

Appendix





Otter Tail River
ONE WATERSHED
ONE PLAN

Plan Summary

CLEAN WATER LAND & LEGACY AMENDMENT

What is One Watershed One Plan?

- Voluntary program and plan to guide watershed managers as they work to protect and restore the watershed's resources.
- Aligns water planning along watershed boundaries, including all the Counties, Soil & Water Conservation Districts, and Watershed Districts within the watershed border.
- Local priorities, locally driven.
- Uses existing authorities and funding mechanisms (County, SWCD, and Watershed District Boards)
- After adopted, implementation funding from the state is obtained through a non-competitive process instead of competitive.
- Program website: https://bwsr.state.mn.us/one-watershed-one-plan

Highlights

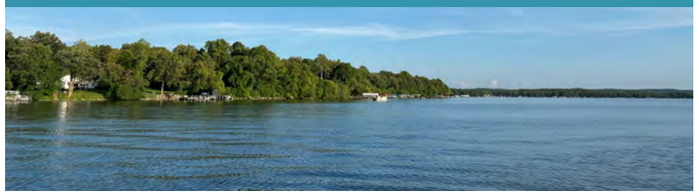
- The watershed starts in the White Earth Nation and Tamarac National Wildlife Refuge. Three main rivers, the Pelican, Toad, and Otter Tail, flow through many lakes and eventually join the Red River west of the planning area.
- Transitions from forests in the north to developed lakes and cultivated cropland in the middle, to prairie potholes and cropland in the southwest.
- The majority of land is in two counties: Becker and Otter Tail.
- There are two small lake-based watershed districts: Pelican River Watershed District and Cormorant Lakes Watershed District.
- Primary towns include: Detroit Lakes, Pelican Rapids, Fergus Falls, Perham.
- Implementation of the Otter Tail Comprehensive Watershed Management Plan is voluntary, and outreach and incentives will be used to assist with voluntary implementation on private lands.
- This plan includes both restoration and protection priorities.

Surface Water

Protecting and restoring lakes and streams by reducing sediment, phosphorus, bacteria, and runoff.

How:
- Stormwater management.
- Streambank, lakeshore, and ditch stabilization.
- Agricultural practices.
- AIS prevention and management.

Outcomes:
- Lake and stream water quality protected and improved.
- Runoff from increasing future precipitation is minimized.



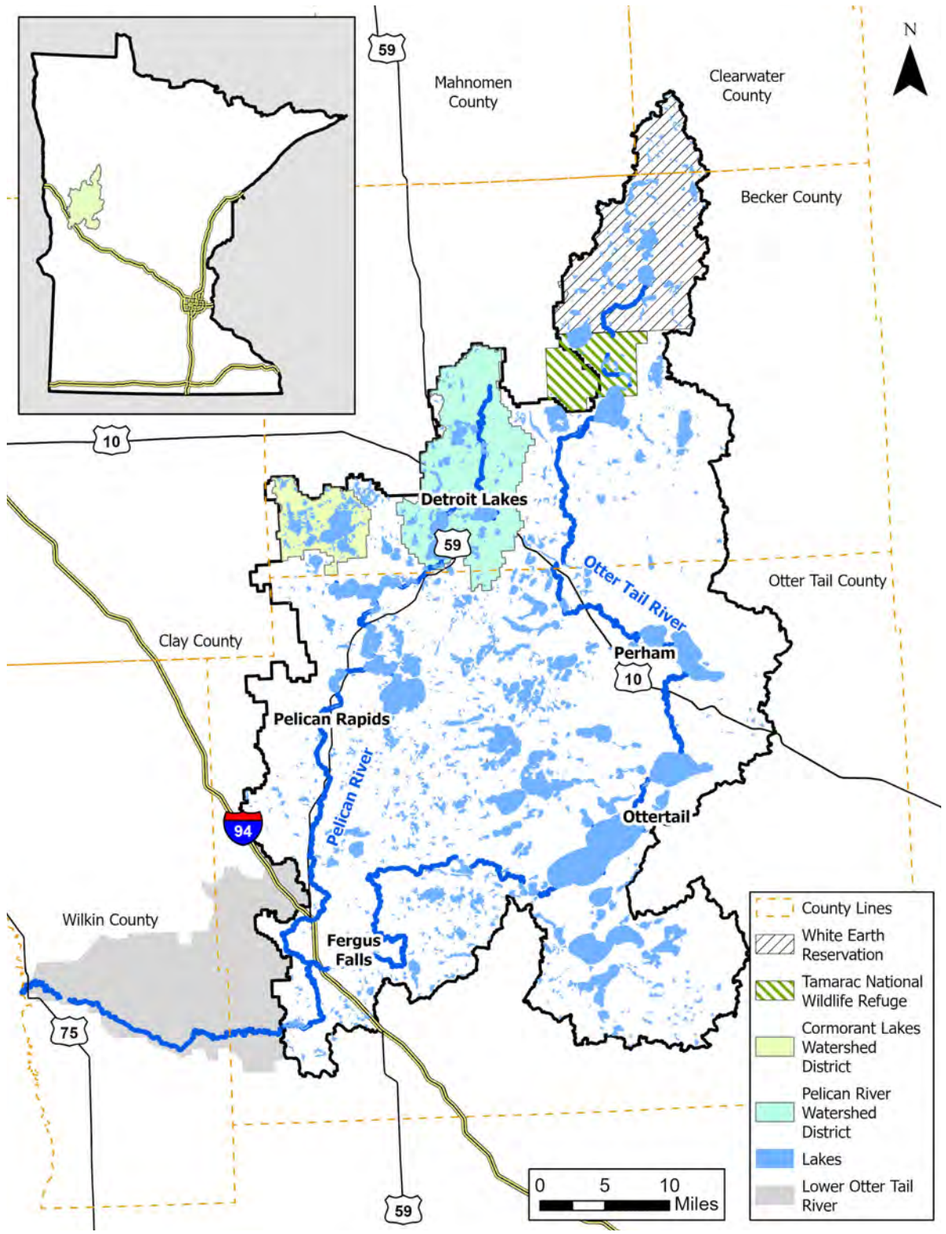
Habitat

Protecting forests, prairies, aquatic habitat, and biologically significant species such as wild rice and cisco by protecting the land and riparian areas.

How:
- Forest Stewardship Plans.
- Sustainable Forest Incentive Act.
- Conservation easements.
- Acquisitions.

Outcomes:
- Forest, prairie, and migratory waterfowl habitat is protected.
- Sensitive and unique plant, animal, and fish species are protected





Groundwater

Protecting drinking water, minimizing nitrates, and increasing understanding of sustainable groundwater use.

How:
- Sealing unused wells.
- Nutrient management.
- Irrigation water management.
- Protecting drinking water supply management areas.

Outcomes:
- Safe and plentiful drinking water.
- Groundwater quantity is conserved.



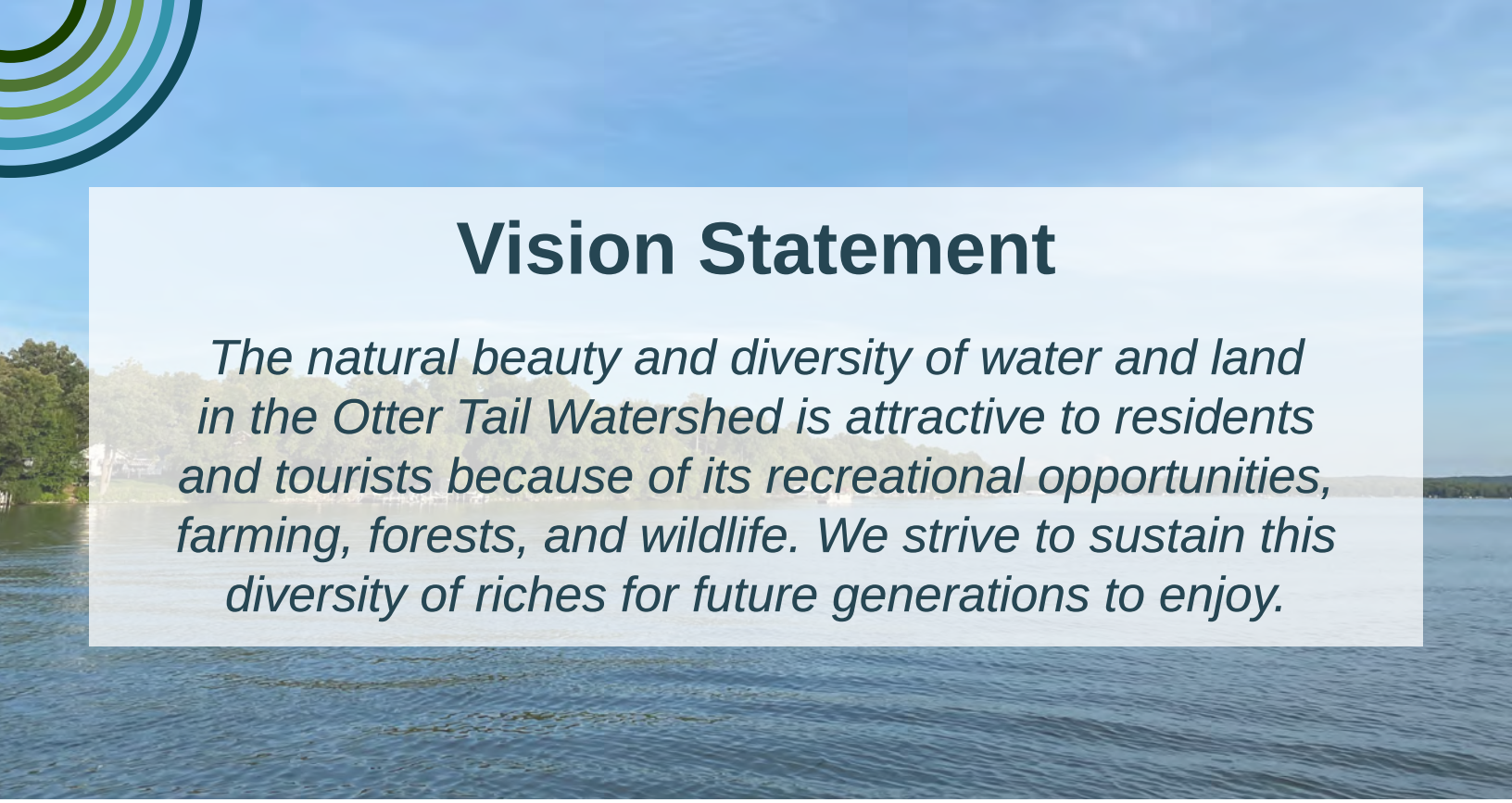
Land Stewardship

Increasing soil health practices on cultivated land and pasture to improve agricultural productivity and minimize erosion impacts to lakes, streams, and ditches.

How:
- Cover crops.
- No till.
- Pasture management.
- Water and sediment control basins.

Outcomes:
- Soil health improved.
- Nutrients, sediment, and bacteria entering lakes and streams is reduced.





Vision Statement

The natural beauty and diversity of water and land in the Otter Tail Watershed is attractive to residents and tourists because of its recreational opportunities, farming, forests, and wildlife. We strive to sustain this diversity of riches for future generations to enjoy.

Otter Tail Watershed Partnership

Becker Soil & Water Conservation District

East Otter Tail Soil & Water Conservation District

West Otter Tail Soil and Water Conservation District

Becker County – Forestry · Industry · Agriculture · Tourism – Established to Serve Since 1858

Otter Tail County - Minnesota

Cormorant Lakes Watershed District

Pelican River watershed district

For a full copy of the plan visit:
https://www.eotswcd.org/one/OT1W1P/
Further questions or comments,
contact your local SWCD, WD, or county:
Pelican River Watershed District: 218-846-0436
Cormorant Lakes Watershed District: 218-234-6865
Becker SWCD: 218-846-7360
Becker County: 218-846-7314
East Otter Tail SWCD: 218-346-9105
West Otter Tail SWCD: 218-998-5300
Otter Tail County: 218-998-8095

BWSR

Clean Water Land & Legacy Amendment

Appendix B. Public Input Summary

Open Houses

In September 2021, the Otter Tail One Watershed One Plan (1W1P) partnership held two Public Open Houses: one in Detroit Lakes and one in Fergus Falls. The purpose of these open houses was to inform watershed residents about the watershed and the1W1P process and gather their priorities to incorporate into the 1W1P.

Participants were given a checklist of six different stations to visit in the room.

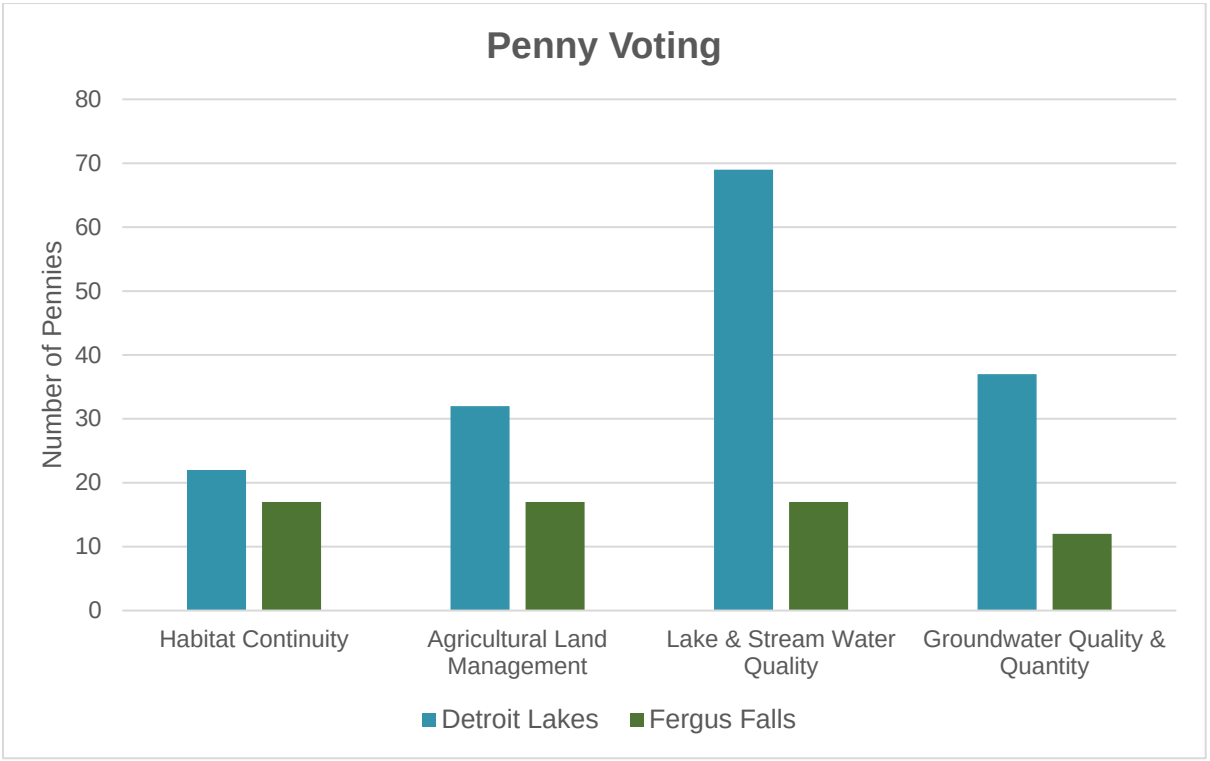
1. What is One Watershed One Plan
2. Put a dot on the watershed map where you live and note any problem areas in the watershed you would like us to know about
3. Using three pennies, vote for the resource category(s) you would spend money on in plan implementation
    a. Lake and Stream Water Quality
    b. Agricultural Land Management
    c. Groundwater Quality and Quantity
    d. Habitat Continuity
4. Visit the Water Bar to taste the difference between Detroit Lakes City Water (groundwater), Fergus Falls City Water (surface water), Private Well Water, and Bottled Water.
5. Leave any additional comments/concerns on post-it notes
6. Fill out the online survey.



Detroit Lakes Open House



The results from the penny voting were very different between the two locations. The Detroit Lakes Open House participants prioritized lake and stream water quality, while the Fergus Falls Open House voting was equally distributed among the categories.

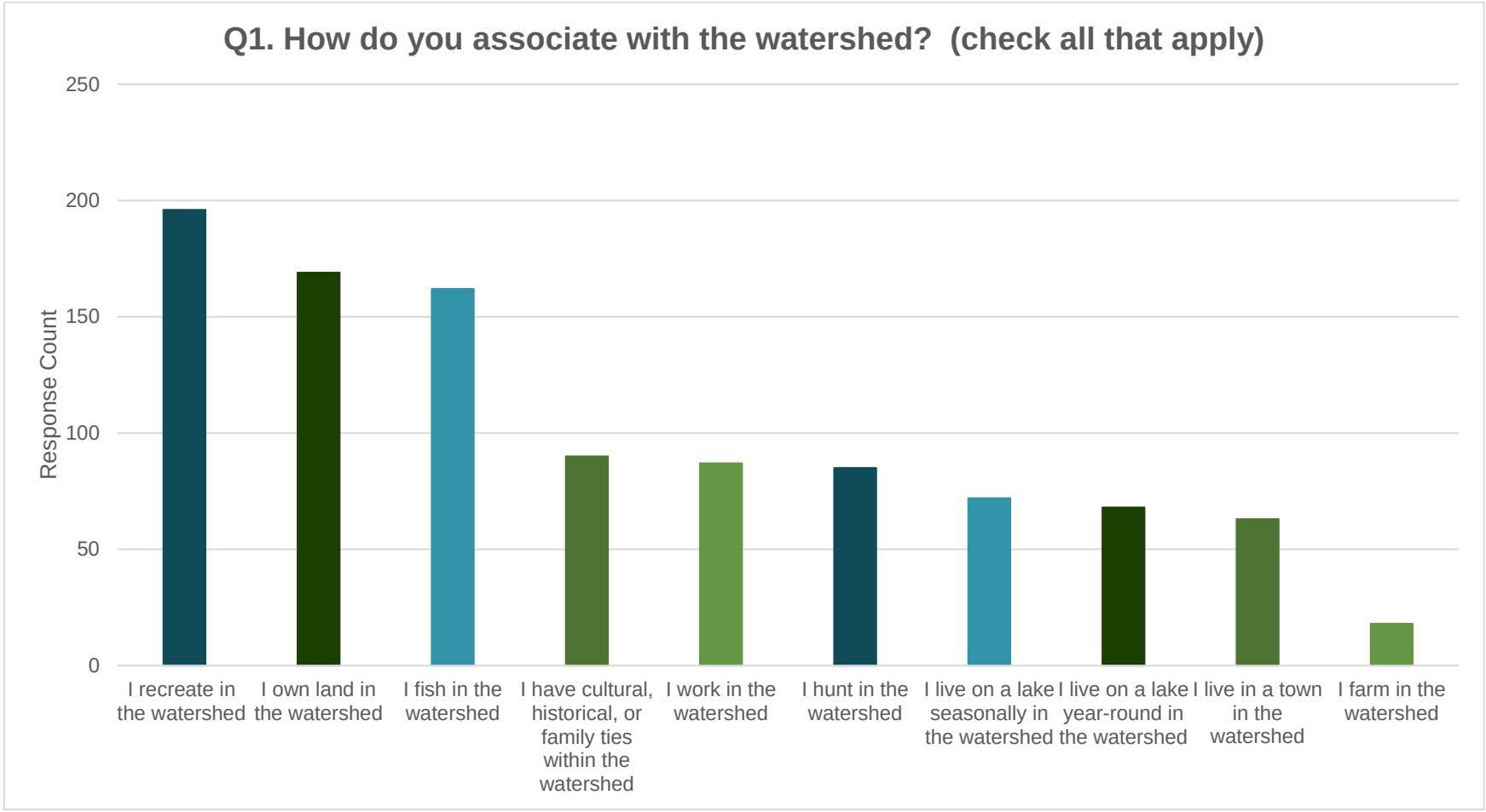


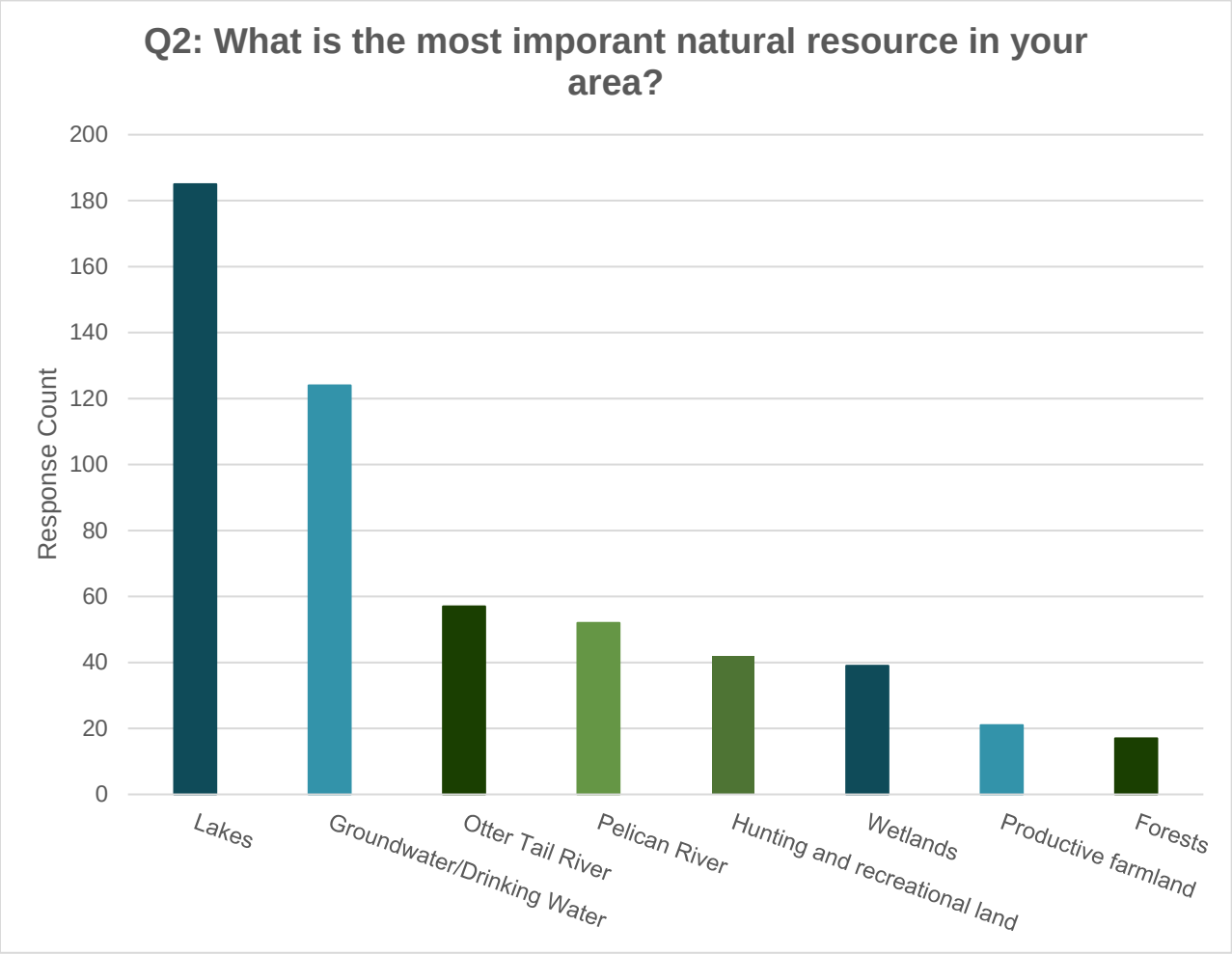
Additional Concerns from the Open Houses

- Climate change effects
- Otter Tail River – Fertilizer runoff, trash
- Lakes – phosphorus, lack of meaningful protection in shoreline management agreement for shoreline vegetation density
- Untreated phosphorus into recreational lakes and river segments
- *E.coli* impairments within the Otter Tail basin that affect recreational use
- Dams in the Otter Tail River impede sturgeon
- Excess sediment in rivers (ag, bank erosion, construction)
- Shoreland development
- Need for designation for stronger protection of areas of lakes where nesting birds and wildlife are abundant that is different from the overall General/Recreational Development Categories
- Drainage to the river which often is untreated from streets and fields
- We need trash cans and trash pick up from water trail landings

Public Survey

The public survey was available online for one month and promoted via social media, newspaper, and at the open houses. A total of 260 survey responses were received. The results of these questions are summarized in the following graphs.




Q2: What is the most imporant natural resource in your area?
Response Count
200
180
160
140
120
100
80
60
40
20
0
Lakes
Groundwater/Drinking Water
Otter Tail River
Pelican River
Hunting and recreational land
Wetlands
Productive farmland
Forests

Question 3: In three to five words, what about the Otter Tail Watershed makes you want to be living or recreating here?

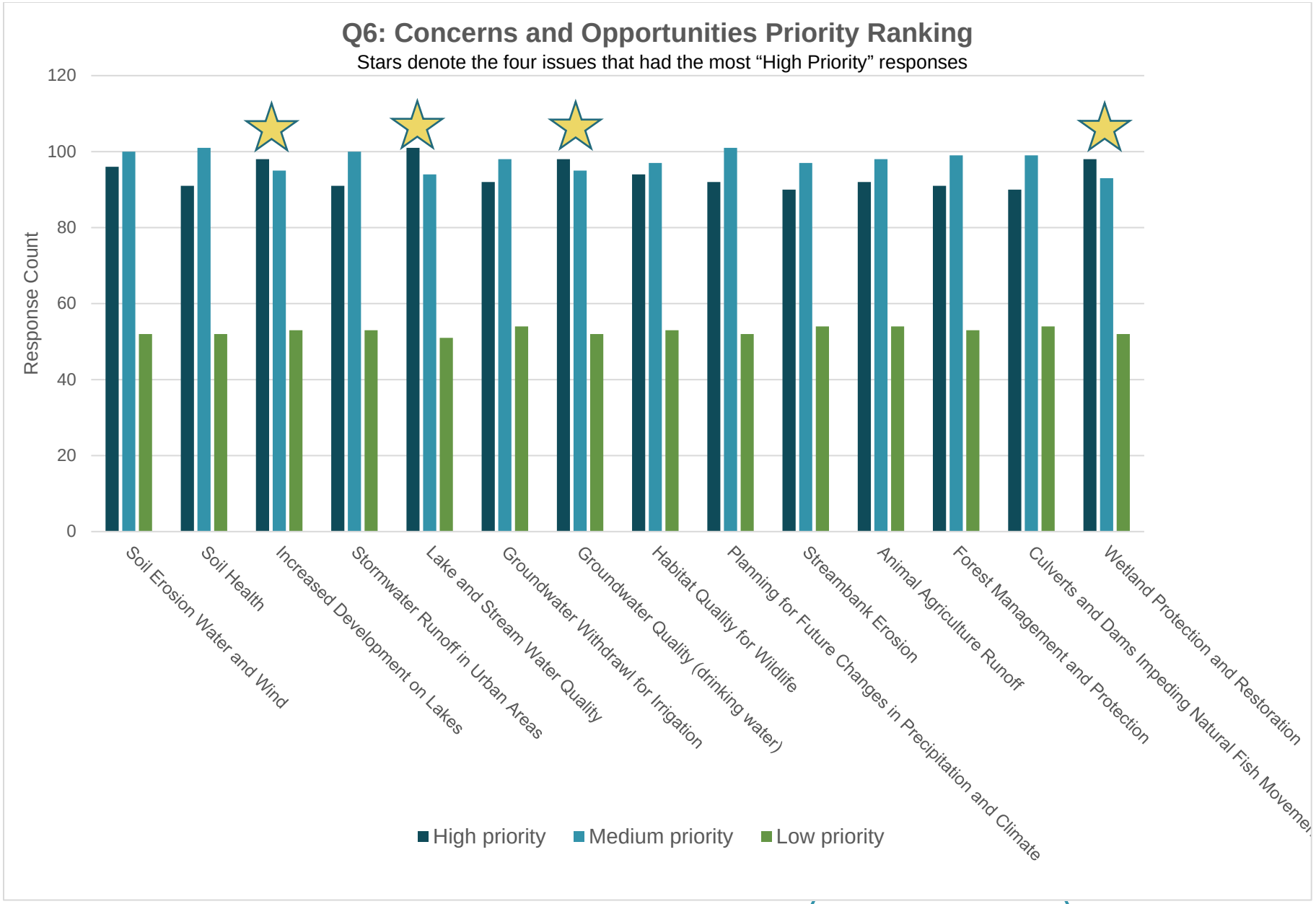


Question 4: In three to five words, what do you think the Otter Tail Watershed will look like in 50 years?



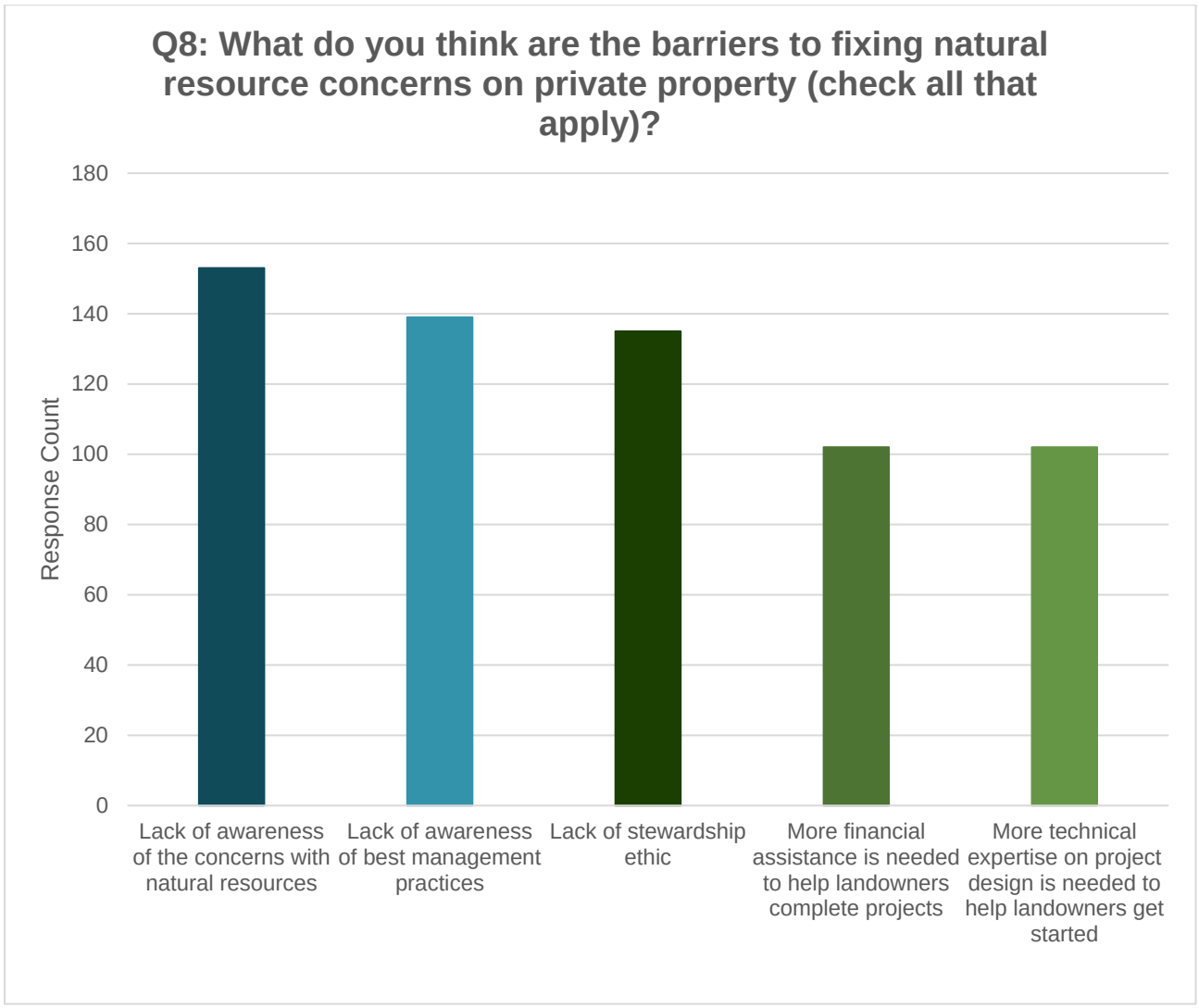
Question 5: In three to five words, what do you want the Otter Tail Watershed to look like in 50 years?




Q6: Concerns and Opportunities Priority Ranking
Stars denote the four issues that had the most “High Priority” responses
Response Count
120
100
80
60
40
20
0
Soil Erosion Water and Wind
Soil Health
Increased Development on Lakes
Stormwater Runoff in Urban Areas
Lake and Stream Water Quality
Groundwater Withdrawl for Irrigation
Groundwater Quality (drinking water)
Habitat Quality for Wildlife
Planning for Future Changes in Precipitation and Climate
Streambank Erosion
Animal Agriculture Runoff
Forest Management and Protection
Culverts and Dams Impeding Natural Fish Movemer
Wetland Protection and Restoration
High priority
Medium priority
Low priority

Question 7: If you could magically fix one natural resource concern in the watershed today, which problem would you fix?

Concern	Responses
AIS	27
Pollutant runoff	20
Water levels	16
Over development	15
Excess vegetation in the water	14
Water quality	12
Agricultural runoff	10
Erosion	10
More water	8
Clean water	8
Soil health	6
Shoreline protection	5
Wetland restoration	4
Climate change adaptation	3
Beaver dams	3
Drinking water quality	2
Drought	2
Groundwater contamination	2


Q8: What do you think are the barriers to fixing natural resource concerns on private property (check all that apply)?
Response Count
180
160
140
120
100
80
60
40
20
0
Lack of awareness of the concerns with natural resources
Lack of awareness of best management practices
Lack of stewardship ethic
More financial assistance is needed to help landowners complete projects
More technical expertise on project design is needed to help landowners get started

Question 9: Are there any topics, resources, problems, or opportunities that we didn't cover during this survey?

- Aquatic invasive species
- Aquatic invasive species
- Aquatic invasive species
- Aquatic Invasive Species.
- An effort to encourage the publics involvement by making the process less invasive and expensive to the landowners
- Close the short cut Otter Tail Lake outlet.
- Concerns with water adjacent landscaping
- Decline of biodiversity, non-native weeds.
- DNR interference
- Drinking water/development
- Droughts suck, but they naturally happen don't over react, more conservation is great but more regulation isn't always the answer.
- Education should be prioritized over enforcement
- Financial planning
- Flow to Red River and protection of our resources being misused downstream
- Foraging- equal access and awareness of foraging without destroying
- Getting floating weeds out the lakes
- Getting the landowners educated and involved.
- Grid Tiling is a concern of mine, I feel we remove water too quickly that is intended to be in the ground longer, this must have a long-term effect on aquifer levels...???
- How we can see climate changing in our area is a major concern
- Humans have responsibilities in addition to rights
- I live in the Pelican Watershed. My answers are based on living within that watershed
- I'd like to know how the closing of the Hoot Lake Power Plant will affect the river in the long term
- Identifying best practices for lake health
- Illegal cutting of weeds or if cutting legal improper maintenance of cuttings. Irresponsible landowners.
- Impaired lakes
- Improving boat launch areas on all lakes. Assess property owners (who use the launch) a small fee to cover the costs. This could directly towards improving the boat ramps.
- Increase communication with the general public to generate more awareness and cooperation with resource stewardship.
- Invasive species
- Invasive species
- Invasive species are the #2 threat to global biodiversity, second only to habitat loss.
- Just sick and tired of the condition on the river don’t even enjoy going there anymore
- Lack of AIS control strategy
- Lack of information regarding the current status of water and land resources and what initiatives are on the forefront of watershed agenda
- Lake levels and River levels
- lake levels-- are they regulated at all?
- Lake shore erosion
- Landowner profit/willingness, incorrect media information. Perceptions that you are wrong or doing bad things such as no till creating weeds, chemicals hurting food. Perceptions that bad things are actually good such as a clean tilled field is good (this is wrong), renewable energy is more harmful than good when you look at a life cycle analysis. Congress is backwards on a lot of their thinking. People 65-70 and older are generally recognized as untrainable and past the effect age of being in the workforce yet those are the idiots running the country, no wonder there is bad decisions and misinformation. Young people (less than 32) are even stupider and worse...

- Landowner willingness and profit. Most landowners would rather take a higher profit (rent) and abuse their land than they would take a lower profit (rent) and sustain or enhance their land for future generations. Equipment abilities. Farmers and ranchers don't always have the equipment with the ability to implement conservation practices or the capital to rent or lease the proper equipment. Change, most landowners and clients are scared of change to a degree, they know what works and they don't want to drastically change to the unknown such as season long grazing to a rotation or tillage to no-till. Absentee landowners, it's really hard to manage land and be on the land to know what you have if you live several hours away.
- Landowner willingness and profit. Most landowners would rather take a higher profit (rent) and abuse their land than they would take a lower profit (rent) and sustain or enhance their land for future generations. They also may “Think” they are doing good thing because they simply don’t know that those actions are detrimental in the long term. For the longest time people thought tillage was the right thing to do and a lot of the older generation still believes that is accurate and true. Equipment abilities. Farmers and ranchers don’t always have he equipment with the ability to implement conservation practices or the capital to rent or lease the proper equipment. Change, most landowners and clients are scared of change to a degree, they don’t know what works and they don’t want to drastically change to the unknown such as season long grazing to a rotation or tillage to no-till. Absentee landowners, it’s really hard to manage land and be on the land to know what you have if you live several hours or more away. Media, false or incorrect information is rapidly spread nowadays. Absentee landowners have a high chance of living in or near an urban area and the media skews the truth or reports incorrect things unknowingly so those landowners believe something that is not accurate and thus their actions are harmful. We need to spread correct information far and wide and get the information in the areas that 70+% of the landowners live and reside. Social media, although a fantastic tool, cannot accomplish this alone, we need to get news stories and articles in local papers and other media sources. DNR could send a survey to everyone who has purchased a fishing license or a boat license in the past 3 years asking where they most commonly fish,or launch their boat and what they do in regards to invasive species, and their opinions on how we could improve lake quality. A survey could be sent to forest landowners asking their opinions on how they would like to eradicate buckthorn invasions. Survey the people and see what they would like to do and if there are BMP’s that would fit those desired actions. If nothing else it gets you guys a better knowledge of the type of misinformation out there and how to combat that.
- Landowner willingness, time, wrong media information, spreading of opinion not fact, emphasizing small things with small impacts to appease a large number of individuals with a narrow view and mindset instead of helping a larger area more affecting everyone even if it’s not in the public spotlight.
- Likely fits under water quality, but litter around common fishing locations is pretty bad
- Maybe ask what regulations people on the watershed feel unnecessary.
- MN legislation and better enforcement (financial implications here) is necessary because voluntary compliance is less likely, I'm afraid.
- Native flora (wild rice etc)
- Need to work more with lake associations...come to our meetings, see who we are, instead of telling us what to do.
- No
- no
- No
- No
- No
- No
- No
- No
- No
- No
- No
- No

- No
- No
- no
- No
- No
- No
- No
- No
- No
- no
- No
- No
- No. Thank you!
- None
- None
- Nope
- not relevant
- Overall, global warming.
- please stop draining our lake
- Pollution due to tubing
- Population of invasive fish or species
- Potential groundwater contamination from excessive gravel mining.
- Power-loading ruins access to lakes, Create nature parks, Protect wildlife & native plants
- preserving prime ag. and critical habitat areas
- Protecting our water shed
- Public - know who controls water levels
- Public perception of farming, how long have these problems taken to reach this point, where do we move forward from here, is climate cycling considered before major lake drainage operations, how are urban pollutions affect our water quality.....
- Recreational water activities
- River usage
- road clean up of allllllllll roads
- Septic system regulations have changed again. Are they a big concern?
- Should have been completed years ago
- Single use plastics and Styrofoam should be banned in the area. Also, the environmental impact of so many gas-powered vehicles on our lakes (and roads) clearly damages the environment. It seems that because of so much seasonal use, there is a lack of concern for our fragile environment. I worry that this beautiful spot will not be available to my grandchildren and future generations.
- Some
- Stop funnel development of lakeshore and enforce setbacks.
- Stop new problems from developing instead of spending money on fixing things after they are a problem.
- Sustainability where people are NOT the priority
- Thanks
- The general public desires their information from incorrect media sources that don't always have proper information. Thus they make think they are doing something beneficial even if they are not. Time and money are also limiting factors especially on recreational lands.
- The use of pesticides and fertilizers on lake lots is out of control!!
- The water quality is awful on Melissa, lily pads and extreme weeds
- There needs to be an effort to bring agricultural producers and lake shore owners together to address resource concerns without them point the finger at each other.
- Tile drainage leading to pollution & flooding and non-resident landowners not paying their share

- Too many weeds growing in the lakes and you won’t let us clear enough away from the docks and shoreline for swimming and playing in the water.
- Too much regulation
- Tourist environmental Damage
- Very thorough.
- Wakeboard style boats causing shoreline erosion, property damage, and disturbing and redistributing the sediments on the lake bottom which contribute to the loss of fish habitat and lead to algal blooms.
- Water levels on lakes this year were very concerning. Uncontrollable weeds that need heavy equipment. Snails dying.
- Water protection from other States demands. They want our water.
- We have some serious debris build up on the bridges/culverts under the highway 10 bridge and culverts under the railroad near the old city of Luce that has caused family members to capsize their canoe. We have notified respective offices about a year ago and the issue apparently still isn't resolved.
- Yes the tile systems that are used so the wetlands etc. aren't able to drain overflow into the ground
- Yes, "kids" will help...train them to help!
- Yes. Farms are farming the right of way in ditches. Which causes run off, erosion, effects bird nesting, clean water filter by having grass holding water. Arrogant farmers and others need to be educated on RW issues
- Zoning to protect natural resources

Appendix C. Citizen Advisory Committee Summary

January 5, 2022
Ottertail Community Center

Citizen Participants

Patty Johnson, Sheri Meester, Hank Ludke, Gary Harrington, Mike Rheault, Howard Mooney, Tim Stenger, Lance Peterson, Lance Akers, Doug Green

Planning Team Participants

Darren Newville (EOTSWCD), Ben Underhill (EOTSWCD), Aaron Larsen (WOTSWCD), Bryan Malone (Becker SWCD), Chris LeClair (Otter Tail County), Kyle Vareberg (Becker County), Pete Waller (BWSR), Moriya Rufer (Houston Engineering)

Introduction

The Citizen Advisory Committee for the Otter Tail Watershed was formed to give a citizen's perspective on priorities and resources in the watershed. The Committee participants are spread geographically and through different stakeholder perspectives such as agriculture, lakes, and forests.



The first meeting of this committee was held on January 5 in Ottertail, MN. The meeting began with introductions and the citizen participants shared their backgrounds and perspectives on why they were there.



The Agenda included an introduction to One Watershed One Plan and introduction to the Otter Tail River Watershed so that all participants are on the same page. Then the major workshop portions of the meeting included issue prioritization and visioning, which are described in detail on the next few pages of this report.

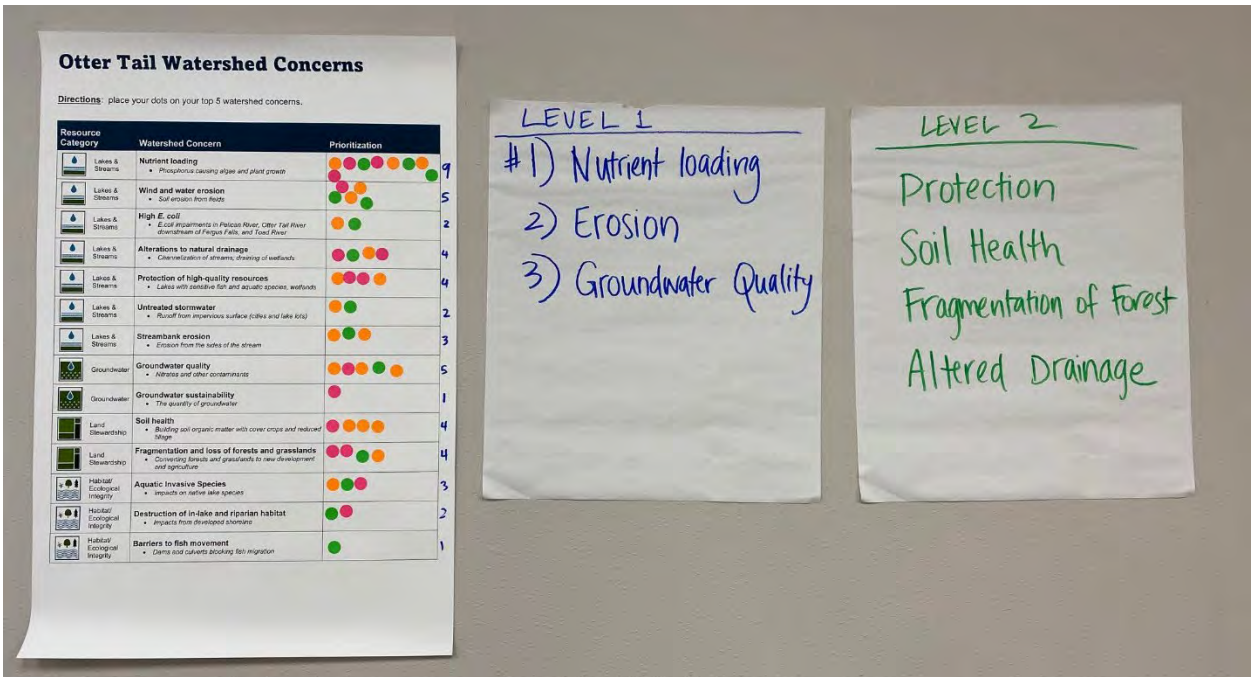
Issue Prioritization

The issues developed by the Technical Advisory Committee were presented and discussed. Then participants were given five sticker dots and invited to place them on the top five issues they think the plan should address. The top three priorities were:

1. Nutrient loading
2. Erosion
3. Groundwater Quality

There was a tie for the next four issues, which were:

4. Protection
5. Soil Health
6. Fragmentation of forests
7. Altered drainage



These priorities aligned very well with the Technical Advisory Committee's priorities, which indicates that there is good agreement in the watershed.

Visioning

Participants were then given a worksheet with the two questions below and asked to write a statement answering the questions. Next, the participants joined together in pairs and compared and joined their statements. Finally, the participants joined into two larger groups and came up with combined statements. The statements developed are below. These will be combined into a Vision Statement for the watershed.

What is special about this watershed?

Farming, recreation, wildlife, air quality, and tourism are attracted by a well-defined and diverse ecosystem. There are numerous programs in place to protect our watershed – use them.

It provides a natural resource which is high quality, easily accessible and renewable for multiple uses including industry, tourism, recreation, agronomy, nature and life.

Provides diversity for the life of people, animals and plants.

The lakes and waterways in the river system and natural beauty.

Clean water in our lakes and rivers for the generations to follow. Clean waters will bring tourism and dollars to this region.

It has a diverse ecosystem. There are ways to manage it. Having larger lakes to use as holding ponds. Protected lands next to watersheds to filter runoff.

Community encouraged; multi-level; Long-term support (resources – people, plan, equipment, fiscal); Progressive-Proactive; databased (soil and water).

The diversity and ability to be self-maintaining in filtration.

Building a sustainable ecosystem that combines wildlife, habitat with economic and personal growth.

What is our aspiration for the next 10-50 years?

Protecting one of our Country's most valuable resources, quality water, for future generations.

To ensure continuation.

Protect and improve water and habitat quality in the future.

Keep it clean for everyone to enjoy.

Ensure safe drinking and groundwater.

Manage the watershed for the future. Having clean water. Controlling runoff.

Continually updating data and implementing appropriate updates.

Quality water = quality life

Better water – leaving a better world for our children

Citizen Advisory Committee Meeting 2

September 12, 2022
Ottertail Community Center

Citizen Participants

Hank Ludtke (Frazee), Larry Anderson (Floyd Lake), Dave Schiller (Rochert), Jeff Vansteenburg (Battle Lake), Patty Johnson (Pelican Rapids), Sheri Meester (Pelican Rapids), Mike Rheault, (Fergus Falls)

Planning Team Participants

Darren Newville (EOTSWCD), Don Bajumpaa (EOTSWCD), Aaron Larsen (WOTSWCD), Cody Dock (WOTSWCD), Phil Doll (Becker SWCD), Chris LeClair (Otter Tail County), Pete Waller (BWSR), Moriya Rufer (Houston Engineering)

Summary

At this second meeting, a presentation was given summarizing the draft Otter Tail Comprehensive Watershed Management Plan and how the information from the first CAC meeting was incorporated into the focus issues and vision statement.

Following the presentation, LGU staff led a discussion about future projects, cost share incentive opportunities and answered questions.

The CAC will be sent a link to the draft plan during the Formal 60 Day Review period.

Appendix D. PRWD Supporting Information

The Pelican River Watershed District adopted an updated Watershed Management Plan in 2020 as required by statute (103D.401). Information from this watershed district plan was incorporated into this Comprehensive Watershed Management Plan authorized in 103B.801. This appendix provides some supporting information for reference use by the PRWD during implementation.

Lake Phosphorus Goals

Table 1. Phosphorus goals for each lake in the PRWD.

Lake	Estimated Total Phosphorus Load (lbs/yr)	Total Phosphorus Load Goal (lbs/yr)	Reduction Goal (lbs/yr)	Reduction Goal (%)
Floyd	1,039	987	52	5%
Little Floyd	1,063	1,010	53	5%
Detroit	3,757	3,568	188	5%
Curfman	87	83	4	5%
Long	190	180	10	5%
Sallie	6,267	5,954	313	5%
Melissa	4,987	4,737	249	5%
Fox	37	25	1.8	5%
Munson	62	59	3	5%
Loon	294	374	20	7%
Pearl	304	259	15	5%
St. Clair*	1,190	904	286	24%
Johnson	463	440	23	5%
Reeves	449	427	22	5%
Meadow	31	29	1.5	5%
Abbey	156	148	7.8	5%
Sands	63	59	3	5%

*These estimates come from the MDNR Lakes Phosphorus Sensitivity Significance Study, except the estimates for St. Clair Lake, which come from the St. Clair Lake TMDL.

Detailed PRWD Actions

These actions are summarized in the Targeted Implementation Schedule section of this Comprehensive Watershed Management Plan, pages 97-99.

Green cells with "H" indicate high priority items, orange cells with "M" indicate medium priority items, and red cells with "L" indicate "as opportunities arise" items.

