



Project Partners













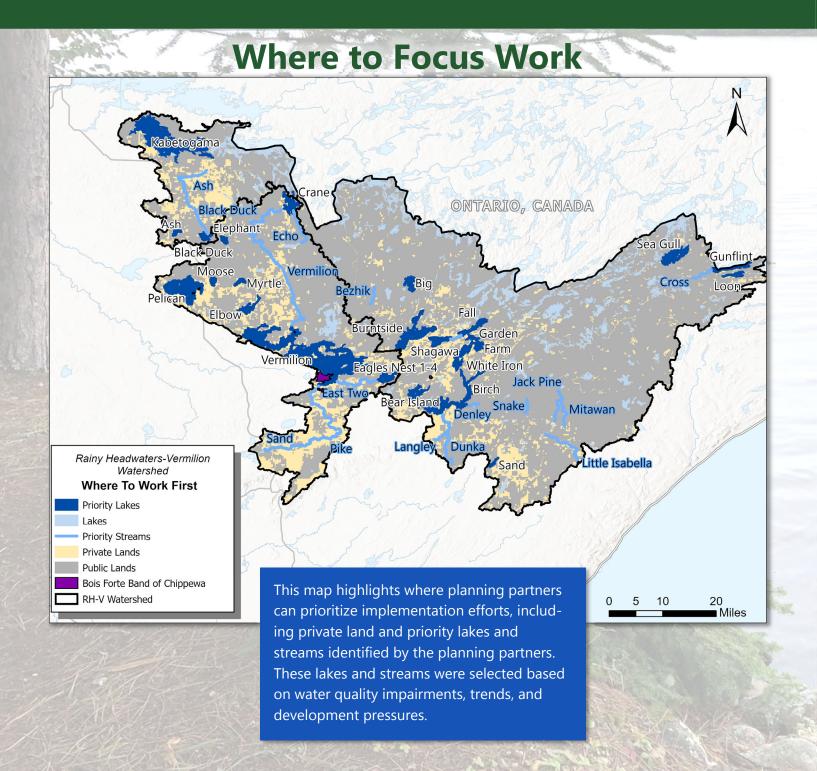






Watershed Highlights

- The Rainy Headwaters Vermilion watershed is renowned for its abundant clear waters and glacially scoured lakes surrounded by boreal forests.
- It is home to the Boundary Waters Canoe Area Wilderness (BWCAW) and Voyageurs National Park (VNP).
- It covers 3,989 square miles in four counties (Cook, Lake, St. Louis, and Koochiching).
- Approximately 72% of the land is publicly owned, with federal (54%), private (27%), and state (18%) being the largest landholders.
- It is within the larger 1854 Ceded Territory, and the Bois Forte Reservation is within the watershed, on the shore of Lake Vermilion



Plan Highlights

- Implementation of this plan is voluntary, and outreach, cost share, and incentive programs will be used to assist with voluntary implementation on private lands (See map below).
- A Landscape Stewardship Plan was developed in parallel with this watershed plan that helped prioritize forest protection and management for water quality and habitat improvement.
- The Planning partners set 8 goals during the planning process. The goals and their outcomes are highlighted below.

10-Year Plan Goals

Lake & Lakeshore Management

- ♦ Goal: 2 miles of lakeshore restored to natural vegetation
- Outcome: improved water quality and shoreland habitat

Riparian Enhancement

- ♦ Goal: enhance 1 mile of riparian land and implement 100 acres of agricultural best management practices
- ♦ Outcome: improved water quality

Forest Health

- 今 Goal: manage 4,200 acres of forested land
- Outcome: healthy forests that protect water quality and are resilient to climate variability & invasive species

Land Protection

- Goal: protect 1,579 acres with

 Sustainable Forest Incentive Act or

 conservation easements
- ♦ Outcome: protected water quality and habitat

Connectivity Enhancement



- Goal: 10 connectivity barriers removed.
- Outcome: improved water quality and fish passage

Drinking Water Protection



- Goal: seal 50 unused wells
 and replace 50 noncompliant septic
 systems
- Outcome: protected surface and groundwater drinking sources

Stormwater Management



- Goal: 4 stormwater plans and 4 stormwater projects in developed areas
- Outcome: improved water quality and resiliency to climate variability

Water Retention



- ♦ Goal: No change in current watershed discharge and build resiliency into projects
- ♦ Outcome: improved water quality and resiliency to climate variability





Three Rainy River Headwaters-Vermilion River public kickoff meetings were held in August 2022. The events were held in Orr on August 11, at Seagull Lake on August 16, and in Ely on August 18. The goal was to reach people across the expansive watershed by offering the kickoff meeting in multiple locations. The purpose was to gather diverse viewpoints on watershed priorities and values. As well as to understand the issues, concerns and opportunities of watershed residents and stakeholders. Information was gathered by having meeting participants complete three activities focused on watershed topics.

