hwy 8
Cty Hwy 39
Clearwater Lake
Cty Hwy 39
Cedar Lake
Mink Lake
Somers Lake
County Ditch 20
Cty Hwy 1
Cty Hwy 8
Cty Hwy 37
Cty Hwy 37
Maple Lake




Cty Hwy 8
Interstate 94
Locke Lake
County Ditch 24
Limestone Lake
Cty Hwy 7
Cty Rd 123
Cty Rd 143
Sugar Lake
Cty Hwy 8
Cty Hwy 39
Clearwater Lake
Cty Hwy 39
Cedar Lake
Mink Lake
Somers Lake
County Ditch 20
Cty Hwy 7
Cty Hwy 8
Cty Hwy 37
Cty Hwy 37
Maple Lake
Wright County GIS, Esri, NASA, NGA, USGS, FEMA, Metropolitan Council, MetroGIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

Locke Lake Report 2024



Lake Summary

Lake ID: **86-0168-00**
Nearby: **Clearwater, MN**
Surface Area: **140 acres**
Max Depth: **49 ft**
Watershed Area: **33,071 acres**
Average Depth: **18 ft**
Ordinary High Water Level: **960 ft**
Impairments: **Nutrients, Fish Life**
AIS: **Curly-leaf pondweed, Common carp, Eurasian watermilfoil, zebra mussels**

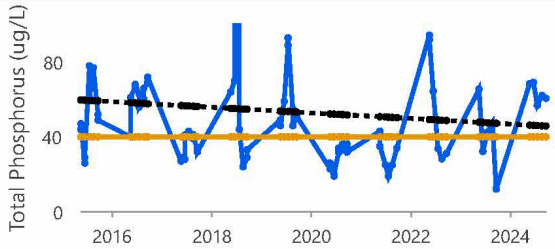
Classification

E

A classification of "E" means the lake is Eutrophic or "well nourished". Contrary to it's meaning these lakes are generally considered impaired. The water is generally green with algae especially later in the summer. Some recreation will be hinder. Fisheries may be limited.

How to read the graphs

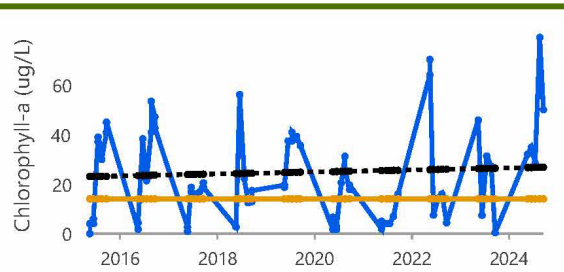
The solid blue lines show change in water quality. The lower the line the healthier the lake. The SWCD's goal is for the solid blue line to be below the orange line. This is the threshold for impairment. The dotted line shows the trend over time. A minimum of 5 years of recent data is required for a trend.



Phosphorus

10-yr Average
52 ug/L
Trend
Improving

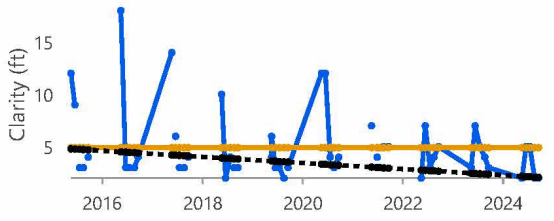
Phosphorus is needed by plants and animals to survive, but can cause algae blooms if there is too much phosphorus available. Some sources of high phosphorus are fertilizer, human and animal waste, and soil erosion



Chlorophyll-a

10-yr Average
23 ug/L
Trend
No Trend

Chlorophyll-a is a measurement of the amount of algae in a lake. Some algae can produce dangerous toxins. High algal concentrations threaten aquatic life and can impede recreation and enjoyment of the lake



Clarity

10-yr Average
5.2 ft
Trend
No Trend

Clarity is affected by the amount of algae and sediment in the water column. Low clarity means sunlight does not reach deeper portions of the lake to support plant and animal life. In the graph the lower the blue line the deeper sunlight can penetrate

Locke 86-0168-00

Lake Information

MN Lake ID: 86-0168-00
County: Wright
Ecoregion: NCHF
Major Drainage Basin: UM
Latitude/Longitude: 45.36027778 / -93.95941667
Years Monitored: 2002 - 2025
Monitored Sites: 201

MPCA Assessment Report
Search County Monthly Precipitation Data
MN DNR Watershed Health Assessment Framework

Physical Characteristics

Surface area (acres): 156
Littoral area (acres): 67
% Littoral area:
Max depth (ft): 49
Max depth (m):
Mean depth (ft): N/A
Watershed size (acres): N/A
Aquatic Invasive Species:

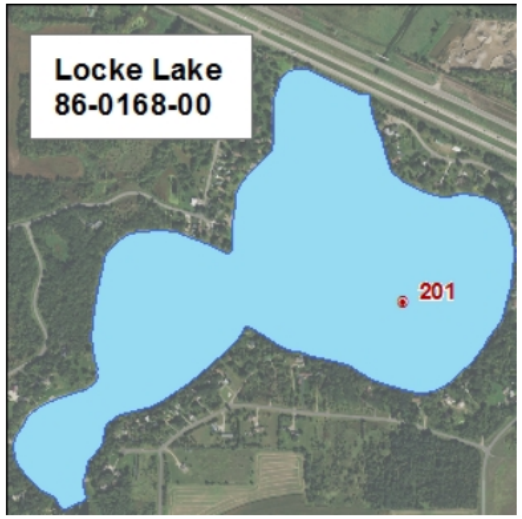
View MN DNR Fisheries Report
View MN DNR Lake Level Report