#	**Water Quality - Lakes** **Action 2023-2032** ***Goal*: Adaptively manage District lakes to protect, enhance and restore lake water quality and recreational utility as appropriate to each lake.**	Cost	Priority
Objective A. Reduce excess nutrient and sediment loading to lakes through best management practices, capital improvement projects and regulatory controls.			
A1	Meet each District lake's water quality goal through phosphorus load reduction. *MOS: Total phosphorus concentrations equal to or below water quality goals in each lake.*	$500,000	H
A2	Write and/or update lake-specific management plans for main District lakes to achieve necessary nutrient reductions and water quality goals. *MOS: Completion of up-to-date implementation plans for each District lake.*	$150,000	H
A3	Reduce Lake St. Clair phosphorus loading to 2.75 pounds per day through activities outlined in the Lake St. Clair TMDL implementation plan. *MOS: Reduce phosphorus loading to 2.75 pounds/day.*	$1,000,000	H
A4	Develop and implement a phosphorus load tracking and credit system for Lake St. Clair. *MOS: Establish tracking and credit system*	$20,000	H
A5	Identify and target critical agricultural erosion and sediment transport areas in the North Floyd and Little Floyd sub-watersheds. *MOS: Completion of geomorphological assessment and report.*	$250,000	H
A6	Develop and implement a streambank stabilization plan for Campbell Creek to reduce TSS and TP loading from Campbell Creek to the Floyd Lakes. *MOS: Completion of Campbell Creek streambank stabilization project.*	$900,000 ($200-$300/ Linear Foot)	H
A7	Monitor existing agricultural BMPs in the Floyd Lake to evaluate phosphorus removal efficiency. *MOS: At least three sampling events of two BMPs/year.*	$25,000	H
A8	Retrofit existing and/or construct new regional wet/dry stormwater basins east of the City of Detroit Lakes. *MOS: Retrofitting or construction of at least one basin.*	$400,000	H
A9	Enforce the Minnesota Buffer Law. *MOS:100 percent landowner compliance with Minnesota Buffer Law.*	$5,000/yr	H
A10	Conduct shoreline surveys on lakes with potential for increased development. *MOS: Completion and documentation of at least two shoreline surveys/lake*	$5,000/yr	M
A11	Evaluate opportunities for capital improvement projects that reduce stormwater nutrient and sediment loads. *MOS: Perform at least one formal evaluation which generates at least ten project opportunities.*	$100,000	M

#	Water Quality - Lakes Action 2023-2032 ***Goal*: Adaptively manage District lakes to protect, enhance and restore lake water quality and recreational utility as appropriate to each lake.**	Cost	Priority
A12	Develop a comprehensive street sweeping management program within the City of Detroit Lakes. *MOS: Completion of a detailed street sweeping program document*	$20,000	M
A13	Explore the feasibility of financially assisting the City of Detroit Lakes in purchasing a street sweeper or equipment that removes fine particles. *MOS: Spend 16 hours of staff time researching grants, evaluating the District budget and brainstorming other methods for financial assistance.*	$150,000	M
A14	Maintain a District cost-share program to implement voluntary stormwater BMPs. *MOS: Provide information to landowner for potential BMP retrofit or installation projects.*	$10,000/yr	M
Objective B. Reduce rate and volume of stormwater runoff entering lakes to help meet water quality loading goals.			
B1	Maintain a cost-share program for installation of agricultural volume reduction BMPs. *MOS: Fund at least five agricultural BMPS.*	$50,000	H
B2	Maintain a cost-share program to implement voluntary stormwater BMPs. *MOS: Fund at least one voluntary BMP per year.*	$20,000	M
B3	Evaluate opportunities for capital improvement projects that reduce stormwater volume and peak flows. *MOS: Perform at least one formal evaluation which generates at least one project opportunity*	$100,000	L
Objective C. Reduce internal phosphorus loading (from bottom sediments) to lakes.			
C1	Calculate necessary internal phosphorus load reduction on Lake St. Clair and, if appropriate, perform a second alum treatment. *MOS: Completion of internal phosphorus load reduction study, and if appropriate, completion of an alum treatment.*	$400,000	H
C2	Assess internal phosphorus loading in North Floyd Lake and perform alum treatment of other appropriate practice to reduce loading. *MOS: Completion of internal phosphorus loading study, and if appropriate, completion of an alum treatment or other practice.*	$400,000	L
Objective D. Monitor and reduce chloride loading to lakes.			
D1	Develop a chloride assessment program and monitor chloride levels in suspected hotspots, such as Big and Little Detroit Lake. *MOS: Completion of a chloride assessment program document and collection of samples for at least two years.*	$15,000	L
Objective E. Reduce and assess loading of pharmaceuticals and personal care products to wastewater.			
E1	Educate public about proper use and disposal of household hazardous waste, pharmaceutical products and other personal care products with at least two social media posts and/or flyers per year. *MOS: Make two social media posts and/or flyers per/year.*	$1,500	L
E2	Attend one workshop on contaminants of emerging concern. *MOS: Attendance of one workshop.*	$2,000	L
Objective F. Protect the public from mercury exposure due to mercury-impaired lakes.			

#	**Water Quality - Lakes** **Action 2023-2032** ***Goal*: Adaptively manage District lakes to protect, enhance and restore lake water quality and recreational utility as appropriate to each lake.**	Cost	Priority
F1	Distribute MDH and MPCA materials about safe consumption of fish through at least two social media posts and/or flyers per year. *MOS: Make two social media posts and/or flyers/year*	$1,000	L
Objective G. Acquire data necessary to better understand water quality trends and threats in order to most effectively implement water quality improvement practices			
G1	Continue the District's annual chemical water quality monitoring program to assess lake health, guide adaptive management, and provide measures of progress. *MOS: Completion of annual monitoring report.*	$30,000/yr	H

#	**Water Quality - Wetlands** **Action 2023-2032** ***Goal*: Protect, enhance, and restore wetland water quality and function.**	Cost	Priority
Objective A. Inventory wetland water quality and function.			
A1	Conduct a systematic wetland inventory throughout the District that identifies, functionally assesses and prioritizes wetlands for protection and restoration. *MOS: Completion of wetland inventory.*	$50,000	M
Objective B. Restore hydrology of altered wetlands and surrounding areas that are contributing excess nutrients to downstream waters.			
B1	Design and complete the Rice Lake Wetland restoration project. *MOS: Completion of 461 acre Rice Lake Wetland restoration project, impounding approximately 691 acre-ft of water.*	$2,500,000	H
B2	Evaluate the potential for restoration of altered wetlands with a restoration feasibility study. *MOS: Completion of wetland restoration feasibility study and report.*	$50,000	H
Objective C. Protect high quality wetlands as identified in wetland inventory to be performed.			
C1	Identify and explore opportunities to protect high quality wetlands through easements, fee title or wetland bank. *MOS: Spend 16 hours of staff time exploring (and if possible, securing) opportunities.*	$25,000	L
Objective D. Help implement requirements for wetland management.			
D1	Help implement wetland requirements such as buffers, setbacks and pretreatment of stormwater prior to discharge into wetlands. *MOS: Assist with implementation of at least one requirement.*	$5,000	L

#	Water Quality Rivers, streams, and other waterways Actions 2023-2032 ***Goal*: Protect, enhance and restore rivers, tributary streams and other waterways, such as ditches**	Cost	Priority
Objective A. Monitor streams for water quality and other indicators of ecosystem health.			
A1	Update all annual stream monitoring plans to include assessment of chemical water quality parameters and flow at minimum, but also bank erosion and runoff when possible. *MOS: Completion of updated annual stream monitoring plan document.*	$10,000	H
#	Water Quality Rivers, streams, and other waterways Actions 2023-2032 ***Goal*: Protect, enhance and restore rivers, tributary streams and other waterways, such as ditches**	Cost	Priority
A2	Evaluate and update the stream monitoring plan for special projects. MOS: Completion of updated special projects monitoring plan document.	$20,000	H
A3	Develop and implement a Sucker Creek monitoring plan. *MOS: Completion of a Sucker Creek monitoring plan document.*	$4,000	M
Objective B. Inventory water quality and function of public drainage systems in the District in accordance with Minnesota State Statute 103E.			
B1	Conduct annual drainage system inspection reports for Drainage Systems 11, 12, 13 and 14. *MOS: Completion of inspection reports.*	$10,000	H
B2	Develop and implement a drainage system records modernization program. *MOS: Development of records database.*	$50,000	M
B3	Identify unstable reaches that degrade water quality. *MOS: Completion of geomorphological assessment and report.*	$50,000	M
Objective C. Restore stream water quality and stream ecosystem health.			
C1	Develop and implement a streambank stabilization plan for Campbell Creek. *MOS: Completion of streambank stabilization project.*	$2,000,000 ($200-$300/ Linear Foot)	H
C2	Design and complete the Rice Lake Wetland restoration project. *MOS: Completion of Rice Lake Wetland restoration project.*	$2,500,000	H
C3	Evaluate the potential for restoration of the wetland bordering Lake St. Clair to reduce phosphorus release to Public Drainage System 14. *MOS: Completion of restoration feasibility study.*	$50,000	H
C4	Evaluate the potential for improving geomorphology of the Pelican River between Highway 34 and Highway 10. *MOS: Completion of restoration feasibility study.*	$850,000 ($200-$300/ Linear Foot)	M
Objective D. Protect high quality stream reaches.			
D1	Protect Sucker Creek by continuing to serve on the Sucker Creek TAC (quarterly meetings) and supporting protection of and education about the Sucker Creek ecosystem. *MOS: Attendance of Sucker Creek technical advisory committee meetings.*	$5,000	H

#	Water Quality - Groundwater Actions 2023-2032 ***Goal*: Protect aquifers and maintain or improve groundwater quality, so that drinking water is safe.**	Cost	Priority
Objective A. Protect groundwater quality and ensure safe drinking water.			
A1	Offer assistance to Becker County and MDH in their efforts to test for potential groundwater contaminants and ensure that all wells in high arsenic areas have water treatment. Act as an information source to identify potential financial assistance such as grants, loans, and cost-share programs for well and septic system work. *MOS: Conduct conversation (at least every three years) with Becker County or MDH staff expressing availability to assist with outreach, etc.*	$1,500	L
A2	Implement infiltration and other BMPs according to the City of Detroit Lakes Wellhead Protection Plan. *MOS: Zero projects that violate the Wellhead Protection Plan.*	$1,500	L
A3	Develop or compile inventories for irrigation wells and areas of high groundwater sensitivity. *MOS: Completion of inventory.*	$2,000	L
Objective B. Increase public awareness of groundwater protection issues and of the City of Detroit Lakes Wellhead Protection Plan.			
B1	Educate about proper septic system tank management and the effects of failing septic systems through flyers, booklets, newsletters, social media, and local television. *MOS: Assist City of DL and Becker County with educational activities*	$1,500	M
B2	Assist Becker County and local SWCDs in promoting proper management of private wells through flyers, booklets, newsletters, social media, and local television. *MOS: Assist with County promotional activities*	$1,500	M
B3	Assist the City of Detroit Lakes in educating about wellhead protection and BMPs through utility bill inserts, newsletters, the District website, and social media. *MOS: Assist with City of DL education activities*	$1,500	M

#	Water Quantity – Lake Levels Actions 2023-2032 ***Goal*: Promote shoreline resilience to fluctuations in water levels of lakes, streams, and drainage systems.**	Cost	Priority
Objective A. Monitor Lake, stream, and drainage system water levels.			
A1	Maintain water level gauges at lake outlets and at key locations in several streams. *MOS: Collection of weekly water level data during ice-off season*	$2,000	H
Objective B. Promote shoreline that is resilient under fluctuating water levels.			
B1	Maintain a District cost-share program for lakeshore landowners to convert shoreline turf grass into “lake-friendly” buffer, which tolerates fluctuating lake levels. *MOS: Provide funding for District cost-share program*	$50,000 (~$500/Site)	H

#	Water Quantity – Localized Flooding Actions 2023-2032 ***Goal*: Mitigate localized flooding issues and prevent flooding-related damages to property, public safety and water resources.**	Cost	Priority
Objective A. Gather baseline floodplain data.			
A1	Complete a FEMA flood insurance study to protect critical infrastructure. *MOS: complete a FEMA flood insurance study.*	$250,000	M
Objective B. Mitigate Current Localized Flooding and Prevent Future Flooding			
B1	Conduct a hydrologic modeling study to identify flood prone areas, potential damages and critical infrastructure that may need updates. *MOS: Completion of hydrologic modeling study and report documenting flood prone areas/potential damages.*	$50,000	H
B2	Meet with the City of Detroit Lakes staff to review and discuss FEMA flood insurance rate maps, flood insurance studies and Atlas 14 data to prevent filling of floodplain in the City of Detroit Lakes. *MOS: Meeting is held that covers above topics.*	$2,500	H
B3	Identify and preserve critical area necessary for the conveyance or temporary storage of stormwater runoff. *MOS: Completion of study and report documenting critical area for stormwater; lack of construction/fill in this area.*	$5,000	M
B4	Develop and implement design standards for bridges, culverts or other water-related infrastructure to ensure integrity of road system and infrastructure while maintaining connectivity where needed. *MOS: All bridges, culverts or other water-related infrastructure replaced based upon design standards.*	$2,000	M
Objective C. Prepare for emergency flood scenarios.			
C1	Develop an Emergency Response Plan for flood-prone areas with Becker and Otter Tail Counties and the City of Detroit Lakes. *MOS: Development of Emergency Response Plan.*	$15,000	L

#	Water Quantity – Groundwater Actions 2023-2032 ***Goal*: Ensure groundwater supply is sustainable.**	Cost	Priority
Objective A. Reduce groundwater withdrawal.			
A1	Review Conditional Use Permits, Environmental Assessment Worksheets and Environmental Impact Statements for projects involving groundwater through the Becker County TAC. *MOS: Fulfill Becker County Technical advisory committee responsibilities (e.g., attend meetings, review permits, etc.).*	$20,000	H
A2	Assist with advertising irrigation workshops and other groundwater-related workshops sponsored by the MDA, Becker County SWCD and Otter Tail County SWCD. *MOS: Assist with irrigation workshops.*	$2,000	L
Objective B. Increase groundwater recharge.			
B1	Maintain cost-share program for installation of stormwater BMPs, including BMPs that encourage infiltration. *MOS: Fund at least one project per year.*	$200,000	H

B2	Explore opportunities for potential cisterns/ water reuse systems. *MOS: Spend 32 hours of staff time exploring opportunities and summarizing findings in memo.*	$5,000	M
B3	Implement a water reuse project (as described in B2) if funding arises. *MOS: Completion of water reuse project.*	$100,000	M

#	**Ecological Integrity – Aquatic Invasive Species** **Actions 2023-2032** ***Goal*: Prevent establishment of new invasive species and manage invasive species that already exist in the watershed.**	Cost	Priority
Objective A. Manage priority invasive species using the best available methods and technology			
A1	Implement the flowering rush management plan on infested waters to achieve less than 2% occurrence. *MOS: Less than 2 percent occurrence of Flowering rush in littoral zones of Detroit, Sallie and Melissa Lakes.*	$800,000	H
A2	Conduct/continue curly-leaf pondweed treatment to reduce frequency of occurrence by 90%. *MOS: 90 percent reduction in occurrence of curly-leaf pondweed in Detroit, Sallie and Melissa Lakes.*	$800,000	H
A3	Develop and Update readiness response plans for priority invasive species. *MOS: Completion of Rapid Response Plan document with a plan for each priority invasive species.*	$200,000	H
A4	Provide readiness response treatments if necessary. *MOS: If appropriate, implementation of one or several invasive species Rapid Response Plans.*	$5,000,000	H
A5	Manage zebra mussels, Chinese Mystery Snails, or other AIS on infested waters using methods devised by the University of Minnesota. *MOS: Completion of zebra mussel management activities on one or several of the above lakes.*	$1,000,000	M
A7	Conduct research to identify alternative treatment practices for flowering rush. *MOS: Completion of report summarizing alternative treatment practices, as well as pros and cons.*	$500,000	L
Objective B. Monitor for new invasive species.			
B1	Survey submerged aquatic vegetation, including aquatic invasive species, on Lakes Floyd, Little Floyd, Curfman, Long, Sallie and Melissa. *MOS: Completion of at least two aquatic vegetation surveys on each of the above lakes in 10 years.*	$400,000	H
Objective C. Stay current with new management strategies and aquatic invasive species research.			
C1	Continue to attend and present at aquatic invasive species workshops and conferences. *MOS: At least one conference (attending or presenting)*	$15,000	H
C2	Continue communications and develop a research partnership with University of Minnesota's Aquatic Invasive Species Center and other institutions. *MOS: Meet with Aquatic Invasive Species Center staff and if possible, also collaborate on one of their studies.*	$75,000	L

#	Wildlife Habitat Actions 2023-2032 ***Goal*: Protect, enhance and restore wildlife habitat**	Cost	Priority
Objective A. Search for opportunities to partner on multi-benefit projects that will enhance water quality and create new wildlife habitat.			
A1	Maintain District cost-share program for converting shoreline turf grass to lake-friendly buffer. *MOS: Fund at least one project per year.*	$250,000 (~$500/Site)	H
A2	Maintain cost-share program for installation of stormwater BMPs such as rain gardens, which provide pollinator habitat. *MOS: Fund at least one project per year.*	$200,000	H
A3	Design and complete the Rice Lake Wetland restoration project. *MOS: Completion of Rice Lake Wetland restoration project.*	$2,500,000	H
A4	Encourage wildlife and pollinator-friendly seed mixes and plantings in buffers or linear projects. *MOS: Note that wildlife-friendly seed mixes should be used in every permit review involving buffers or linear projects.*	$5,000	M
A5	Assist in enforcing the new Minnesota Buffer Law as appropriate. *MOS: 100 percent landowner compliance with the Minnesota Buffer Law.*	$50,000	M
A6	Prevent habitat degradation and fragmentation through conversations with MDNR staff. *MOS: Contact MN DNR at least once per year.*	$5,000	L

#	Fish Communities Actions 2023-2032 ***Goal*: Maintain healthy fish communities**	Cost	Priority
Objective A. Prioritize areas for aquatic habitat protection.			
A1	Through the Ottertail WRAPS Cycle 2, assess the following streams for index of biological integrity (IBI): Campbell Creek, Pelican River and Sucker Creek. *MOS: Obtain IBI values for the streams above.*	$100,000	H
A2	Develop an assessment program to identify priority areas (reaches, lakes, wetlands) for aquatic habitat protection. *MOS: Completion of assessment program document outlining how to identify priority habitat protection areas.*	$15,000	L
Objective B. Protect, enhance, and restore fish habitat, especially when projects have multiple benefits that meet District objectives.			
B1	Conduct a study to assess river ecosystem connectivity and identify river segments that need more or less connectivity. *MOS: Identification of river segments needing changes.*	$100,000	H
B2	Conduct a feasibility study to prioritize practices identified during the river ecosystem connectivity study (see B1). *MOS: Completion of feasibility study.*	$100,000	H
B3	Implement the priority recommendations from the river ecosystem connectivity feasibility study (see B2). *MOS: Implementation of at least one recommended practice.*	$100,000	H
B4	Prevent the introduction of invasive species and manage existing invasive species to support healthy ecosystem for fisheries. *MOS: Implementation of invasive species management action items.*	$100,000	H

#	**Fish Communities** **Actions 2023-2032** ***Goal*: Maintain healthy fish communities**	Cost	Priority
B5	Promote aquatic vegetation species diversity and density to support ecosystem health and fish habitat. *MOS: Implementation of invasive aquatic vegetation management action items.*	$5,000	M
B6	Explore providing a District cost-share program to remove seawalls and replace with shoreline practices that provide fish habitat. *MOS: Fund projects at high priority shoreline segments.*	$50,000 (~$10,000/Site)	M
B7	Incorporate fish spawning areas into projects when feasible. *MOS: Construction of a fish spawning area within applicable project.*	$5,000	L
B8	Assist the MN DNR in replacing the weir on Little Floyd Lake with rock rapids. *MOS: Replacement of weir with rock rapids.*	$220,000	L
B9	Assist the MDNR in replacing Bucks Mill Dam with rock rapids. *MOS: Replacement of Bucks Mill dam with rock rapids.*	TBD (~$2,500,000)	M

#	**General Administration** **Actions 2023-2032** ***Goal*: Provide efficient administrative services**	**Cost**	**Priority**
Objective A. Improve water resources by enhancing and refining administrative procedures.			
A1	Enhance local intra-agency administration effectiveness through meetings, agreements, procedures, etc. *MOS: At least three intra-agency enhancement activities per year.*	$10,000	H
A2	Identify and implement solutions to streamline permit application process. *MOS: Identification and implementation of at least three strategies for the permit application process.*	$50,000	H
A3	Develop software to facilitate permitting process. *MOS: Development and implementation of permitting software.*	$45,000	H
A4	Sponsor regular events to facilitate exchange of practical information. *Mos: At least one event per year.*	$50,000	H
A5	Continually update the District's website and social media pages. *MOS: Website update at least once/year; Facebook post at least once/month.*	$30,000	H
A6	Utilize a Technical and Citizen Advisory Committees *MOS: Convene a meetings when applicable*	$5,000	H

#	General Administration Actions 2023-2032 ***Goal*: Provide efficient administrative services**	Cost	Priority
A7	Provide technical input to development projects. *MOS: At least one piece of technical input per project.*	$2,000	M
A8	Develop and maintain inventory of District-owned or financed stormwater management facilities. *MOS: Development of stormwater facility inventory.*	$30,000	M
Objective B. Improve water resources by developing new District Rules or refining existing rules.			
B1	Refine District Rules to restrict new developments from increasing rate or volume of runoff leaving a site. *MOS: Publication of new rules and standards with the above refinement.*	$15,000 For Rule Revision	H
B2	Refine District Rules to prevent building or filling in the 100-year floodplain. *MOS: Publication of new rules and standards with the above refinement.*	$15,000 For Rule Revision	H
B3	Ensure District Rules support the Becker County and Detroit Lakes shoreland ordinances, the MS4 Ordinance and the City of Detroit Lakes WHPP. *MOS: Publication of new rules and standards with the above refinement.*	$15,000 For Rule Revision	H
B4	Ensure that Rules reflect Minnesota Buffer Law enforcement responsibilities. *MOS: Publication of new rules and standards with the above refinement.*	$15,000 For Rule Revision	H
B5	Consider developing rules to require wetland buffers and/or setbacks. *MOS: Consideration of this topic during the rule revision process, and if appropriate, a revised rule.*	$15,000 For Rule Revision	H
B6	Consider developing rules to protect groundwater. *MOS: Consideration of this topic during the rule revision process, and if appropriate, a revised rule.*	$15,000 For Rule Revision	M
B7	Consider adopting and enforcing a standard for minimum low floor elevation of buildings. *MOS: Consideration of this topic during the rule revision process, and if appropriate, a revised rule.*	$15,000 For Rule Revision	M
B8	Consider a filtration requirement for wellhead protection areas. *MOS: Consideration of this topic during the rule revision process, and if appropriate, a revised rule.*	$15,000 For Rule Revision	M

#	**Education** **Actions 2023-2032** ***Goal*: Provide efficient education services for the purpose of improving water resources.**	Cost	Priority
Objective A. Improve water resources through programs/ practices that encourage residents and businesses to reduce their phosphorus "footprints," reduce stormwater runoff volume, and enhance ecosystem health through other means.			
A1	Continue education program, including social media, radio interviews, talks, mailings. *MOS: 12 social media posts/year, 12 radio interviews/year, 6 educational talks/year, 1 Detroit Lakes message/year, and 1 Becker County mailing/10 years.*	$20,000	H
A2	Post educational signs at the Rice Lake Wetland restoration project. *MOS: Informational signs posted.*	$5,000	H
A3	Add stormwater facility info. to District website. *MOS: Website updated with appropriate information.*	$2,000	H
A4	Pilot a phosphorus/ runoff reduction outreach program. *MOS: Program developed and at least five target properties enrolled.*	$20,000	M
A5	Assist with Sucker Creek education program. *MOS: Assistance with two educational events per year.*	$2,000	M
A6	Conduct or assist with BMP workshops for stakeholders. *MOS: 2-3 workshops conducted.*	$10,000	M
A7	Host or support attendance of water-focused festivals *MOS: 1-2 events conducted*	$5,000	L
A8	Develop a salt application education program. *MOS: At least three Facebook posts and one "All Over Media" workshop hosted.*	$5,000	L
Objective B. Maximize visibility and public use of data collected by the District.			
B1	Put data on website and social media. *MOS: Data from every year of monitoring available on website.*	$2,000	H
B2	Develop data reports. *MOS: Each year, produce annual monitoring report and at least two types of educational materials that summarize findings from annual monitoring report.*	$10,000	H

Implementation Programs and Projects

1. Project Establishment

The purpose of this section is to introduce the types of projects that can be initiated and established and how they may be done. District projects can be established in one of the following manners specified in M.S. 103D.601- 103D.615:

- by a vote of the managers;
- by a petition;
- by a contract with a government entity;
- through establishment of an emergency project; or
- through Drainage Law (M.S. Chapter 103E).

The law has been summarized to highlight the key elements. These statutes should be referred to prior to initiating a project.

Projects Initiated by Managers. The District (M.S. 103D.601) may initiate a project by resolution of at least a majority of the managers, if the project is financed by grants totaling at least 50 percent of the estimated project cost, and the engineer's estimate of costs to parties affected by the watershed district, including assessments against benefited properties but excluding state, federal, or other grants, is not more than $750,000 for the project. The District may not establish a project by resolution if drainage is the essential nature and purpose. The District does not currently have any projects initiated by this method.

Construction Projects with Government Aid. These are projects to be constructed within the District under a contract between the District and the State or Federal government (M.S. 103D.611) and the cost of the project is to be paid for in whole or in part by the state or federal government, but the rights-of-way and the cost of the project are assumed by the watershed district. The District does not currently have any projects initiated by this method.

Basic Water Management Projects. Basic water management projects must be identified in the District's watershed management plan or constructed within the District under an agreement between the District and the State or Federal government. Projects initiated under this section may be linked to M.S.103D.905, Subd. 3, which allows the use of a District-wide ad valorem levy if the project is initiated by a municipality and the cost is a ttributable to implementing and managing the basic water management features of projects identified in the plan. An example would be the Districts LMP-01 project, initiated by the city of Detroit Lakes, to undertake AIS research, education, treatments, and management.

Emergency Projects of Common Benefit. If the District (M.S. 103D.615) finds that conditions exist that present a clear and imminent danger to the health or welfare of the people of the watershed district, and that to delay action would prejudice the interests of the people of the District or would be likely to cause irreparable harm, the District may declare the existence of an emergency and designate the location, nature, and extent of the emergency. The District may order that work be done under the direction of the managers and the engineer, without a contract. The cost of work undertaken without a contract may be assessed against benefited properties or, if the cost is not more than 25 percent of the most recent administrative ad valorem levy of the watershed district and the work is found to be of common benefit to the watershed district, funding may be raised by an ad valorem tax levy upon all taxable property within the watershed district, or both. The District does not currently have any projects initiated by this method.

Drainage Systems and Projects A county board or a joint county drainage authority may direct the District to assume responsibility for a drainage system within the District (M.S.103D.621-103D.625). After the transfer, any repairs, improvements, or construction must take place in accordance with Minnesota Drainage Law (M.S. Chapter 103E). The cost of routine maintenance and repair of the District's projects (M.S.103D.631, 103D.635 and 103D.641), including the cost of removing obstructions and accumulations of foreign substances from drainage systems, must be paid from the District's maintenance fund. If the cost of maintenance or repair, including all fees and costs relating to it, is less than $25,000, the District may have the work done by contract without advertising for bids (M.S.103D.641). An example would be the District's maintenance funds for maintaining the function of Becker County Ditches 11, 12, 13, and 14.

2. Regulation and Enforcement



Rules/ Regulatory

Per the authorities granted in Minnesota Statutes 103D, the District has rules to regulate the use and development of land within its jurisdiction (Appendix F). In 2003, the District's rules were revised to adopt a permit system. The permit system requires installation of BMPs under certain land development scenarios in order to manage stormwater runoff from impervious surfaces and to minimize alterations along shorelines. For example, a District permit is required if a project creates more than 1 acre of impervious surface, disturbs near shore areas, or includes floodplain, wetland, or public waters. Other criteria trigger a watershed permit as well. In 2018, the District assumed jurisdiction to enforce the Minnesota Buffer Law (MN Statutes 103F.48) and adopted rules enabling enforcement of this law on the drainage systems within its jurisdiction, i.e., Becker County Drainage systems 11,12, 13, and 14. The District will continue to enforce its rules, using District staff and qualified professional consultants.

It is the District's intent to revise the rules as we learn more about development impacts on water quality of lakes, streams, wetlands, and groundwater and the means to reduce them. In particular, it seems likely the District will adopt rules to encourage practices pertaining to stormwater infiltration, shoreline vegetative buffers, wetland building setbacks, erosion and sediment control, off-site stormwater mitigation for linear reconstruction projects, groundwater protection, and wetlands and shoreline preservation. When District rules are revised, the District will attempt to coordinate efforts with other government organizations and look for ways to streamline regulatory burden on the public. In addition to maintaining its own rules, the District regularly reviews and offers advice to other agencies concerning their rules and how these rules could better protect water resources. The idea behind this cooperation and oversight is to coordinate regulatory efforts and avoid duplication of rules. The District will continue to work closely with state, county, city and township officials to strengthen regulations that protect water resources, especially those that protect sensitive shoreline areas and enhance stormwater management. The District will also revise its own rules in response to changes in the rules of other agencies in order to eliminate duplication or gaps.

3. Data Collection and Monitoring



Data Collection

The District understands that data collection and studies are necessary for making informed management decisions, and therefore has an extensive monitoring program for water quality, water quantity, and land use. Like most watershed monitoring programs in Minnesota, the District's water quality monitoring focuses on phosphorus, but also includes data collection of several other water

chemistry parameters at regular intervals throughout the summer. The District also monitors submerged aquatic vegetation as well as zooplankton, phytoplankton, and invertebrate communities, as part of the water quality monitoring program. The water quantity monitoring program includes flow monitoring in creeks and water level monitoring in lakes. Finally, the District collects data on land use change such as shoreline development and impervious surface coverage to study how that may impact water quality.

Following each year of monitoring, an annual report is created that summarizes data collected. Water quality data is also annually uploaded to the MPCA's Environmental Quality Information System (EQuIS) database. The data collected in any given year varies, depending on special information needs, weather conditions, and availability of equipment and staff. The District adds monitoring stations and upgrades equipment and software as needed. For all monitoring efforts, focus is given to those water bodies identified as impaired or at risk.

Lake and Stream Monitoring

Currently, stream monitoring occurs twice per month at twelve sites on Campbell Creek, Pelican River and Ditch 14, April through September. Water quality and quantity are monitored, with continuous flow data collected at seven of the twelve sites. In addition to these core stream sites, the District also monitors at special stream sites, which often include the site of a proposed project, where pollutant loads are being investigated, or the site of a past projects, where the effectiveness of the project is being evaluated. Lake monitoring occurs twice per month on seven core lakes (Big Floyd, North Floyd, Little Floyd, Detroit, Little Detroit, St. Clair, Sallie and Melissa Lakes), June through September. Water quality and quantity parameters are measured, including lake levels, which are recorded biweekly from ice-out to ice-in, except on Detroit Lake, which has lake levels continuously recorded. Additional small lakes are monitored in the same way every 2-3 years, following MPCA guidelines that dictate these lakes must be monitored for a minimum of three years within a ten-year period. The District also collects zooplankton and phytoplankton samples on Detroit, Sallie and Melissa Lakes once per month, June through September, to assess the health of these communities, and to track population changes that may occur due to zebra mussel infestation (this monitoring program began in 2018).

Aquatic Invasive Species Management

The District currently monitors and manages the spread of AIS in District Lakes through projects 1-B, 1-C, and LMP-01. Projects 1-B and 1-C were authorized in the 1980's to manage nuisance levels of aquatic vegetation for recreation and ecosystem management for Detroit Lake, Curfman Lake, Lake Sallie, and Lake Melissa. Project LMP-01 was authorized in 2010 to undertake district-wide AIS research, education, treatments, and management. The District will continue to research, develop, and implement new strategies to limit the spread of AIS into new lakes, and control AIS populations in infested lakes.

Aquatic Vegetation Monitoring

Aquatic vegetation surveys are conducted on core District lakes (Big, North Floyd, Little Floyd, Detroit, St. Clair, Sallie and Melissa Lakes) on a rotating basis, with the goal of performing a survey on each lake at least once every five years. Additional surveys may be conducted more frequently to aid in the specific management decisions.

Land Use Change Data Collection

The District compiles data on land use change, specifically land use change relating to shoreline development and impervious surface coverage. Shoreline surveys have been conducted on all the District's core lakes to assess the amount of development on the shoreline. The District

records the extent of sand blankets, rip rap, retaining walls, and natural shoreline as well as the number of boats, docks, and lifts. Photographs of shoreline have also become part of the survey protocol; photographs of each house's shoreline are then linked to taxpayer IDs. Shoreline surveys have been conducted every 5-10 years since 1997.

4. Education and Outreach Programs



The District's education and outreach program exists to improve water quality and ecosystem health by leveraging the power of the community to effect positive change. It is clear that if the public had a better understanding of water problems and their respective causes and solutions, water resources would be better protected. Accordingly, the District has been involved in producing publications for the general public (reports, brochures, news articles); maintaining social media pages and a website; appearing monthly on the local radio station to discuss water topics; hosting technical trainings for contractors and landscapers; leading workshops on AIS; organizing river cleanup events; opening internship positions for college students; developing curricula for teachers; preparing and disseminating BMP materials for realtors, land owners and developers; presenting information to students, service groups and governmental organizations; and providing assistance to lake associations and the Becker County Coalition of Lake Associations. The education and outreach programs need to be adaptive and responsive to keep up with evolving environmental concerns, communication approaches, and strategies. The District will continue to engage and foster partnerships with the following groups:

- **Residents.** This is a diverse audience that includes homeowners, landowners, renters, and seasonal visitors. Their local identity may be influenced by where they reside, their proximity to a water body, occupation, and the community groups they belong to. These groups can be formal or informal including community, agricultural, and neighborhood organizations, lake and homeowner associations, and outdoor groups.

- **Local Leaders.** Local elected and appointed leaders may include mayors, city council members and county commissioners. This audience generally includes individuals with decision-making power on a local (city, county, state) level.

- **Students.** There is one school district within the District containing elementary, middle and high schools. There are both public and private schools in the District, preschool programs, and several nearby colleges and universities.

- **Businesses and Professionals.** Local businesses have the potential to be leaders in the implementation of best practices to protect water. Business campuses often have large footprints and their own community of employees who are impacted by the business culture. Professionals are those who do work that impacts water resources and may be in private businesses or government. These include individuals who manage winter snow and ice or turf grass as well as landscapers, builders and developers.

5. Drainage System Management



Drainage Systems Management

The District serves as the public ditch authority within its jurisdictional boundary and has been since 1997 when Becker County elected to turn over responsibility of County Ditches 11, 12, 13, and 14 to the District. In 2018, the District became the authority to enforce the Minnesota Buffer Law for ditches in its jurisdiction, which states that all public ditches must have perennial vegetative buffers of 16.5 feet along their shores. The County SWCDs inspect the ditches to verify compliance with the Buffer Law, but the District is notified if enforcement action is required. The District receives annual funding from the State for this enforcement.

The District recognizes that the ditches in its jurisdiction were originally constructed to provide drainage for agricultural lands, and intends to maintain the ditches for this purpose, in accordance with Minnesota Statutes 103E. However, the District intends to simultaneously minimize the ditches' past and present downstream impacts on District lakes through restorations, installation of BMPs, and other measures consistent with multi-purpose drainage criteria outlined in Minnesota Statute 103E.015, Subd. 1. The primary duties that come with managing public ditches include performing annual inspections, reviewing plans for bridge and culvert installations or replacements, mitigating flowage obstructions and sediment accumulation (for example, build up caused by debris or beaver dams), and enforcing use of vegetated buffers.

6. Incentive Programs



Incentive Programs

The District's main incentive program is its cost-share program. This program has provided cost-share assistance for implementing BMPs (structural, non-structural and management BMPs) in rural, urban, and shoreland settings. Examples of activities that are eligible for cost-share assistance include native shoreline buffers, streambank and lake shoreline stabilization, and stormwater treatment practices (e.g., rain gardens, infiltration swales, etc.). Projects are ineligible for funding assistance if the project is a requirement of any federal, state, or local government regulation, including variance, conditional use, required mitigation, or correction of a violation. Priority is given to projects that treat stormwater at the source or that are located near shoreland or streambanks. The cost-share program is funded through the district-wide utility fund. Depending on the project, there may be other funding sources, such as the State of Minnesota's Clean Water Fund or grants from other government agencies or foundations. Projects and practices funded by the District's cost-share program are typically much smaller in size than capital improvement projects.

7. Capital Improvement Projects



Capital Improvement Projects

The District has several capital improvement projects planned, which are listed in **Table 8.3 (page 124)**. These projects have been identified through TMDL and WRAPS studies and other investigations. In many cases, the PRWD will be the lead agency for implementing the activities, but in some cases, the District will cooperate with other agencies and organizations to plan and fund the project.

Many of the projects included in **Table 8.3** are planned at the conceptual or feasibility-study level. These estimated costs are total project costs; the District will pursue collaborative and

grant opportunities to reduce cost borne by the District. As projects become better defined, so will the estimated project costs and responsibilities of the District and its partners. At this time, **Table 8.3** may be revised. BWSR may require a plan amendment if the anticipated cost is significantly greater than the original estimate, as adjusted to reflect inflation. Any proposed amendments to the Plan will follow the procedures described in Section 9. Additionally, if a funding mechanism changes for any of the capital improvement projects listed in **Table 8.3** such that the financial obligation to the District is increased, the District may hold a public hearing on the proposed change before ordering the project. In addition to costs of capital improvement projects, timelines of these projects may also change. The District implements capital improvement projects as circumstances dictate, and to fit in with the District's financing strategies. For example, the availability of grants and partnerships could result in either the acceleration or delay of projects. For capital improvement projects not included in the Plan, the PRWD will initiate a plan amendment to add the proposed capital project to **Table 8.3** prior to implementation.

The District will follow the process outlined in the applicable statutes for implementing proposed capital improvement projects. The District will coordinate with and involve the affected local units of government and other agencies in the implementation of these projects. If the District orders the project, then the District prepares project plans and bidding documents, finalizes the funding mechanism, and advertises the project for bid. Through its capital improvement projects program, the District completes the work, oversees the project construction, manages the project's finances, and provides monitoring and evaluation

Appendix E. Lake Targeting

This section utilizes models that were created in the planning process to help local water managers target projects. The lakes in this section are the focus lakes determined in Section 4 of this plan.

Phosphorus Targeting Map

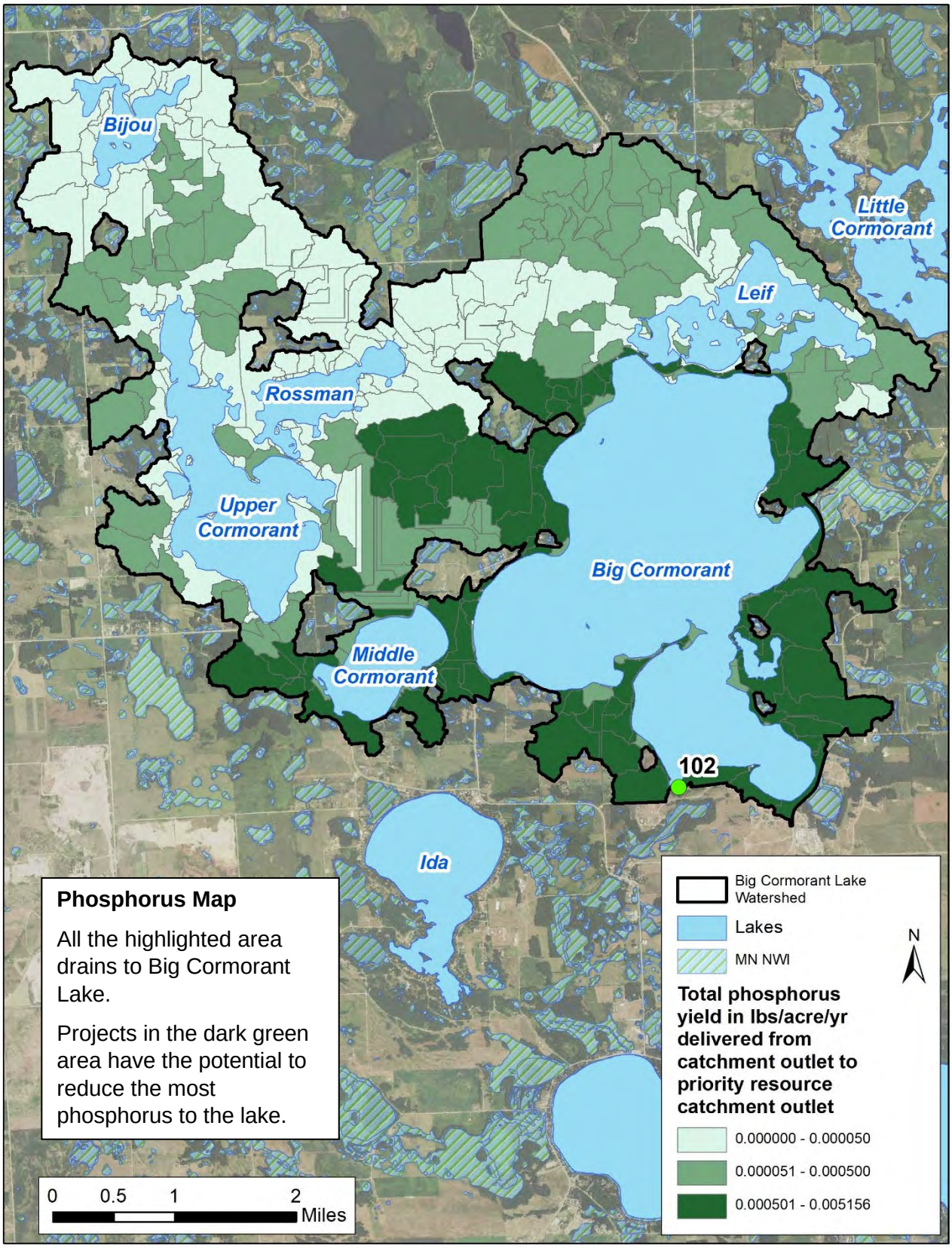
The phosphorus targeting map was created with the Prioritize, Target, Measure Application (PTMApp). It identifies the drainage area to the lake and where the most phosphorus is coming from to the lake (darkest green areas). PTMApp can also be used in these areas to target agricultural practices.

Protection Targeting Map

The protection targeting map was created through the Landscape Stewardship Planning process. It uses a scoring method to prioritize large parcels for protection practices such as forest stewardship plans, Sustainable Forest Incentive Act (SFIA), conservation easements, and acquisitions. The scoring method (RAQ) gives points for the parcel being Riparian, Adjacent to other protected lands, and having high Quality or sensitive features such as wild rice or cisco.

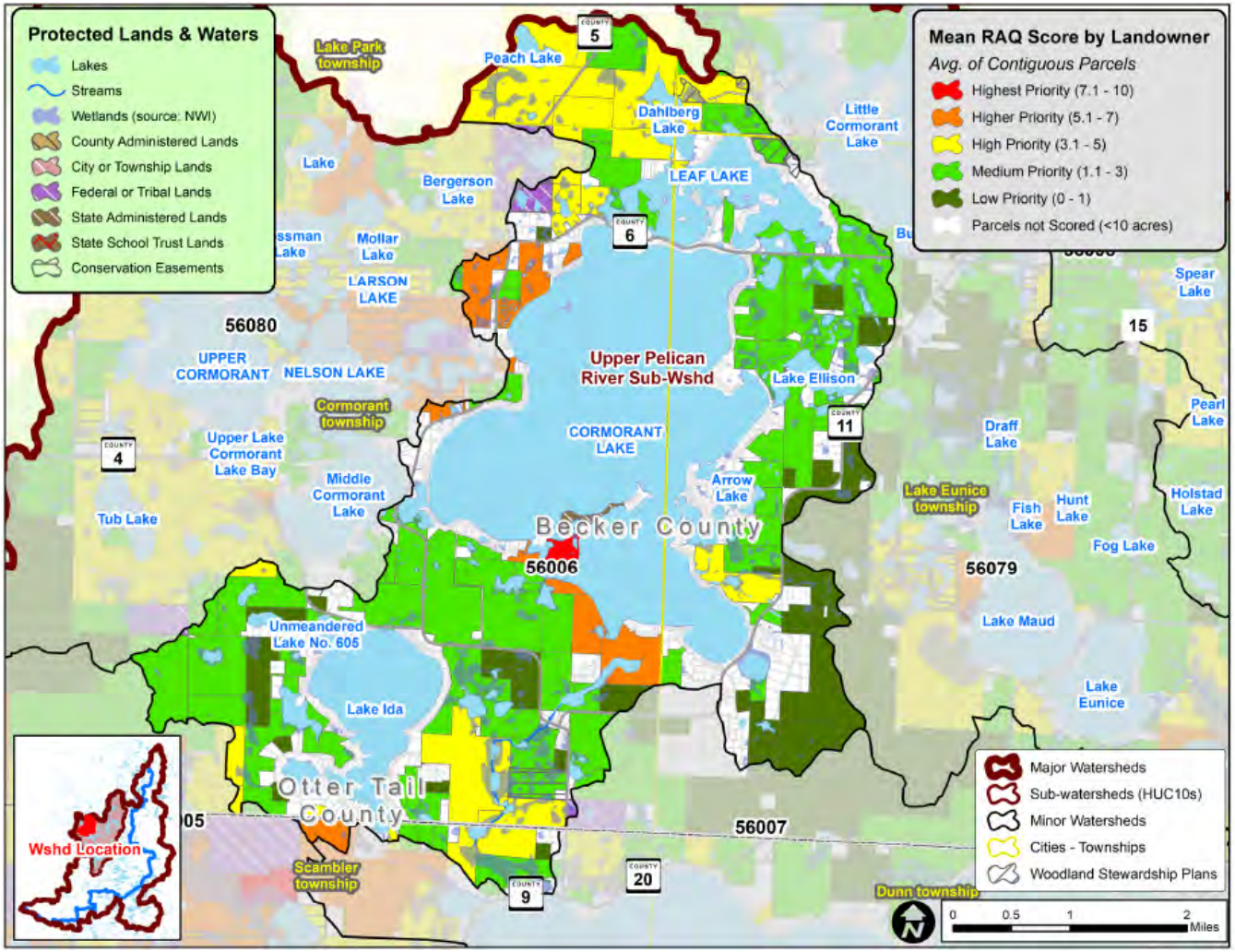
Big Cormorant Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 6	**Phosphorus Loading Focus**: Nearshore



Big Cormorant Lake

Potential Acres to Protect: 2,786 | **Protection Goal: 46** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice,
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

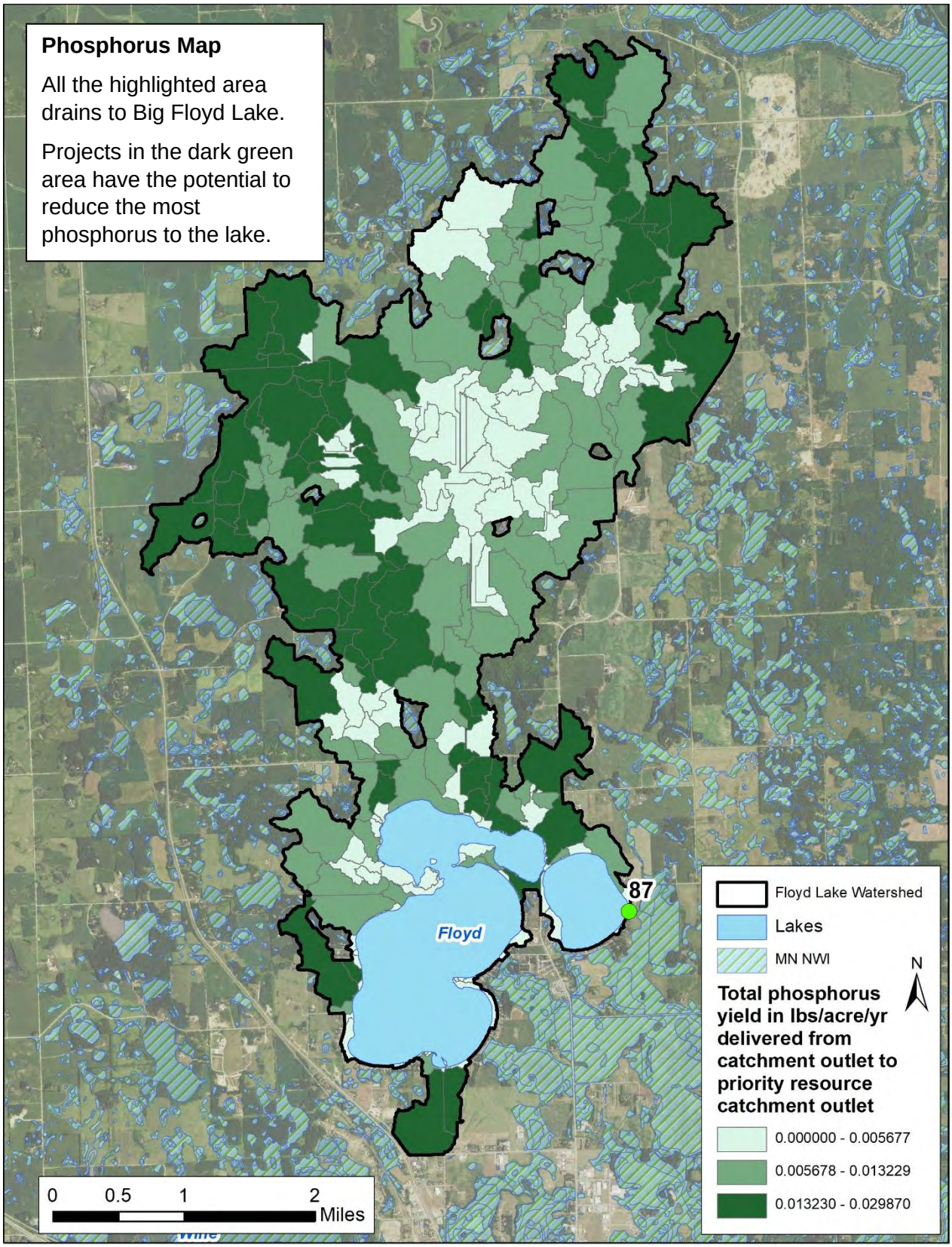
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