Seven topic areas were identified by the Steering Committee. These included:

- Lakes
- Rivers / Streams
- Wetlands
- Forests
- Agriculture
- Groundwater
- Stormwater



The events were advertised using print and social media ad campaigns. In addition, Steering Committee members advertised the events using their contact lists and connections. For those who could not attend the events in person, an online survey was created and shared. The survey ran for one month. In addition, a paper survey was available at the event for people not willing to participate in a group activity.

A total of 31 people participated in the events (7 in Orr, 4 at Seagull Lake, and 20 in Ely). In addition, 21 people completed the online survey.

Kickoff Meeting Activities

Identifying Issues, Concerns and Opportunities

A list of watershed issues, concerns and opportunities was compiled by the Steering Committee for each of the seven topics. The list was used to create voting posters. Participants from each event used stickers to vote if they prioritized an issue. They were



able to vote for as many or as few as they wished. They used sticky notes to add issues, concerns and opportunities that they felt were missing. A complete list is at the end of this report.

Identifying Desired Future Conditions

A list of potential future outcomes for the watershed was compiled by the Steering Committee for each of the seven topics. This list was also used to create voting posters. Participants from each event used stickers to vote if they prioritized the future condition. They were only allowed to vote for two future outcomes per topic area. A complete list of future conditions is at the end of this report.

Prioritizing Watershed Topics

Event participants were given four \$100,000 bills at the beginning of the event. They were asked to view each of the seven topics and think about how they would spend this money to protect and restore natural resources in the watershed in the next 10 years. Then they were asked to place their money in the topic area(s) most important to them. Money could be spent all on one topic or spread over four.

Other Information

Using posters, we asked participants to share additional information related to:

- Where do you most associate within the watershed? Place a pin on a map to designate.
- Are there any topics/resources we didn't cover?
- If you could magically improve one water resource in the watershed today, which problem would you fix?
- Considering the current rate of land use change in the watershed, what do you think the watershed will look like in 50 years?
- What would you like the watershed to look like in 50 years?

Online Survey

The online survey mimicked the in-person event as much as possible. The same list of issue statements was listed for each topic, and participants were asked to rank the four highest priority topics.

Some additional questions were asked that were not recorded in the in-person meetings:

• In just 4-5 words, when you think of the Rainy River Headwater-Vermilion River watershed, what comes to mind?

• For each of the 7 topic areas: In a sentence or two, what do you think could be done to improve water quality in relation to (lakes, streams, forests, etc). This information will be used later as we look for potential implementation activities.

Results

Where were participants from or most identified within the watershed?

As expected, meeting attendees were mostly from near the meeting location they attended. Online survey participants identified across the watershed planning area. Participants indicated they most identified with the following locations in the planning area:

- Orr
- Ely
- Tower
- Winton
- Babbitt
- Fall Lake Township
- Eagles Nest Township
- Vermilion River
- Ely Area Lakes
- Pelican Lake
- Sandpoint Lake
- Kabetogama Lake
- Gull Lake/Seagull River
- Rainy River
- White Iron Lake
- Round Lake
- Knife River
- BWCA

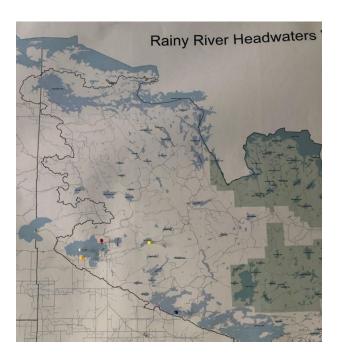
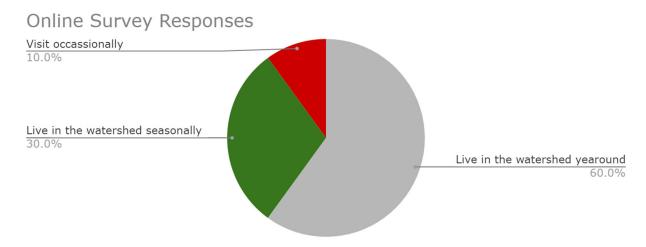


Figure 1: Online survey responses to watershed residence

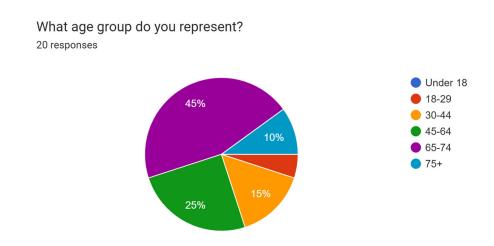


Who Attended?