Water Quality Characteristics

(data from RMB monitoring database only)

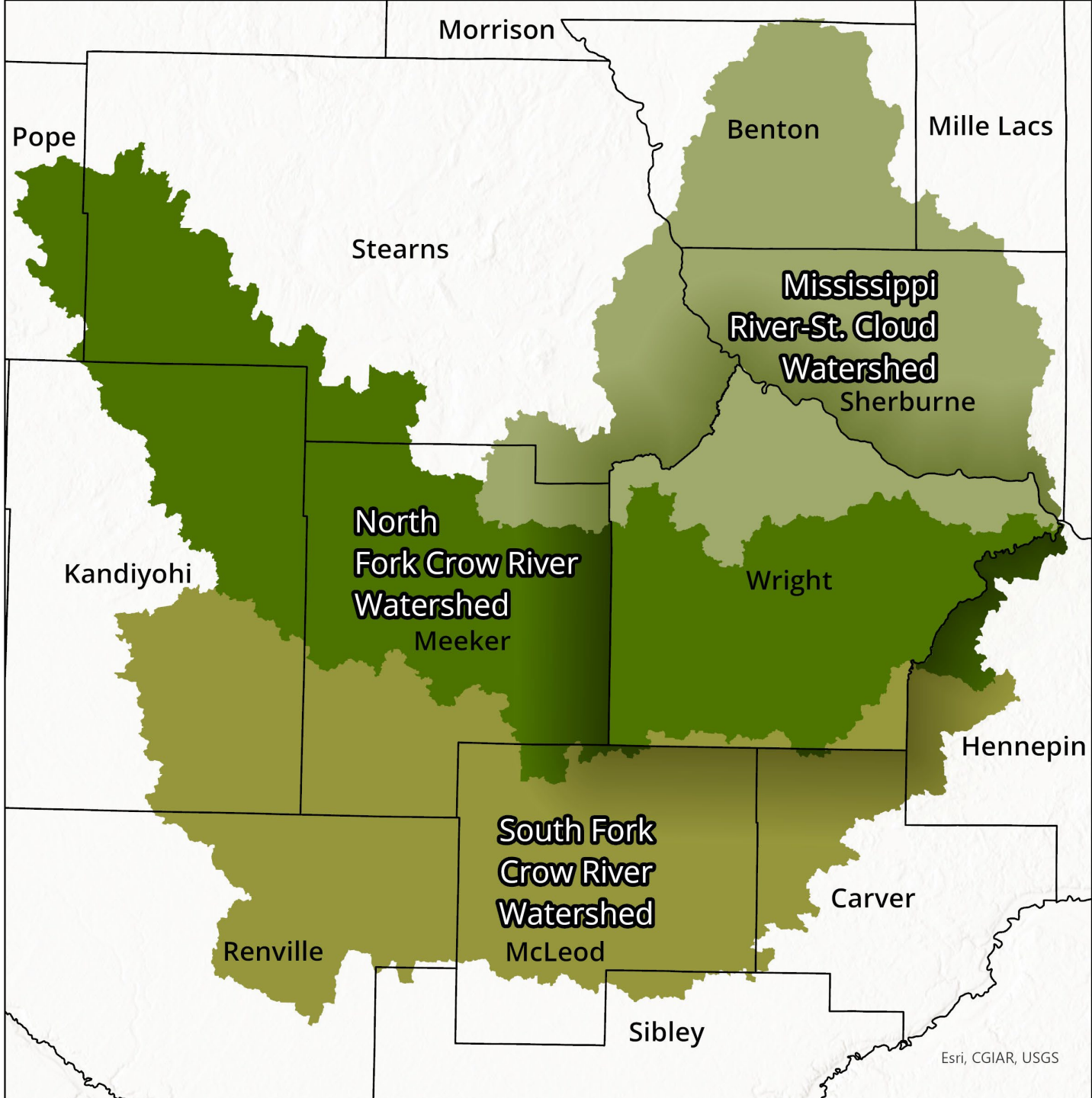
Parameters	Primary Site 201
Total Phosphorus Mean:	56.8
Total Phosphorus Min:	4
Total Phosphorus Max:	460
Number of Observations:	177
Chlorophyll-a Mean:	27.5
Chlorophyll-a Min:	0
Chlorophyll-a Max:	79.2
Number of Observations:	176
Secchi Depth Mean:	4.2
Secchi Depth Min:	1
Secchi Depth Max:	18
Number of Observations:	149
Trophic State Index Mean:	60

Trophic State: Eutrophic



North Central Hardwood Forest – Ecoregion Water Quality Standards
TP: 23-50
CHLA: 5-22
Secchi: 5-10.5

Includes basic modeling of whole watershed, with detailed modeling along CD 24 and evaluation of alternatives for Township culverts. Also includes review of storage /capacity improvements in CD 24 and preliminary design of an alternative	**$80,000**
Option 1: Detailed Modeling in CD 20: This includes survey along CD 20 and adding detail to the model sufficient to evaluate restoration alternatives	$15,000
Option 2: Multipurpose Drainage Management Review of CD 20: This includes evaluating alternatives for storage and/or other conservation practices along CD 20, and detailing the conclusions within a report	$10,000
Option 3: Outreach and Meetings: This includes attending a County Board meeting and a landowner meeting, and developing materials for those meetings	$5,000
TOTAL (Base and all three options)	$110,000



How to help the lake

Stormwater	Manage Aquatic plants	Septic	Shoreline	Restoring or improving wetlands
• Impervious surface (development)	• Enhance native plant species in the lake	• How is mine?	• Native Plants • Riprap in combination with natives • Mowing down to shoreline • Buffer between lawns and lake	• Adding storage • Removing nutrients