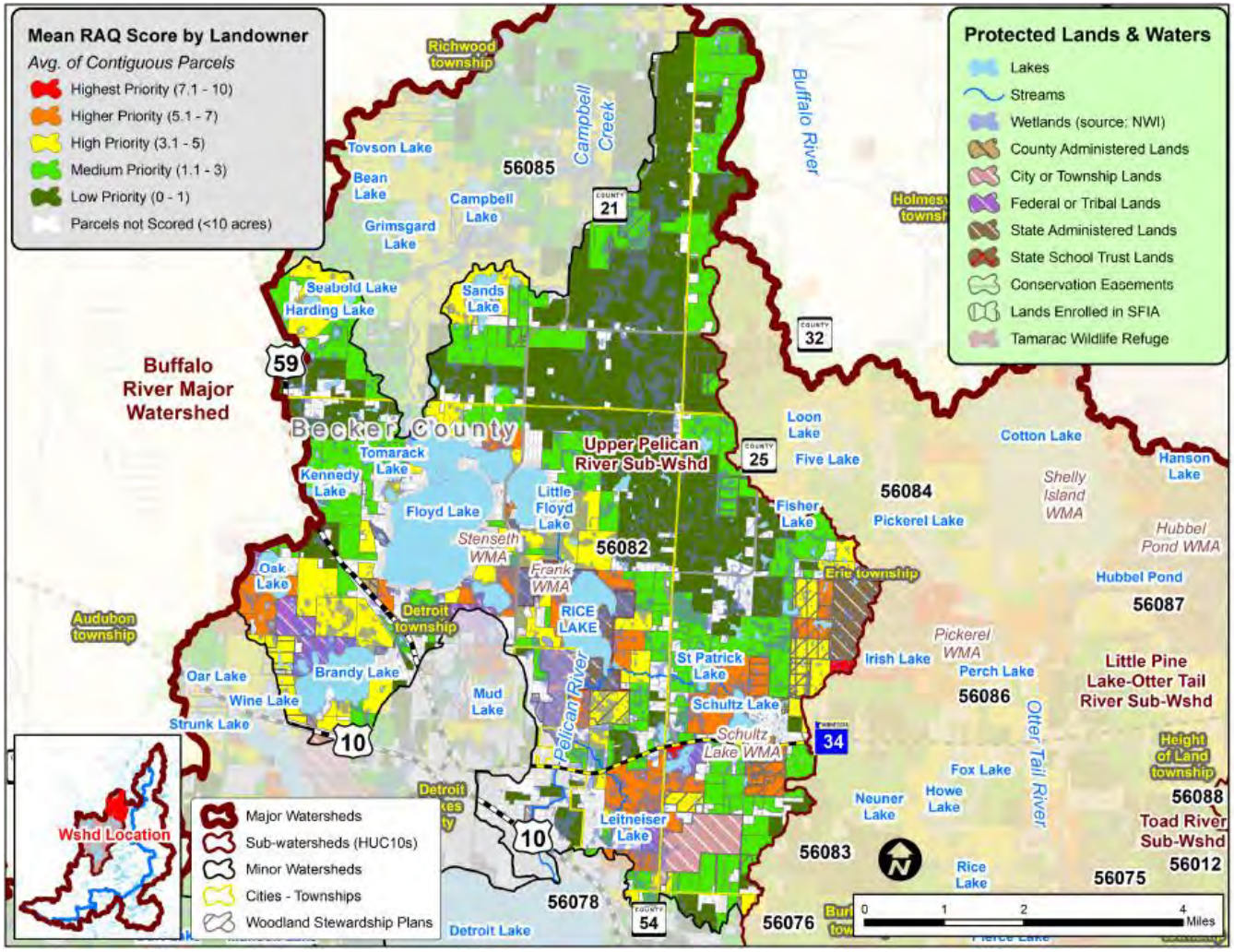
Big Floyd Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 15	**Phosphorus Loading Focus**: Watershed and Nearshore



Big Floyd Lake

Potential Acres to Protect: 6,119 | **Protection Goal: 283** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

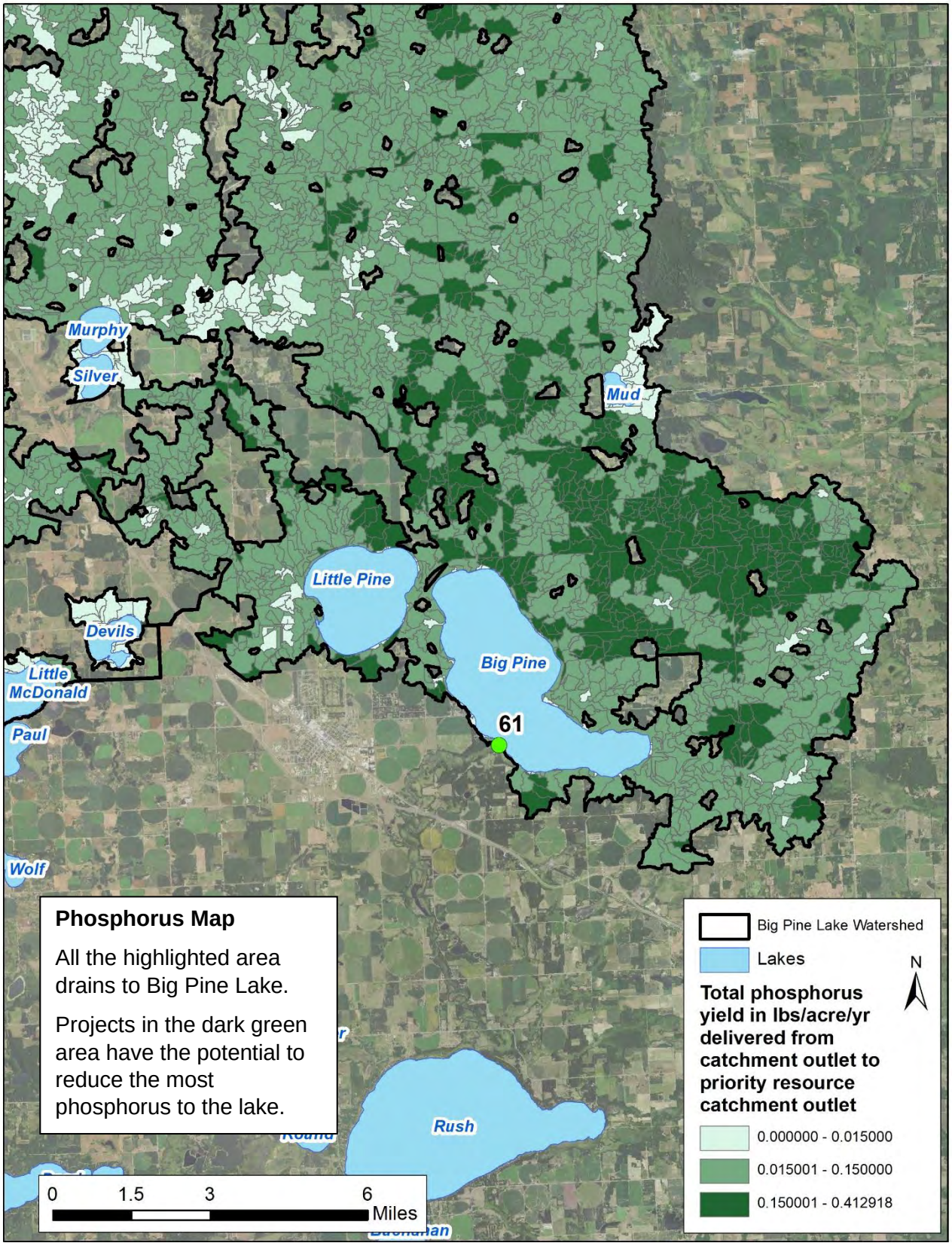
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

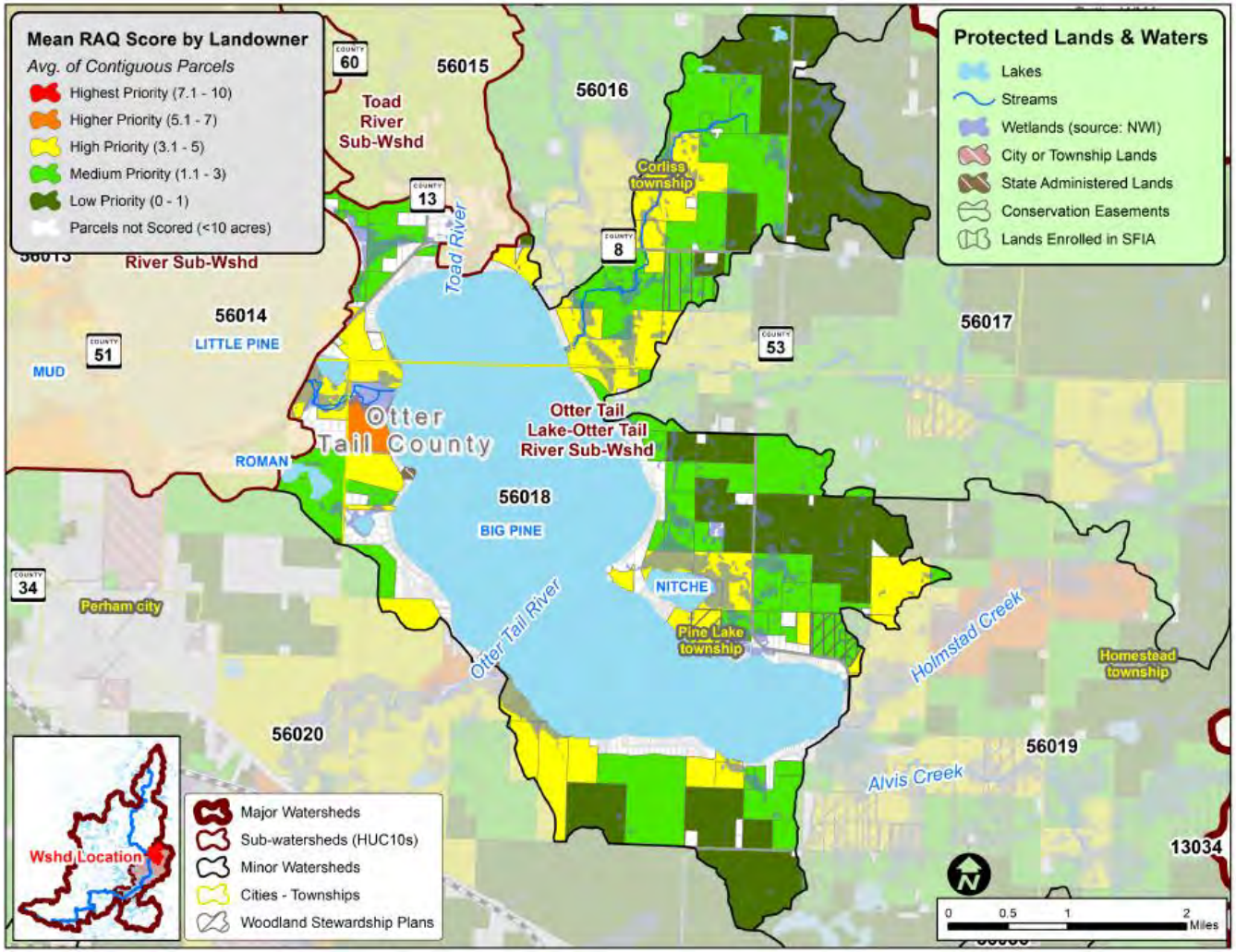
Big Pine Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 76	**Phosphorus Loading Focus**: Watershed



Big Pine Lake

Potential Acres to Protect: 1,676 | **Protection Goal: 48** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

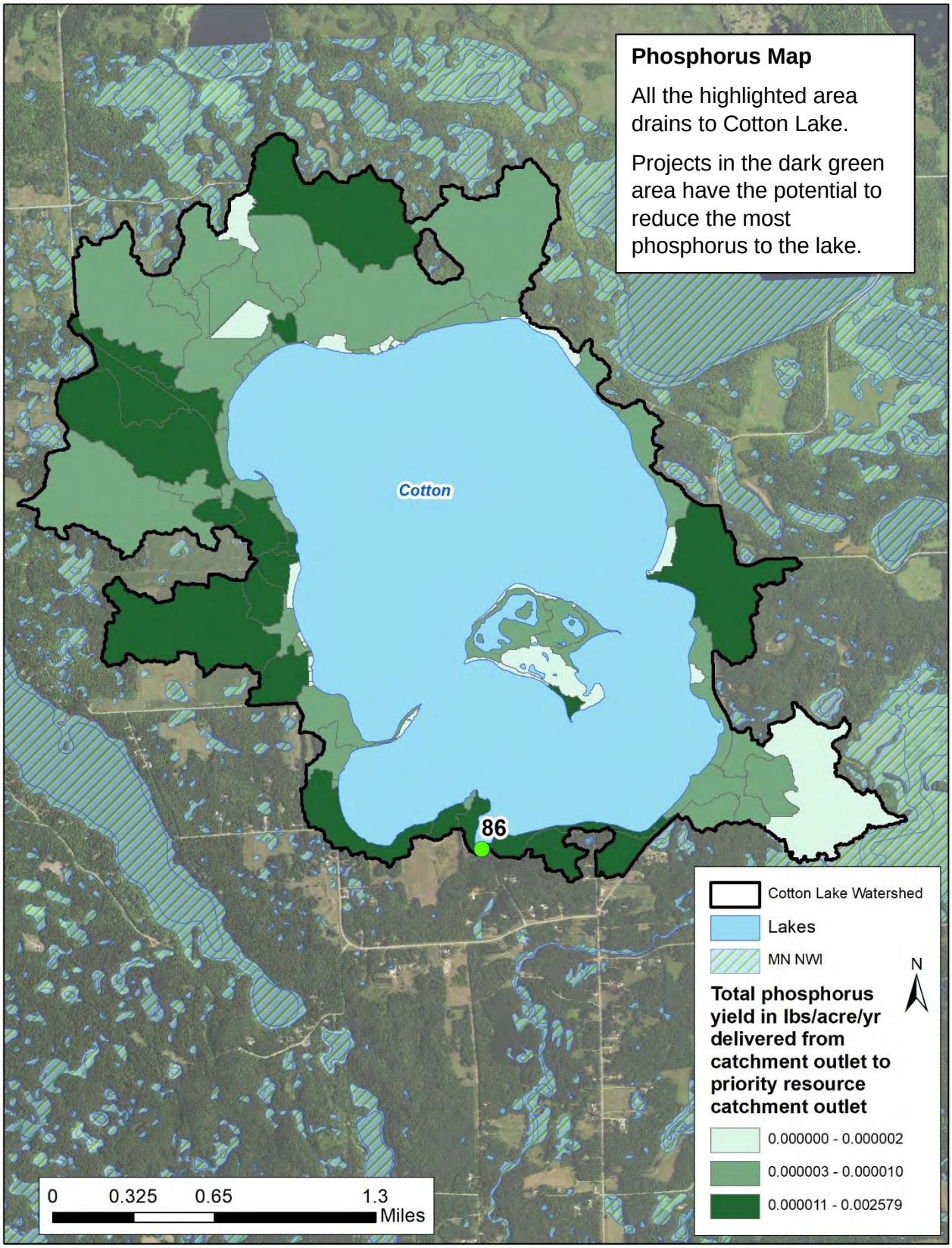
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

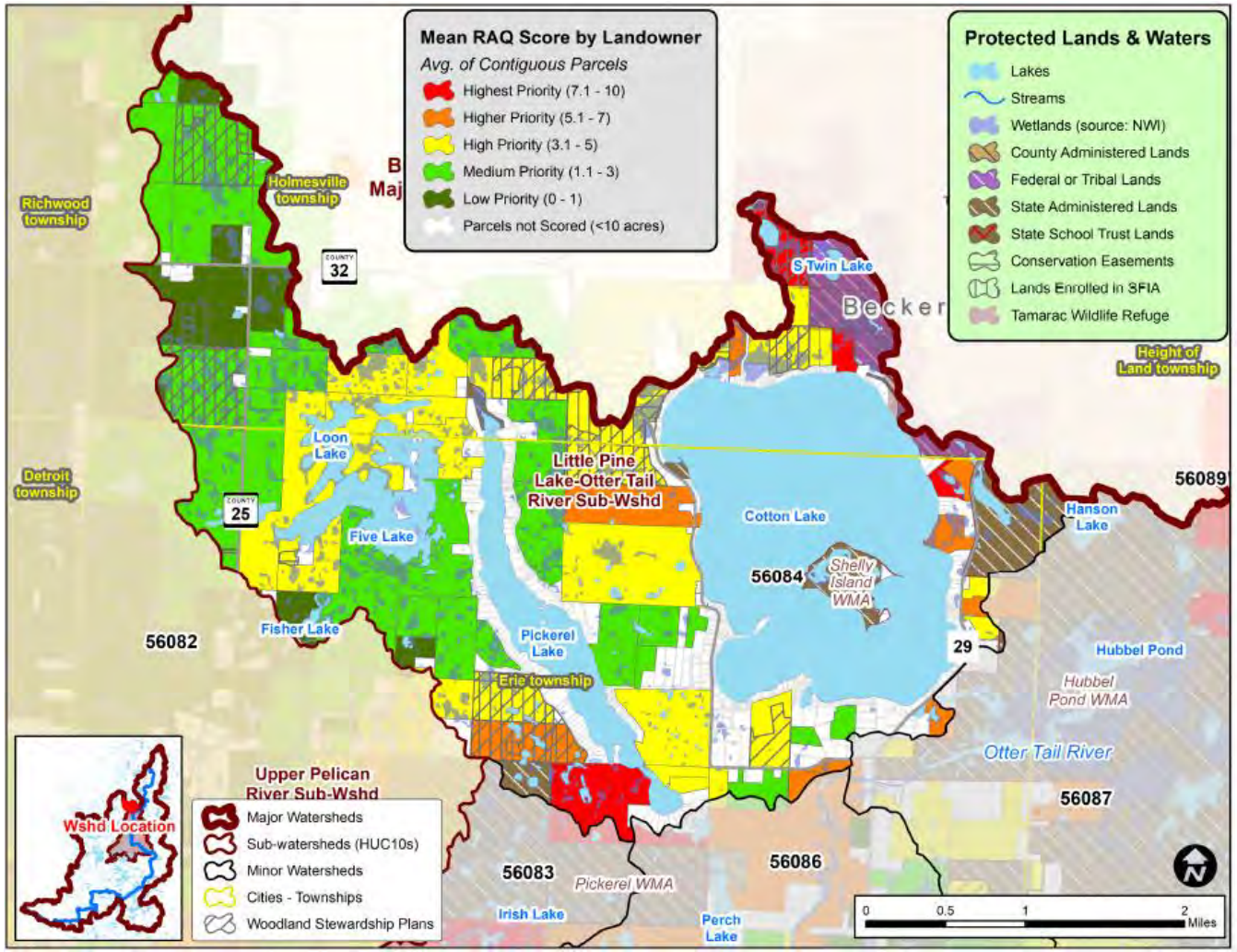
Cotton Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 5	**Phosphorus Loading Focus**: Nearshore



Cotton Lake

Potential Acres to Protect: 2,233 | **Protection Goal: 71** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

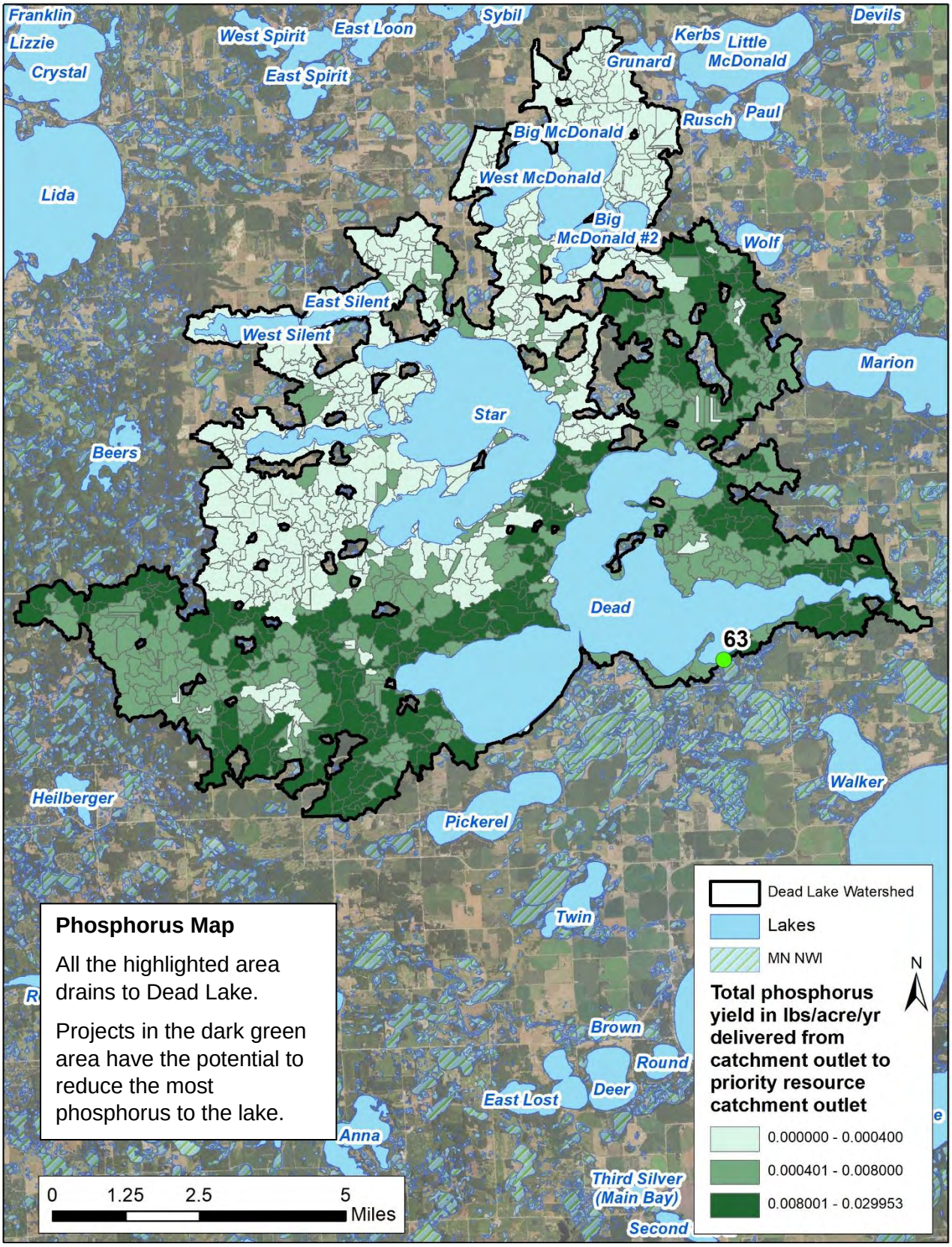
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

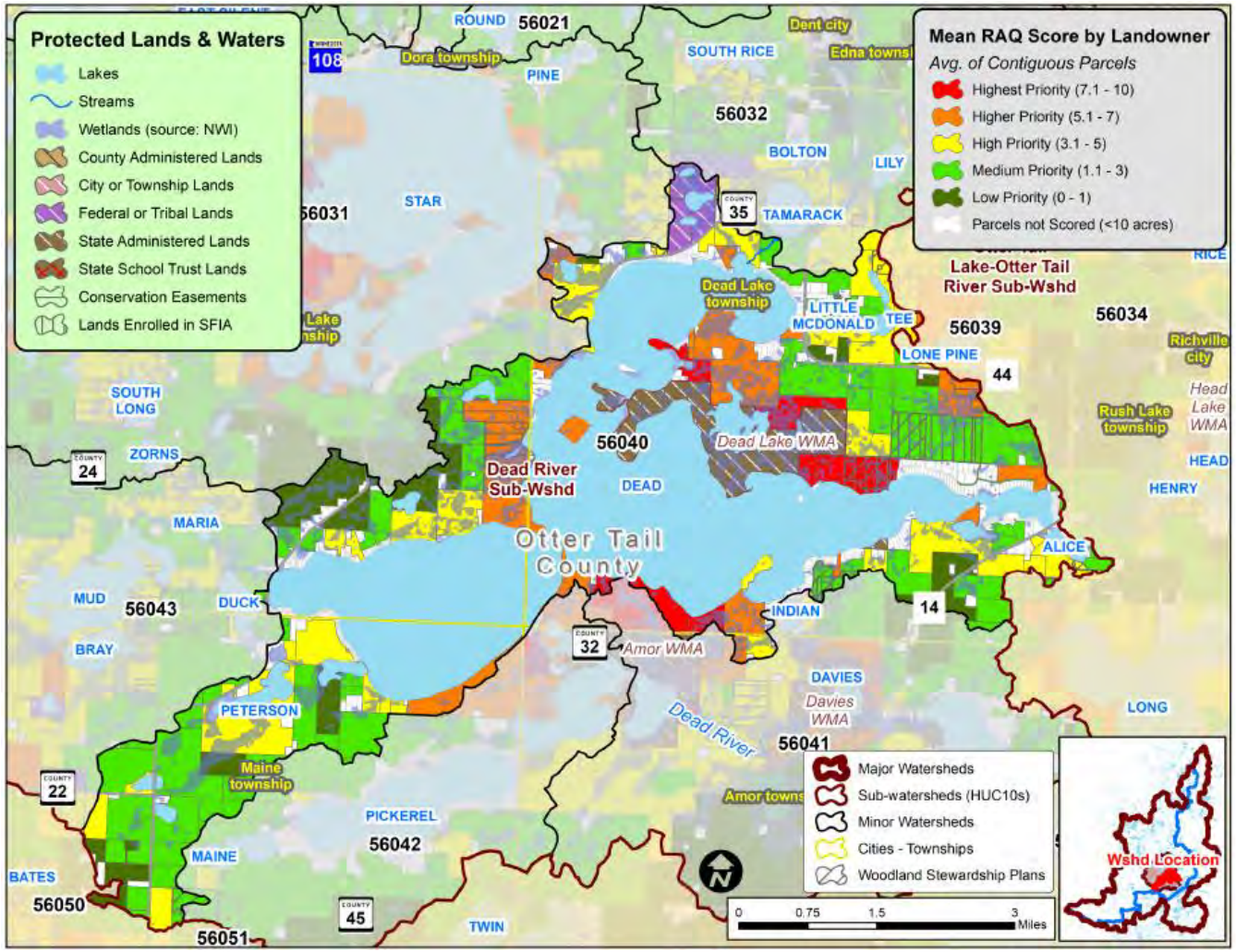
Dead Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 11	**Phosphorus Loading Focus**: Nearshore



Dead Lake

Potential Acres to Protect: 2,993 | **Protection Goal: 123** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice L, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

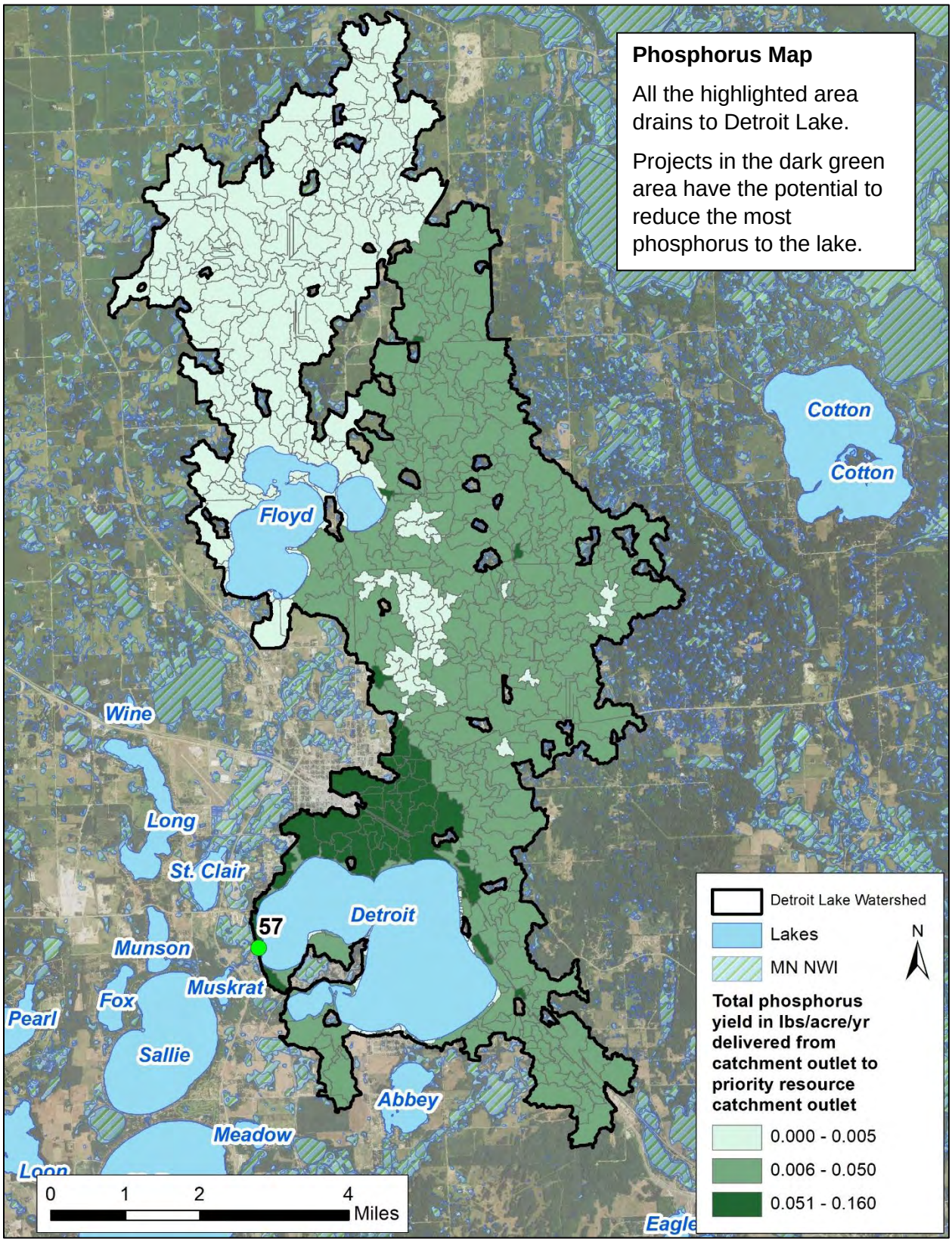
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

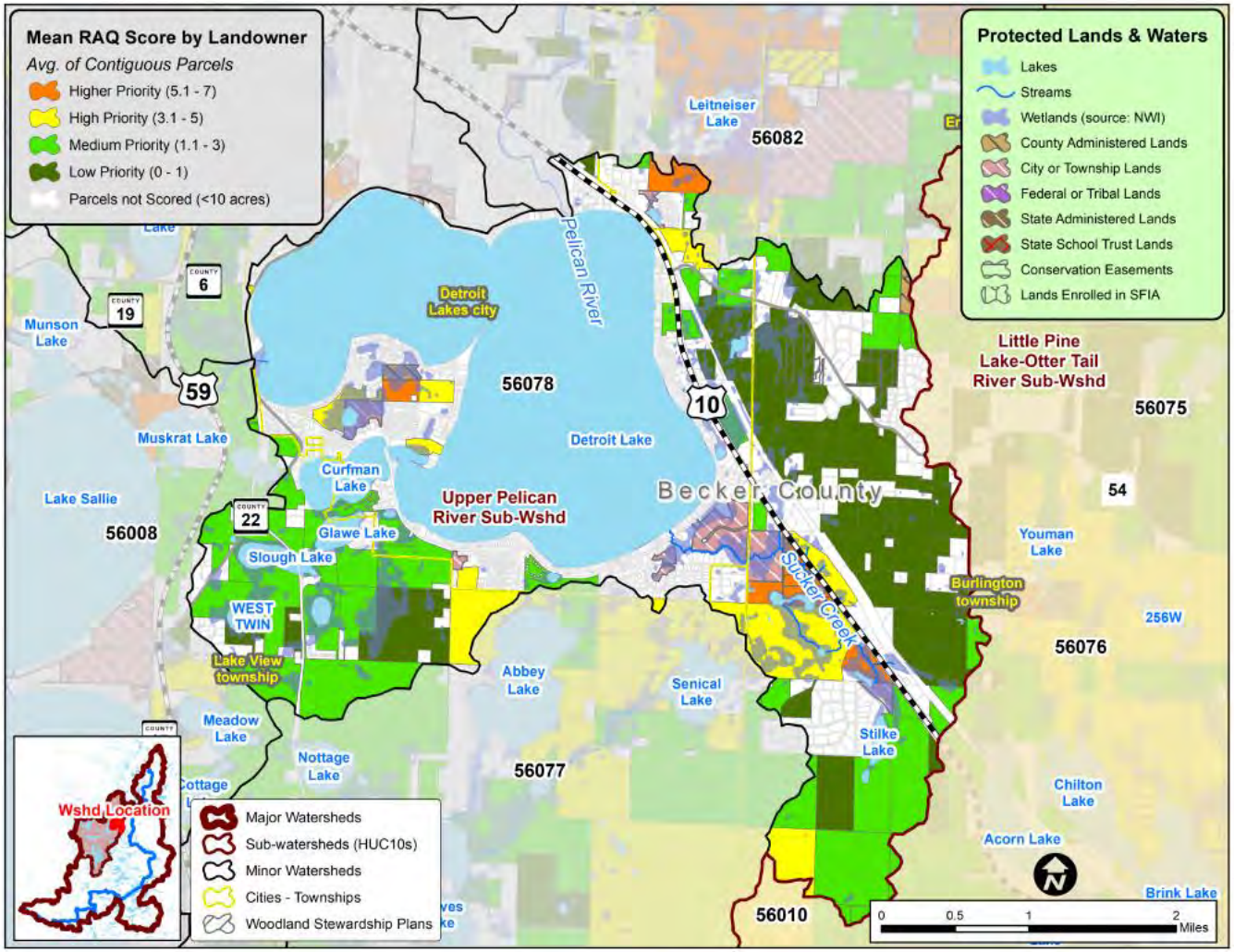
Detroit Lake

Management Focus: ENHANCE	**Goal**: Reduce phosphorus by 5% (188 lbs/yr)
Watershed: Lake Ratio: 15	**Phosphorus Loading Focus**: Watershed and Nearshore



Detroit Lake

Potential Acres to Protect: 1,664 | **Protection Goal:** 18 acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

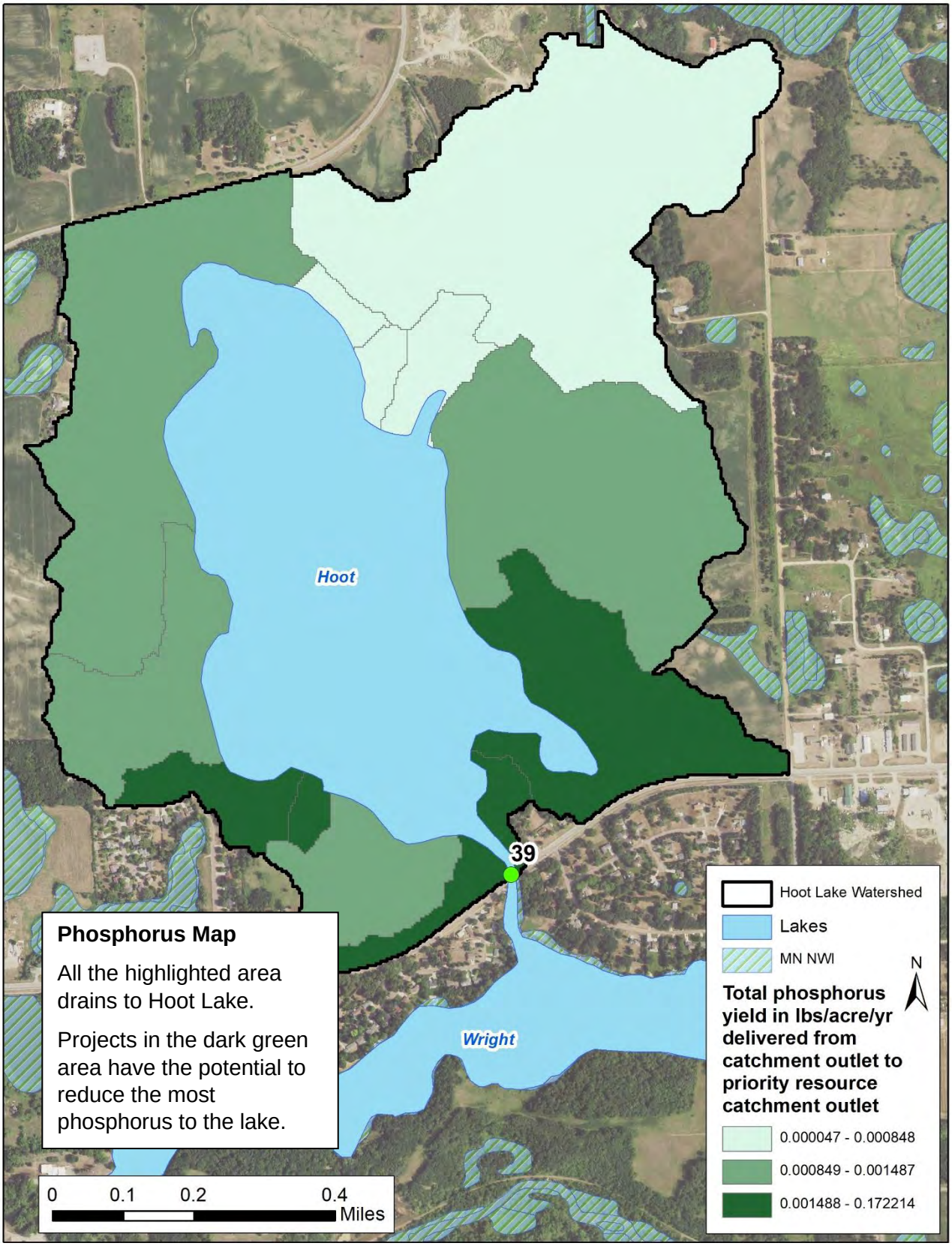
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

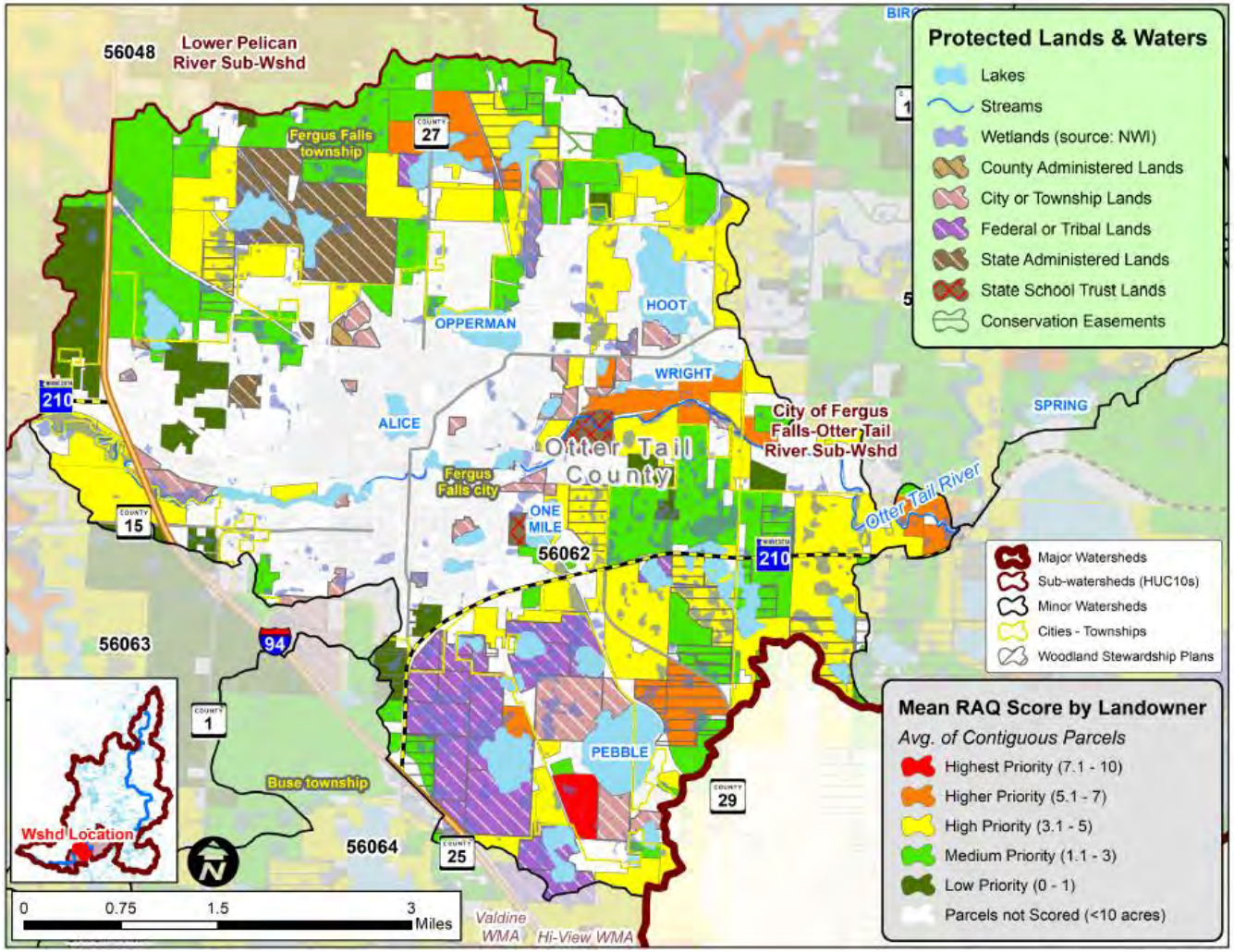
Hoot Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: NA	**Phosphorus Loading Focus**: Watershed



Hoot Lake

Potential Acres to Protect: 298 | **Protection Goal: 7** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice L,
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

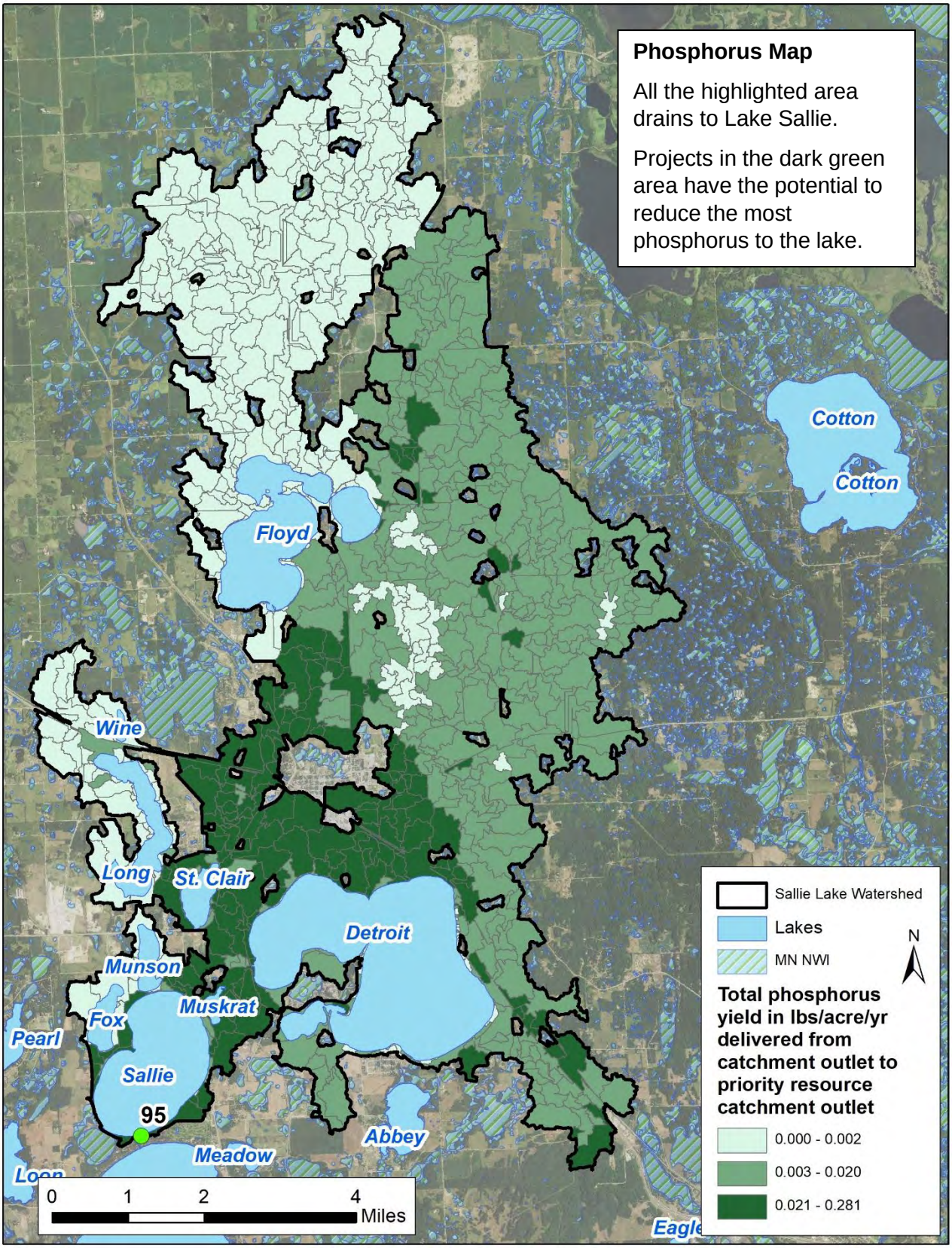
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

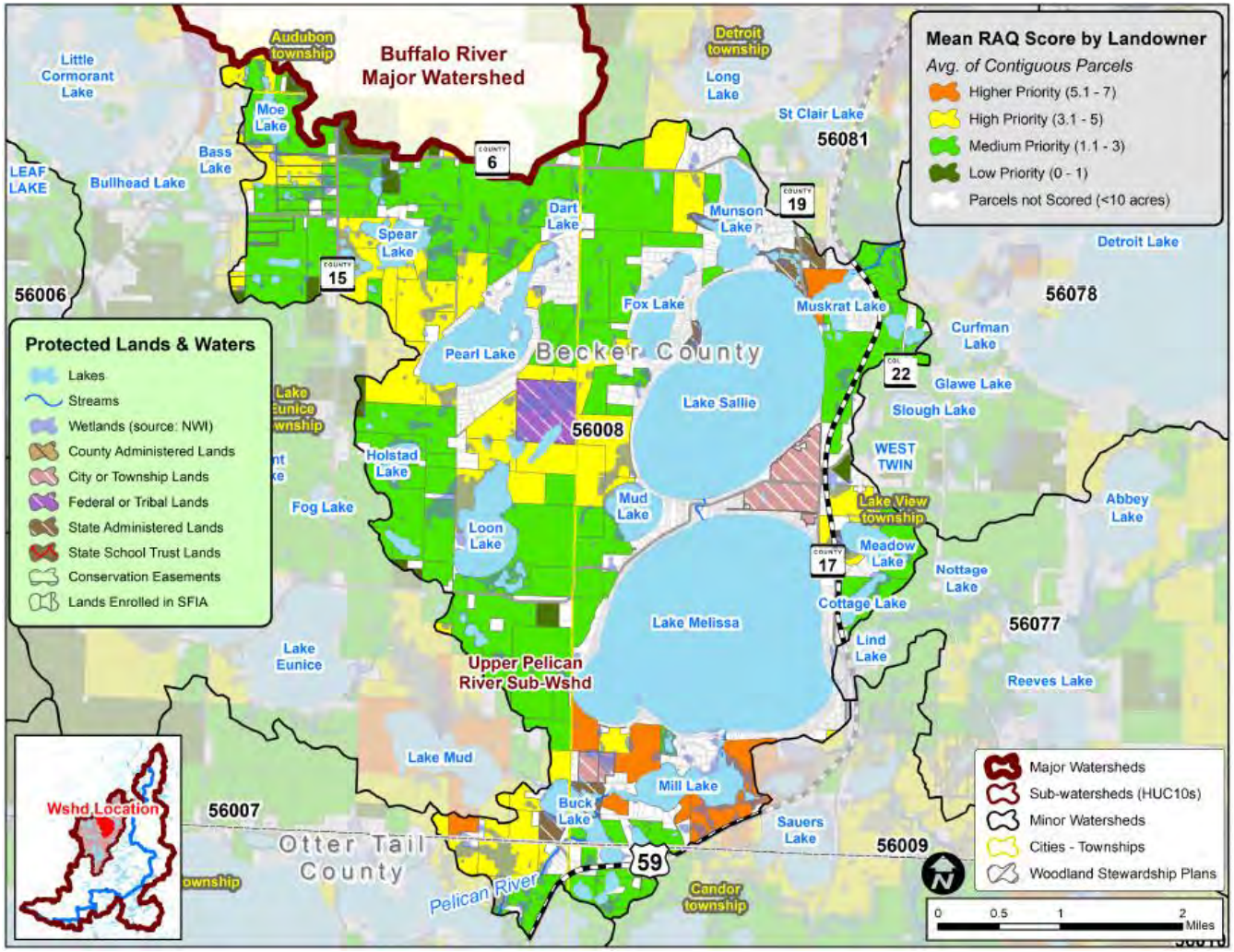
Lake Sallie

Management Focus: ENHANCE	**Goal**: Reduce phosphorus by 5% (313 lbs/yr)
Watershed: Lake Ratio: 46	**Phosphorus Loading Focus**: Watershed



Lake Sallie

Potential Acres to Protect: 2,632 | **Protection Goal: 26** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

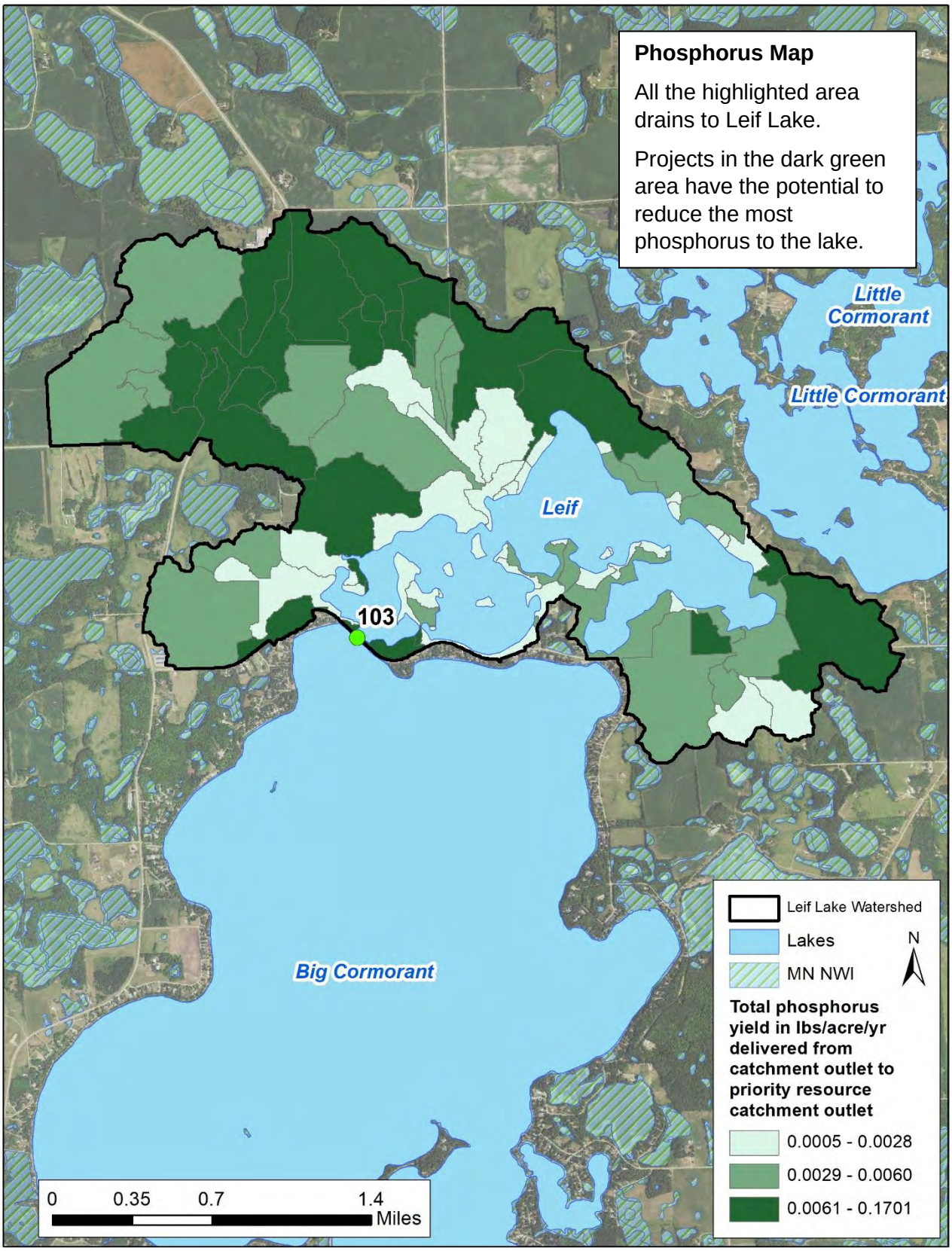
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