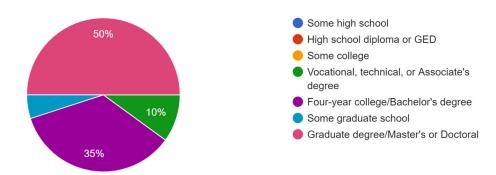
Most visitors to the in-person meetings either lived within or near the watershed planning meeting location. While we did not have attendees self-report, most attendees appeared to be above retirement age and White. Several attendees were involved in local lake associations, townships, or working adjacent to water planning efforts.

Through the online survey, we asked participants to report on their demographics. Again, most participants were above 65 with only one respondent under 30. The respondents were also largely educated with 50% having a master's degree or above and no respondent reported having less than a 2-year degree. No one identified as anything other than White. While the watershed population is largely White, it should be noted that the Bois Forte Band of Chippewa has reservation land within the watershed. This population does not appear to be represented in this survey.

Figure 2: Online survey demographic responses

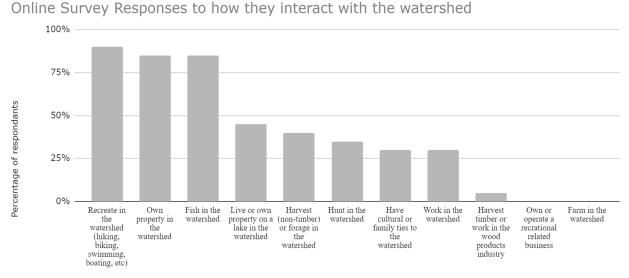


What is the highest level of education you have completed? 20 responses



The majority (over 75%) of online respondents recreate, own property, and fish in the watershed. Between a quarter and half of online respondents work, have cultural/family ties, hunt, forage/harvest (non-timber), and live/own property on a lake in the watershed. There is a noticeable lack of respondents who farm or operate a reaction-related business.

Figure 3: Online survey responses to watershed interactions



Top Issue Statements

The top three (or 4 if tied) ranked issue statements were collected for each topic.

Lakes

- Lakeshore owners and lake users are not aware of their role in protecting lake health
- There are not enough rules to protect lakes, or the current rules are not enforced

- Algae blooms are increasing and a threat to water quality and human health
- Aquatic invasive species are creating problems in lake ecosystems

Rivers / Streams

- People don't know how to protect or restore streams/rivers
- Upland management next to riparian habitat is affecting streams health
- Pollutants such as bacteria, nutrients, sediment, chloride are entering streams

Wetlands

- People do not understand the importance/value of wetlands
- More funding is needed to restore/protect wetlands
- More research/studies are needed to understand where wetlands should be restored

Forests

- Forest management should adapt to changing climate
- Landowners are unaware of programs that help manage and protect their forests
- More funding is needed to cost share forest health activities/forest management plans

Agricultural Practices

- Agricultural producers are worried about regulations
- I don't know
- There is not enough cost share money available to assist with conservation goals

Groundwater

- People are unaware of groundwater risks/concerns
- More testing/monitoring is needed to track groundwater
- There is not enough funding to help landowners protect groundwater

Stormwater

- Landowners and municipalities need help managing stormwater
- Landowners and municipalities are unaware of stormwater issues
- Flooding is damaging public and private infrastructure

Each of the topic areas had at least one top ranked issue suggesting a lack of awareness or knowledge by stakeholder or the public about the issue and opportunities. Stormwater, Groundwater, and Agricultural Practices were the topics with more uncertainty of the issues with Agricultural Practices having "Don't know" as the second highest ranked issue/concern/opportunity for the topic.

Top Future Condition

The top two ranked future condition statements were collected for each topic.