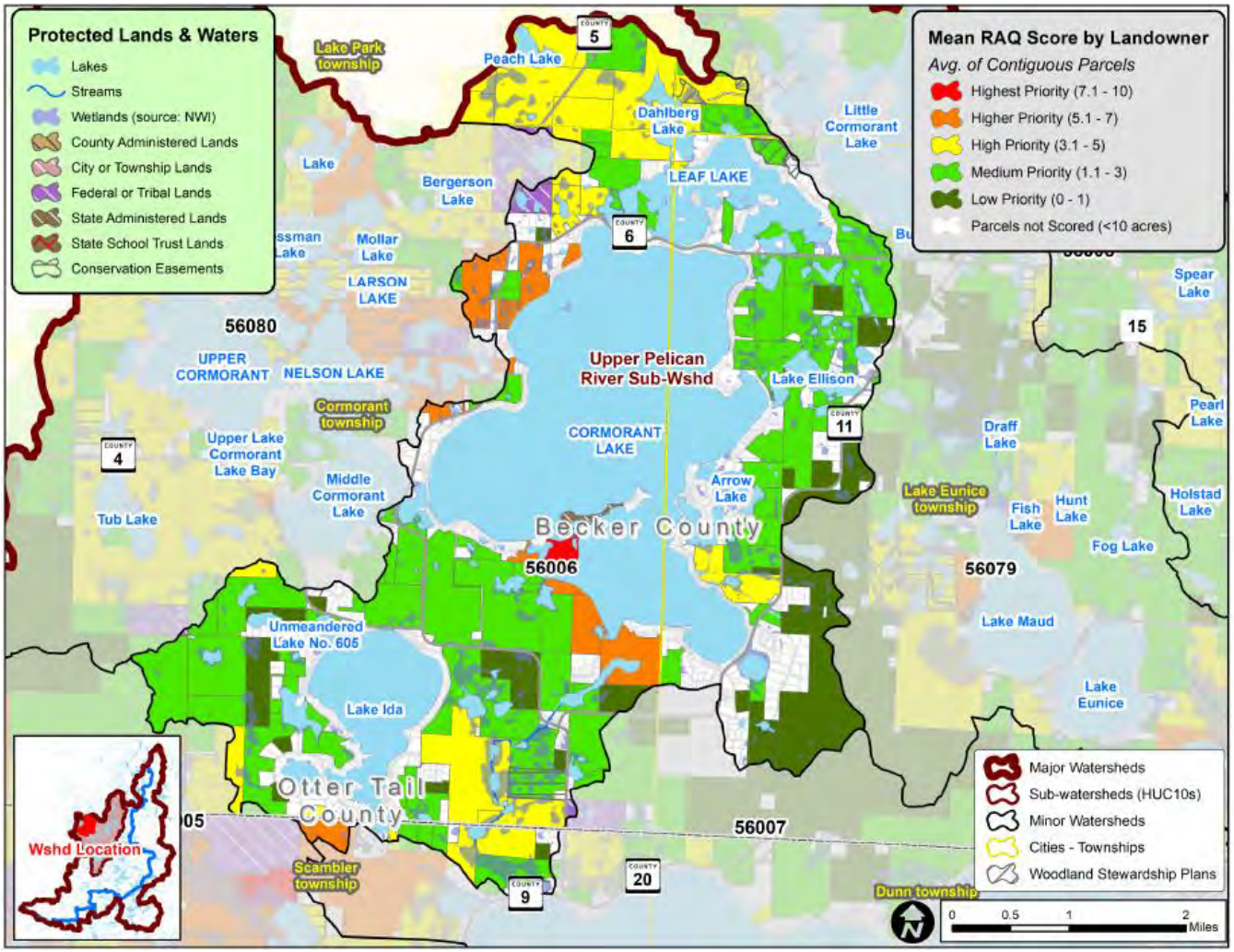
Leif Lake

Management Focus: ENHANCE	**Goal**: Reduce phosphorus by 5% (18 lbs/yr)
Watershed: Lake Ratio: 6	**Phosphorus Loading Focus**: Nearshore



Leif Lake

Potential Acres to Protect: 2,786 | **Protection Goal: 46** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice,
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

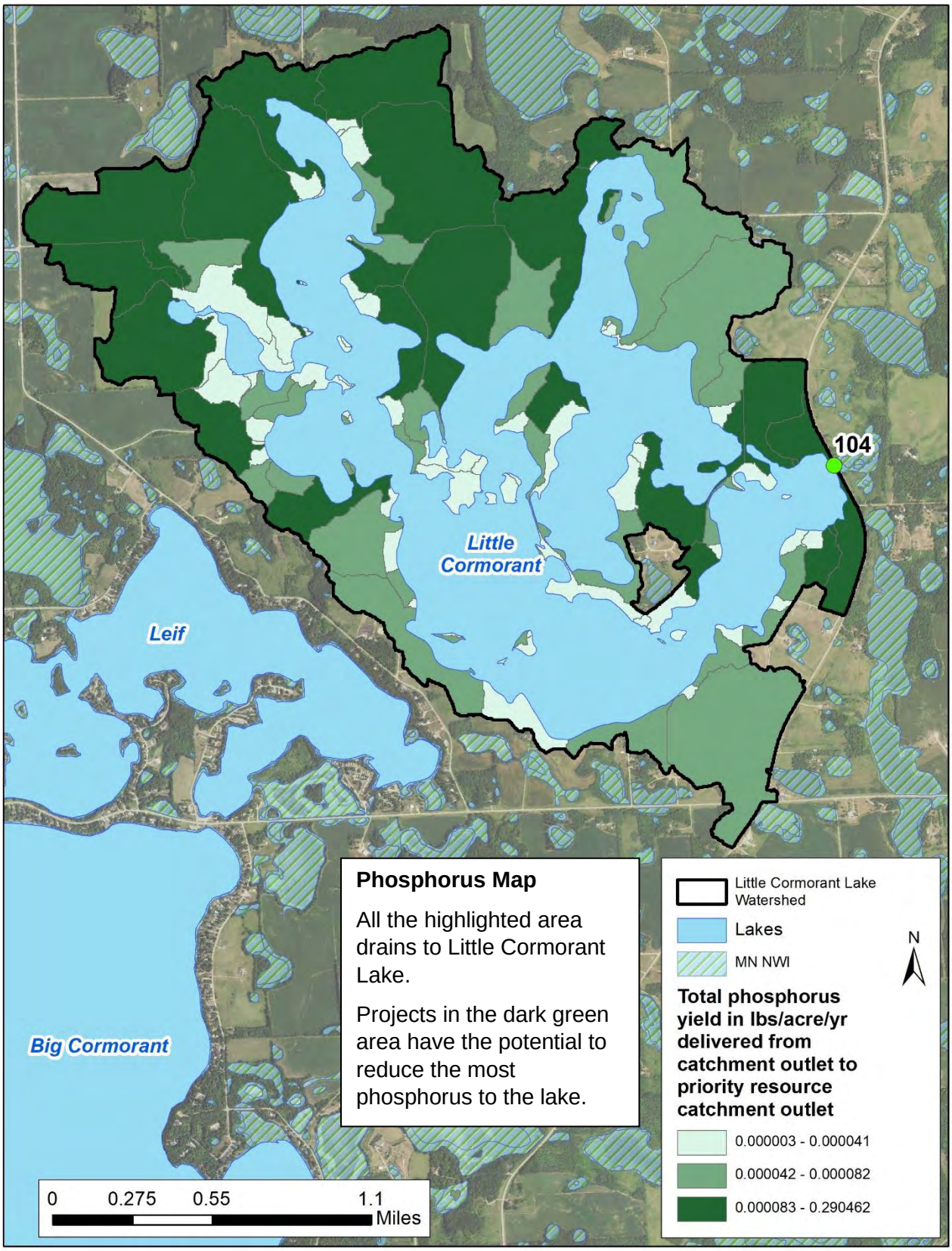
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

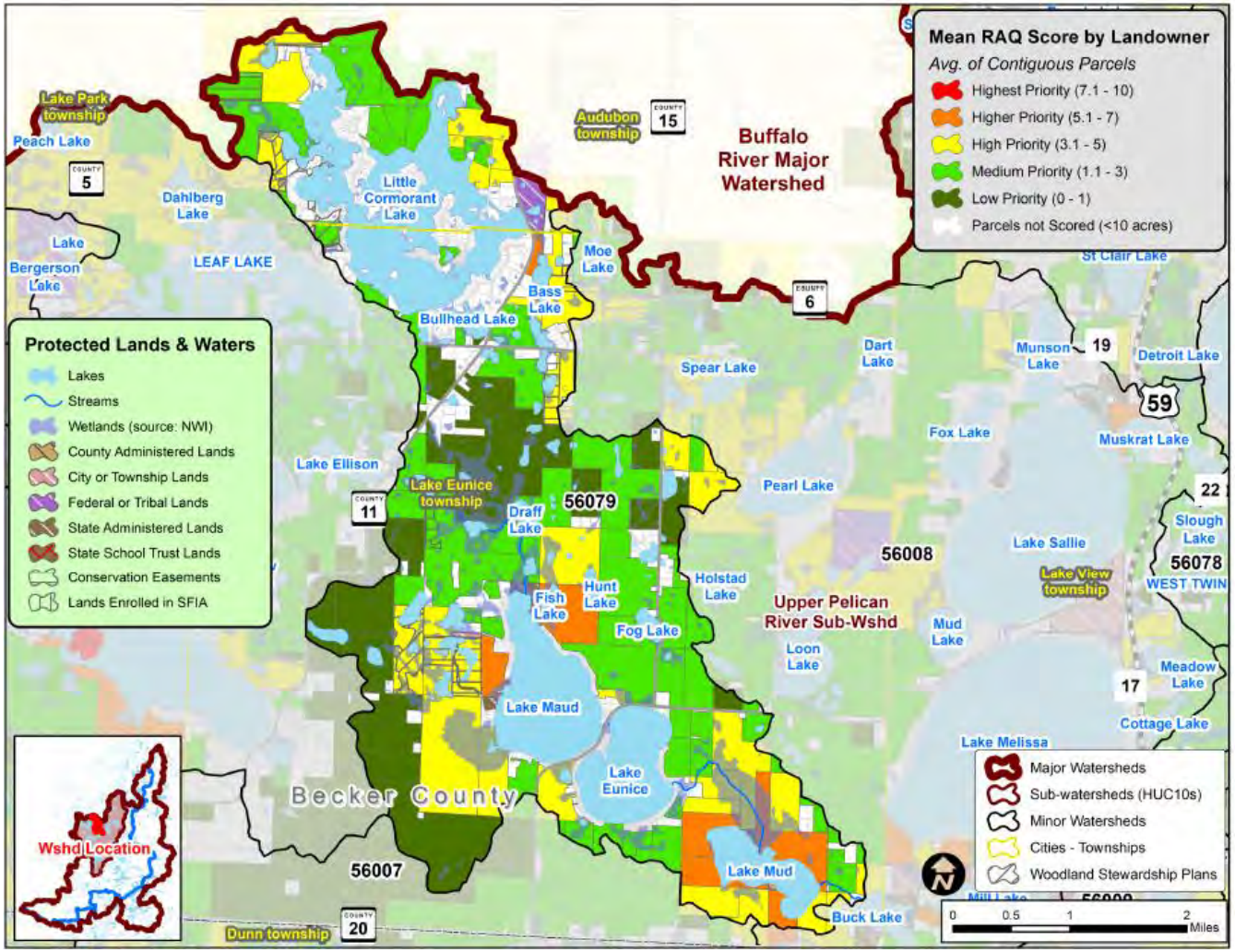
Little Cormorant Lake

Management Focus: ENHANCE	**Goal**: Reduce phosphorus by 5% (18 lbs/yr)
Watershed: Lake Ratio: 3	**Phosphorus Loading Focus**: Nearshore



Little Cormorant Lake

Potential Acres to Protect: 2,285 | **Protection Goal: 20** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

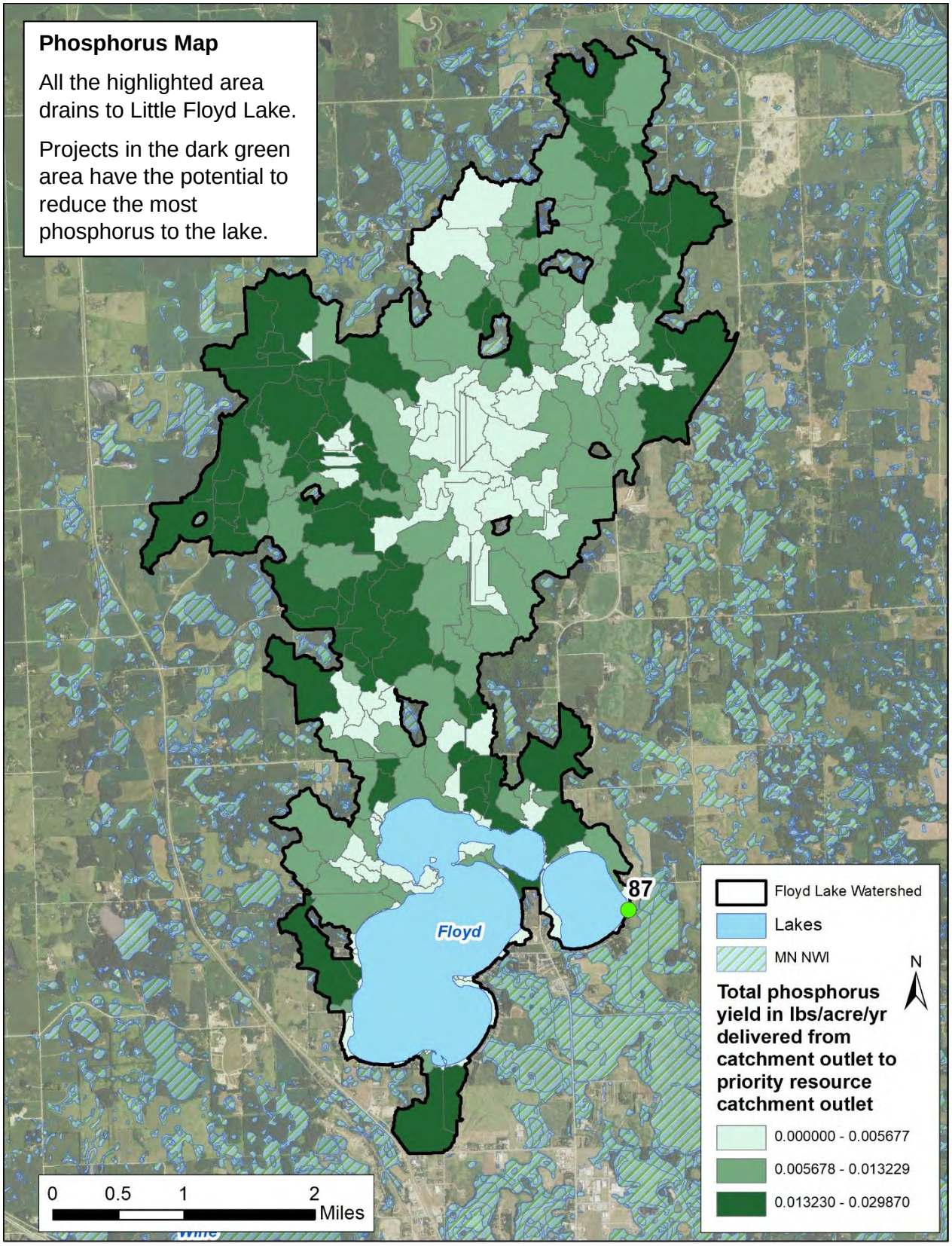
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

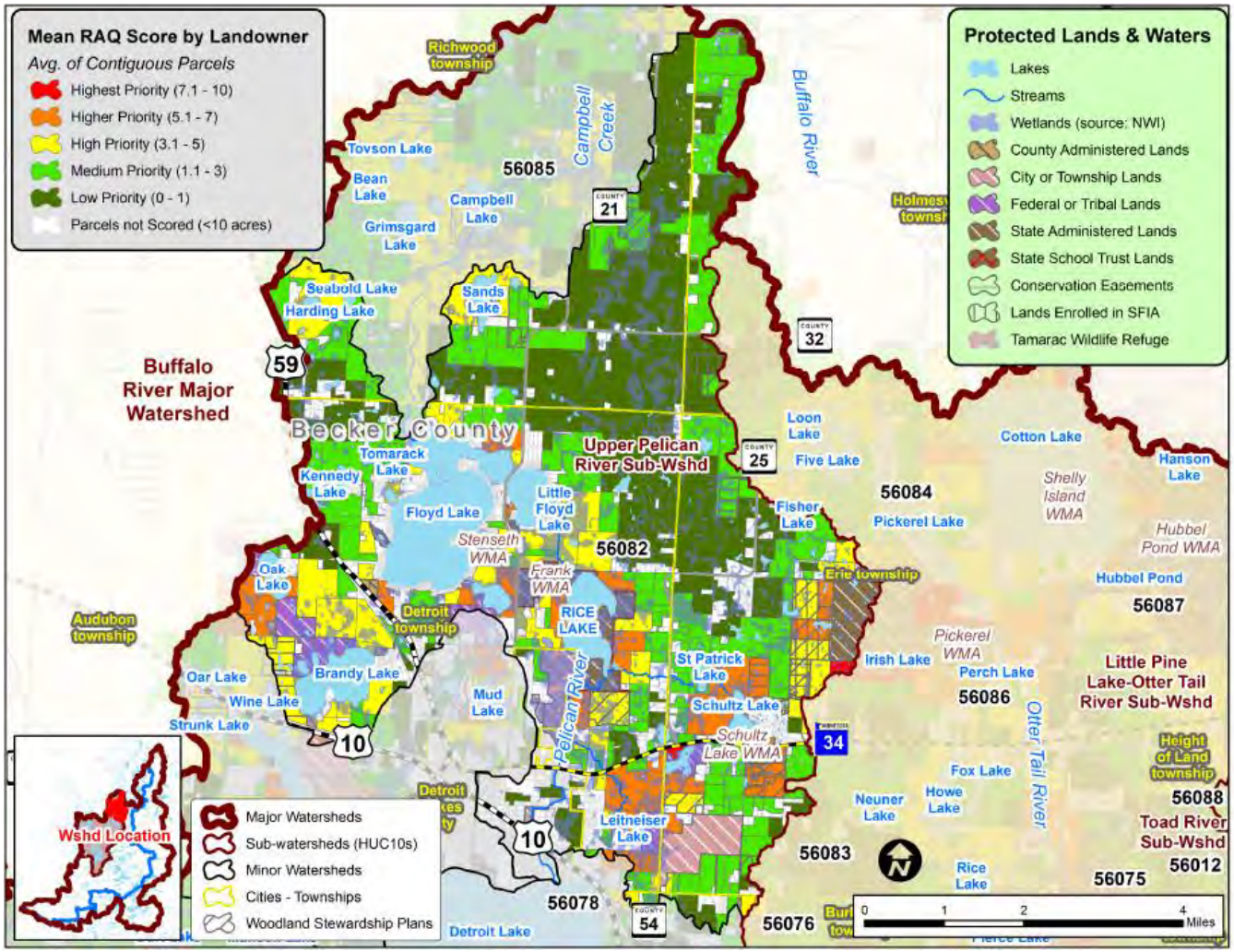
Little Floyd Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 81	**Phosphorus Loading Focus**: Watershed



Little Floyd Lake

Potential Acres to Protect: 6,119 | **Protection Goal: 283** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

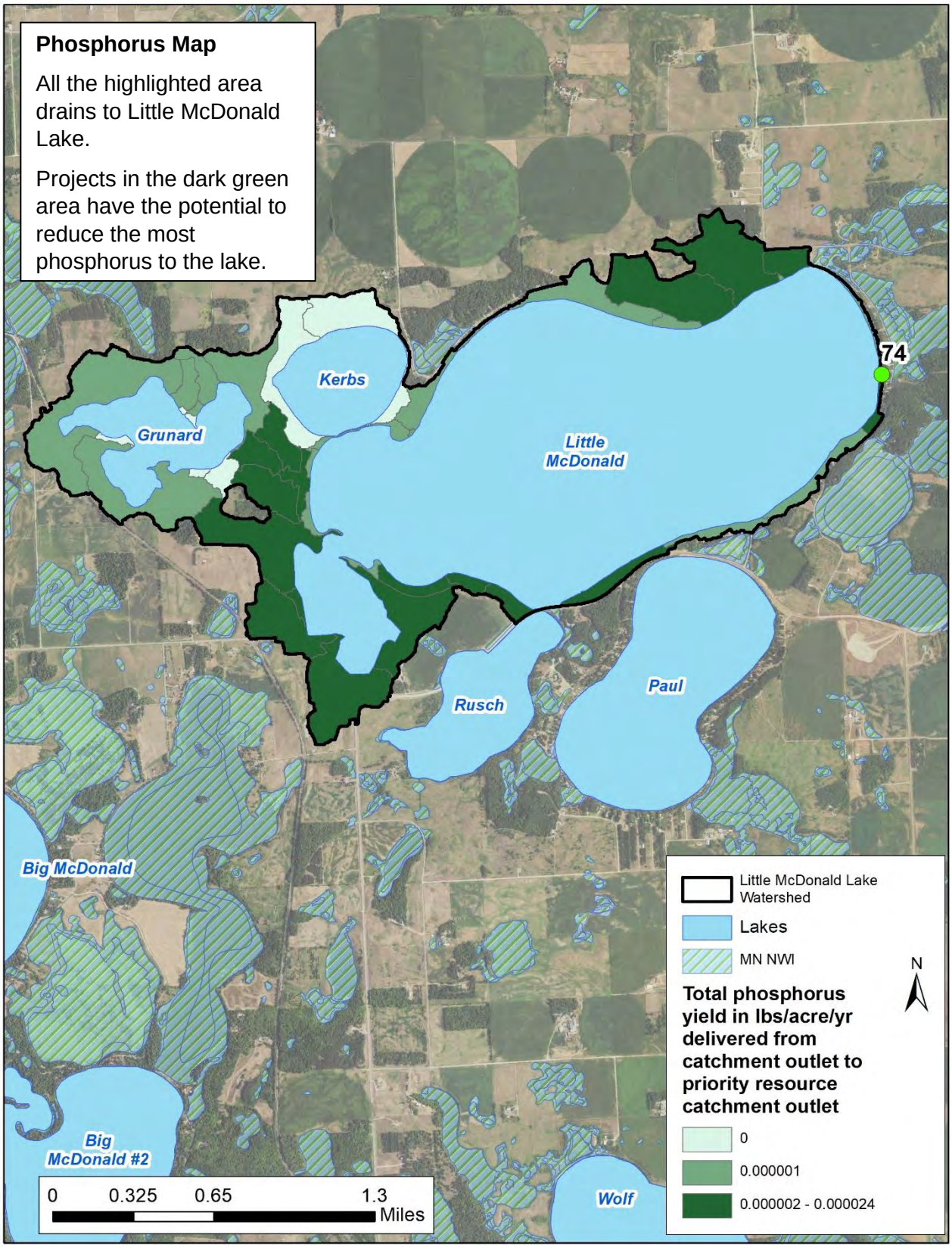
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

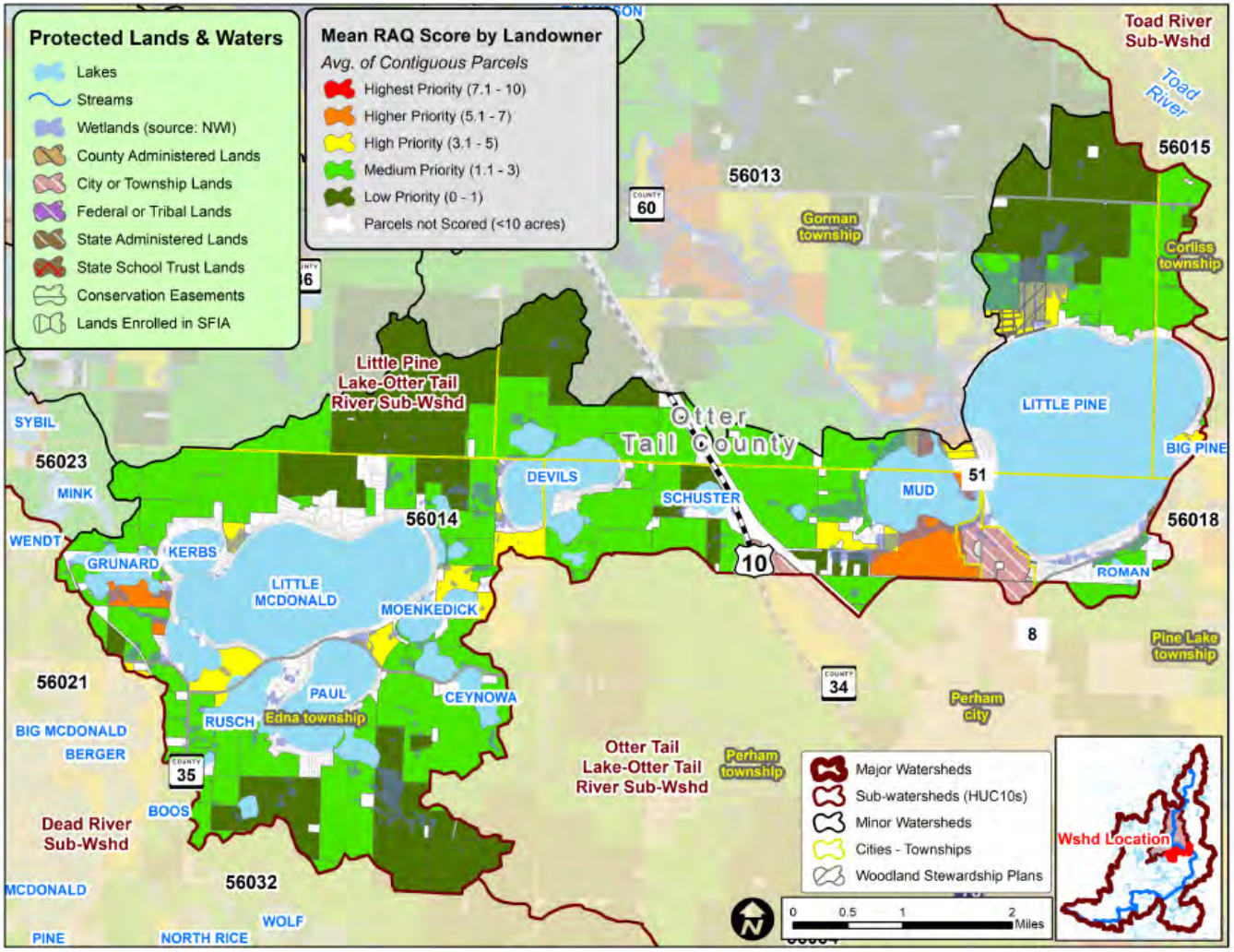
Little McDonald Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 5	**Phosphorus Loading Focus**: Nearshore



Little McDonald Lake

Potential Acres to Protect: 1,797 | **Protection Goal: 24** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

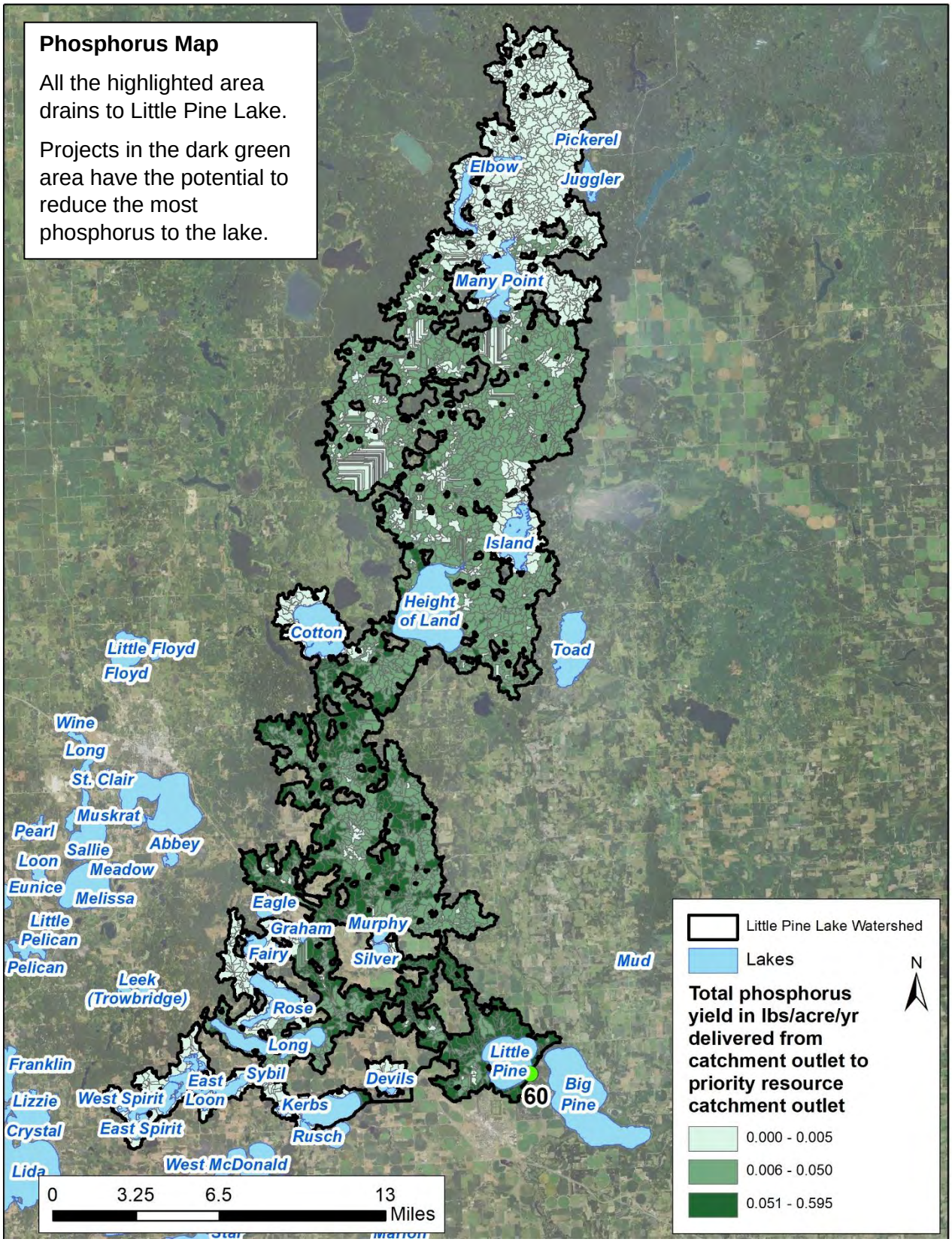
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)....*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

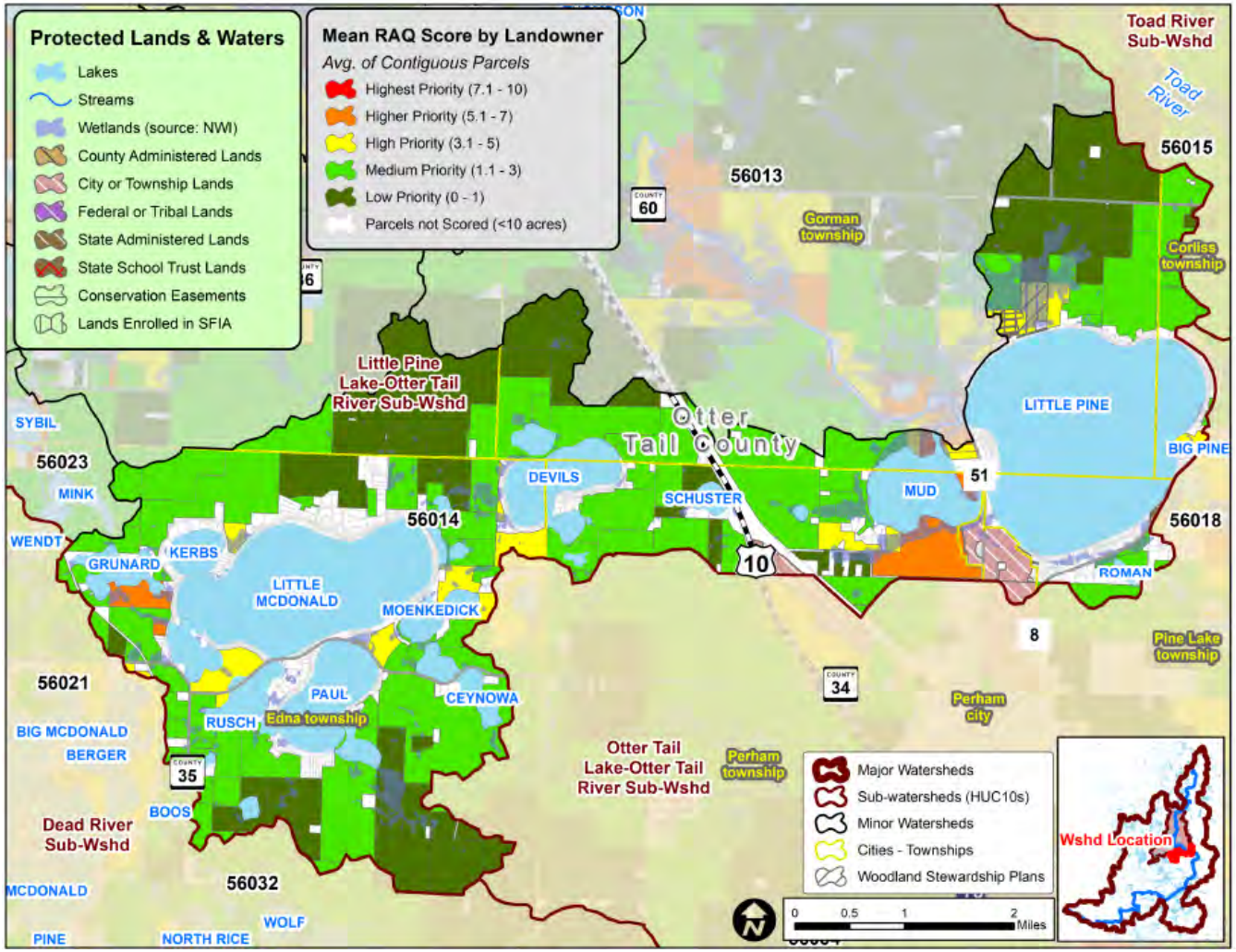
Little Pine Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 120	**Phosphorus Loading Focus**: Watershed



Little Pine Lake

Potential Acres to Protect: 1,797 | **Protection Goal: 24** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

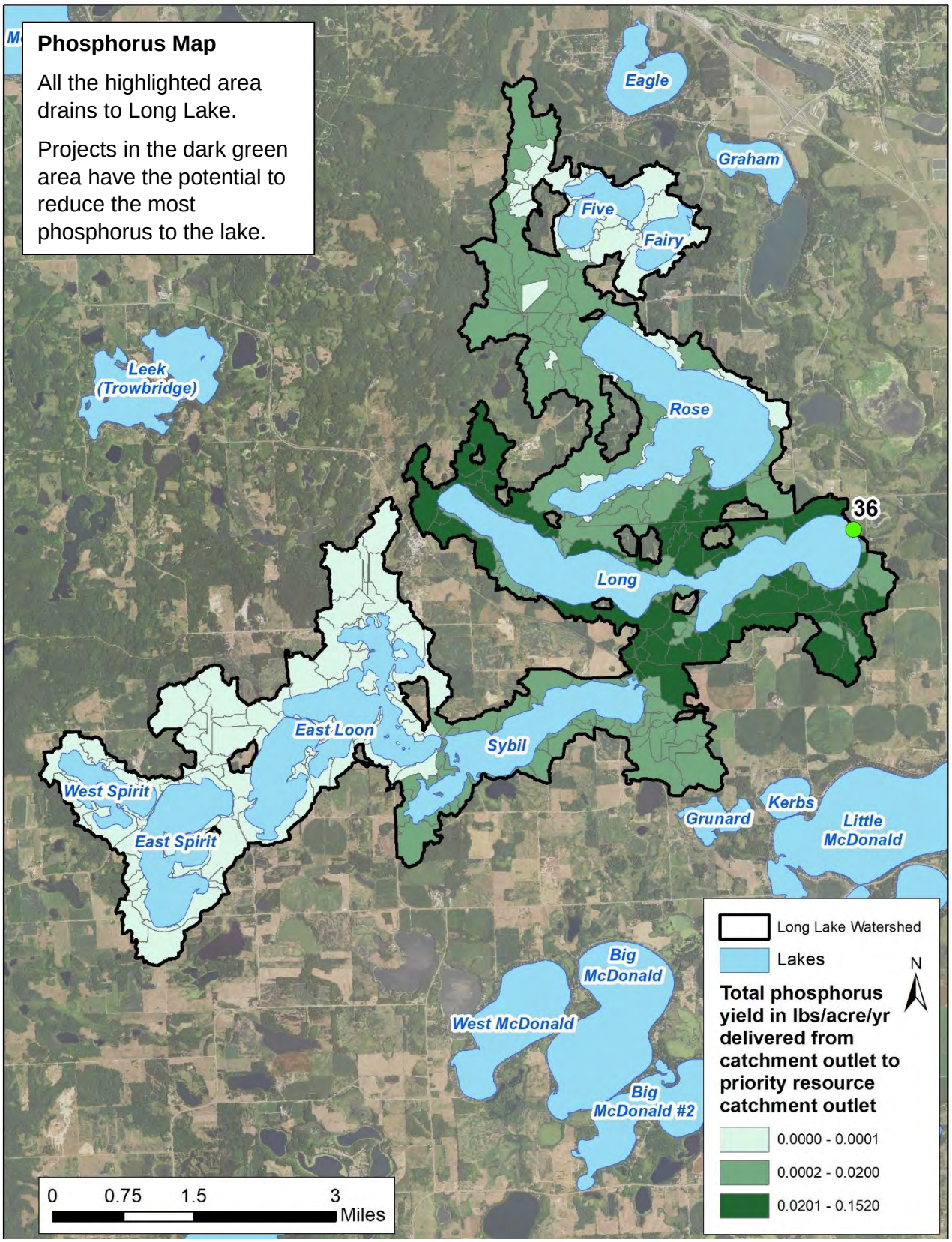
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

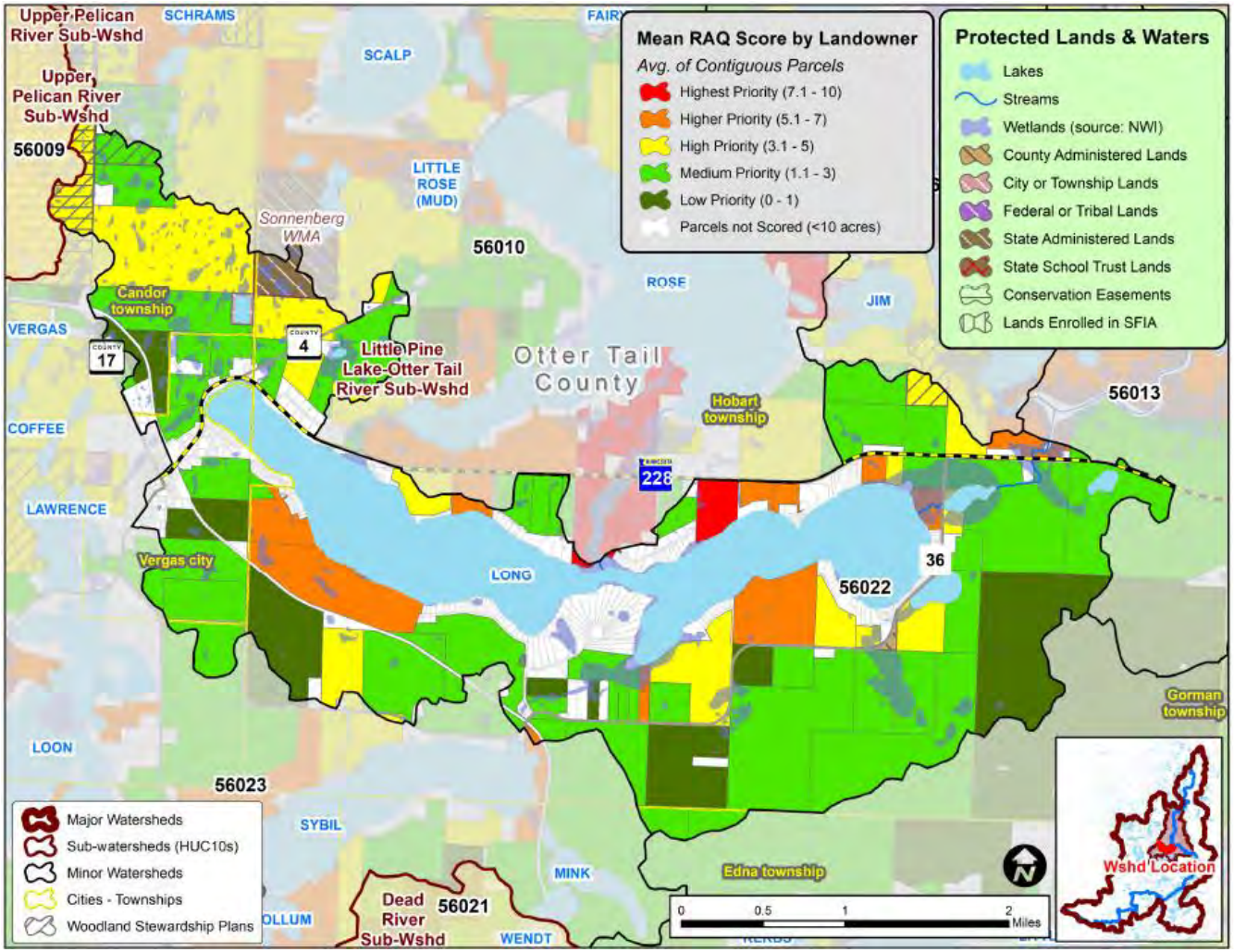
Long Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 25	**Phosphorus Loading Focus**: Watershed and Nearshore



Long Lake

Potential Acres to Protect: 1,684 | **Protection Goal: 51** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

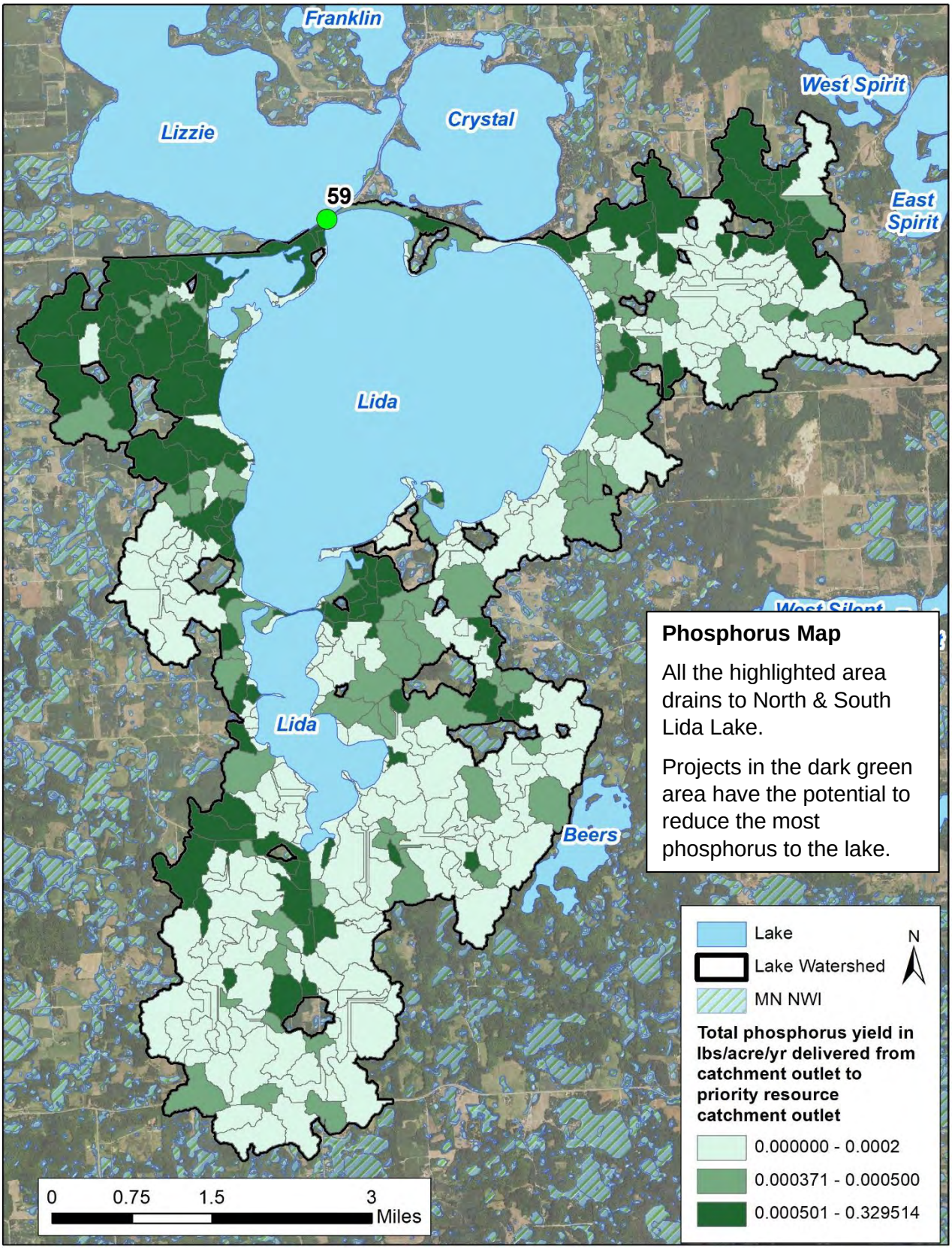
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

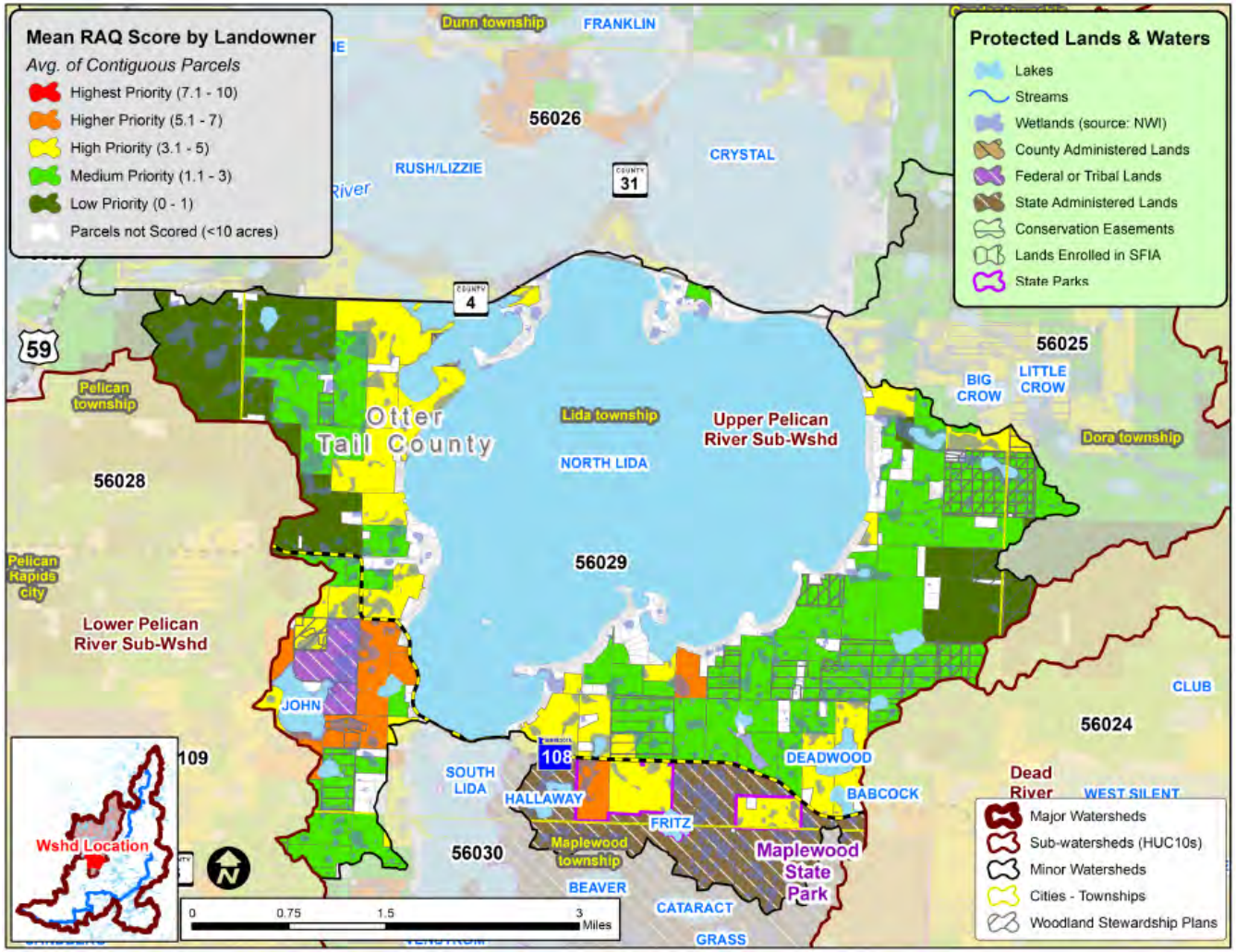
North & South Lida Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 5	**Phosphorus Loading Focus**: Nearshore



North Lida Lake

Potential Acres to Protect: 1,712 | **Protection Goal: 13** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

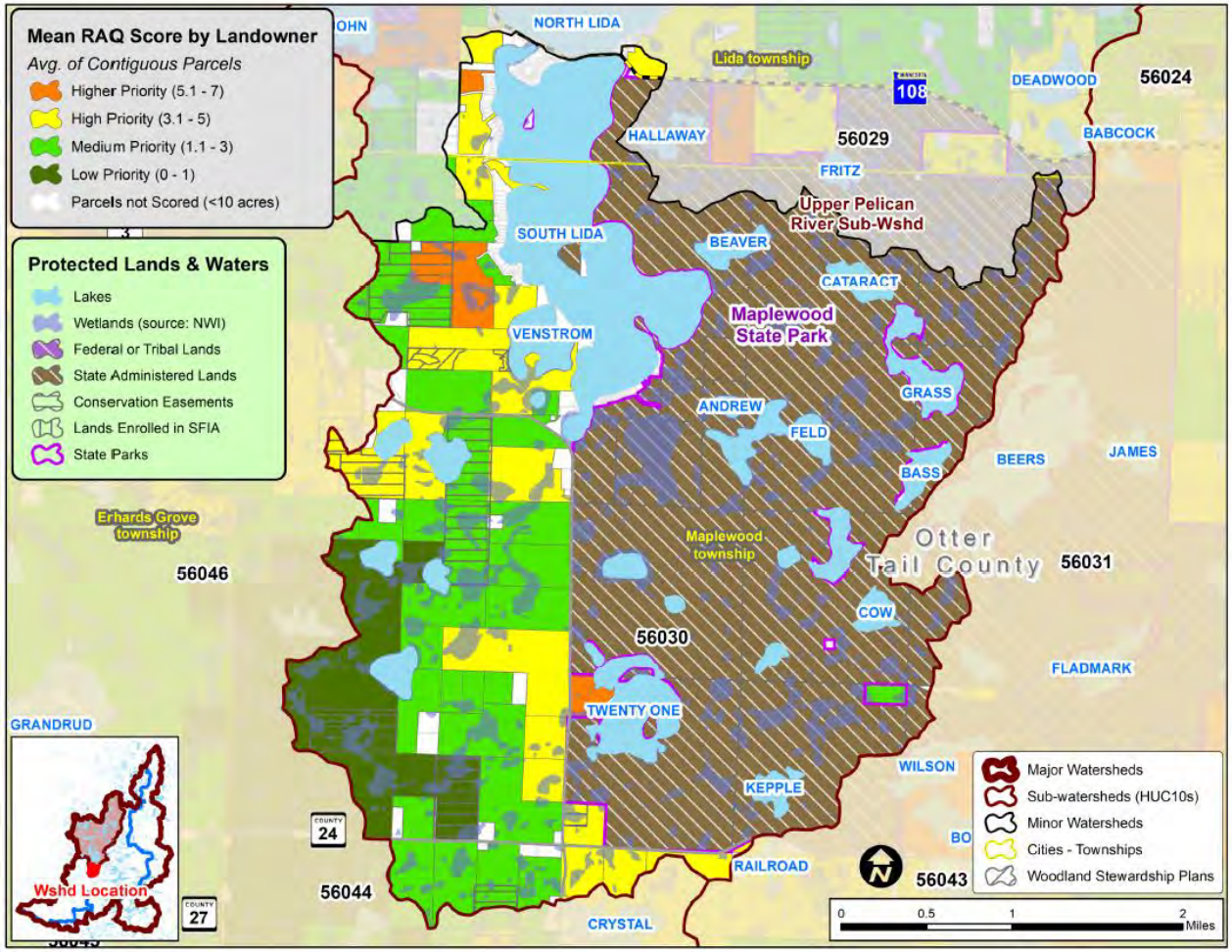
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

South Lida Lake

Potential Acres to Protect: 1,500	Protection Goal: 8 acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

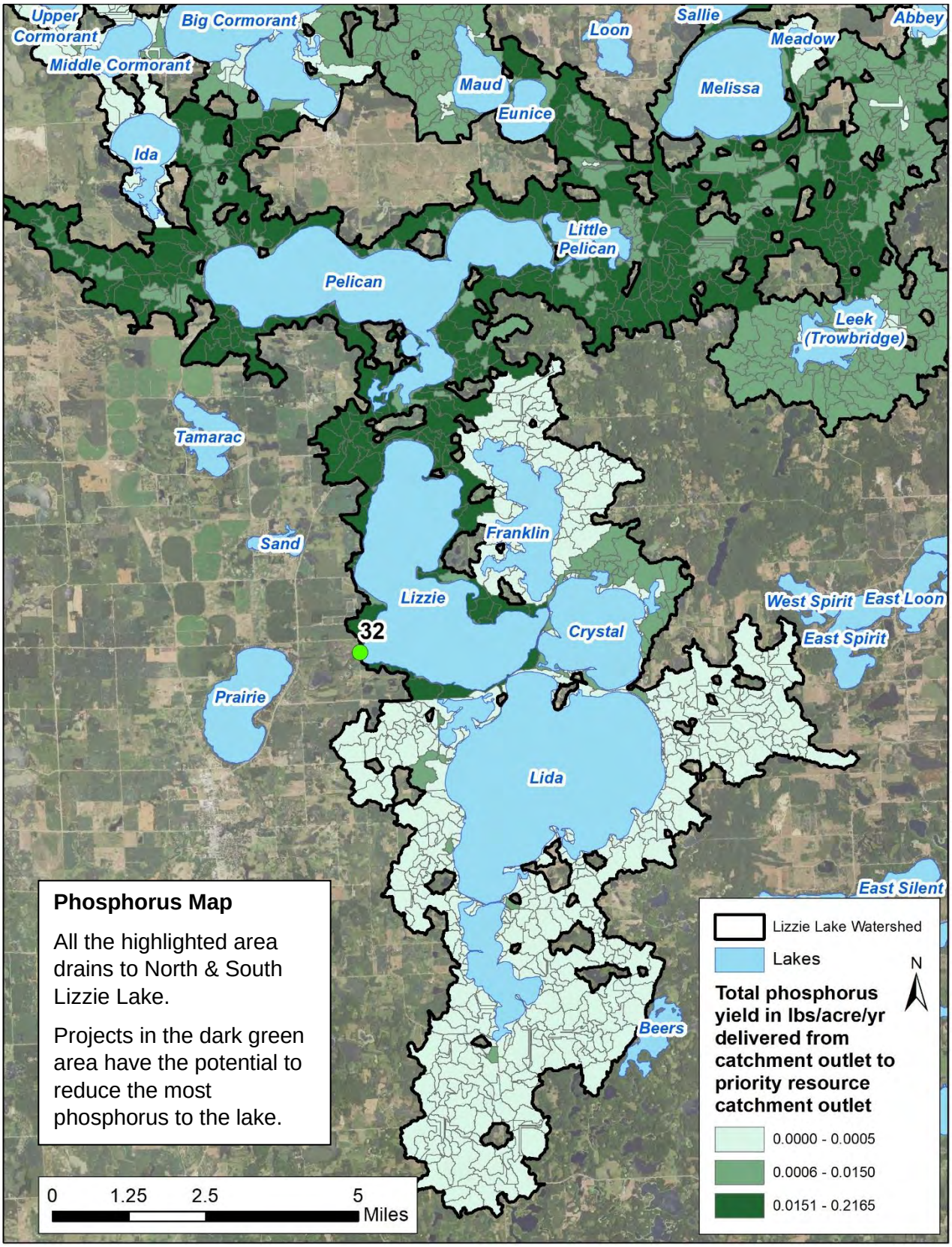
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

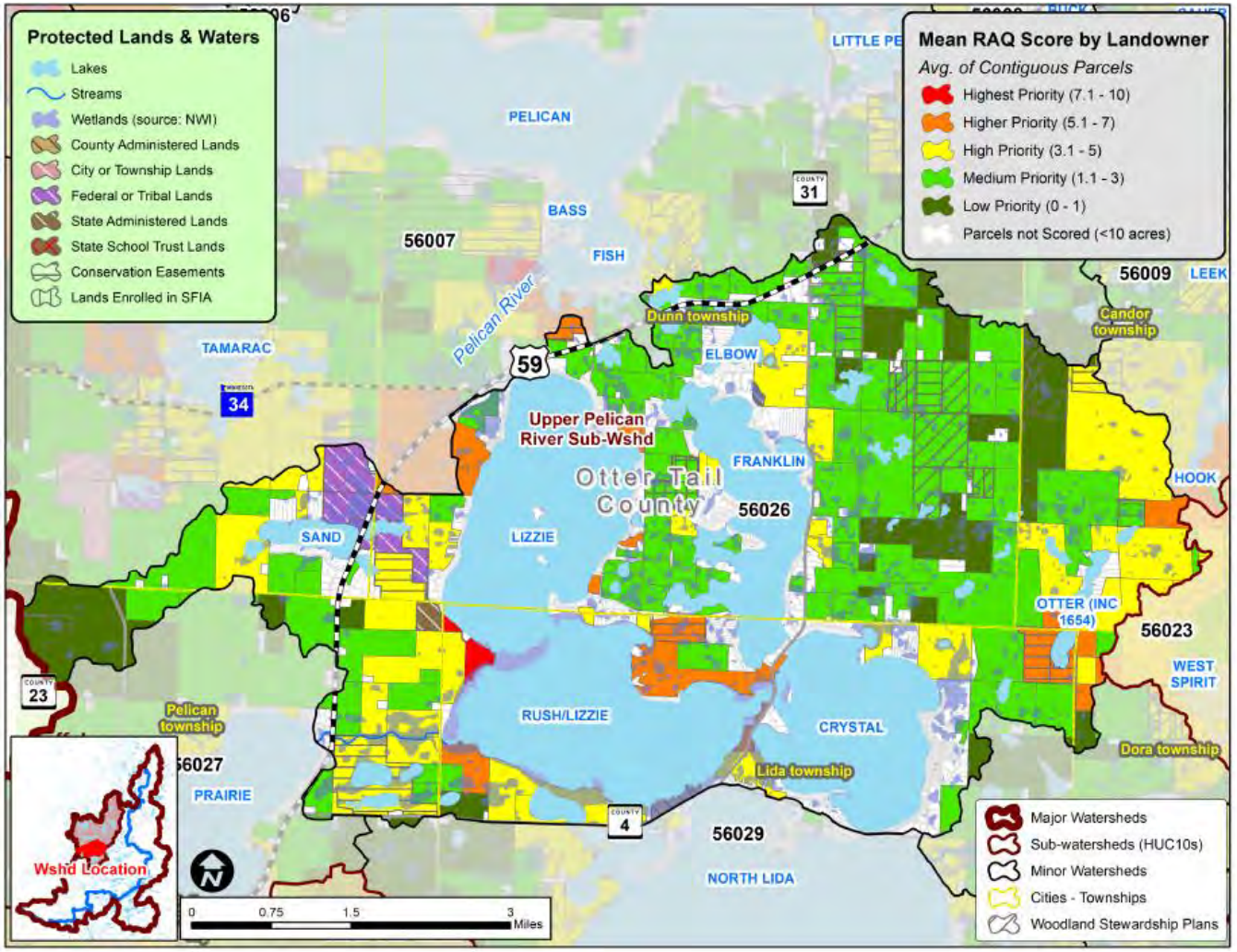
North & South Lizzie Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 111	**Phosphorus Loading Focus**: Watershed



North & South Lizzie Lake

Potential Acres to Protect: 6,172 | **Protection Goal: 266** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

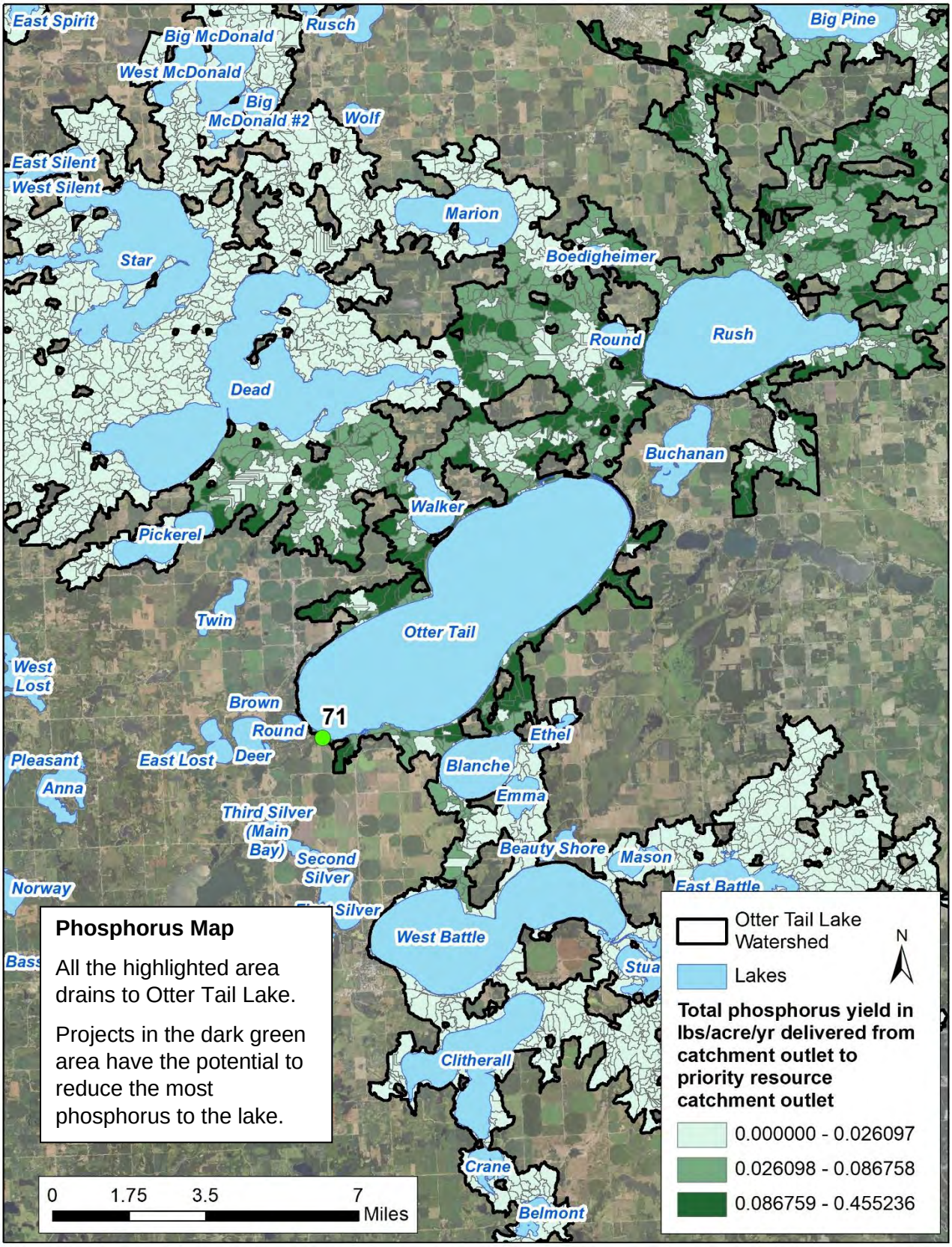
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

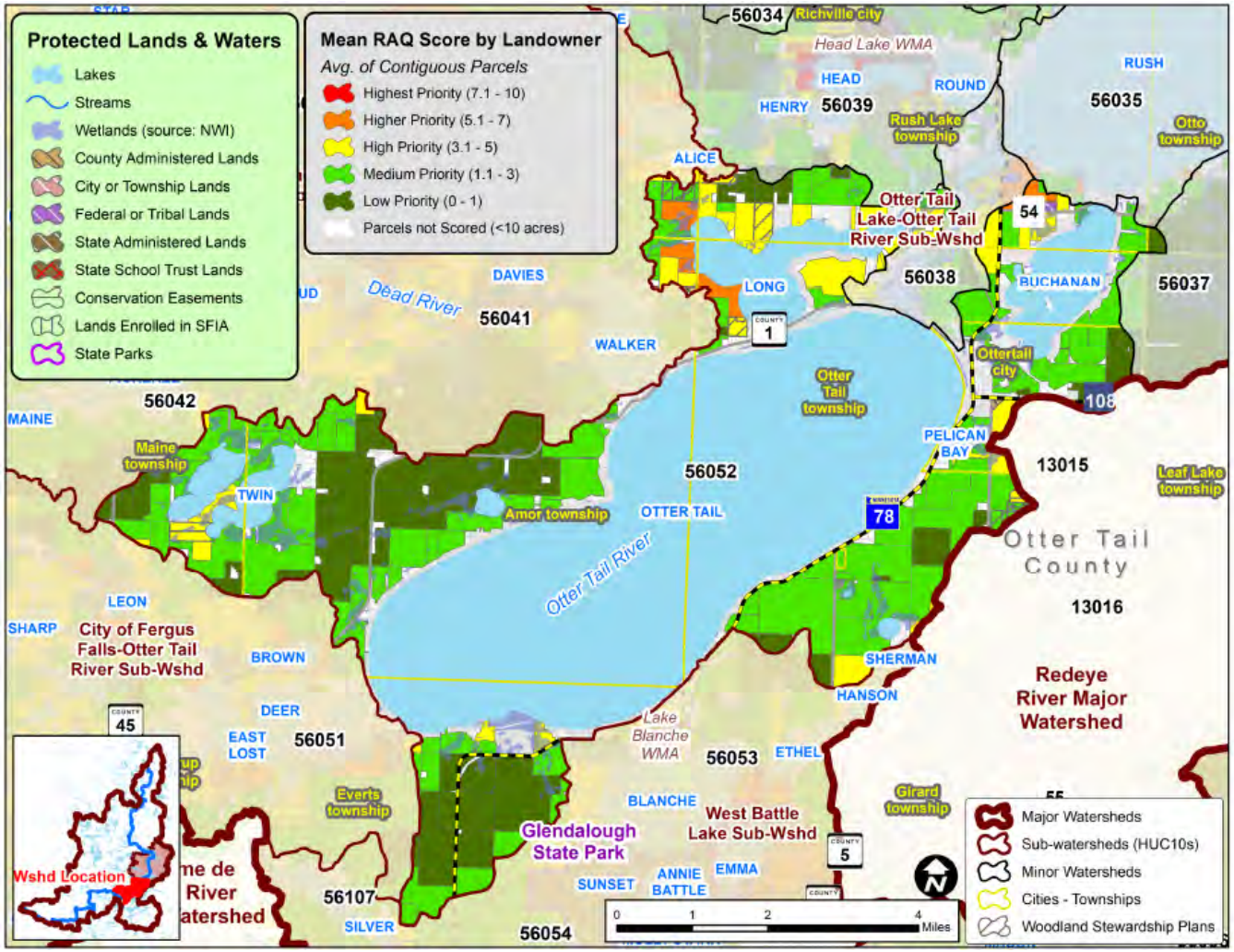
Otter Tail Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 48	**Phosphorus Loading Focus**: Watershed



Otter Tail Lake

Potential Acres to Protect: 2,263 | **Protection Goal: 43** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

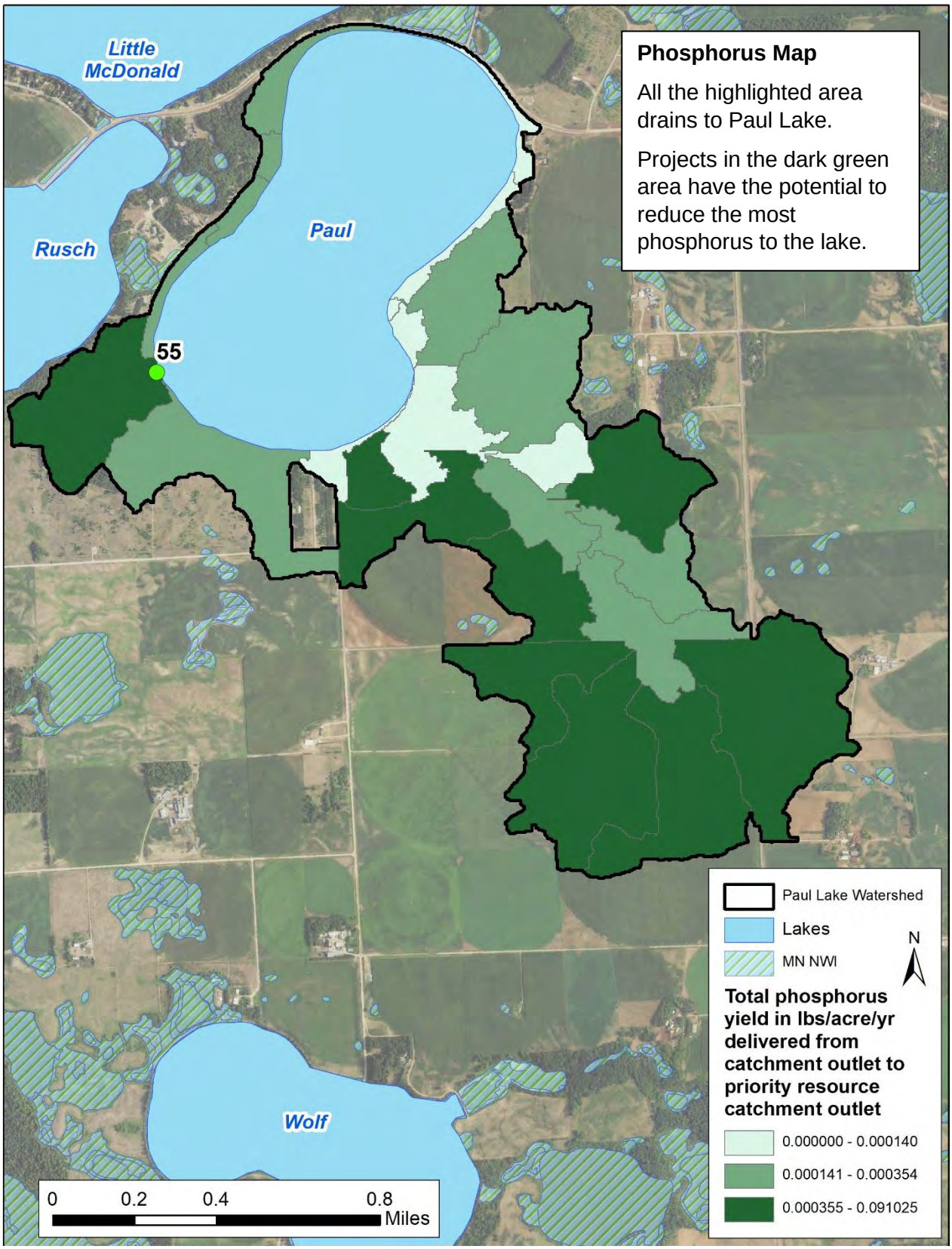
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

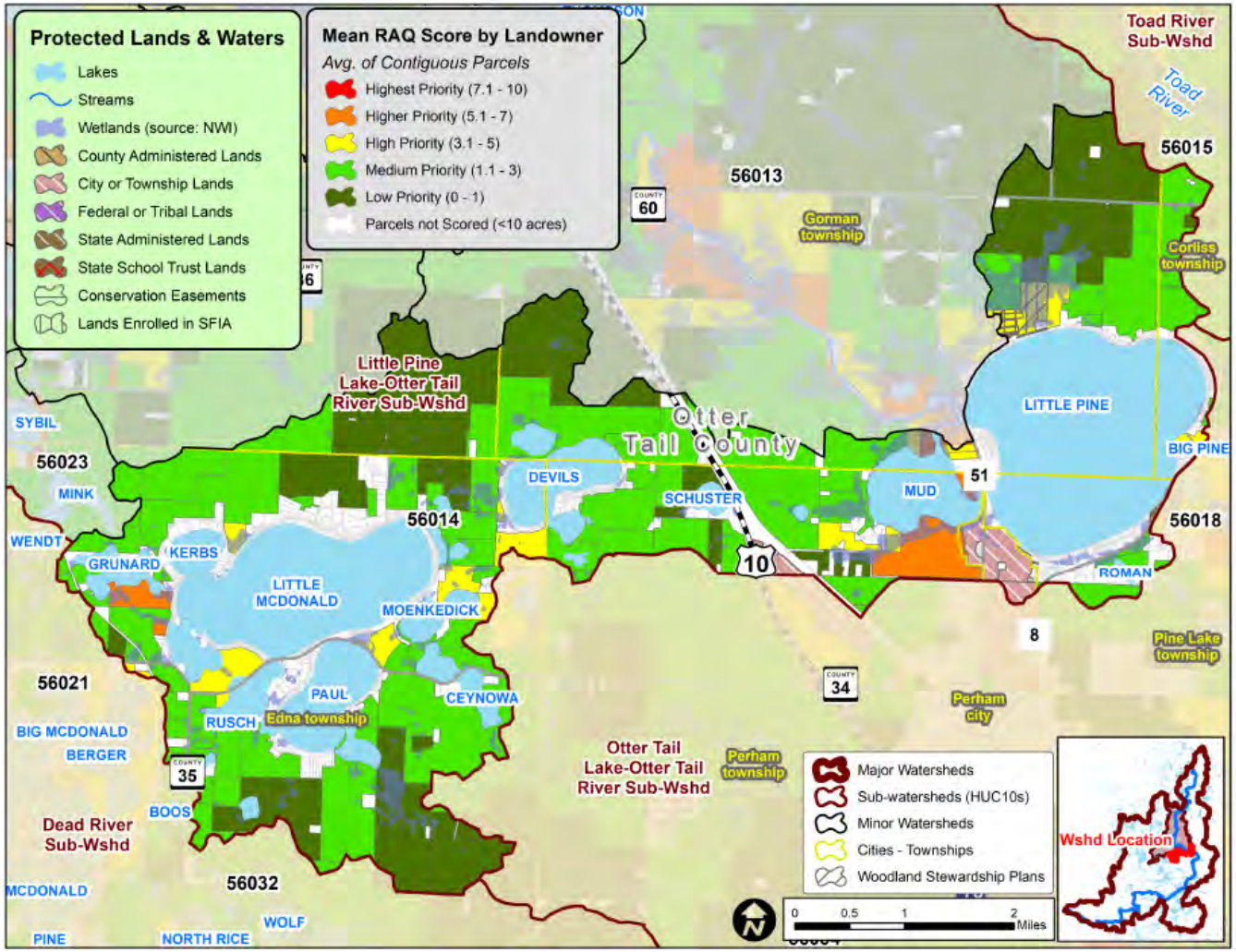
Paul Lake

Management Focus: ENHANCE	**Goal**: Reduce phosphorus by 5% (7 lbs/yr)
Watershed: Lake Ratio: 7	**Phosphorus Loading Focus**: Nearshore



Paul Lake

Potential Acres to Protect: 1,797 | **Protection Goal: 24** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

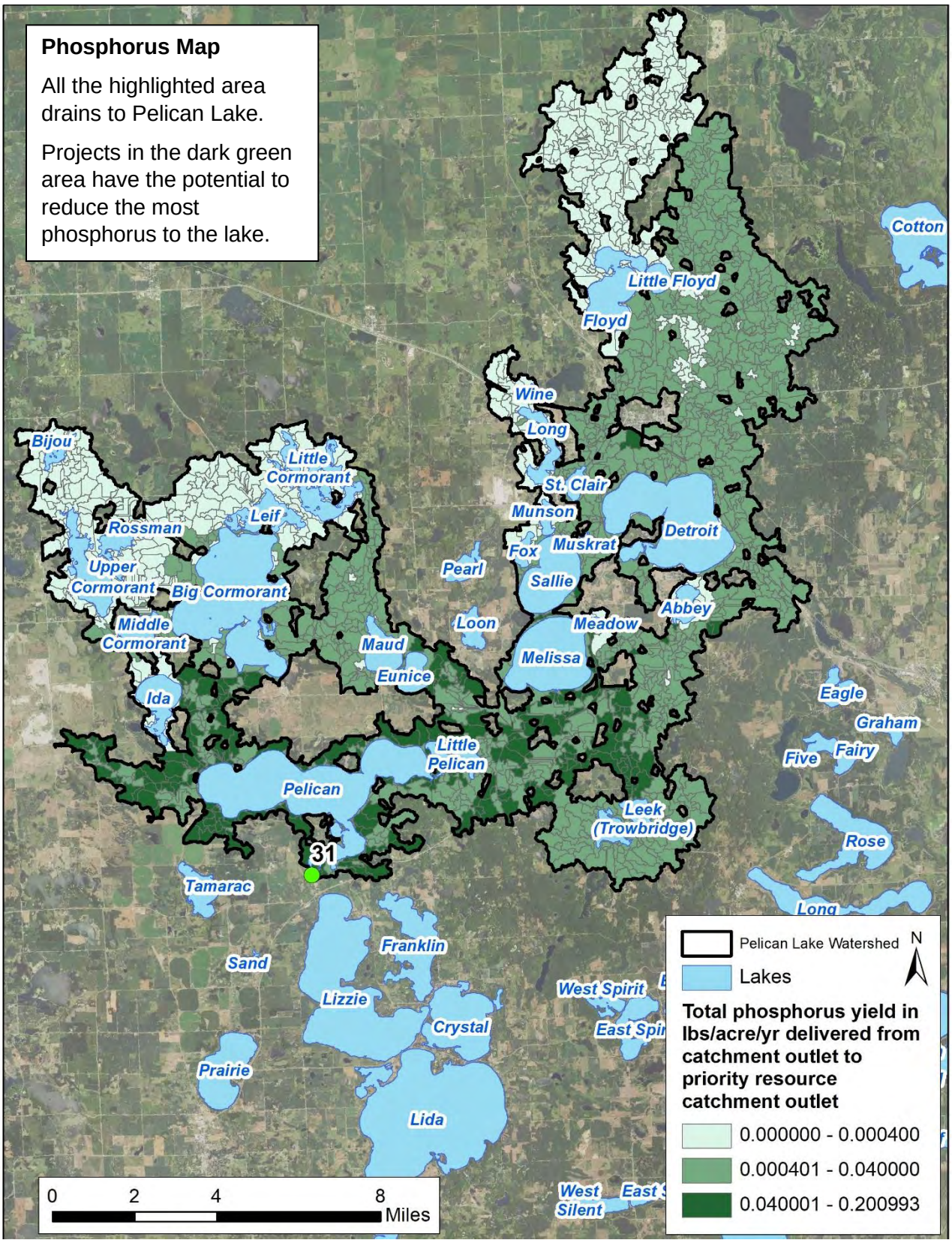
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

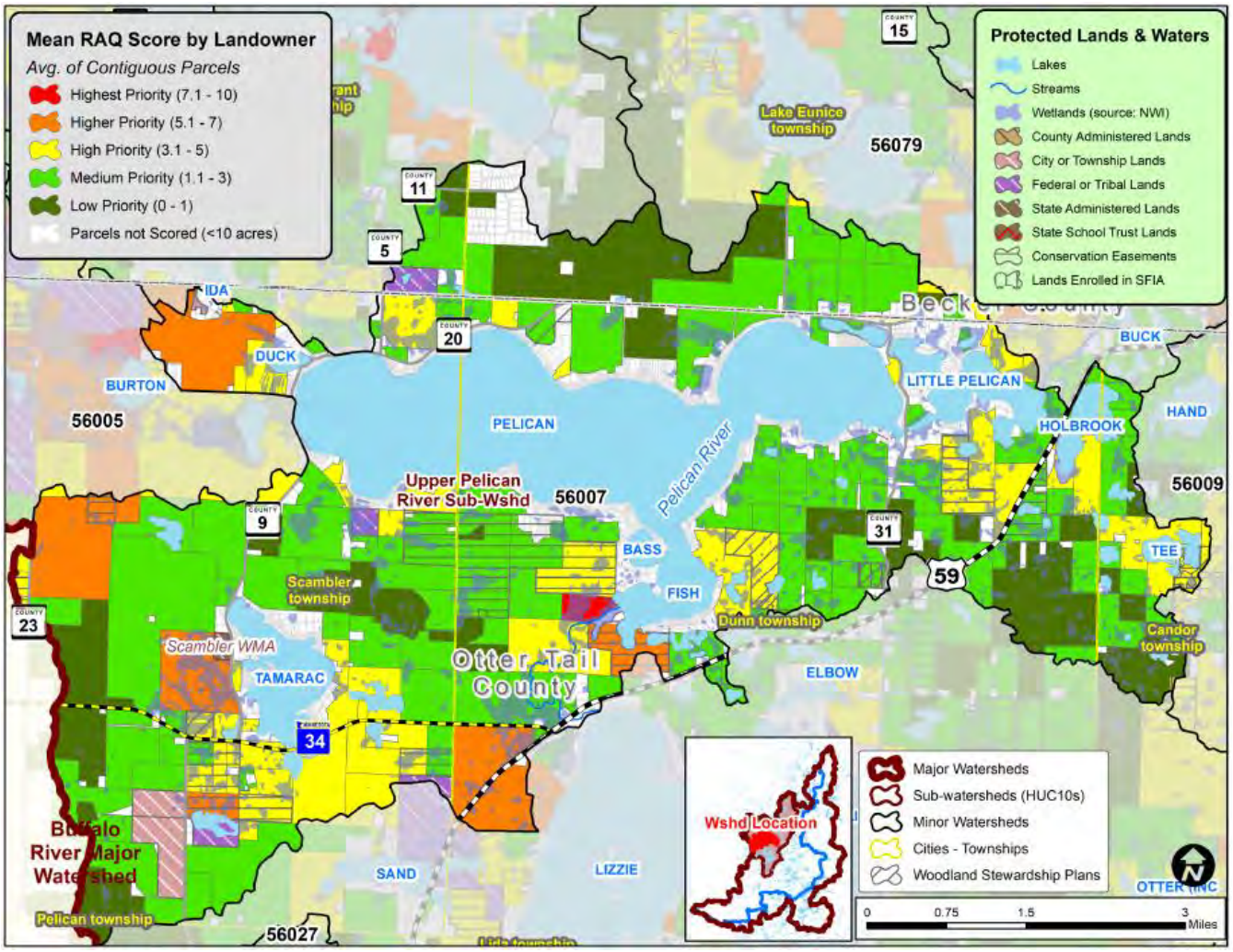
Pelican Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 39	**Phosphorus Loading Focus**: Watershed



Pelican Lake

Potential Acres to Protect: 5,650	Protection Goal: 164 acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

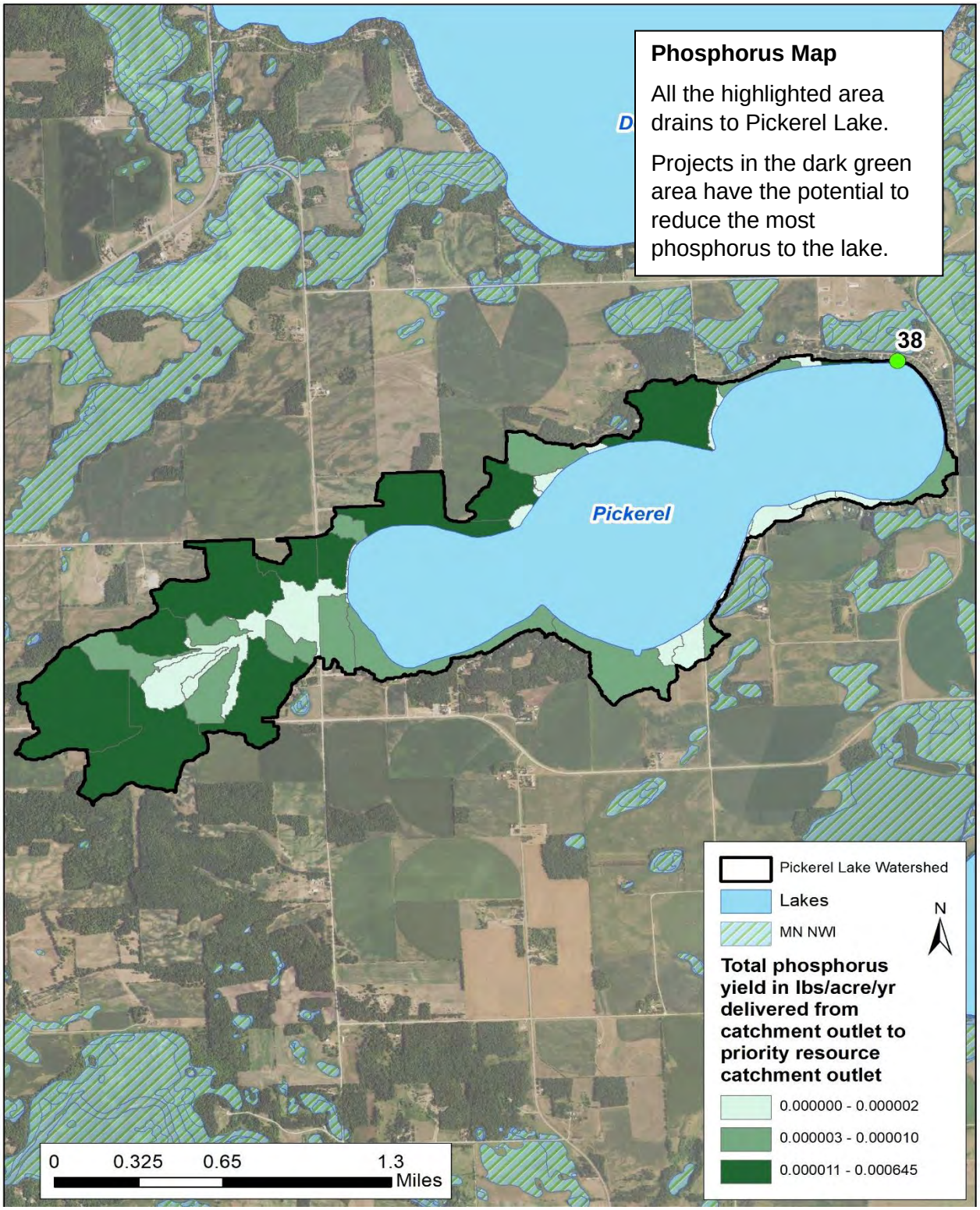
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

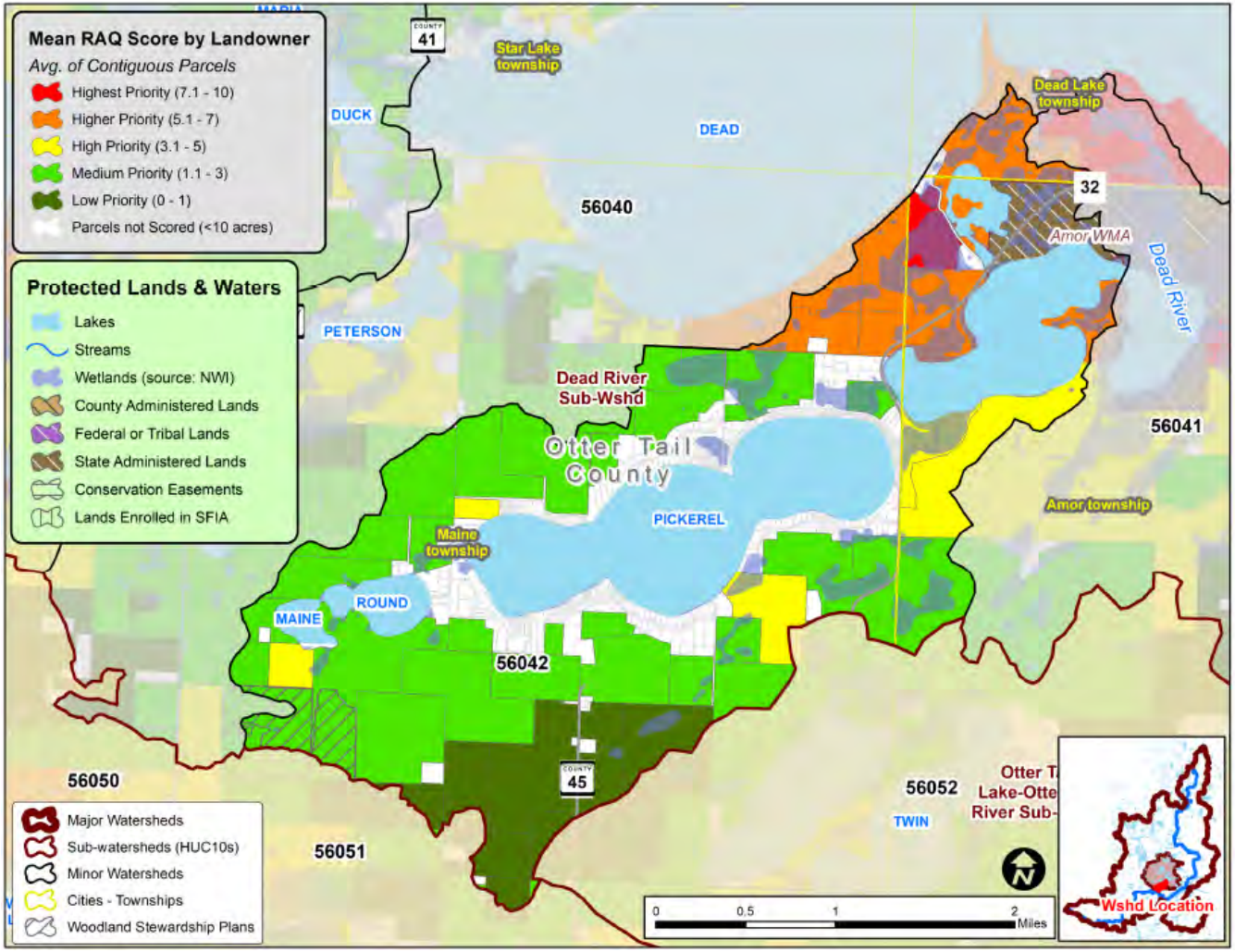
Pickerel Lake

Management Focus: ENHANCE	**Goal**: Reduce phosphorus by 5% (12 lbs/yr)
Watershed: Lake Ratio: 5	**Phosphorus Loading Focus**: Nearshore



Pickerel Lake

Potential Acres to Protect: 1,070 | **Protection Goal: 11** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice L, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

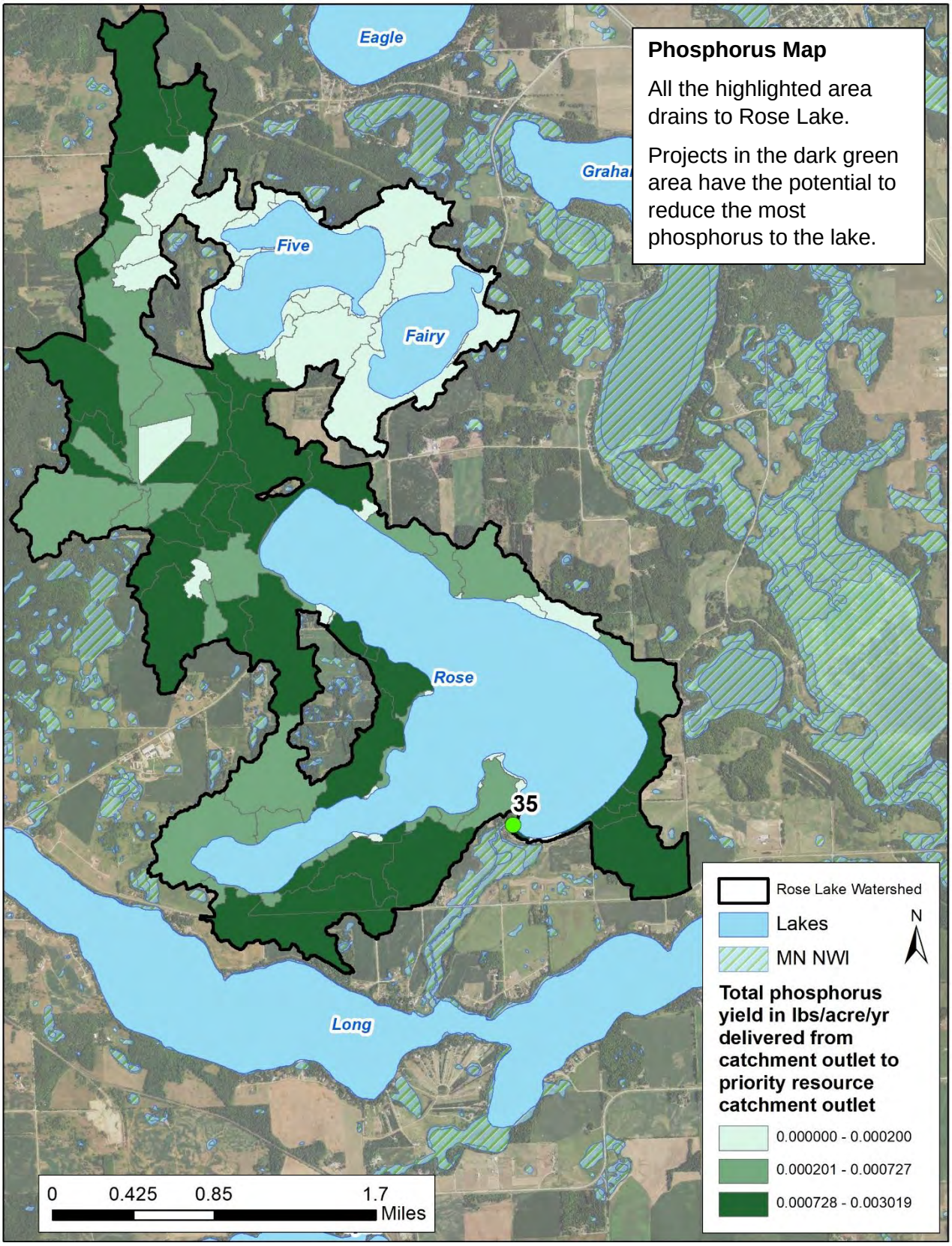
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

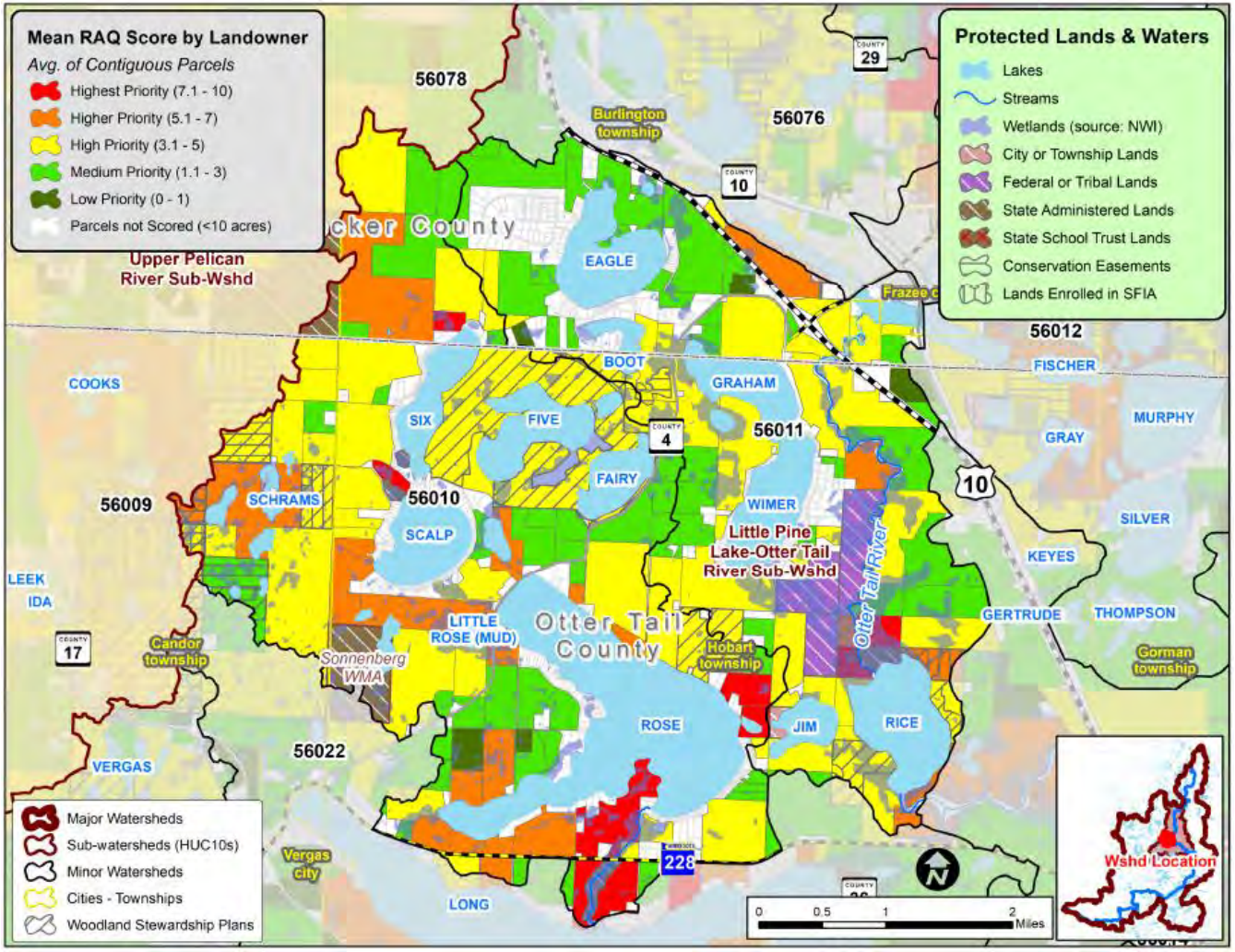
Rose Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 8	**Phosphorus Loading Focus**: Nearshore



Rose Lake

Potential Acres to Protect: 3,731 | **Protection Goal: 116** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice,
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

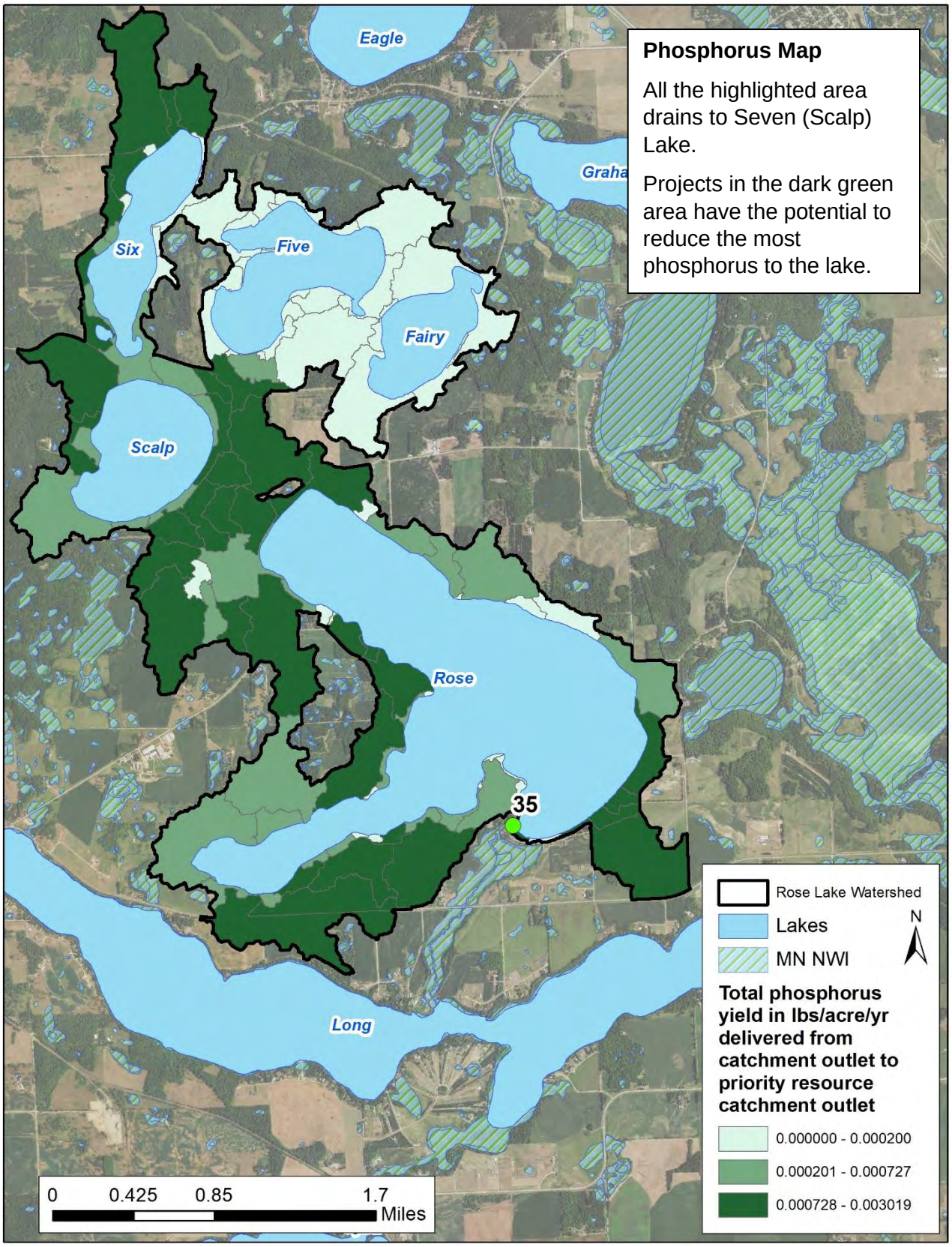
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

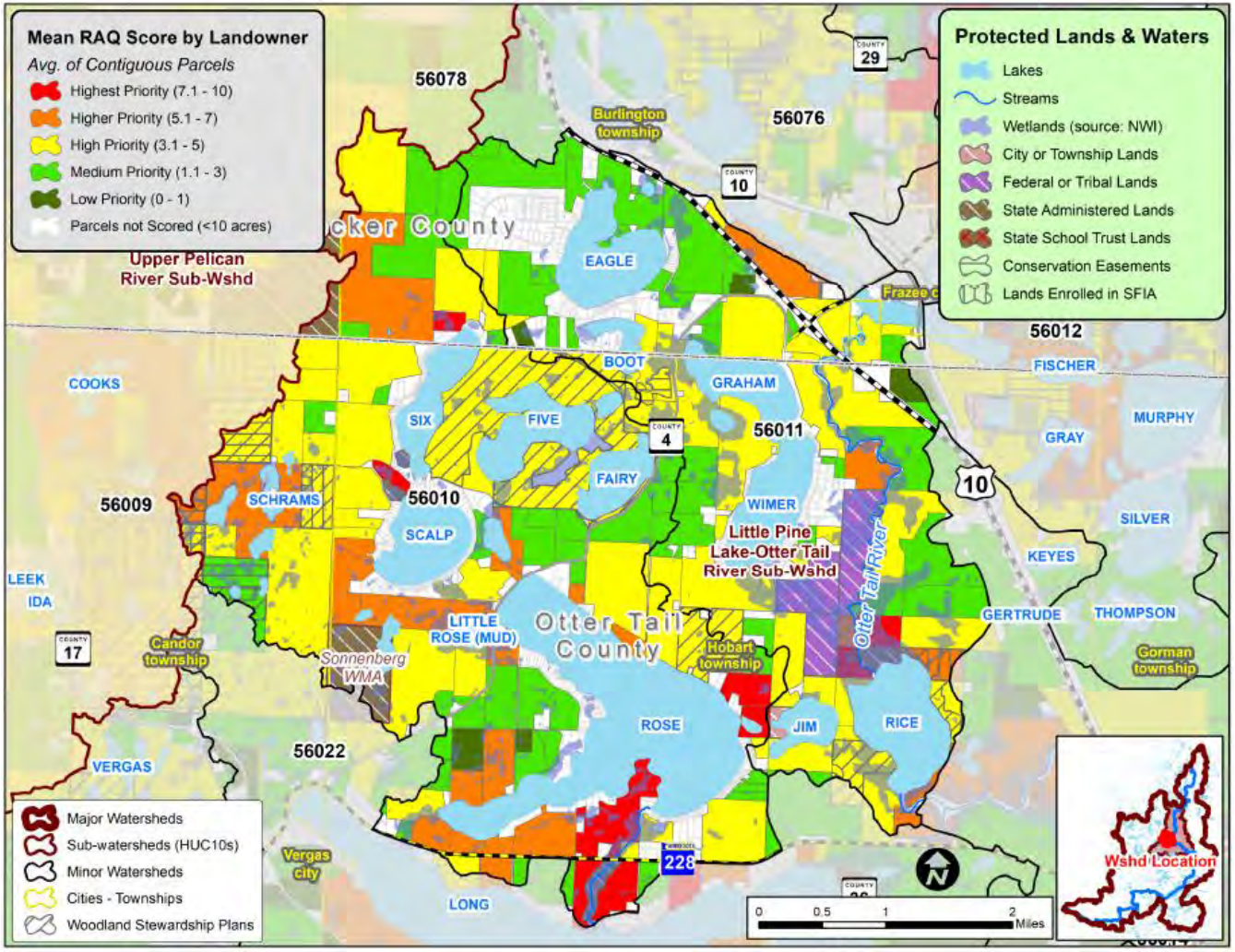
Seven (Scalp) Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 16	**Phosphorus Loading Focus**: Watershed and Nearshore



Seven (Scalp) Lake

Potential Acres to Protect: 3,731 | **Protection Goal: 116** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice,
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

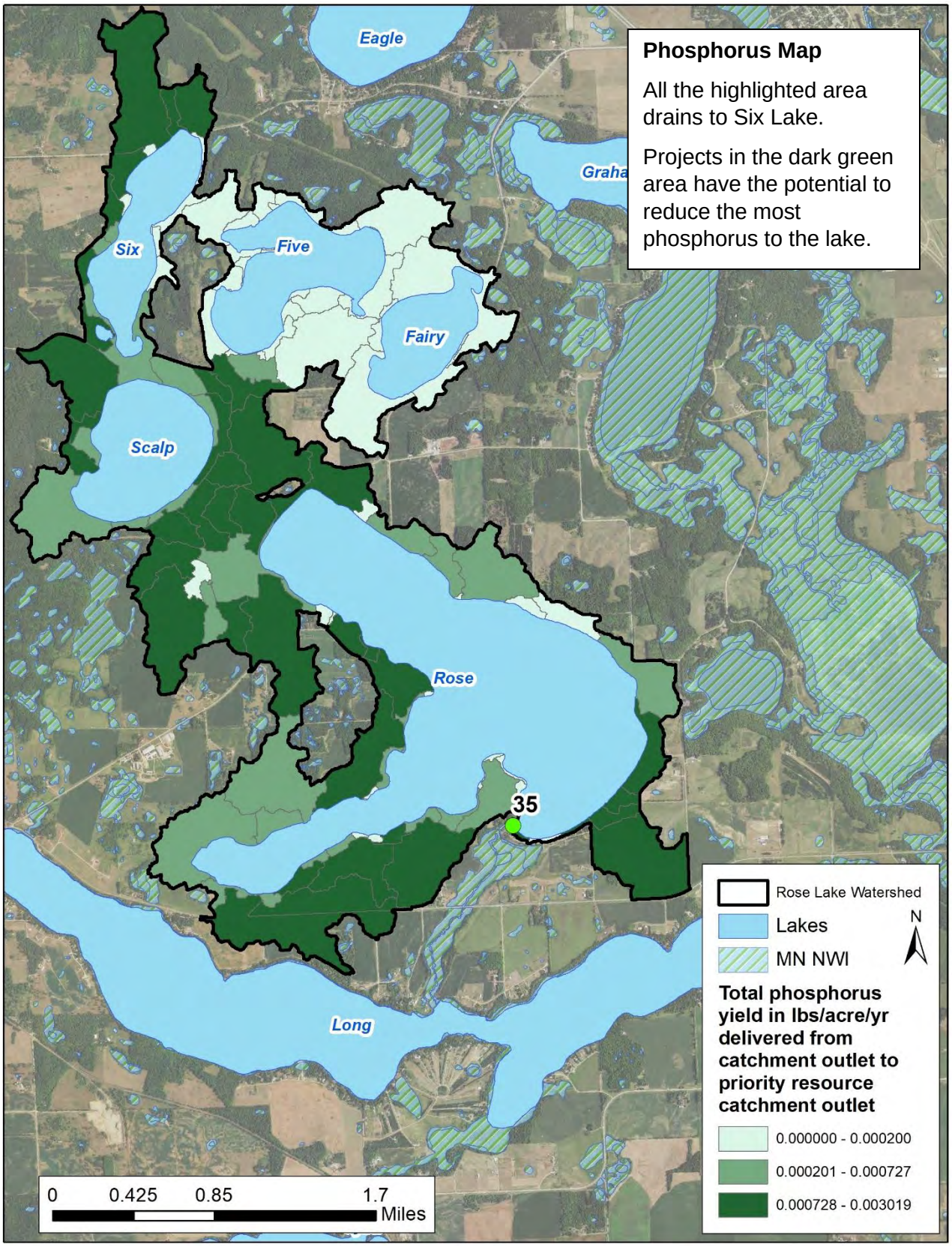
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

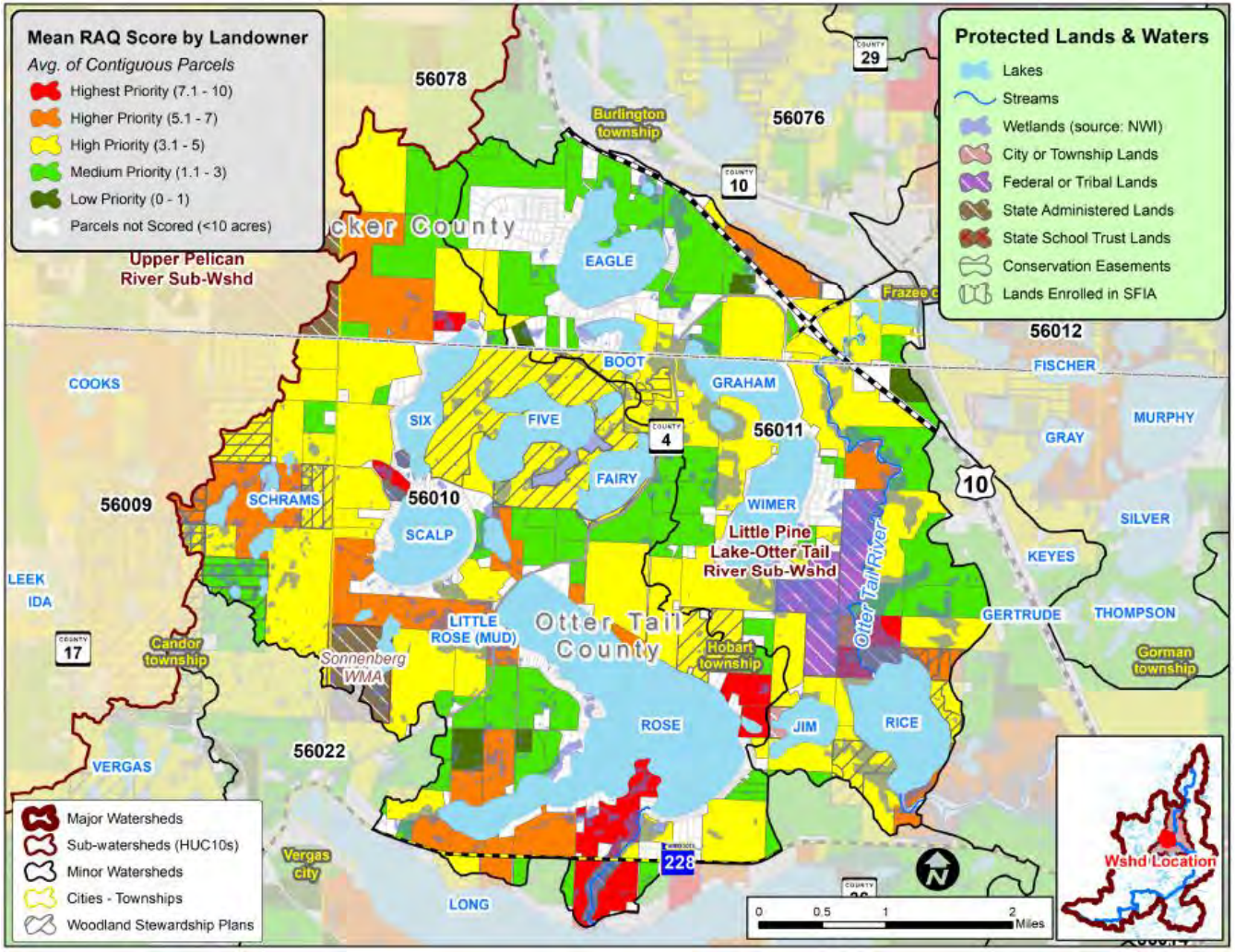
Six Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 6	**Phosphorus Loading Focus**: Nearshore



Six Lake

Potential Acres to Protect: 3,731 | **Protection Goal: 116** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice,
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

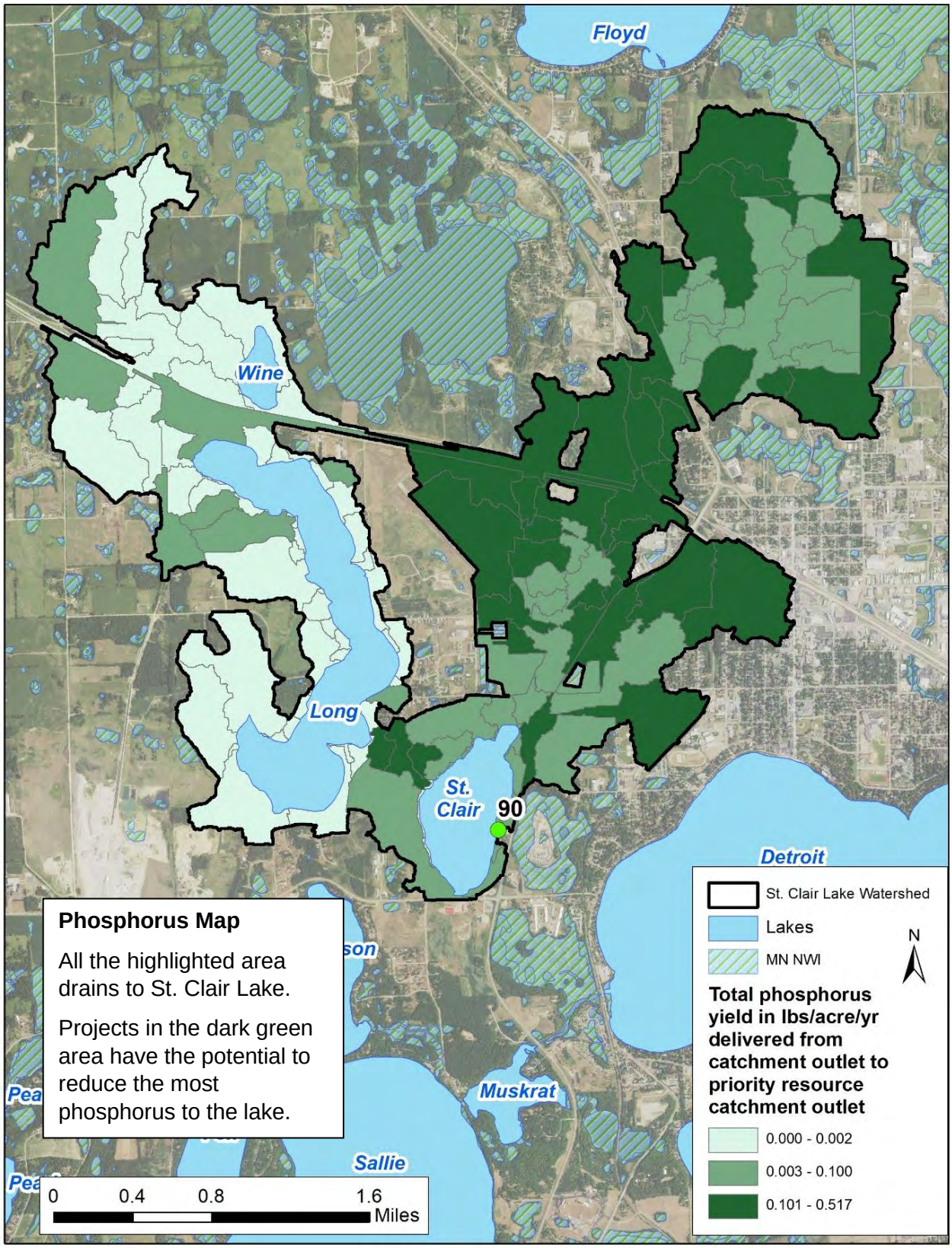
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

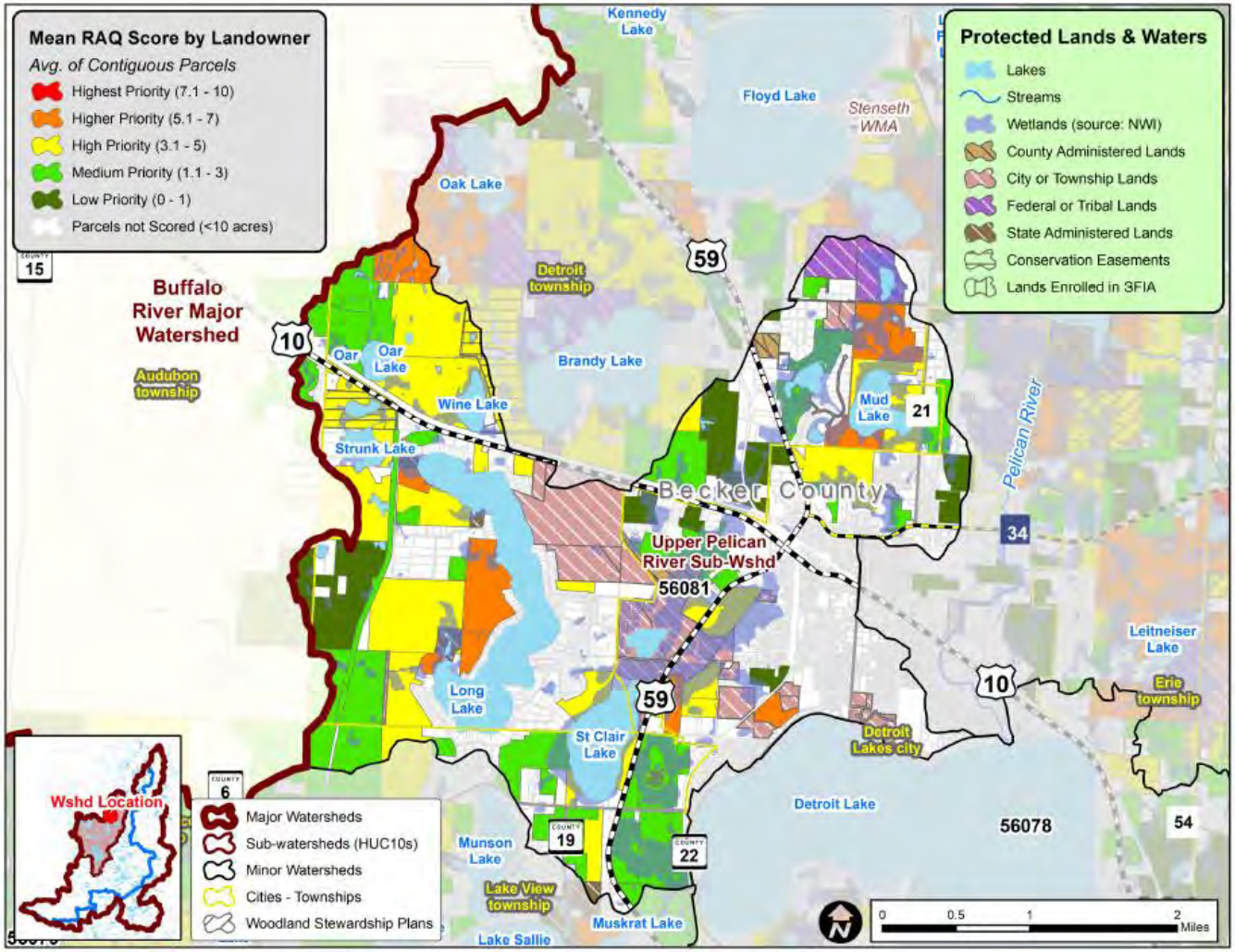
St. Clair Lake

Management Focus: **RESTORE**	**Goal**: Reduce phosphorus by 5% (286 lbs/yr)
Watershed: Lake Ratio: 49	**Phosphorus Loading Focus**: Watershed



St. Clair Lake

Potential Acres to Protect: 707 | **Protection Goal:** 15 acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

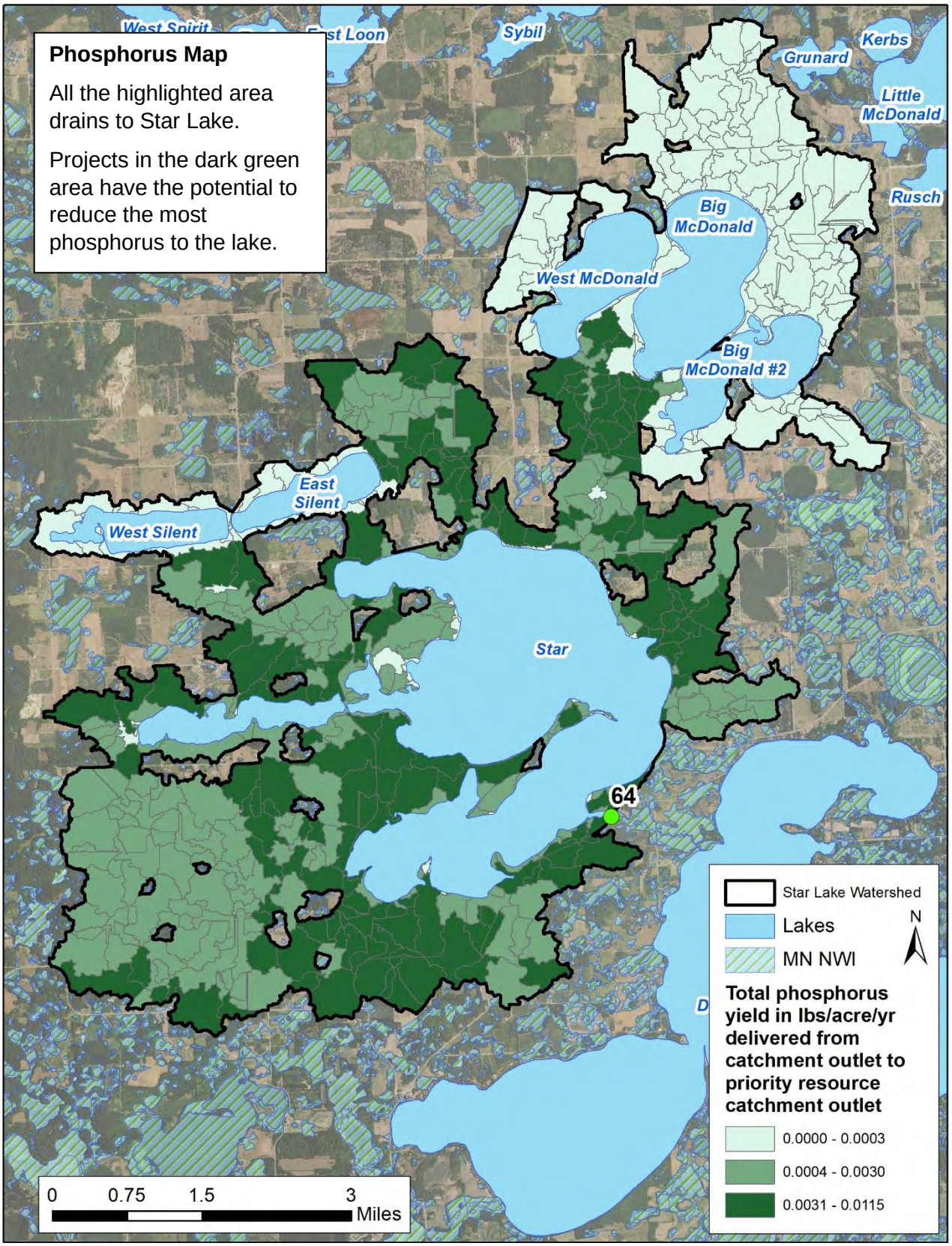
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

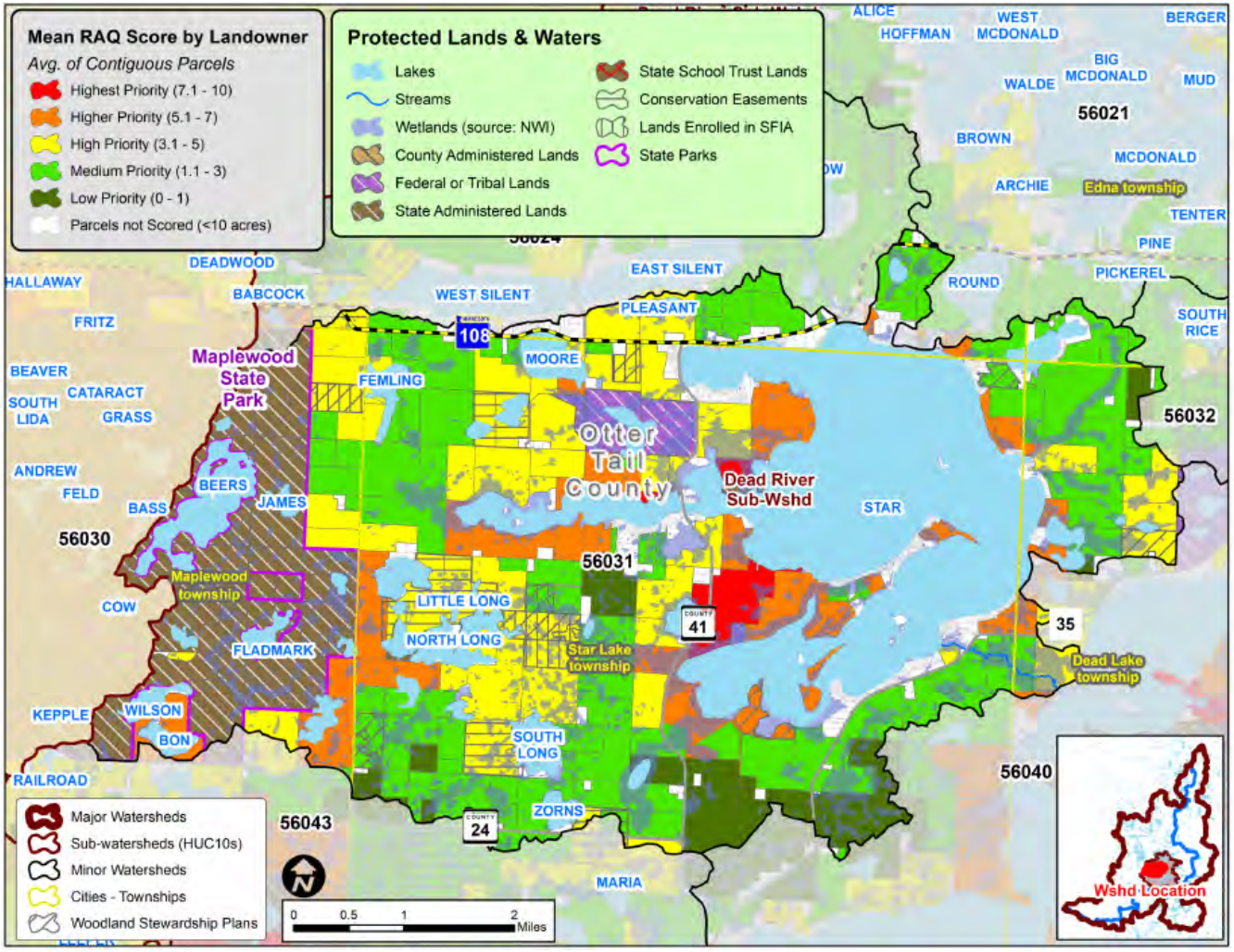
Star Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 9	**Phosphorus Loading Focus**: Nearshore



Star Lake

Potential Acres to Protect: 5,664 | **Protection Goal: 242** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice L, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

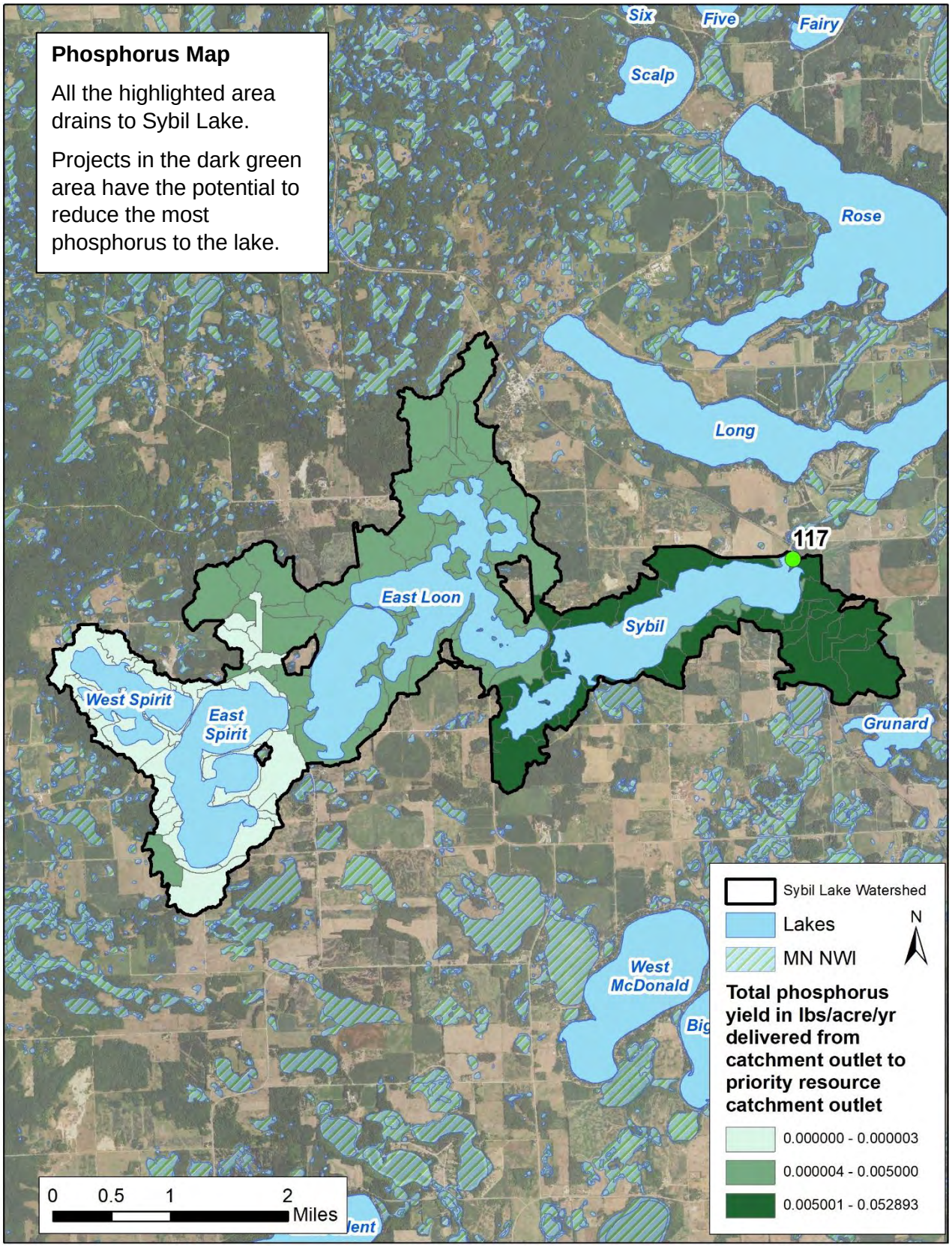
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

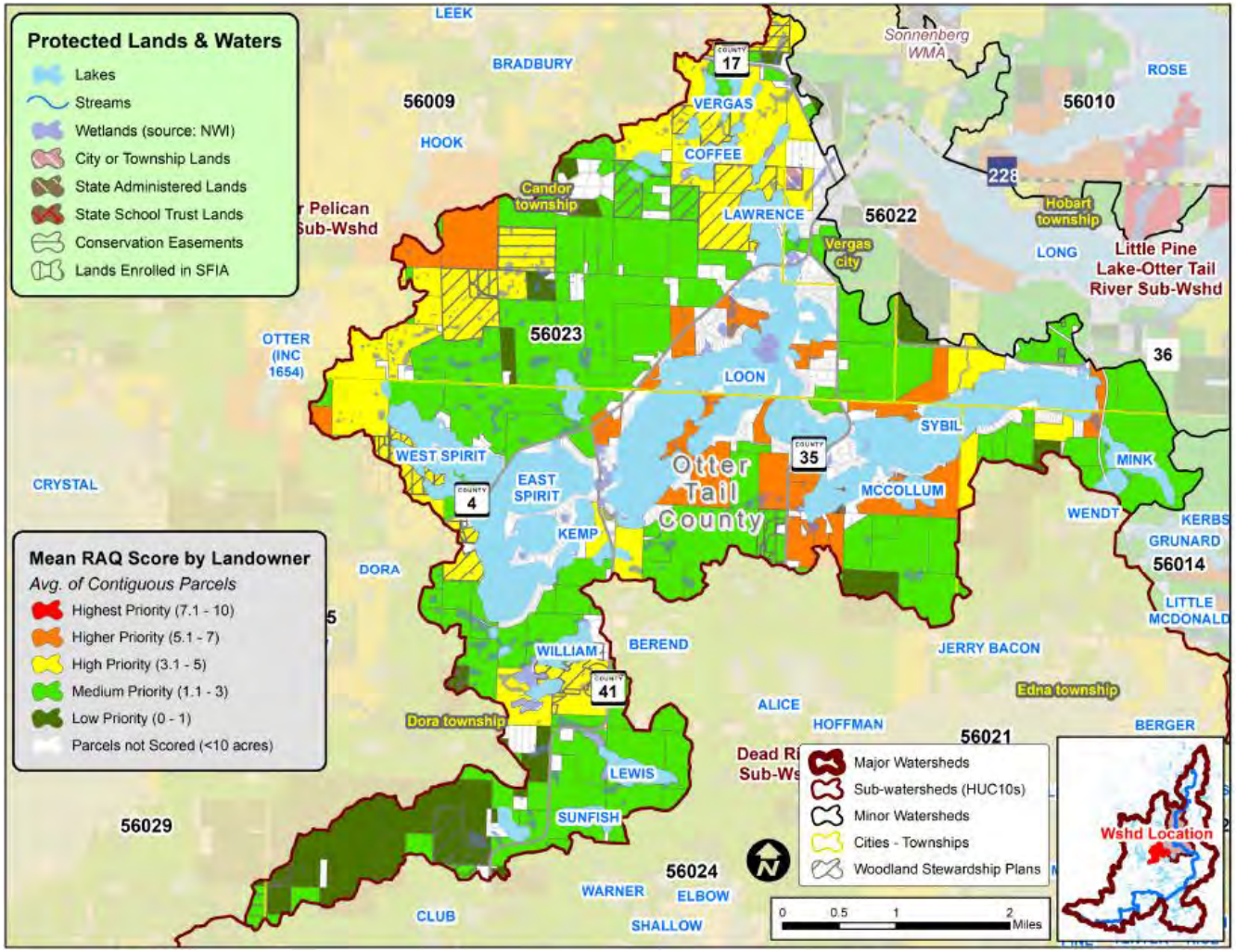
Sybil Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 23	**Phosphorus Loading Focus**: Watershed and Nearshore



Sybil Lake

Potential Acres to Protect: 5,535 | **Protection Goal: 250** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

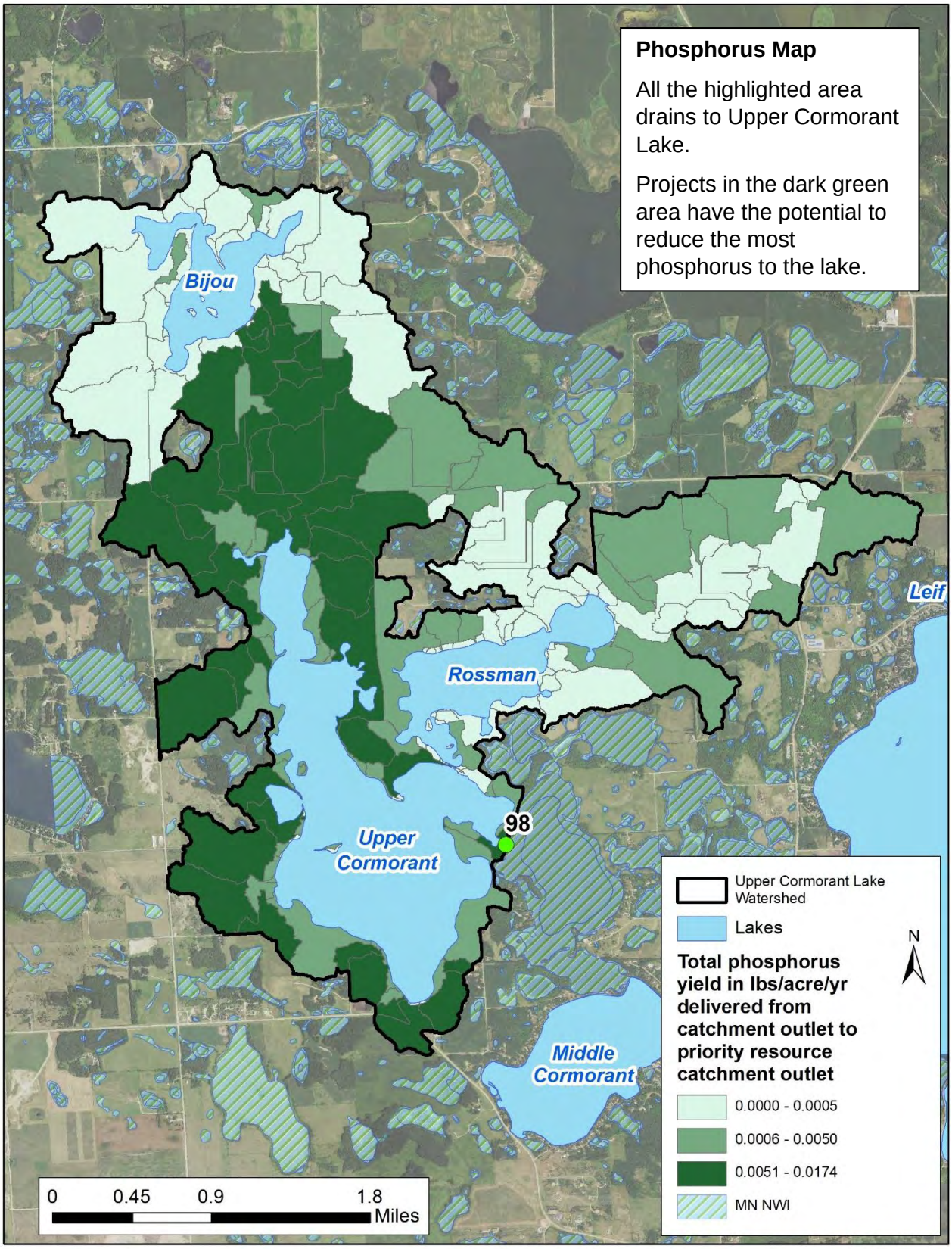
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

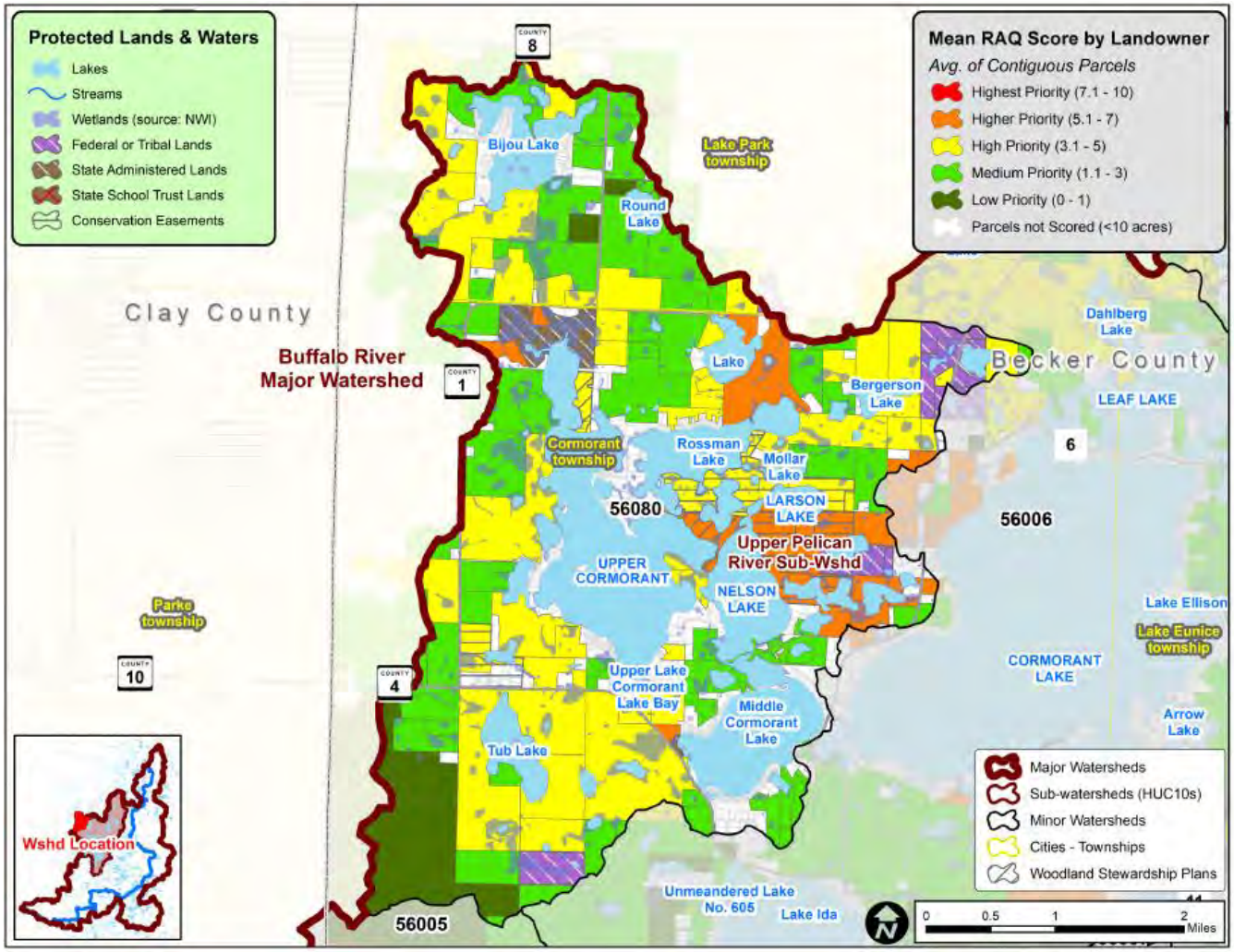
Upper Cormorant Lake

Management Focus: ENHANCE	**Goal**: Reduce phosphorus by 5% (52 lbs/yr)
Watershed: Lake Ratio: 9	**Phosphorus Loading Focus**: Nearshore



Upper Cormorant Lake

Potential Acres to Protect: 2,651 | **Protection Goal: 27** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

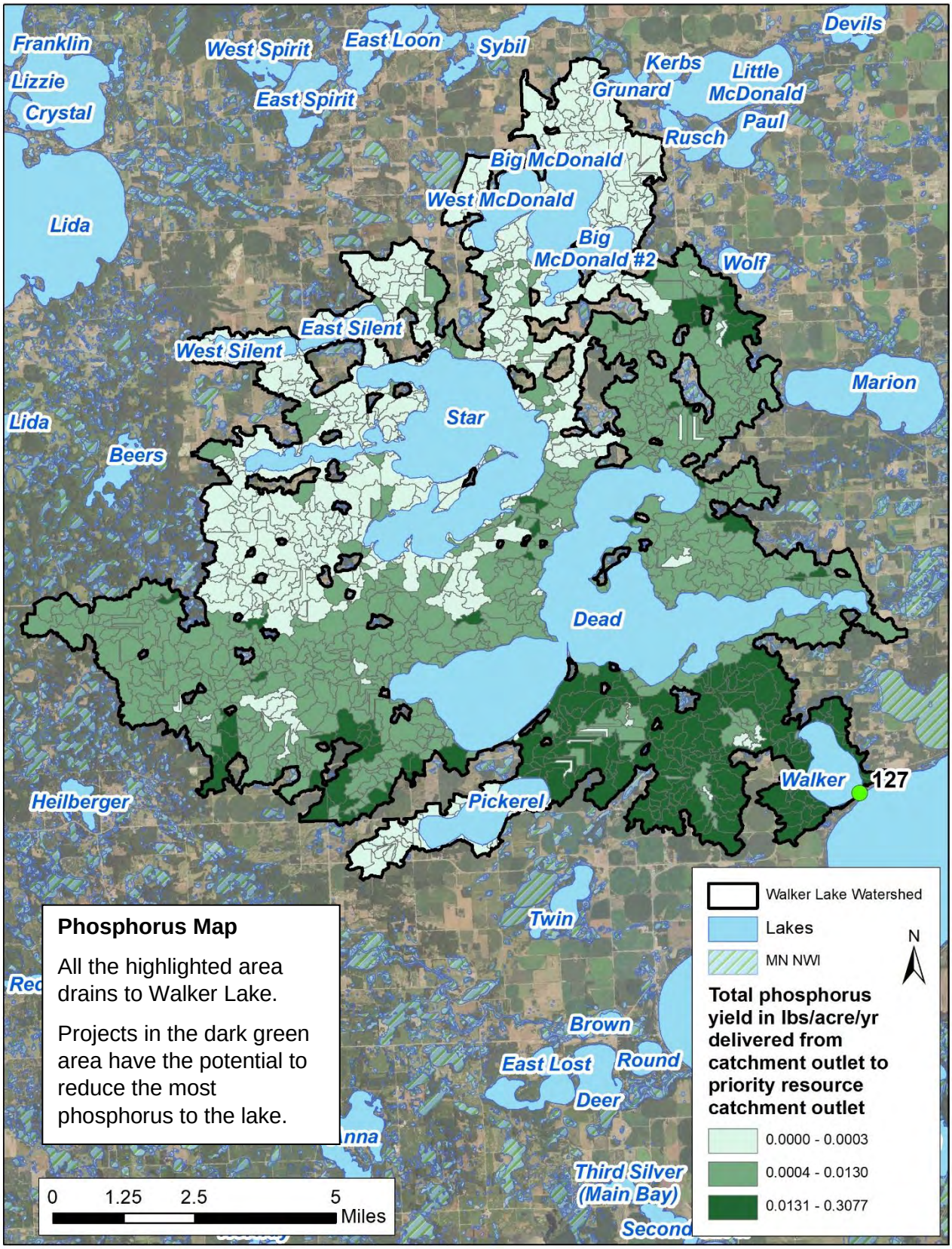
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

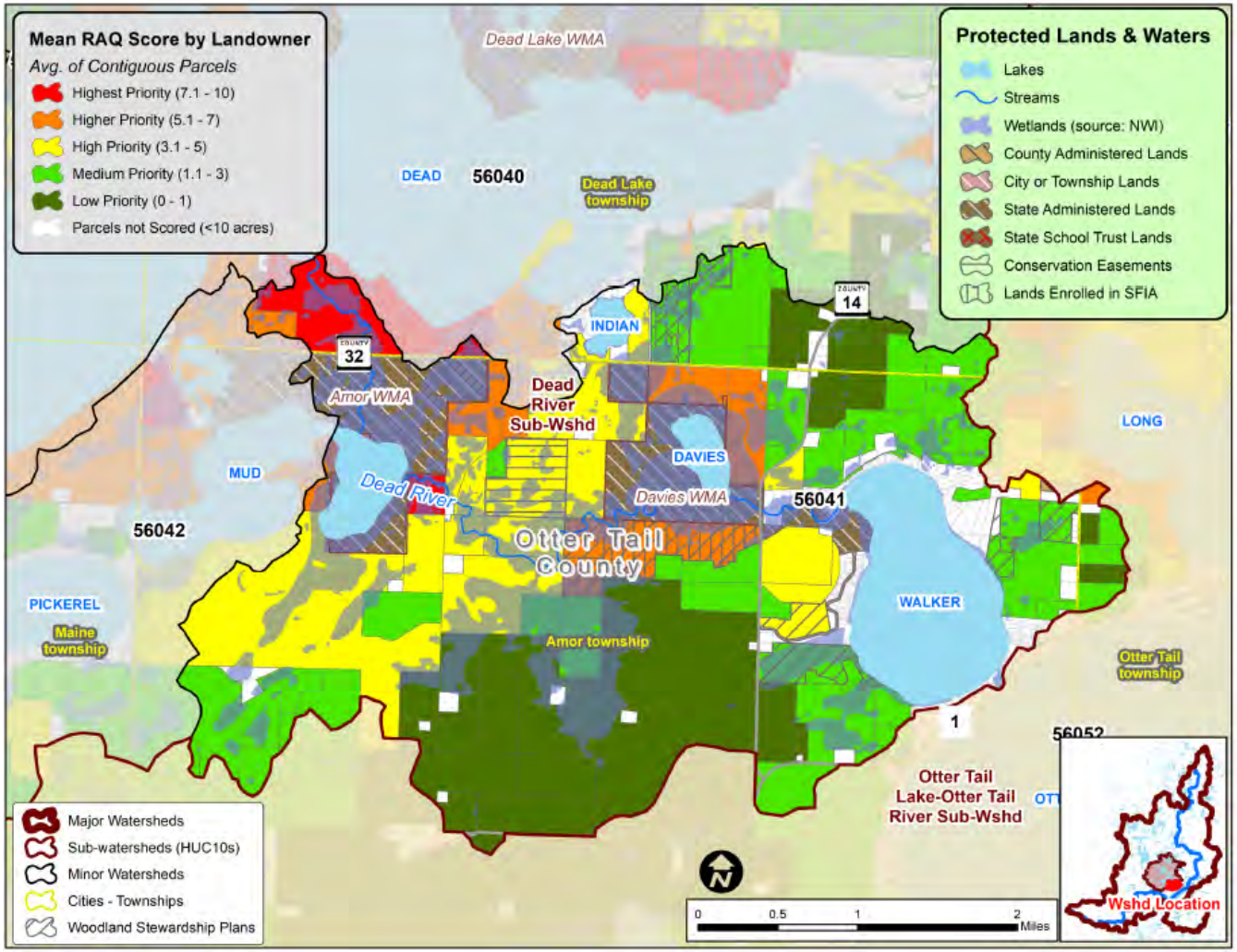
Walker Lake

Management Focus: ENHANCE	**Goal**: Reduce phosphorus by 5% (420 lbs/yr)
Watershed: Lake Ratio: 165	**Phosphorus Loading Focus**: Watershed



Walker Lake

Potential Acres to Protect: 1,415 | **Protection Goal:** 15 acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice L, Cisco L, Trout L/Streams, etc.
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

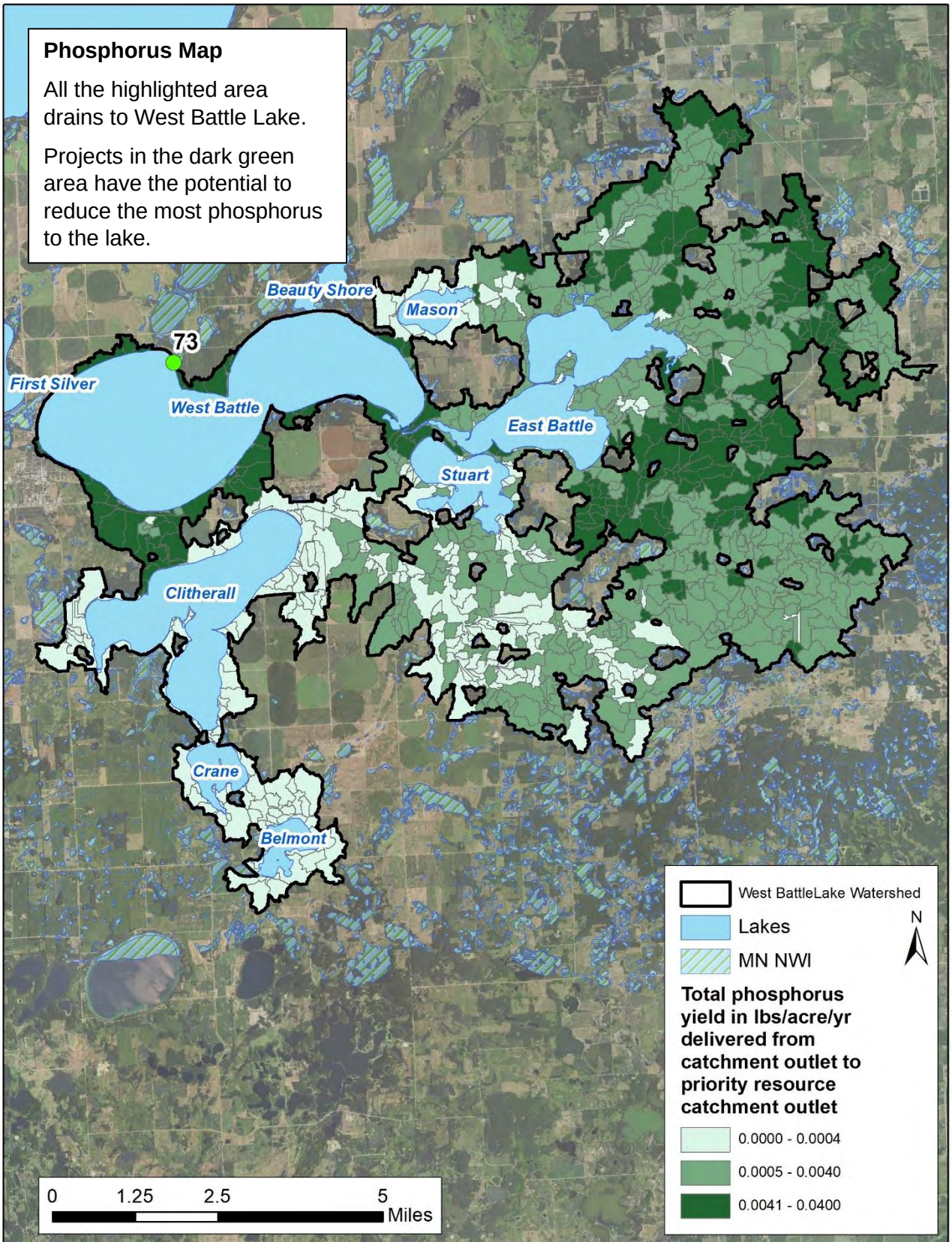
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

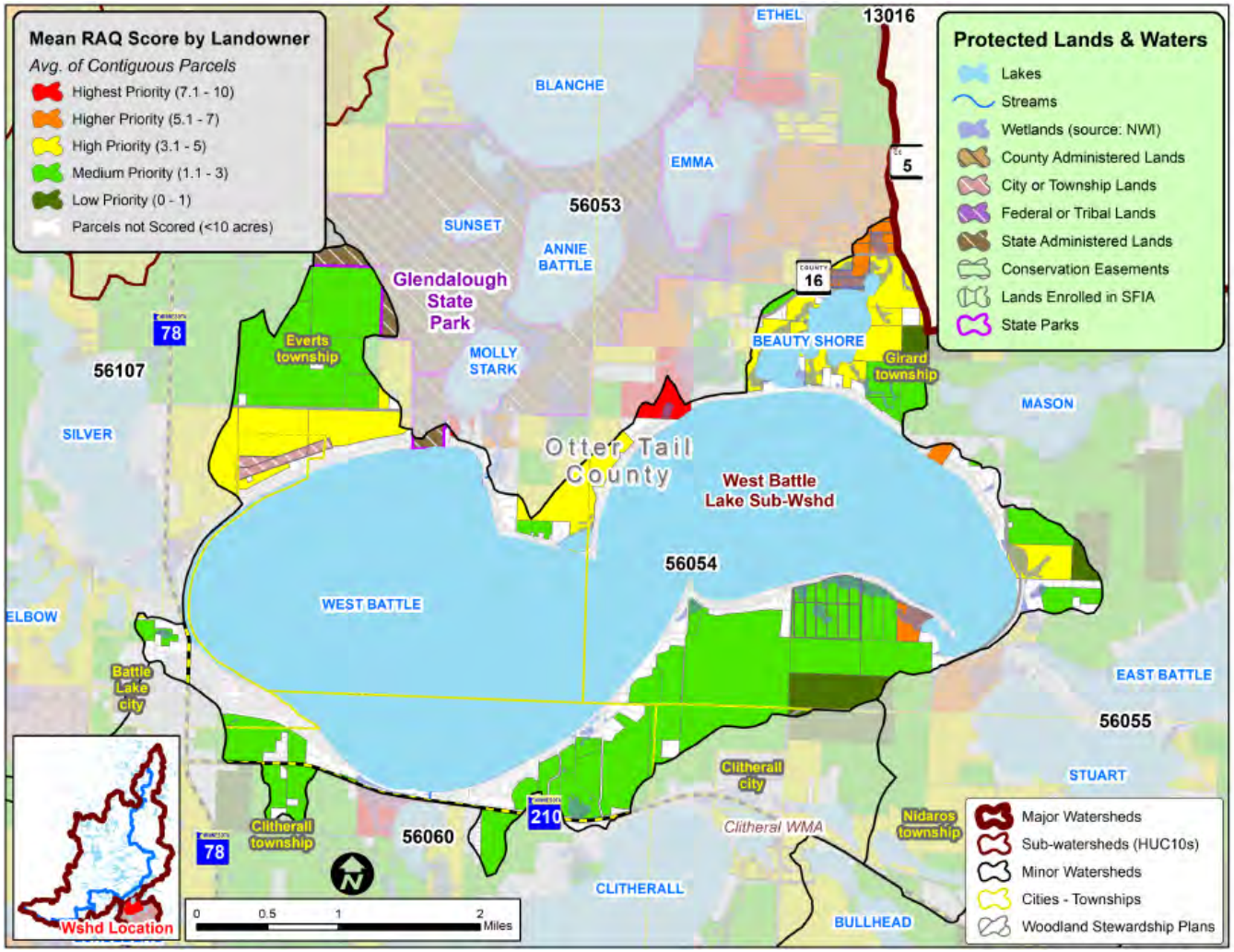
West Battle Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 17	**Phosphorus Loading Focus**: Watershed and Nearshore



West Battle Lake

Potential Acres to Protect: 480 | **Protection Goal: 15** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice,
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

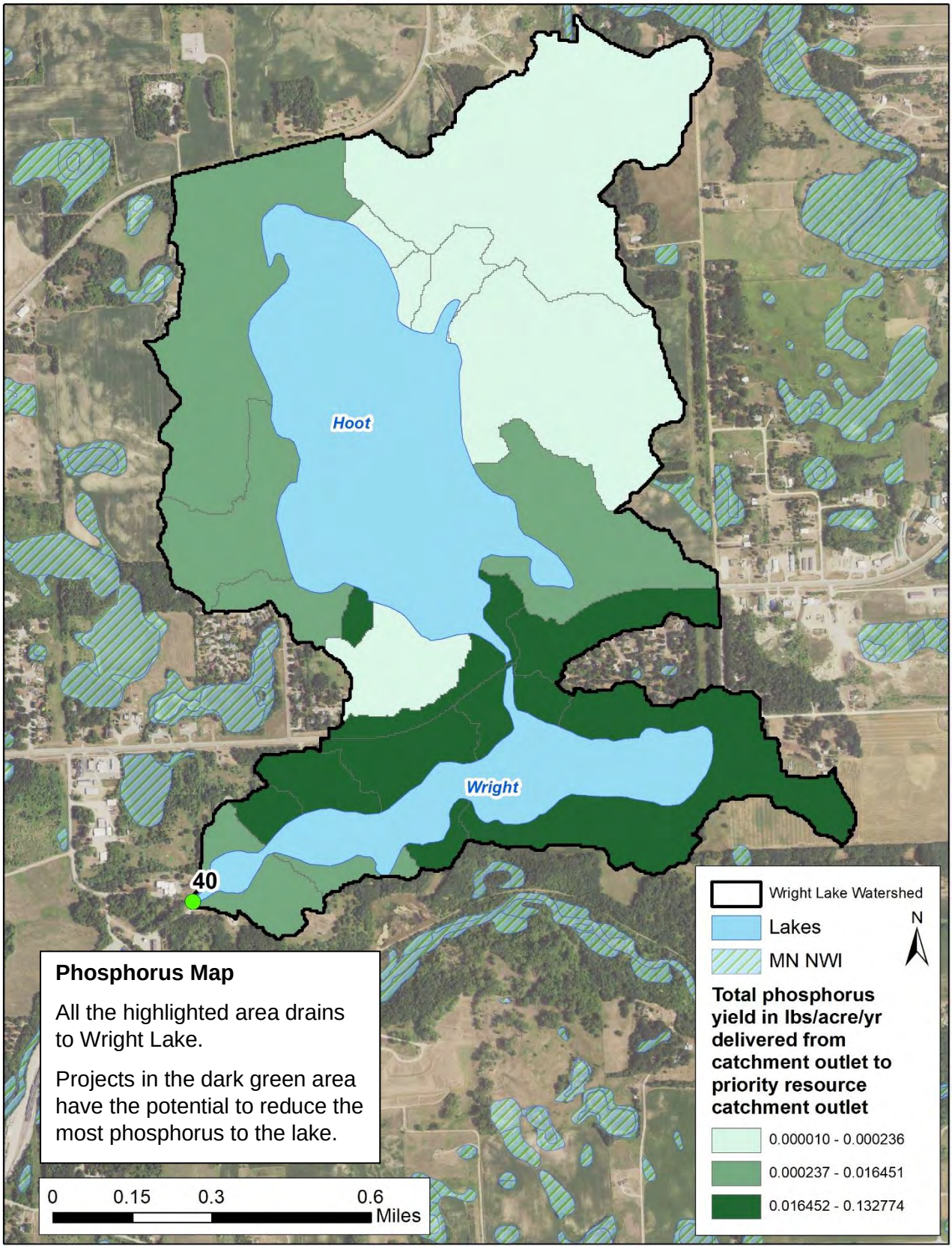
- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

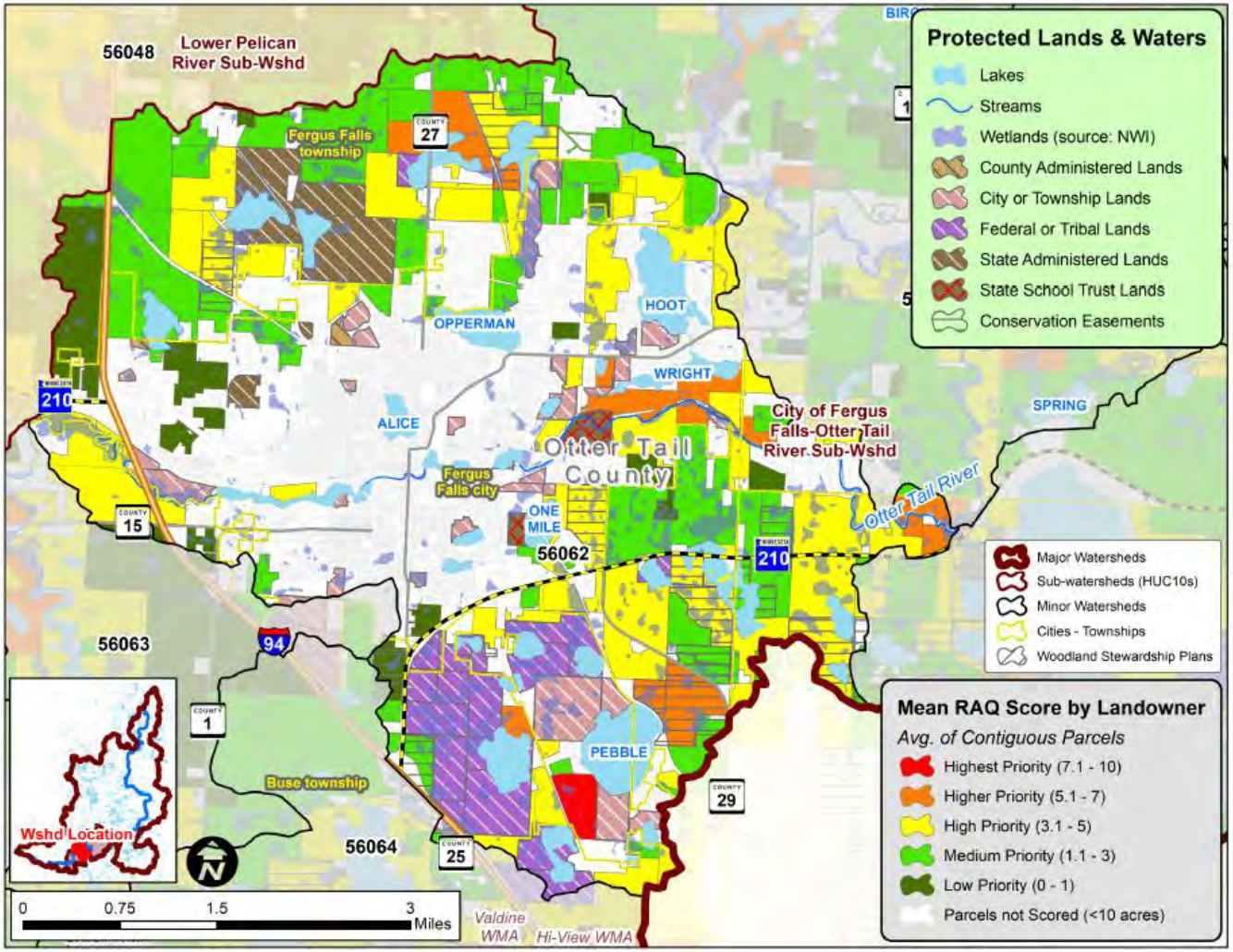
Wright Lake

Management Focus: PROTECT	**Goal**: No increase in phosphorus
Watershed: Lake Ratio: 14	**Phosphorus Loading Focus**: Watershed and Nearshore



Wright Lake

Potential Acres to Protect: 298 | **Protection Goal: 7** acres



Scoring Criteria:		
Riparian	3	Riparian
	2	Non-riparian: Shoreland (1 parcel back)
	1	2 parcels back
Adjacency	3	2 sides touching public land
	2	1 side touching public land
	1	One parcel removed from public land or touching parcel with SFIA or Easement
Quality*	3	1 point for each feature that the parcel touches: such as High or Outstanding Biodiversity (upl. or aqu.), Wild Rice L,
	2	
	1	

* Quality is locally determined and for this project included other features, including groundwater resources. For this project, quality also included:

- Outstanding Resource Value Resources (MPCA)
- Old Growth Forests (DNR)
- Lakes with Exceptional IBI Scores (DNR)
- Drinking Water Supply Management Areas (MDH)
- Source Water Assessment Areas (MDH)
- Medium High or High Wildlife Action Network Score (DNR)
- Priority Shallow /Waterfowl Lakes
- Oligotrophic Lakes
- Audubon Important Bird Areas (IBAs)
- Rare Species (DNR)...*see disclaimer below*

Max Score for Quality = 4

Rare species data included in the RAQ scoring: Copyright 2020, State of Minnesota, Department of Natural Resources. Rare species data included here were provided by the Division of Ecological and Water Resources Division, Minnesota Department of Natural Resources (DNR), and were current as of May 2020. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

Appendix F. PRWD Rules

WATER MANAGEMENT RULES
RULES OF PELICAN RIVER WATERSHED DISTRICT

TO PROTECT AND ENHANCE THE QUALITY OF WATERS WITHIN ITS JURISDICTION; TO ENSURE THAT WISE DECISIONS ARE MADE CONCERNING THE MANAGEMENT OF STREAMS, WETLANDS, LAKES, GROUNDWATER AND RELATED LAND RESOURCES WHICH IMPACT THESE WATERS; AND TO ACCOMPLISH THE PURPOSES FOR WHICH A WATERSHED DISTRICT IS ESTABLISHED.

Section 1.0 Introduction

1.1 Statutory Authority to Adopt Rules
According to Minnesota Statutes (M.S.) Section103D.341, subdivision 1, the managers must adopt rules to accomplish the purposes of this chapter and to implement the powers of the managers.

1.3 Short Title
These rules shall be known and may be cited as the "Pelican River Watershed District Rules."

1.4 Inconsistent Provisions
If any rule or rules herein contained are inconsistent with the provisions of M.S. Chapter 103D or other applicable laws of the State of Minnesota, the provisions of Chapter 103D or other applicable law shall govern.

1.8 Severability
The provisions of these rules shall be severable and the invalidity of any section, subdivision or any other part thereof shall not make invalid any other section, subsection, paragraph, subparagraph, subdivision or any other part thereof.

Section 2.0 Policy Statement

2.1 General Policy
These rules shall be adopted by the Board of Managers of the Pelican River Watershed District to effectuate the purposes of M.S. Chapter 103D and the powers of the Board of Managers therein prescribed. It is the intention of the Board of Managers that its rules conform to the legislative policy of M.S. Chapter 103D.

It is the Managers' intention to use these rules as a tool to carry out the District's mission to enhance the quality of water in the lakes within its jurisdiction. It is understood that to accomplish this, the District must ensure that wise decisions are made concerning the management of streams, wetlands, lakes, groundwater, and related land resources which directly affect these lakes. The Managers' further intent is to accomplish this mission in a manner that is most beneficial to the general welfare of present and future residents of the District and to minimize adverse environmental impacts upon the water resources of the District.

Specifically, the District seeks to minimize increased discharges or nutrients to the waters of the District by exercising control over development and to regulate improvements by riparian property owners of the beaches, banks, and shores of lakes, streams, and wetlands for preservation and beneficial public use.

The rules stated below shall be followed by any persons, corporations, firms, state, county or municipal governments, and other government agencies undertaking revision of their existing rules, plans or statutes, or undertaking certain land use modification or land development activities within the District.

Section 3.0 Definitions

For the purposes of these Rules, certain words and terms are defined below. In the absence of a definition, the definitions established for the State of Minnesota by statute or by case law shall apply to these Rules unless clearly in conflict, clearly inapplicable, or unless the context makes such meaning repugnant thereto. Certain terms or words used herein shall be interpreted as follows: the word "shall" is mandatory, not permissive. All distances, unless otherwise specified, shall be measured horizontally.

ALTERATIONS TO LAND – grading, excavation, fill or movement of soil or vegetative material.

APPROPRIATE REGISTERED PROFESSIONAL OR REGISTERED PROFESSIONAL – a professional registered in the state of Minnesota with the necessary expertise in the fields of hydrology, drainage, flood control, erosion and sediment control, and stormwater pollution control to design and certify stormwater management devices and plans, erosion prevention and sediment control plans, and shoreland alterations including retaining walls. Examples of registered professionals may include professional engineers, professional landscape architects, professional geologists, and professional soil engineers who have the referenced skills.

BLUFF - a topographic feature such as hill, cliff, or embankment located in a shoreland area and draining to a water body, having a slope rising at least 25 feet above the ordinary high water level of the water body, and where the grade of the slope from the toe of the bluff to any point 25 feet or more above the ordinary high water level averages 30 percent or greater.

BLUFF IMPACT ZONE- a bluff and land located within 20 feet from the top of the bluff.

BOARD OF MANAGERS shall mean the Managers of the Pelican River Watershed District.

BWSR – Minnesota Board of Water and Soil Resources

DETENTION SYSTEM – a structure or facility, which collects and stores runoff on a temporary basis with a subsequent gradual release of stormwater at a controlled rate. A detention basin may retain some water.

DE-WATERING – discharge of appropriated surface or ground water.

DISCHARGE – the disposal, conveyance, channeling of runoff or drainage of water or material, including, but not limited to stormwater and snow melt.

DISTRICT – shall mean the Pelican River Watershed District.

EROSION – the wearing away of soil by rainfall, surface water runoff, wind, or ice-movement.

FILL – soil, sand, gravel, clay or any other material which is placed on land or in waters of the state.

GROUNDWATER RECHARGE AREA - area in which surface water accumulates and is conveyed to groundwater aquifers.

ICE RIDGE shall mean the ridge, comprised of soil, sand and/or gravel, often found in the shore impact zone near the ordinary high-water mark of lakes, and caused by wind driven ice or ice expansion.

ICE RIDGE MODIFICATION – the removal, excavation, alteration, of material or vegetation on an ice-ridge.

IMPERVIOUS SURFACE shall mean a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include, but are not limited to, rooftops, sidewalks, patios, roads, streets, driveways, and parking lots constructed of concrete, asphalt, paving stones and bricks, or compacted soils (including “class 5”).

LATERAL means any constructed waterway or drain which conveys water to a public ditch.

LAND ALTERATION – any change in the surface of the land.

LOADS – a quantity of sediment or nutrients, expressed by weight, and carried by, or dissolved in, discharge.

MANAGERS – the Board of Managers of the Pelican River Watershed District.

MPCA – Minnesota Pollution Control Agency.

NATURAL VEGETATION DISBURBANCE – the removal or destruction of established vegetation species.

NRCS – U.S. Department of Agriculture Natural Resource Conservation Service Agency.

ON-SITE - within the contiguous confines of an ownership parcel.

ORDINARY HIGH WATER (OHW) – The boundary of public waters and wetlands which is an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly the point where the natural vegetation changes from predominantly aquatic to predominately terrestrial. For watercourses, the ordinary high-water level is the elevation of the top of the bank of the channel.

POINT DISCHARGE – discharge from a specific outlet, such as storm sewer, pipe, culvert, or ditch.

PROPERTY OWNER– means the party possessing the title of the land on which the activity will occur; or if the activity is for a lease holder, the party identified as the lease holder; or the contracting government agency responsible for the activity.

RECONSTRUCTION – includes, but is not limited to, changing drainage, re-grading, changing cross sections or vegetation removal; reconstruction does not include seal-coating or overlays of roads, streets, highways, driveways or parking lots, right-of-way maintenance, or road repairs resulting from maintenance or repair of sanitary or water supply system.

RETAINING WALL – a structure intended to maintain a grade differential of six inches or more.

RETENTION SYSTEM – a structure or facility which accumulates a specified amount of stormwater or runoff.

RUNOFF is water, including nutrients, pollutants and sediments carried by water, discharged from land surface.

SEDIMENT – mineral or organic particulate matter that has been carried from its point of origin by water or wind.

SHORE IMPACT ZONE means land located between the ordinary high water level of a public water and a line parallel to and 1/2 the setback from it (as defined by applicable county or municipal zoning ordinances), except that on property used for agricultural purposes the shore impact zone boundary is a line parallel to and 50 feet from the ordinary high water level.

SHORELAND (SHORELAND DISTRICT OR SHORELAND ZONE) means land located within 1000 feet of the ordinary high-water mark of a lake, pond, or 300 feet from a river or stream, as defined in the Becker County Zoning Ordinance.

SLOPE INSTABILITY – condition in which slope has exhibited sloughing or slumping or other failure to maintain natural grades or is determined by an appropriate registered professional to have the potential for failure.

STABILIZATION – covering an exposed ground surface by sod, erosion control blanket, rip rap or other material that prevents erosion. A surface is not considered stabilized by simply sowing grass seed.

STEEP SLOPE – steep slopes, that are not bluffs, are lands having average slopes more than 12 percent, as measured over distances of 50 feet measured on the ground.

STORM SEWER shall mean a system of pipe installed for the specific purpose of transporting surface and/or underground waters from one location to another and said system need not be continuously constructed only of pipe, but may include reaches of flumes, spillways, or open channels.

STORMWATER – precipitation runoff, snow melt runoff, or any other surface runoff and drainage.

STORMWATER INFRASTRUCTURE – constructed measures to collect, convey, or treat stormwater.

STORMWATER TREATMENT – facility designed to retain or detain stormwater, or to lower its sediment or nutrient content.

RELIEF – A modification or variation of the provisions of the Rules, as applied to a specific piece of property.

VEGETATION – brush, shrubs, grass, or trees.

WATERCOURSE - channel having definable beds and banks capable of conducting confined runoff from adjacent lands. During floods water may leave the confining beds and banks, but under low and normal flows water stays within the channel. A watercourse may be perennial or intermittent, natural or man-made. Ditches and streams are examples of watercourses.

WATERS OF THE STATE - means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.

WATERSHED DISTRICT- shall mean the legally established agency named and referred to as the Pelican River Watershed District, when the word "District", it shall mean the land contained within the boundary of the Pelican River Watershed District.

WETLAND-shall mean all wetlands as defined in Minnesota Statutes.

4.0 Water Quality Protection and Enhancement

4.10 Thresholds for Permits. Permits are required for any of the following actions:

a. alterations to land, impervious surface, or vegetation in Shore or Bluff Impact Zones, or on steep slopes in a Shoreland Zone;

b. additions to impervious surface resulting in total impervious surface (new and existing) in excess of 25% of lot area, or 10,000 square feet in the shoreland zone, or 1 acre elsewhere for any property draining to waters of the state, or draining to an existing storm sewer or stormwater treatment facility;

c. construction or re-construction of a private or public highway, road, street, parking lot, or public water access;

d. subdivisions, plats, developments based upon certified surveys or planned unit development**;**

e. changes to stormwater infrastructure, including streets and public parking, inlets to waters of the state, bridges, or culverts;

f. de-watering of groundwater by discharges to Waters of the State;

g. installation, repair, or replacement of rip-rap or beach sand blanket in the shore impact zone;

h. installation, repair, or replacement of retaining walls in the shore or bluff impact zone.

4.11 Approval of Permits. Permits will be granted for actions in 4.0 which meet all of the following conditions:

a. Actions will not result in increases in stormwater discharge rates to adjoining properties or to waters of the state for the 5-year, 25-year, and 100-year- 24-hour rainfall events.

b. All actions must utilize standards and procedures for controlling runoff rates, nutrients, and sediments as described in the "Protecting Water Quality in Urban Areas" manual (MPCA, 2000) as revised. If a facility or measure is not addressed in that manual, other resources include "BWSR Minnesota Construction Site Erosion and Sediment Control Planning Handbook" as revised, the NRCS "Slope Protection for Dams and Lakeshores, Minnesota Technical Release 2" (October 1997) as revised, "Minnesota Urban Small Sites BMP Manual, Met Council, 2001", or "Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices, U.S. Environmental Protection Agency, 1992", as revised.

c. Actions in Section 4.10 b, c, d, and e, must be accompanied by a stormwater management plan, and for areas that are changed incorporate retention of the stormwater runoff generated by the 5 year 24 hour rainfall event on site; an alternative standard would be to show a minimum of 90% removal of total suspended solids and a 50% or higher total phosphorus removal for a 5-year-24-hour rainfall event using Walker's Pond Net model. In either case, a maintenance schedule for the provisions must be provided.

d. Actions involving ice ridges are allowed only for purposes of repairing existing shoreline damage; no ice ridge modifications which result in an increase of runoff to a lake or natural vegetation disturbance are allowed, except that a 4 foot wide walkway may be constructed upon an ice ridge.

e. Actions involving the stabilization of shorelines or stream banks, or installation of beach sand blankets must use fill or material that is non-polluting under any foreseeable circumstances. For rip-rap, under normal conditions, no rip-rap or filler materials should be placed more than six feet waterward of the shoreline measured from the Ordinary High Water (OHW) level elevation. The encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of water.

f. Retaining walls in the shore impact zone are allowed only for the purposes of correcting existing slope instability or erosion; the base of such walls must be above the highest known water level. Retaining wall design plans must comply with accepted engineering principles and submit an analysis which shows that the wall will withstand expected ice and wave action, and earth pressure.

4.12 Permit Application Requirements

a. No action, works, or use requiring a permit shall be commenced prior to issuance of the permit, except for emergency repairs necessitated by storms, floods, or water, electrical and sewage system failures. The District should be notified of such repairs as soon as practicable.

b. Application forms and instructions will be available from the Pelican River Watershed District office, the City of Detroit Lakes, and the Becker County Zoning office. Permit applications must be complete in order to be considered by the District.

c. Permits are valid for an eighteen- month period from the date of issuance unless otherwise suspended or revoked. To extend a permit, the property owner must apply to the District in writing stating the reasons for extension. Any plan changes, and related project documents must also be included in the extension application. The District must receive this application at least thirty days prior to the permit's expiration date.

d. Permit applications involving land alterations of a bluff or steep slope, or involving the construction, repair, or replacement of a retaining wall in the shore impact zone *are* required to include a site evaluation and construction plan designed and signed by an appropriate registered professional.

e. Nothing in these Rules shall limit the District from requiring a design certification by a registered professional when deemed necessary and appropriate by the Managers or their designee in order to ensure compliance with the Rules.

4.13 Fees

a. A permit fee will be required for permit applications as established on an annual basis by the Board of Managers.

b. A field inspection fee, based upon the actual hourly rates of District staff or consultants will be charged in order to cover actual costs related to investigation of the area affected by the proposed activity, analysis of the proposed activity, services of a consultant, and any required subsequent monitoring of the proposed activity.

c. Governmental agencies are exempt from fees.

4.14 Sureties

a. The District may require a performance bond, letter of credit or other surety in a form approved by the District for an activity regulated under these Rules. A commercial surety shall be from an issuer licensed and doing business in Minnesota. The surety shall be submitted by the property owner, but the surety principal may be either the property owner or the individual or entity undertaking the proposed activity.

b. The surety shall be in favor of the District and conditioned on the applicant's performance of the activities authorized in the permit in compliance with all applicable laws, including the District's Rules, the terms and conditions of the permit and payment when due of any fees or other charges authorized by law, including the District's Rules. The surety shall state that in the event the conditions of the surety are not met, the District may make a claim against it.

c. The surety must be valid and in force for at least an eighteen (18) month period and shall contain a provision that it may not be canceled or released except pursuant to the terms in 4.14 e herein.

d. The amount of the surety shall be set by the Board of Managers by resolution as the amount the Board deems necessary to cover the following potential liabilities to the District:

(1) Application, field inspection, monitoring and related fees authorized under Minnesota Statute § 103D.345;
(2) The cost of maintaining and implementing protective measures set forth in or incorporated into the permit; and
(3) The cost of remedying damage resulting from permit noncompliance or for which the property owner otherwise is responsible.

e. On written notification of completion of a project, the District will inspect the project to determine if the project is constructed in accordance with the terms of the permit and District Rules. If the project is completed in accordance with the terms of the permit and District Rules and there is no outstanding balance for unpaid inspection fees, the District will release the surety if one was required in Section 4.14a. If the District has not inspected the project and made a determination about the project's compliance with the above criteria within 45 days of District receipt of written notification of project completion, the surety is deemed released. In this event, the District will provide a written release of the surety if needed to meet the issuer's requirements.

f. Governmental agencies are exempt from surety requirements.

4.15 Relief

Any request for a relief from a requirement of these Rules must be decided by the Pelican River Watershed District Board of Managers under the following conditions:

a. Relief Authorized – The Board of Managers may hear requests for appeals of staff interpretation of these Rules or relief from the literal provisions of these Rules in instances where their strict enforcement would cause undue hardship because of circumstances unique to the property under consideration. The Board of Managers may grant relief where it is demonstrated that such action will be in keeping with the spirit and intent of these Rules. Requests for relief must be in writing.

b. Standard – In order to grant a relief, the Board of Managers will determine that:

1. Special conditions apply to the structure or land under consideration that do not generally apply to other land or structures in the District.

2. Because of the unique conditions of the property involved, undue hardship to the applicant would result, as distinguished from mere inconvenience, if the strict letter of the rules was carried out A hardship cannot be created by the landowner or their contractor. Economic hardship is not grounds for issuing a relief.

3. The proposed activity for which the relief is sought will not adversely affect the public health, safety, welfare; will not create extraordinary public expense; will not adversely affect water quality, water control, drainage in the District.

4. The intent of the District's Rules is met.

c. Term - A relief will become void after eighteen (18) months after it is granted if not used.

d. Violation - A violation of any condition set forth in a relief is a violation of the District's Rules and will automatically terminate the permit.

4.2 Upgrade of Existing Stormwater Discharges.

The Managers may require a person or government to provide a treatment plan for point discharges of stormwater containing annual loads in excess of 10 pounds of phosphorus or 2000 pounds of sediment to waters of the state. Such a plan must be implemented within 2 years of notification by the District.

4.3 Maintenance of Stormwater Treatment Devices.

The owner of property on which a stormwater treatment device has been constructed must maintain that device so that its function is not diminished.

Section 5.0 Governmental Responsibilities

5.1 All township, municipal, county and state governments must work to reduce sediment and nutrient loadings to waters of the state with designs described in Protecting Water Quality in Urban Areas (MPCA, 2000) as revised.

5.2 Notification and Review

All township, municipal, county and state governments shall provide copies of plans or documents for proposed actions which may impact the waters of the state to the legal address of the District at least 10 calendar days before the first public hearing date for review and comment, or before rendering a decision on the proposed action ,whichever is earlier. The Board of Managers shall review such changes in light of the foregoing Water Quality Protection and Enhancement Rules (Section 4.0) to ensure that such changes contain provisions for maintaining or enhancing water quality. The following are specific cases in which such notification and review are required:

a. Proposed ordinances involving land use, storm water, or wetlands;
b. Proposed public works including modifications of existing roadway, storm collection or treatment systems, sewage collection and treatment systems, or plans for such projects;
c. Requests for zoning changes, divisions of riparian lots, subdivisions, plats, variances, conditional use permits, and planned unit developments, to be authorized under county or municipal zoning ordinances;
d. Requests for permits involving construction or other modifications in a shoreland zone.

6.0 Ditch Authority

6.1 Policy Statement

The Managers understand their responsibility to maintain Ditches 11-12, 13 and 14 in accordance with M.S. Chapter 103E and relevant case law. The District also intends to maintain and further develop the ditches in such a way as to minimize their past, present and future downstream impacts on the District's lakes.

6.2 Notification and Review

In addition to any obligations or restrictions described in preceding sections in these Rules copies of a proposal or plan which involves any modification of the Public Ditch systems, or any waterways that impact the discharge or the nutrient loads of those systems, must be provided to the Managers at least 10 days prior to the commencement of work. This notification is specifically required for, but is not limited to...

a. dredging, filling, or diking of watercourses, wetlands or lakes
b. culvert and bridge replacements or modifications
c. variance and conditional use for feedlots within 1000 feet of a waterway
d. streambank stabilization, including the placement of rip rap
e. channelization of watercourses
f. construction of laterals
g. repair of laterals
h. removal of grass, shrubs or trees within 16.5 feet of a watercourse
i. increased discharge to a lateral or ditch as a result of increases in impervious surface
j. storage of snow within 50 feet of a ditch or a lateral.

The notification must contain sufficient information to allow Managers to make an informed judgment on the conformance with provisions of M.S. Chapter 103E, the District Rules, and other applicable rules, statutes and ordinances.

6.3 Compliance with District Rules

All District Rules will apply to the management of Ditch systems.

Section 7.0 Enforcement Powers of Board of Managers

7.1 Stop Work Order

District staff shall issue an order to immediately stop or prevent any violation or threatened violation of these rules or other applicable statutes, rules or regulations affecting water quality within the District.

7.2 Enforcement

These Rules, other applicable statutes, rules or regulations affecting water quality within the District and any stop work order issued by District staff shall be enforced by all appropriate legal action, including, but not limited to temporary restraining orders, injunctions, actions to compel compliance with these rules, restoration, abatement, costs and damages. Costs, fees and expenses incurred by the District in enforcing these rules, including but not limited to engineering and attorneys fees, shall be assessed against and paid by any person, entity, contractor or governmental subdivision found to be in violation of these rules.

7.2 Contractor's Liability

Any individual, firm, corporation, partnership, association or other entity contracting to perform services regulated by these Rules shall be responsible for ascertaining that all permits have been obtained and that the work performed complies with all requirements of these Rules. Contractors and landowners in violation of these Rules may be separately subject to all methods of enforcement as provided above.

Section 8.0 Adoption or Amendment

These Rules of the Pelican River Watershed District shall be adopted or amended in accordance with M.S. Chapter 103D.

Section 9.0 Effective Date

Upon adoption, Rules and Amendments of the Rules previously approved by the Board of Managers are hereby rescinded. These Rules are effective upon adoption in accordance with M.S. Chapter 103D.

BOARD OF MANAGERS
PELICAN RIVER WATERSHED DISTRICT
By David Brainard, Secretary
Adopted April 1, 2003; Published in Detroit Lakes Tribune on April 20, 2003.

WATER MANAGEMENT RULES
CORMORANT LAKES WATERSHED DISTRICT

TO PROTECT AND ENHANCE THE QUALITY OF WATERS WITHIN ITS JURISDICTION; TO ENSURE THAT APPROPRIATE DECISIONS ARE MADE CONCERNING THE MANAGEMENT OF STREAMS, WETLANDS, LAKES, GROUNDWATER AND RELATED LAND RESOURCES WHICH IMPACT THESE WATERS; AND TO ACCOMPLISH THE PURPOSES FOR WHICH A WATERSHED DISTRICT IS ESTABLISHED.

Section 1.0 Introduction

1.1 Statutory Authority to Adopt Rules

According to Minnesota Statutes (M.S.) Section 103D.341, subdivision 1, the managers must adopt rules to accomplish the purposes of this chapter and to implement the powers of the managers.

1.2 Short Title

These rules shall be known and may be cited as the "Cormorant Lakes Watershed District Rules." The address of the District's office is 10929 County Highway #5, Pelican Rapids, Minnesota 56572.

1.3 Inconsistent Provisions

If any rule or rules herein contained are inconsistent with the provisions of M.S. Chapter 103D or other applicable laws of the State of Minnesota, the provisions of Chapter 103D or other applicable law shall govern.

1.4 Severability

The provisions of these rules shall be severable and the invalidity of any section, subdivision or any other part thereof shall not make invalid any other section, subsection, paragraph, subparagraph, subdivision or any other part thereof.

Section 2.0 Policy Statement

2.1 General Policy

These rules shall be adopted by the Board of Managers of the Cormorant Lakes Watershed District to effectuate the purposes of M.S. Chapter 103D and the powers of the Board of Managers therein prescribed. It is the intention of the Board of Managers that its rules conform to the legislative policy of M.S. Chapter 103D.

It is the Managers' intention to use these rules as a tool to carry out the District's mission to enhance the quality of water in the lakes and water of the state within its jurisdiction. It is understood that to accomplish this, the District must ensure that appropriate decisions are made concerning the management of streams, wetlands, lakes, groundwater, and related land resources which directly affect these lakes. The Managers' further intent is to accomplish this mission in a manner that is most beneficial to the general welfare of present and future residents of the District and to minimize adverse environmental impacts upon the water resources of the District.

Specifically, the District seeks to minimize increased discharges or nutrients to the waters of the District by exercising control over development and to regulate improvements by riparian property owners of the beaches, banks, and shores of lakes, streams, and wetlands for preservation and beneficial public use.

The rules stated below shall be followed by any persons, corporations, firms, state, county or municipal governments, and other government agencies undertaking revision of their existing rules, plans or statutes, or undertaking certain land use modification or land development activities within the District.

Section 3.0 Definitions

For the purposes of these Rules, certain words and terms are defined below. In the absence of a definition, the definitions established for the State of Minnesota by statute or by case law shall apply to these Rules unless clearly in conflict, clearly inapplicable, or unless the context makes such meaning repugnant thereto. Certain terms or words used herein shall be

interpreted as follows: the word "shall" is mandatory, not permissive. All distances, unless otherwise specified, shall be measured horizontally.

ALTERATIONS TO LAND means grading, excavation, fill or movement of soil or vegetative material.

APPROPRIATE REGISTERED PROFESSIONAL OR REGISTERED PROFESSIONAL means a professional registered in the state of Minnesota with the necessary expertise in the fields of hydrology, drainage, flood control, erosion and sediment control, and stormwater pollution control to design and certify stormwater management devices and plans, erosion prevention and sediment control plans, and shoreland alterations including retaining walls. Examples of registered professionals may include professional engineers, professional landscape architects, professional geologists, and professional soil engineers who have the referenced skills.

BLUFF means a topographic feature such as hill, cliff, or embankment located in a shoreland area and draining to a water body, having a slope rising at least 25 feet above the ordinary high water level of the water body, and where the grade of the slope from the toe of the bluff to any point 25 feet or more above the ordinary high water level averages 30 percent or greater.

BLUFF IMPACT ZONE means a bluff and land located within 20 feet from the top of the bluff.

BOARD OF MANAGERS means the Managers of the Cormorant Lakes Watershed District.

BWSR means Minnesota Board of Water and Soil Resources.

DETENTION SYSTEM means a structure or facility, which collects and stores runoff on a temporary basis with a subsequent gradual release of stormwater at a controlled rate. A detention basin may retain some water.

DE-WATERING means discharge of appropriated surface or ground water.

DISCHARGE means the disposal, conveyance, channeling of runoff or drainage of water or material, including, but not limited to stormwater and snow melt.

DISTRICT means the Cormorant Lakes Watershed District.

EROSION means the wearing away of soil by rainfall, surface water runoff, wind, or ice-movement.

FILL means soil, sand, gravel, clay or any other material which is placed on land or in waters of the state.

GROUNDWATER RECHARGE AREA means area in which surface water accumulates and is conveyed to groundwater aquifers.

ICE RIDGE means the ridge, comprised of soil, sand and/or gravel, often found in the shore impact zone near the ordinary high water mark of lakes, and caused by wind driven ice or ice expansion.

ICE RIDGE MODIFICATION means the removal, excavation, alteration, of material or vegetation on an ice-ridge.

IMPERVIOUS SURFACE means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include, but are not limited to, rooftops, sidewalks, patios, roads, streets, driveways, and parking lots constructed of concrete, asphalt, paving stones and bricks, or compacted soils (including "class 5").

LATERAL means any constructed waterway or drain which conveys water to a public ditch.

LOADS means a quantity of sediment or nutrients, expressed by weight, and carried by, or dissolved in, discharge.

MANAGERS means the Board of Managers of the Cormorant Lakes Watershed District.

MPCA means Minnesota Pollution Control Agency.

NATURAL VEGETATION DISTURBANCE means the removal or destruction of established vegetation species.

NRCS means U.S. Department of Agriculture Natural Resource Conservation Service Agency.

ON-SITE means within the contiguous confines of an ownership parcel.

ORDINARY HIGH WATER LEVEL (OHWL) means the boundary of public waters and wetlands which is an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly the point where the natural vegetation changes from predominantly aquatic to predominately terrestrial. For watercourses, the ordinary high water level is the elevation of the top of the bank of the channel.

POINT DISCHARGE means discharge from a specific outlet, such as storm sewer, pipe, culvert, or ditch.

PROPERTY OWNER means the party possessing the title of the land on which the activity will occur; or if the activity is for a lease holder, the party identified as the lease holder; or the contracting government agency responsible for the activity.

RECONSTRUCTION includes, but is not limited to, changing drainage, re-grading, changing cross sections or vegetation removal; reconstruction does not include seal-coating or overlays of roads, streets, highways, driveways or parking lots, right-of-way maintenance, or road repairs resulting from maintenance or repair of sanitary or water supply system.

RETAINING WALL means a structure intended to maintain a grade differential of six inches or more.

RETENTION SYSTEM means a structure or facility which accumulates a specified amount of stormwater or runoff.

RUNOFF means water, including nutrients, pollutants and sediments carried by water, discharged from land surface.

SEDIMENT means mineral or organic particulate matter that has been carried from its point of origin by water or wind.

SHORE IMPACT ZONE means land located between the ordinary high water level of a public water and a line parallel to and ½ the setback from it (as defined by applicable county or municipal zoning ordinances), except that on property used for agricultural purposes the shore impact zone boundary is a line parallel to and 50 feet from the ordinary high water level. In no instance shall the shore impact zone be less than fifty (50) feet from the ordinary high water level.

SHORELAND (SHORELAND DISTRICT OR SHORELAND ZONE) means land located within 1000 feet of the ordinary high water mark of a lake, pond, or 300 feet from a river or stream, as defined in the Becker County Zoning Ordinance.

SLOPE INSTABILITY means a condition in which slope has exhibited sloughing or slumping or other failure to maintain natural grades, or is determined by an appropriate registered professional to have the potential for failure.

STABILIZATION means covering an exposed ground surface by sod, erosion control blanket, rip rap or other material that prevents erosion. A surface is not considered stabilized by simply sowing grass seed.

STEEP SLOPE means steep slopes, that are not bluffs, are lands having average slopes more than 12 percent, as measured over distances of 50 feet measured horizontally.

STORM SEWER means a system of pipe installed for the specific purpose of transporting surface and/or underground waters from one location to another and said system need not be continuously constructed only of pipe, but may include reaches of flumes, spillways, or open channels.

STORMWATER means precipitation runoff, snow melt runoff, or any other surface runoff and drainage.

STORMWATER INFRASTRUCTURE means constructed measures to collect, convey, or treat stormwater.

STORMWATER TREATMENT DEVICE means a facility designed to retain or detain stormwater, or to lower its sediment or nutrient content.

RELIEF means a modification or variation of the provisions of the Rules, as applied to a specific piece of property.

VEGETATION means brush, shrubs, grass, or trees.

WATERCOURSE means a channel having definable beds and banks capable of conducting confined runoff from adjacent lands. During floods water may leave the confining beds and banks, but under low and normal flows water stays within the channel. A watercourse may be perennial or intermittent, natural or man-made. Ditches and streams are examples of watercourses.

WATERS OF THE STATE means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.

WATERSHED DISTRICT means the legally established agency named and referred to as the Cormorant Lakes Watershed District, when the word "District", it shall mean the land contained within the boundary of the Cormorant Lakes Watershed District.

WETLAND means all wetlands as defined in Minnesota Statutes.

Section 4.0 Water Quality Protection and Enhancement

4.1 Thresholds for Permits

Permits are required for any of the following actions within the boundaries of the Cormorant Lakes Watershed District:

a. alterations to land, impervious surface, or vegetation in Shore Impact Zone or Bluff Impact Zones, or steep slopes in a Shoreland Zone;

b. additions to impervious surface resulting in total impervious surface (new and existing) in excess of 25% of lot area, or 10,000 square feet in the shoreland zone, or 1 acre elsewhere for any property draining to waters of the state, or draining to an existing storm sewer or stormwater treatment facility;

c. construction or re-construction of a private or public highway, road, street, parking lot, or public water access;

d. subdivisions, plats, developments based upon certified surveys or planned unit developments;

e. changes to stormwater infrastructure, including streets and public parking, inlets to waters of the state, bridges, or culverts;

f. de-watering of groundwater or surface water including sump pumps, heating and air conditioning systems, well cleaning resulting in discharges into public waters of the state; no permit shall be issued to allow a direct discharge into the waters of the state within the shore impact zone. An expedited permit may be granted for temporary de-watering provided adequate erosion control methods are in place and does not result in a direct discharge into waters of the state.

g. installation, repair, replacement or removal of rip-rap or beach sand blanket in the shore impact zone;

h. installation, repair, replacement or removal of retaining walls in the shore or bluff impact zone.

i. the removal, construction or modification of an ice ridge formed at the edge of a public water.

j. No person shall alter or fill land below the OHWL flood elevation of any wetland or public water or wetland without first securing a permit from the District. An expedited administrative permit is required for 1" or less of fill within the shore impact zone in preparation for sodding or seeding purposes. A Becker County land alteration permit and a CLWD permit is required for any fill in the shore impact zone exceeding 1" in depth.

k. Operating equipment for land alteration purposes in the shore impact zone.

l. Normal agricultural practice shall be excluded from regulations, unless such agricultural practice adversely affects the water quality of the district, at which time a permit will be required.

4.2 Approval of Permits

Permits will be granted for actions in 4.1 which meet all of the following conditions:

a. Actions will not result in increases in stormwater discharge rates to adjoining properties or to waters of the state for the 5-year, 24-hour rainfall events.

b. All actions must utilize standards and procedures for controlling runoff rates, nutrients, and sediments as described in the "Protecting Water Quality in Urban Areas" manual (MPCA, 2000) as revised. If a facility or measure is not addressed in that manual, other resources as possible references include but may not be limited to; "BWSR Minnesota Construction Site Erosion and Sediment Control Planning Handbook" as revised, the NRCS "Slope Protection for Dams and Lakeshores, Minnesota Technical Release 2" (October 1997) as revised, "Minnesota Urban Small Sites BMP Manual, Met Council, 2001", or "Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices, U.S. Environmental Protection Agency, 1992", as revised.

c. Actions in Section 4.1 b, c, d and e must be accompanied by a stormwater management plan, and for areas that are changed incorporate retention of the stormwater runoff generated by the 5 year 24 hour rainfall event on site. An alternative standard would be to show a minimum of 90% removal of total suspended solids and a 50% or higher total phosphorus removal for a 5-year-24-hour rainfall event using the Walker's Pond Net model or other equivalent models. In either case, a maintenance schedule for the provisions must be provided.

d. Actions involving ice ridges are allowed only for purposes of repairing current year shoreline damage; no ice ridge modifications which result in an increase of runoff to a lake or natural vegetation disturbance are allowed, except that a 4 foot wide walkway may be constructed across a permanent ice ridge after a permit is obtained from the CLWD, following the general permit from the DNR, using the DNR existing guidelines for ice ridge modification. The completion date for a permit to remove an ice ridge may be extended by the District, if the existing lake elevation would prohibit a practicable repair during the current year.

e. Actions involving the stabilization of shorelines or stream banks, or installation of beach sand blankets must use fill or material that is non-polluting under any foreseeable circumstances. For rip-rap, under normal conditions, no rip-rap or filter materials should be placed more than six feet waterward of the shoreline measured from the Ordinary High Water (OHW) level elevation. The encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of water.

f. Retaining walls in the shore impact zone are allowed only for the purposes of correcting existing slope instability or erosion; the base of such walls must be above the highest known water level. Retaining wall design plans must comply with accepted engineering principles and submit an analysis which shows that the wall will withstand expected ice and wave action, and earth pressure.

g. A complete permit application which includes all required exhibits shall be received by the District at least 30 full days prior to the scheduled meeting date of the Board of Managers. Late submittals or submittals with incomplete exhibits will be scheduled to a subsequent meeting date.

h. Permit applications tabled at a board meeting due to revisions needed for compliance with District rules will be addressed at the next board meeting if the revisions are submitted within 5 working days of being tabled.

i. Regular Board meetings of the Board of Managers are conducted on the first Monday of each month at 7:00 p.m., and are held at the Cormorant Townhall, Cormorant Village, 10929 County Highway #5, Pelican Rapids, Minnesota 56572, unless otherwise noticed. Special meetings will be subject to posted notice.

j. A permit issued shall be posted on the premises prior to commencement of the project and remain posted until the project has been inspected and approved by the Cormorant Lakes Watershed District Staff.

4.3 Permit Application Requirements

a. No action, works, or use requiring a permit shall be commenced prior to issuance of the permit, except for emergency repairs necessitated by storms, floods, or water, electrical and sewage system failures. The District should be notified of such repairs as soon as practicable.

b. Application forms and instructions will be available from the Cormorant Lakes Watershed District office and the Becker County Zoning office. Permit applications must be complete in order to be considered by the District.

c. Permits are valid for up to a twelve (12) month period from the date of issuance unless otherwise suspended or revoked. To extend a permit, the property owner must apply to the District in writing stating the reasons for the requested extension. Any plan changes, and related project documents must also be included in the extension application. The District must receive this application at least thirty days prior to the permit's expiration date.

d. Nothing in these Rules shall limit the District from requiring a design certification by a licensed engineer or licensed landscape architect, or other appropriate professional, when deemed necessary and appropriate by the Managers or Administrator in order to ensure compliance with the Rules.

e. For any proposed land alteration project in the shore impact zone or a bluff impact zone, an applicant must provide a design, site drawing and proposed construction plan, approved by a certified engineer or landscape architect as required by the Becker County Zoning Ordinance Section 12, Subdivision 7. A copy of said design and drawing must be attached to the application submitted to the Cormorant Lakes Watershed District thirty (30) days prior to approval being received from the County to allow comments by the CLWD as may be appropriate. Nothing in this regulation shall limit the CLWD from requiring a design certification by a licensed engineer or landscape architect, or other appropriate professional, when deemed necessary and appropriate by the managers to provide sediment control, pollution control, run off, erosion or drainage.

f. All new residential, commercial, industrial and institutional structures and alterations to existing structures shall be constructed such that all finished floor elevations are at a minimum of 18 inches above highest recorded water level. For Big Cormorant Lake, the highest recorded lake level elevation shall be 1,356.2 feet. The Applicant shall bear the burden of establishing the proposed elevation of the structure. The CLWD shall place a monument establishing the OHWL on each lake within the District, that has an established OHWL by the DNR.

g. A CLWD permit shall not be construed as a valid permit required from any state, county, township or other regulatory agency as may be required such as State of Minnesota Department of Natural Resources, State of Minnesota Pollution Control Agency, Becker County, Township, Soil and Water Conservation District and U.S. Army Corps of Engineers.

4.4 Sureties

a. The District may require a performance bond, letter of credit or other surety in a form approved by the District for an activity regulated under these Rules. A commercial surety shall be from an issuer licensed and doing business in Minnesota. The surety shall be submitted by the property owner but the surety principal may be either the property owner or the individual or entity undertaking the proposed activity.

b. The surety shall be in favor of the District and conditioned on the applicant's performance of the activities authorized in the permit in compliance with all applicable laws, including the District's Rules, the terms and conditions of the permit and payment when due of any fees or other charges authorized by law, including the District's Rules. The surety shall state that in the event the conditions of the surety are not met, the District may make a claim against it.

c. The surety must be valid and in force for at least an eighteen (18) month period and shall contain a provision that it may not be canceled or released except pursuant to the terms in 4.13(e) herein.

d. The amount of the surety shall be set by the Board of Managers by resolution as the amount the Board deems necessary to cover the following potential liabilities to the District:

(1) Application, field inspection, monitoring and related fees authorized under Minnesota Statute § 103D.345;

(2) The cost of maintaining and implementing protective measures set forth in or incorporated into the permit; and

(3) The cost of remedying damage resulting from permit noncompliance or for which the property owner otherwise is responsible.

e. On written notification of completion of a project, the District will inspect the project to determine if the project is constructed in accordance with the terms of the permit and District Rules. If the project is completed in accordance with the terms of the permit and District Rules and there is no outstanding balance for unpaid inspection fees, attorney's fees, engineer's costs, contract labor on materials ordered and installed by the District, the District will release the surety if one was required in Section 4.4(a).

f. Governmental agencies are exempt from surety requirements.

g. The Cormorant Lakes Watershed District, in the sole discretion of the Board Managers, may accept a personal surety from a landowner with an accompanying financial statement.

4.5 Upgrade of Existing Stormwater Discharges

The Managers may require a person or government to provide a treatment plan for point discharges of stormwater containing annual loads in excess of 10 pounds of phosphorus or 2000 pounds of sediment to waters of the state. Such a plan must be implemented within one (1) year of notification by the District.

4.6 Maintenance of Stormwater Treatment Devices

The owners of property on which a stormwater treatment device has been constructed must maintain that device so that its function is not diminished. If a stormwater treatment device is not maintained by the owner, the District shall have the authority to order all necessary emergency repairs and assess all costs to the record owners of the property.

Section 5.0 Dredging

5.1 Policy

It is the policy of the Board of Managers to preserve the natural appearance of shoreline areas, recreational, wildlife and fisheries resources of surface waters, and surface water quality.

5.2 Regulations

No person shall dredge in the beds, banks or shores of any protected water or wetland in the District without first securing a permit from the District and the State of Minnesota Department of Natural Resources, and posting a bond or letter of credit pursuant to Regulation 4.4(a).

5.3 General Standards

All permitted dredging shall comply with the following standards:

a. The disposal site must be identified and found not to be below the OHWL of a public water or public water wetland, wetland subject to the Wetland Conservation Act of 1991, or floodplain and not prone to erosion.

b. In cases of an identifiable source of sediment under the control of the applicant, the plan shall include remedial action to minimize deposition of sediment into a waterbody or off-site.

c. Prior to review by the District, all dredging proposals that involve docking shall be submitted to and approved by the Minnesota Department of Natural Resources.

d. The proposed project shall represent the "minimal impact" solution to a specific need with respect to all other reasonable alternatives such as dock extensions, aquatic nuisance plant removal without dredging, beach sandblankets, excavation above the bed of public water, less extensive dredging in another area of the public water, or management of an alternative water body for the intended purpose.

e. The dredging shall be limited to the minimum dimensions necessary for achieving the stated purpose.

f. If the dredging will be accomplished by means of hydraulic dredging the following additional standards will apply: the disposal site shall have a minimum storage capacity equal to four times the calculated volume of solid material to be removed, a minimum free board between the top of the projected water surface elevation and the top of the dike of one foot, if no outlet from the disposal is proposed.

g. All permit applications must be accompanied by design information by a certified civil engineer.

Section 6.0 Shoreline & Streambank Improvement

6.1 Policy

It is the policy of the Board of Managers to:

a. Assure that improvement of shoreline and streambank areas to prevent erosion and to enhance water quality complies with accepted engineering principles in conformity with Department of Natural Resources (DNR) construction guidelines, and

b. Preserve the natural appearance of shoreline and streambank areas.

6.2 Regulations

a. No person shall construct a shoreline or streambank improvement, such as rip rap or to prevent erosion, or for any other purpose, such as boat ramps and sand blankets, without first securing a permit from the District. Any retaining wall shall require a conditional use permit to be issued by Becker County and it is the expressed policy of the District to discourage the development of retaining walls that abut any lake or stream.

b. An expedited administrative permit may be issued for routine rip rap projects that conform with the requirements set forth in paragraph 4.2(e) of this Rule.

c. An expedited administrative permit may be issued for routine sandblanket projects that conform with the requirements set forth in paragraph 4.2(e) of this Rule.

d. The District may issue an expedited permit for activity limited to Section 6.2(b), 6.2(c), 4.1(f), 4.1(j) and 8 without inspection to a contractor that has posted a cash bond or personal surety with the CLWD Administrator in the sum of $1,000.00 prior to May 1, of each construction year. The contractor must also attend a CLWD training seminar for contractors. The contractor must advise a manager of the scope of the project before the work is commenced. The CLWD reserves the right to terminate the contractor's privilege to obtain an expedited permit without inspection for any or no reason. The purpose of the surety bond is to provide funds to restore the activity to the pre-permit condition for any activity completed that is not in compliance with all CLWD regulations.

6.3 Criteria For Rip Rap Placement

Rip rap placement shall comply with the following criteria:

a. General standards:

(1) Clean rip rap material should be durable, natural stone and of a gradation that will result in stable shoreline embankment.

(2) The finished slope of the rock fragments, boulders and/or cobbles should not be deeper than a ratio of 3 feet horizontal to 1 foot vertical (3:1) under normal conditions. Steeper lopes will generally require larger sized rip rap. The minimum finished slope shall be no steeper than 2:1 (horizontal to vertical). Any rock/boulder stabilization project with a proposed finished slope steeper than 2:1 (horizontal to vertical) shall be evaluated in accordance with the conditions for retaining walls.

(3) No rip rap or filter material should be placed more than 6 feet waterward of the shoreline measured from the ordinary high water level (OHW) elevation under normal conditions. The encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of water.

(4) No existing rip rap may be removed without a permit.

Section 7.0 Stream and Lake Crossings

7.1 Policy

It is the policy of the Board of Managers to discourage the use of lake beds and beds of waterbodies for the placement of roads, highways, and utilities.

7.2 Regulation

No person shall use the beds of any waters of the state within the District for the placement of roads, highways and utilities without first securing a permit from the District. Utility service providers shall be exempt from permit requirements if the utilities are placed within the public right of way and are consistent with recorded easements or dedications of public right of way.

7.3 Criteria

Use of the bed:

a. Shall meet a demonstrated public benefit, and

b. Shall regain adequate hydraulic capacity, and

c. Shall retain adequate navigational capacity, and

d. Shall not adversely affect water quality, and

e. Shall represent the "minimal impact" solution to a specific need with respect to all other reasonable alternatives,

7.4 Required Exhibits

The following exhibits shall accompany the permit application. One set - full size, one set - reduced to 11" x 17."

a. Construction plans and specifications.

b. Analysis prepared by a professional civil engineer or qualified hydrologist showing the effect of the project on hydraulic capacity and water quality.

c. An erosion control and restoration plan.

Section 8.0 Trees

An administrative expedited permit shall be required to remove any tree or root system, whether said tree is living, dead or diseased, within the shore impact zone. Any unauthorized removal shall result in a $250.00 per tree restoration assessment and the District shall require the property owner to plant replacement trees in a number, kind and quality to be determined by the discretion of the Board on a case by case basis for all trees removed without CLWD authorization. Tree removal contractors shall be jointly liable with the property owners for unauthorized removal of trees. To be subject to CLWD regulations, a tree must have a two (2) inch diameter at four (4) feet above ground level. This regulation may be enforced by any method set forth in Section 10.1 of these rules. Nothing in this section shall prohibit the emergency removal of trees or limbs to prevent loss of life or damage to property. A permit is required for any tree that is removed by chainsaw or other means that results in the tree, whether living, dead or diseased, falling on the ice. The permit shall require the owner or the owners agent to remove all debris and waste material from the ice in a timely manner.

Section 9.0 Governmental Responsibilities

9.1 Notification and Review

All township, municipal, county and state governments shall provide copies of plans or documents for proposed actions which may impact the waters of the state to the legal address of the District at least 30 calendar days before the first public hearing date for review and comment, or before rendering a decision on the proposed action, whichever is earlier. The Board of Managers shall review such changes in light of the foregoing Water Quality Protection and Enhancement Rules (Section 4.0) to ensure that such changes contain provisions for maintaining or enhancing water quality. The following are specific cases in which such notification and review are required:

a. Proposed ordinances involving land use, storm water, or wetlands;
b. Proposed public works including modifications of existing roadway, storm collection or treatment systems, sewage collection and treatment systems, or plans for such projects;
c. Requests for zoning changes, divisions of riparian lots, subdivisions, plats, variances, conditional use permits, and planned unit developments, to be authorized under county or municipal zoning ordinances;
d. Requests for permits involving construction or other modifications in a shoreland zone.

Section 10.0 Enforcement Powers of Board of Managers

10.1 Enforcement

These Rules, and other applicable statutes, affecting water quality within the District and any stop work order issued by the District may be enforced by local law enforcement officials or by all appropriate legal action, including, but not limited to temporary restraining orders, injunctions, actions to compel compliance with these rules, restoration, misdemeanor prosecution, abatement, costs and damages. Costs, fees and expenses incurred by the District in enforcing these rules, including activity commenced without a permit, including but not limited to engineering, attorneys' fees and emergency erosion control costs, shall be assessed against and paid by any person, landowner, entity, contractor or governmental subdivision found to be in violation of these rules.

10.2 Contractor's Liability

Any individual, firm, corporation, partnership, association or other entity contracting to perform services regulated by these Rules shall be responsible for ascertaining that all permits have been obtained and that the work performed complies with all requirements of these Rules. Contractors and landowners in violation of these Rules shall be jointly and individually subject to all methods of enforcement as provided above, including criminal prosecution.

10.3 Administrative Stop Work Order.

The District and their designated agents, staff, and professionals, as a condition to granting a permit, may inspect the premises at any time and issue a cease and desist order when it finds that a proposed or initiated project presents a serious threat of soil erosion, sedimentation, or an adverse effect upon water quality or violates any rule or condition of the permit issued by the District. Failure of the owner or contractor to comply with a cease and desist order shall constitute grounds for immediate revocation of any permit, and shall require the permit holder to pay all costs of restoration, emergency erosion control measures and attorney fees reasonably incurred to restore work done in violation of the permit to the pre-permit condition in the minimum amount of $150.00. The District may also issue an administrative stop order for work performed without a permit.

Section 11.0 Adoption, Amendment, and Effective Date

These Rules of the Cormorant Lakes Watershed District shall be adopted or amended in accordance with M.S. Chapter 103D. Upon adoption, Rules and Amendments of the Rules previously approved by the Board of Managers are hereby rescinded. These Rules are effective upon adoption in accordance with M.S. Chapter 103D.

Section 12.0 Variances

12.1 Variances Authorized

The Board of Managers may hear requests for variances from the literal provisions of these rules in instances where their strict enforcement would cause undue hardship because of circumstances unique to the property under consideration. The Board of Managers may grant variances in conformance with the definitions found at Minnesota Statute 394.27(7), where it is demonstrated that such action will be keeping with the spirit and intent of these rules.

12.2 Standard

In order to grant a variance, the Board of Managers shall determine that the special conditions which apply to the structure or land in question do not apply generally to other land or structures in the District, that the granting of such variance will not merely serve as a convenience to the applicant, and that the variance will not impair or be contrary to the intent of these rules. A hardship cannot be created by the landowner, the landowner's agent or representative, or a contractor, and must be unique to the property. Economic hardship shall not be considered grounds for issuing a variance. A variance granted because of a physical disability shall be personal to the applicant and the District shall make every effort to insure the variance is temporary in nature and any structures erected pursuant to the variance will be removed within sixty (60) days after the individual requesting the variance no longer resides or uses the premises.

12.3 Term

A variance shall become void after one year after it is granted if not used, unless an extension in writing is granted by the CLWD Board.

12.4 Violation

A violation of any condition set forth in a variance shall be a violation of the District rules and shall automatically terminate the variance.

Section 13.0 Fees Charged In Certain Cases

13.1 Policy

The Board finds that:

a. Public awareness of and compliance with the permitting process will be served by a policy of not charging a permit application fee. By encouraging applicants to seek permits for potential projects, the public benefits by reduced inspection and enforcement costs.

b. From time to time persons perform work requiring a permit from the District without a permit, and persons perform work in violation of an issued District permit. The Board finds that its costs of engineering, inspection, analysis, attorney fees and temporary erosion control measures in such cases exceeds those where the applicant has complied with District requirements. The Board further concludes that its annual tax levy should not be used to pay such costs which are incurred because of a failure to meet District requirements. Therefore, the Board adopts a rule charging fees to the responsible persons in such cases. In these cases, the applicant or person responsible for the violation shall pay to the District a fee equal to the District's actual costs of field inspection of the work, including mileage for the District staff, investigation of the area affected by the work, analysis of the work, emergency erosion control measures, services of a consultant, including engineering and legal consultants, and any subsequent monitoring of the work, which in the case of a violation are incurred after notice of violation from the District; inspection fees shall be at least $75.00 per inspection, as may be established from time to time by the CLWD.

c. It is in the public interest that certain projects, involving larger scale development or development in sensitive locations, be inspected by District staff to provide the Board sufficient information to evaluate compliance with District rules and applicable law.

d. For commercial, residential developments, or restoration projects, a field inspection fee for permits required under 4.1, based upon the actual hourly rates of District staff or consultants may be charged in order to cover actual costs related to investigation of the area affected by the proposed activity, analysis of the proposed activity, services of a consultant, and any required subsequent monitoring of the proposed activity. The fee may be assessed for actual costs of enforcement of permit violations.

e. Governmental agencies are exempt from fees.

f. The failure to erect or maintain temporary erosion control measures as directed by the District shall result in the District ordering the work done. The record legal owner shall pay to the District $100.00 plus the actual costs of installation. The District may erect temporary erosion control devices in emergency circumstances anywhere within this District.

g. No permit fee will be assessed by the Cormorant Lakes Watershed District when an application is submitted in a timely manner as set forth in the rules. The District may, in its discretion, waive enforcement of fees.

Section 14.0 Refuse, Temporary Buildings

14.1 Refuse

To preserve and protect water quality, no refuse, garbage, vehicles or obnoxious materials shall be deposited in, or within the shore impact zone of any public waters in said District, or placed in any location where the same would by natural runoff or overflow drain into and be cast upon public waters.

14.2 Temporary Buildings

No permanent or temporary storage building, ice house, shed or any other structures may be located within the shore impact zone without a CLWD permit to prevent run off or discharge into the public water and without first obtaining a conditional use permit from Becker County.

Section 15.0 New Subdivisions, Plat, Tract or Planned Unit Developments.

It shall be compulsory to include an owner's affidavit on each new plat within the shoreland district, or in the absence of such plat, it shall be included in the owner's restrictive covenants, contained in any deed of conveyance to wit: "The undersigned owner or owners acknowledge that this land is in the Cormorant Lakes Watershed District and all purchasers and assigns hereafter are given notice that all properties and improvements made thereon are subject to the regulations, requirements and permit obligations of the said District and must be adhered to." A stormwater runoff plan prepared by a licensed engineer or licensed landscape architect, or other appropriate professional, shall be required for any portion of a proposed new subdivision, plat, tract or planned unit developments that are located within 1,000 feet of a lake. The CLWD may require a stormwater runoff plan prepared by a licensed engineer, for any new proposed subdivision, plat, tract or planned unit developments that are located outside 1,000 feet from public waters of the state. The owner shall submit a draft of the preliminary plat, proposed subdivision tract or planned unit development forty-five (45) days in advance of presentation to the Becker County Planning Commission, to the District to allow a period of review and comment before any formal action is taken by the Becker County Planning Commission. The developer shall request a preliminary inspection of the final plat and submit the final plat to the CLWD forty-five (45) days prior to submission to the Becker County Planning Commission to allow a period of review and comment before final action is taken by the Becker County Planning Commission.

Section 16.0

No fertilizer containing phosphorus may be applied in the shore impact zone. A permit shall be required for any phosphorus fertilizer applied outside the shore impact zone that is causing an adverse impairment to any waters of the state located within the District.

BOARD OF MANAGERS
CORMORANT LAKES WATERSHED DISTRICT

Jeff Moritz, Manager

Jody Beaudine, Manager

Ellis Peterson, Manager

A map of the Cormorant Lakes Watershed District is attached as Exhibit "A".

F:\Water\Cormorant Lakes Watershed District\water management rules.wpd

Local Funding Authorities

Purpose: *This table provides an overview of Minnesota statutes and laws that provide authorities to local governments to fund water management projects, to be used by local governments while exploring funding options for locally funded water projects. Does not include fees, fines, or wetland banking, grants, etc. This is not a legal document and should not be considered comprehensive, complete, or authoritative.*

note: "metro" refers to Anoka, Carver, Dakota, Hennepin, Ramsey, and Washington counties or watershed organizations in the 7-county metro area.

Citation	Applies to	Summary *(please see details in the full text of each provision)*
§40A.152	Counties (metro)	Money from the county conservation account (see chapter 287) must be spent by the county to reimburse the county and taxing jurisdictions within the county for revenue lost under the conservation tax credit under §273.119 or the valuation of agricultural preserves under §473H.10. Money remaining in the account after reimbursement may be spent on: 1) agricultural land preservation and conservation planning and implementation of official controls under this chapter or chapter 473H; 2) soil conservation activities and enforcement of soil loss ordinances; 3) incentives for landowners who create exclusive agricultural use zones; 4) payments to municipalities within the county for the purposes of clauses 1-3.
§103B.241	Watershed districts & watershed management organizations (metro)	May levy a tax to pay for plan preparation costs & projects in the adopted plan necessary to implement the Metropolitan Water Management Program.
§103B.245	Watershed districts & watershed management organizations (metro)	May establish a watershed management tax district within the watershed to pay the costs of: planning required under §§103B.231 and 103B.235, the capital costs of water management facilities described in the capital improvement program of the plans, and normal & routine maintenance of the facilities.
§103B.251	Watershed districts & watershed management organizations (metro), counties	May certify for payment by the county all or any part of the cost of a capital improvement contained in the capital improvement program of plans developed in accordance with §103B.231. Counties may issue general obligation bonds to pay all or part of the cost of project. The county may pay the principal and interest on the bonds by levying a tax on all property located in the watershed or subwatershed in which the bonds are issued. Loans from counties to watershed districts for the purposes of implementing this section are not subject to the loan limit set forth in §103D.335.

Citation	Applies to	Summary *(please see details in the full text of each provision)*
§103B.331 Subdivisions 3 & 4	Counties	(3) May charge users for services provided by the county necessary to implement the local water management plan.
		(4) May establish one or more special taxing districts within the county and issue bonds to finance capital improvements under the Comprehensive Local Water Management Act. After adoption of the resolution, a county may annually levy a tax on all taxable property in the district.
§103B.335	Counties, municipalities, or townships	May levy a tax to implement the Comprehensive Local Water Management Act or a comprehensive watershed management plan (§103B.3363). A county may levy amounts needed to pay the reasonable costs to SWCDs and WDs of administering and implementing priority programs identified in an approved & adopted plan or comprehensive watershed management plan.
§103B.555 Subdivisions 1 & 3	Counties	(1) May establish a Lake Improvement District and impose service charges on the users of lake improvement district services within the district. May levy an ad valorem tax solely on property within the lake improvement district for projects of special benefit to the district; may impose or issue any combination of service charges, special assessments, obligations, and taxes.
		(3) A tax under Subd. 1 may be in addition to amounts levied on all taxable property in the county for the same/similar purposes.
§103C.331 Subdivision 16	County boards on behalf of soil and water conservation districts	May levy an annual tax on all taxable real property in the district for the amount that the board determines is necessary to meet the requirements of the district.
§103D.335	Watershed districts	A watershed district has the power to incur debts, liabilities, and obligations and to provide for assessments and to issue certificates, warrants, and bonds.
§103D.601	Watershed districts	May set up special taxing districts via petition to conduct larger, Capital Improvement Projects (CIP). The costs to the affected parties cannot exceed $750,000.
§103D.615	Watershed districts	May declare an emergency and order that work be done without a contract. The cost of work undertaken without a contract may be assessed against benefitted properties or raised by an ad valorem tax levy if the cost is not more than 25% of the most recent administrative ad valorem levy and the work is found to be of common benefit to the watershed district.

Citation	Applies to	Summary *(please see details in the full text of each provision)*
§103D.729	Watershed districts	May establish a water management district or districts in the territory within the watershed to collect revenues and pay the costs of projects initiated under §§103B.231, 103D.601, 103D.605, 103D.611, or 103D.730. (Guidelines for creating water management districts)
§103D.901	Watershed districts	County auditors assess the amount specified in an assessment statement filed by managers. The county may issue bonds (§103E.635). An assessment may not be levied against a benefited property in excess of the amount of benefits received.
§103D.905 Subdivisions 2,3, 7-9	Watershed districts	Established funds for watershed districts (not a complete list – see full statute language): **Organizational expense fund** - consisting of an ad valorem tax levy, shall be used for organizational expenses and preparation of the watershed management plan for projects. **General fund** - consisting of an ad valorem tax levy, shall be used for general administrative expenses and for the construction or implementation and maintenance of projects of common benefit to the watershed district. May levy a tax not to exceed 0.00798 percent of estimated market value to pay the cost attributable to projects initiated by petition. **Repair and maintenance funds** - established under §103D.631, Subd. 2. **Survey and data acquisition fund** - consists of the proceeds of a property tax that can be levied only once every 5 years and may not exceed 0.02418 percent of estimated market value. **Project tax levy** - a WD may levy a tax: 1. To pay the costs of projects undertaken by the WD which are to be funded, in whole or in part, with the proceeds of grants or construction or implementation loans under the Clean Water Partnership Law; 2. To pay the principal of, or premium or administrative surcharge (if any), and interest on, the bonds and notes issued by the WD pursuant to §103F.725; 3. To repay the construction or implementation loans under the Clean Water Partnership Law.
§103E.011 Subdivision 5	Drainage authorities	A drainage authority can accept and use external sources of funds together with assessments from benefited landowners in the watershed of the drainage system for the purposes of flood control, wetland restoration, or water quality improvements.
§103E.015 Subdivision 1a	Drainage authorities	When planning a "drainage project" or petitioned repair, the drainage authority must investigate the potential use of external sources of funding, including early coordination for funding and technical assistance with other applicable local government units.
§103E.601 §103E.635 §103E.641	Drainage authorities	Funding of all costs for constructed "**drainage projects"** are apportioned to benefited properties within the drainage system pro rata on the basis of the benefits determined (§103E.601). After the contract for the construction of a drainage project is awarded, the board of an affected county may issue bonds of the county

Citation	Applies to	Summary *(please see details in the full text of each provision)*
		in an amount necessary to pay the cost of establishing and constructing the drainage project. (§103E.635). Drainage authorities may issue drainage funding bonds (§103E.641).
§103E.728 §103E.731 §103E.735	Drainage authorities	Costs for drainage system **repairs** are apportioned pro rata on all benefited properties of record. The drainage authority may charge an additional assessment on property that is in violation of §103E.021 (ditch buffers) or a county soil loss ordinance (§103E.728). If there is not enough money in the drainage system account to make a repair, the board shall assess the costs of the repairs on all property and entities that have been assessed benefits for the drainage system (§103E.731). To create a repair fund for a drainage system to be used only for repairs, the drainage authority may apportion and assess an amount against all property and entities benefited by the drainage system, including property not originally assessed and subsequently found to be benefited according to law. (§103E.735).
Chapter 287	Counties	Counties participating in the agricultural land preservation program impose a fee of $5 per transaction on the recording or registration of a mortgage or deed that is subject to tax under §§287.05 and 287.21.
Chapter 365A	Towns	Townships may create subordinate service districts with special taxing authority. Requires a petition signed by at least 50 percent of the property owners in the part of the town proposed for the subordinate service district.
§373.475	Counties	A county board must deposit the money received from the sale of land under Laws 1998, chapter 389, article 16, section 31, subd. 3, into an environmental trust fund. The county board may spend interest earned on the principal only for purposes related to the improvement of natural resources.
Chapter 429	Municipalities	May levy special assessments against properties benefitting from special services (including curbs, gutters and storm sewer, sanitary sewers, holding ponds, and treatment plants).
§444.075	Municipalities	May collect stormwater utility fees to build, repair, operate & maintain stormwater management systems.
§462.358 Subdivision 2b(c)	Municipalities	May accept a cash fee for lots created in a subdivision or redevelopment that will be served by municipal sanitary sewer and water service or community septic and private wells. May charge dedication fees for the acquisition and development or improvement of wetlands and open space based on an approved parks and open space plan.
M. L. 1998, Chapter 389 Article 3, Section 29	Red River Watershed Management Board	Watershed Districts that are members of the Red River Watershed Management Board may levy an ad valorem tax not to exceed 0.04836 percent of the taxable market value of all property within their district. This levy is in excess of levies authorized by §103D.905.

Appendix I. Regulatory Comparisons

Many of the issues affecting priority issues can be addressed in part through administration of statutory responsibilities and ordinances. This document is intended to be used to summarize the existing local rules, ordinances and statutes that are currently being administered by planning entity, to understand areas of duplication, gaps, and opportunities.

Key:

Regulatory responsibility lies with this LGU and there is an ordinance

Administers program but no ordinance

Regulatory Concern	Government Unit							Comments
	Otter Tail County	Becker County	Otter Tail SWCDs	Becker SWCD	CLWD	PRWD	State	
County-wide zoning								Otter Tail: No county-wide zoning. Only the shoreland zone.
Aggregate Sand & Gravel Mining								Gravel pits. Otter Tail: For land in the shoreland only.
AIS								Otter Tail County has a Dock and Riparian Use Ordinance.
Buffers	Enforcement	Enforcement	Compliance checks	Compliance checks		Enforcement		
Near Shore Regulations (alternations, retaining walls, structures, Impervious surface)	Part of Shoreline Ordinance	Part of Shoreline Ordinance			Rules & Regulations	Rules & Regulations		
Construction Stormwater Management	Part of Shoreline Ordinance	Part of Shoreline Ordinance			Rules & Regulations	Rules & Regulations		Otter Tail County: part of the shoreline ordinance. PRWD and CLWD: part of Rules.

Regulatory Concern	Government Unit							Comments
	Otter Tail County	Becker County	Otter Tail SWCDs	Becker SWCD	CLWD	PRWD	State	
Feedlots								No local responsibility
Floodplain Management								Otter Tail: no local responsibility
Forestland Management								Otter Tail County: part of the shoreline ordinance
Groundwater use								Otter Tail County: delegation agreement with MDH: PRWD De-Watering permits
Groundwater Protection Rule								MDA Administers. Part 1 applies in the watershed. Part 2 applies to the City of Perham (DWSMA with nitrate >5.4 mg/L).
Subsurface Sewage Treatment Systems								Otter Tail and Becker counties require SSTS inspections on point-of-sale.
Noxious Weed Law								
Public Drainage Systems (103E)								

Regulatory Concern	Government Unit							Comments
	Otter Tail County	Becker County	Otter Tail SWCDs	Becker SWCD	CLWD	PRWD	State	
Shoreland management								Otter Tail: Ordinance exceeds state standards. Stormwater Management Rules within Shoreland District
Solid waste management								Shared Director of Solid Waste Management with Wadena, Otter Tail, and Todd Counties
Stormwater Management Rules	Only shoreland zone	Only shoreland zone				District-wide Stormwater Managemen t Rule		Fergus Falls and Detroit Lakes MS4 permits require Stormwater Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs).
Wellhead Protection Rule								Otter Tail County: Delegation agreement with MDH for inspections including non-community water supplies (not wellcode or wellhead protection). Becker County: no local responsibility.
Wetland Conservation Act							DNR also does enforcement	Otter Tail County: county is responsible for enforcement and SWCDs responsible for restoration orders for violations.

Appendix J. Memorandum of Agreement

MEMORANDUM OF AGREEMENT

This agreement (Agreement) is made and entered into by and between:

The Counties of Otter Tail, and Becker by and through their respective County Board of Commissioners, and

The East Otter Tail, West Otter Tail, and Becker Soil and Water Conservation Districts, by and through their respective Soil and Water Conservation District Board of Supervisors, and

The Pelican River and Cormorant Lakes Watershed Districts, by and through their respective Board of Managers,

Collectively referred to as the "Parties."

WHEREAS, the Counties of this Agreement are political subdivisions of the State of Minnesota, with authority to carry out environmental programs and land use controls, pursuant to Minnesota Statutes Chapter 375 and as otherwise provided by law; and

WHEREAS, the Soil and Water Conservation Districts (SWCDs) of this Agreement are political subdivisions of the State of Minnesota, with statutory authority to carry out erosion control and other soil and water conservation programs, pursuant to Minnesota Statutes Chapter 103C and as otherwise provided by law; and

WHEREAS, the Watershed Districts of this Agreement are political subdivisions of the State of Minnesota, with statutory authority to carry out conservation of the natural resources of the state by land use controls, flood control, and other conservation projects for the protection of the public health and welfare and the provident use of the natural resources, pursuant to Minnesota Statutes Chapters 103B, 103D and as otherwise provided by law; and

WHEREAS, the parties to this Agreement have a common interest and statutory authority to prepare, adopt, and assure implementation of a comprehensive watershed management plan in the Otter Tail River Watershed to conserve soil and water resources through the implementation of practices, programs, and regulatory controls that effectively control or prevent erosion, sedimentation, siltation and related pollution in order to preserve natural resources, ensure continued soil productivity, protect water quality, reduce damages caused by floods, preserve wildlife, protect the tax base, and protect public lands and waters; and

WHEREAS, with matters that relate to coordination of water management authorities pursuant to Minnesota Statutes Chapters 103B, 103C, and 103D with public drainage systems pursuant to Minnesota Statutes Chapter 103E, this Agreement does not change the rights or obligations of the public drainage system authorities; and

WHEREAS, the Parties have formed this Agreement for the specific goal of developing a plan pursuant to Minnesota Statutes § 103B.801, Comprehensive Watershed Management Planning, also known as *One Watershed, One Plan*.

NOW, THEREFORE, the Parties hereto agree as follows:

1. **Purpose:** The Parties to this Agreement recognize the importance of partnerships to plan and implement protection and restoration efforts for the Otter Tail River Watershed, see attached exhibit A. The purpose

of this Agreement is to collectively develop and adopt, as local government units, a coordinated watershed management plan for implementation per the provisions of the Plan. Parties signing this agreement will be collectively referred to as the Otter Tail Watershed Partnership (Partnership).

2. **Term:** This Agreement is effective upon signature of all Parties in consideration of the Board of Water and Soil Resources (BWSR) Operating Procedures for One Watershed, One Plan; and will remain in effect until adoption of the plan by all parties unless canceled according to the provisions of this Agreement or earlier terminated by law.

3. **Adding Additional Parties:** A qualifying party desiring to become a member of this Agreement shall indicate its intent by adoption of a board resolution prior to 6/30/21. The party will not have voting authority until 90 days after adopting a resolution to become a member of this Agreement. The party agrees to abide by the terms and conditions of the Agreement; including but not limited to the bylaws, policies and procedures adopted by the Policy Committee.

4. **Withdrawal of Parties:** A party desiring to leave the membership of this Agreement shall indicate its intent in writing to the Policy Committee in the form of an official board resolution. Notice must be made at least 30 days in advance of leaving the Agreement.

5. **General Provisions**:

    a. **Compliance with Laws/Standards:** The Parties agree to abide by all federal, state, and local laws; statutes, ordinances, rules and regulations now in effect or hereafter adopted pertaining to this Agreement or to the facilities, programs, and staff for which the Agreement is responsible.

    b. **Indemnification:** Each party to this Agreement shall be liable for the acts of its officers, employees or agents and the results thereof to the extent authorized or limited by law and shall not be responsible for the acts of any other party, its officers, employees or agents. The provisions of the Municipal Tort Claims Act, Minnesota Statute Chapter 466 and other applicable laws govern liability of the Parties. To the full extent permitted by law, actions by the Parties, their respective officers, employees, and agents pursuant to this Agreement are intended to be and shall be construed as a "cooperative activity." It is the intent of the Parties that they shall be deemed a "single governmental unit" for the purpose of liability, as set forth in Minnesota Statutes §471.59, subd. 1a(a). For purposes of Minnesota Statutes § 471.59, subd. 1a(a) it is the intent of each party that this Agreement does not create any liability or exposure of one party for the acts or omissions of any other party.

    c. **Records Retention and Data Practices:** The Parties agree that records created pursuant to the terms of this Agreement will be retained in a manner that meets their respective entity's records retention schedules that have been reviewed and approved by the State in accordance with Minnesota Statutes § 138.17. The Parties further agree that records prepared or maintained in furtherance of the agreement shall be subject to the Minnesota Government Data Practices Act.

At the time this agreement expires, all records will be turned over to the East Otter Tail SWCD for continued retention.

d. **Timeliness:** The Parties agree to perform obligations under this Agreement in a timely manner and keep each other informed about any delays that may occur.

e. **Extension:** The Parties may extend the termination date of this Agreement upon agreement by all Parties.

6. **Administration:**

a. **Establishment of Committees for Development of the Plan.** The Parties agree to designate one representative, who must be an elected or appointed member of the governing board, to a Policy Committee for development of the watershed-based plan and may appoint one or more technical representatives to an Advisory Committee for development of the plan in consideration of the BWSR Operating Procedures for One Watershed, One Plan.

i. The Policy Committee will meet as needed to decide on the content of the plan, serve as a liaison to their respective boards, and act on behalf of their Board. Each representative shall have one vote.

ii. Each governing board may choose one alternate to serve on the Policy Committee as needed in the absence of the designated member.

iii. The Policy Committee will establish bylaws within 90 days of execution of this document to describe the functions and operations of the committee(s).

iv. The Advisory Committee will meet monthly or as needed to assist and provide technical support and make recommendations to the Policy Committee on the development and content of the plan. Members of the Advisory Committee may not be a current board member of any of the Parties.

b. **Submittal of the Plan.** The Policy Committee will recommend the plan to the Parties of this agreement. The Policy Committee will be responsible for initiating a formal review process for the watershed-based plan conforming to Minnesota Statutes Chapters 103B and 103D, including public hearings. Upon completion of local review and comment, and approval of the plan for submittal by each party, the Policy Committee will submit the watershed-based plan jointly to BWSR for review and approval.

c. **Adoption of the Plan.** The Parties agree to adopt and begin implementation of the plan within 120 days of receiving notice of state approval, and provide notice of plan adoption pursuant to Minnesota Statutes Chapters 103B and 103D.

7. **Fiscal Agent:** East Otter Tail SWCD will act as the fiscal agent for the purposes of this Agreement and agrees to:

    a. Accept all responsibilities associated with the implementation of the BWSR grant agreement for developing a watershed-based plan.

    b. Perform financial transactions as part of grant agreement and contract implementation.

    c. Annually provide a full and complete audit report.

    d. Provide the Policy Committee with the records necessary to describe the financial condition of the BWSR grant agreement.

    e. Retain fiscal records consistent with the agent's records retention schedule until termination of the agreement (at that time, records will be turned over to East Otter Tail SWCD.

    f. Provide reasonable documentation of the BWSR grant agreement to any party upon request.

8. **Grant Administration**: East Otter Tail SWCD will act as the grant administrator for the purposes of this Agreement and agrees to provide the following services:

    a. Accept all day-to-day responsibilities associated with the implementation of the BWSR grant agreement for developing a watershed-based plan, including being the primary BWSR contact for the *One Watershed, One Plan* Grant Agreement and being responsible for BWSR reporting requirements associated with the grant agreement.

    b. Provide the Policy Committee with the records necessary to describe the planning condition of the BWSR grant agreement.

9. Scope of services agreements may be developed with other Parties for assistance with administration, planning, or other duties, as appropriate. Scope of services shall not exceed current fund allocations and must be consistent with any workplan or timelines developed for a grant agreement.

10. **Authorized Representatives:** The following persons will be the primary contacts for all matters concerning this Agreement:

Otter Tail County
Land & Resource Management Director
500 W Fir Ave
Fergus Falls, MN 56537
Telephone: 218-998-8105

East Otter Tail SWCD
District Administrator
801 Jenny Ave SW, Suite #2
Perham, MN 56573
Telephone: 218-346-9105

West Otter Tail SWCD
District Administrator
506 Western Ave N

Fergus Falls, MN 56537
Telephone: 218-998-5300

Becker County
Planning & Zoning Administrator
915 Lake Ave
Detroit Lakes, MN 56501
Telephone: 218-846-7314

Becker SWCD
District Administrator
809 8th St SE
Detroit Lakes, MN 56501
Telephone: 218-846-7360

Pelican River Watershed District
District Administrator
211 Holmes St W
Detroit Lakes, MN 56501
Telephone: 218-846-0436

Cormorant Lakes Watershed District
Administrator
10929 County Highway 5
Pelican Rapids, MN 56572
Telephone: 218-234-6865

IN TESTIMONY WHEREOF the Parties have duly executed this agreement by their duly authorized officers.

PARTNER: East Otter Tail SWCD

APPROVED:

BY: _____ 4-21-21
Board Chair Date

BY: _____ 4-21-21
District Manager/Administrator Date

APPROVED AS TO FORM

BY: _____
County Attorney Date

IN TESTIMONY WHEREOF the Parties have duly executed this agreement by their duly authorized officers.

PARTNER: West Otter Tail SWCD

APPROVED:

BY: Rod Wenethom 11-9-20
Board Chair Date

BY: [signature] 11/9/20
District Manager/Administrator Date

APPROVED AS TO FORM

BY: _____
County Attorney Date

IN TESTIMONY WHEREOF the Parties have duly executed this agreement by their duly authorized officers.

PARTNER: OTTER TAIL COUNTY

APPROVED:

BY: _____ 11-03-2020
Board Chair **Date**

BY: _____ 11-5-2020
District Manager/Administrator **Date**

APPROVED AS TO FORM

BY: _____ 11-5-2020
County Attorney **Date**

IN TESTIMONY WHEREOF the Parties have duly executed this agreement by their duly authorized officers.

PARTNER: Becker Soil and Water Conservation District

APPROVED:

BY: _____ 20 Jan 2021
Board Chair Date

BY: Bryan E Malone 1/20/2021
District Manager/Administrator Date

IN TESTIMONY WHEREOF the Parties have duly executed this agreement by their duly authorized officers.

PARTNER: Pelican River Watershed District

APPROVED: April 22, 2021

BY: Dennis Kral 4-22-2021
Board Chair Date

BY: 4-22-2021
District Manager/Administrator Date

IN TESTIMONY WHEREOF the Parties have duly executed this agreement by their duly authorized officers.

PARTNER: **Cormorant Lakes Watershed District**

APPROVED:

BY: Ellie Peterson 3/17/21
Board Chair Date

BY: Elizabeth M. Jansen 3/17/21
District Manager/Administrator Date

IN TESTIMONY WHEREOF the Parties have duly executed this agreement by their duly authorized officers.

PARTNER: _____

APPROVED:

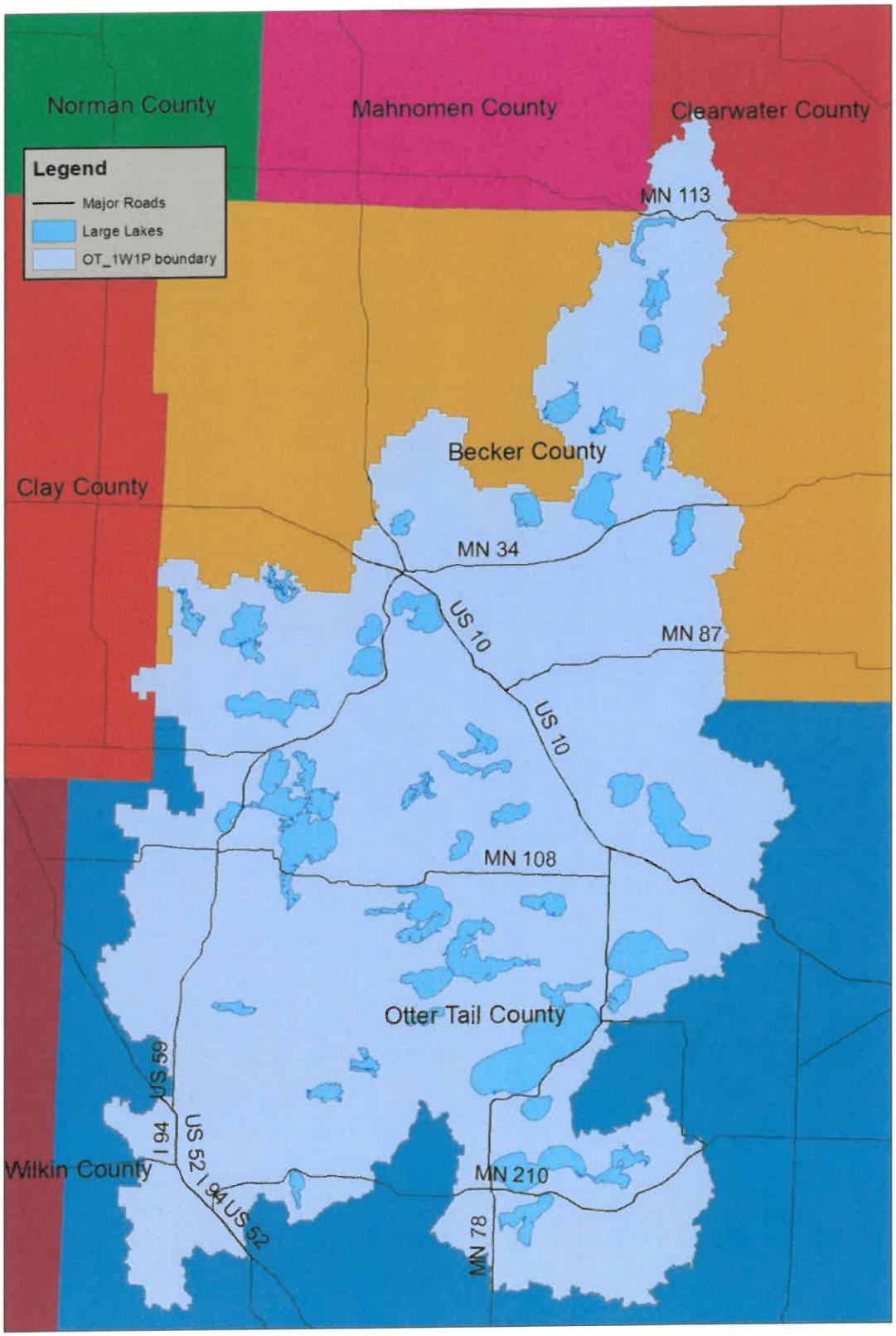
BY: Barry Nelson 6-1-21
Board Chair Date

BY: 6-1-21
/Administrator Date

APPROVED AS TO FORM

BY: 6-2-21
County Attorney Date

Attachment A



Appendix M. References

Anderson and Kean, 2004. Red River Basin Flood Damage Reduction Framework. Technical paper 11. Red River Basin Flood Damage Reduction Work Group.

Becker Soil and Water Conservation District, January 2017. Becker County Water Plan 2017-2026. Detroit Lakes, MN.

Cormorant Lakes Watershed District, 2012. Cormorant Lakes Watershed District Watershed Management Plan 2012-2022. Cormorant, MN.

East Otter Tail Soil and Water Conservation District and West Otter Tail Soil and Water Conservation District, Amended August 2014. Otter Tail County Water Plan 2009-2019. Perham and Fergus Falls, MN.

Field to Market: The Alliance for Sustainable Agriculture, 2021. Environmental Outcomes from On-Farm Agricultural Production in the United States (Fourth Edition). ISBN: 978-0-578-33372-4

Harper, Elizabeth; Gerda Nordquist, Steve Stucker, Carol Hall, 2006. Rare Animals in the Hardwood Hills and Pine Moraines and Outwash Plains Ecological Subsections of West-Central Minnesota. Minnesota County Biological Survey. Division of Ecological Services, Department of Natural Resources.

Krenz, G. and J. Leitch. 1993, 1998. A River Runs North: Managing an International River. Red River Water Resources Council.

Marschner, Francis J. 1974. The Original Vegetation of Minnesota. Compiled from U.S. General Land Office Survey notes. North Central Forest Experiment Station, Forest Service, U.S. Department of Agriculture.

Minnesota Department of Natural Resources (DNR), 2010. Flood Flow Contribution of the Upper Otter Tail River Watershed. St. Paul, MN.

Minnesota Department of Natural Resources (DNR), 2015. Lakes of Biological Significance. St. Paul, MN.

Minnesota Department of Natural Resources (DNR). 2020. “Watershed Health Assessment Framework (WHAF)”. https://www.dnr.state.mn.us/whaf/index.html

Minnesota Department of Natural Resources (DNR). 2021. “Otter Tail River State Water Trail”. https://www.dnr.state.mn.us/watertrails/ottertailriver/index.html. Accessed 9/14/2021.

Minnesota Department of Natural Resources (DNR) and Minnesota Pollution Control Agency (MPCA), 2019. “Otter Tail River Watershed Stressor Identification Report – Lakes.”

https://www.pca.state.mn.us/sites/default/files/wq-ws5-09020103b.pdf

Minnesota Pollution Control Agency (MPCA), 2019a. “Otter Tail River Watershed Monitoring and Assessment Report”. https://www.pca.state.mn.us/sites/default/files/wq-ws3-09020103b.pdf

Minnesota Pollution Control Agency (MPCA), 2019b. “Otter Tail River Watershed Stressor Identification Report”. https://www.pca.state.mn.us/sites/default/files/wq-ws5-09020103a.pdf

Minnesota Pollution Control Agency (MPCA), 2020. “Healthier Watersheds.” https://www.pca.state.mn.us/water/healthier-watersheds

Minnesota Pollution Control Agency (MPCA), 2021. “Otter Tail River Watershed Restoration and Protection Strategy Report.” https://www.pca.state.mn.us/sites/default/files/wq-ws4-82a.pdf

National Geographic (NG), 2020. https://www.nationalgeographic.com/magazine/graphics/see-how-your-citys-climate-might-change-by-2070-feature. Accessed 9/2/2021.

Pelican River Watershed District, March 2020. Pelican River Watershed District Watershed Management Plan 2020-2030. Detroit Lakes, MN.

Russell, M., 2020. Forest Carbon Fact Sheet for Minnesota. Analysis for Forest Resources Association.https://forestresources.org/pdf/Data_and_methods_for_forest_carbon_fact_sheets.pdf Accessed August 2021.

Senay, G. B. and Kagone, S., 2019, Daily SSEBop Evapotranspiration: U. S. Geological Survey Data Release, https://doi.org/10.5066/P9L2YMV

United States Department of Agriculture (USDA). 2017. Census of Agriculture. https://www.nass.usda.gov/AgCensus. Assessed 11/10/21.

USFWS-TNWR. Tamarac National Wildlife Refuge website. https://www.fws.gov/refuge/tamarac. Accessed 9/2/2021.