Lakes

- All lakeshore owners are good stewards of their lake
- Lake waters are clear; there are limited algae blooms

Rivers / Streams

- Increased local knowledge of stream value
- Headwater, high-quality streams are protected

Wetlands

- Increased local knowledge of the value of wetlands
- Wetlands are restored/protected where they will best protect lakes and streams

Forests

- A diverse forest with different ages and species of trees
- Forest landowners are actively managing their forest to keep it healthy

Agricultural Practices

- Reduced livestock access to lakes and streams
- Increased local knowledge of agricultural best management practices

Groundwater

- Increased local knowledge of groundwater
- Increased funding for projects that protect groundwater

Stormwater

- Assistance is available to landowners and municipalities to manage stormwater
- There is more green infrastructure in developed areas

The majority of desired future condition topics included a desire for increased knowledge about or assistance with the topic. Stewardship was a focus for the lakes and forests topic in addition to a desire for good condition resources.

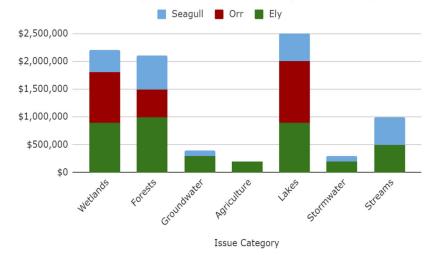
Prioritization Activity

The prioritization activity saw some differences between events. At the Orr meeting, Lakes had the highest ranking followed by Wetlands and then Forests. In Ely, Forests ranked as the highest topic, with Lakes and Wetland tying for second. At Seagull Lake, Forests also ranked highest, with Lakes and Streams in second place. Agriculture, Stormwater, and Groundwater ranked lowest at all meetings, which also happened to be the highest rank for "don't know" when it came to the issues and concerns. Combined with the online survey, Lakes, Forests, and Wetland are ranked as highest priority areas.

In Person Meeting Prioritization through spending

Online Rankings

- 1. Lakes
- 2. Forests
- 3. Wetlands
- 4. Streams
- 5. Groundwater
- 6. Stormwater
- 7. Agriculture



Additional Questions

In just 4 or 5 words, when you think of the Rainy River Headwaters/Vermilion River Watershed, what comes to mind?

The words used to describe the watershed focused on the scenic and wilderness like natural features as seen in the word cloud below.



Considering the current rate of land use change in the watershed, what do you think Rainy River Headwaters/Vermilion River Watershed will look like in 50 years?



What would you like the watershed to look like in 50 years?



As shown in the word clouds above, most respondents share a future with some degradation of water quality if current land use change continues at the current pace. However, the second question shows a desire for more protection or sustaining the water quality experienced today.

What is your biggest concern related to your experiences related to the Rainy River Headwater/Vermilion River Watershed (DOES NOT HAVE TO BE WATER-RELATED)



"What is your biggest concern related to your experiences with the watershed that doesn't have to be water-related?" was asked to try and see if there were any pressing issues that may supersede concerns about water quality. Most answers did relate to water quality but also to complex issues like relationships with policymakers, mining, and fire management.

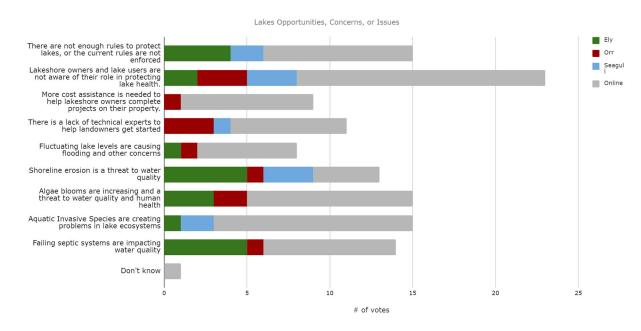
Are there any topics/resources we didn't cover in this survey?

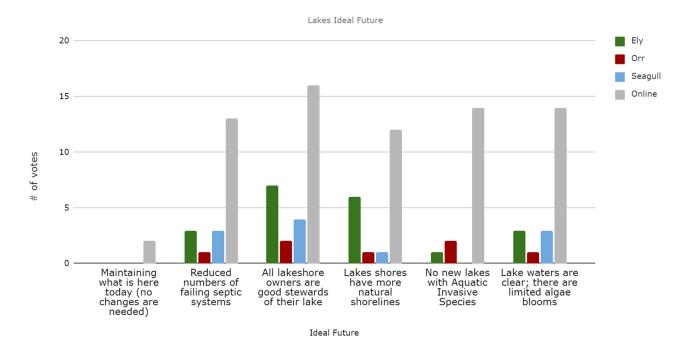
- No (2)
- Tourist Education
- Get the Lead Out of all fishing tackle
- Tourism/Recreation
- Septic
- Risk to the watershed due to sulfide mining
- Humans and pollution
- Tour survey is skewed to a presumption that people need to be told what to do, that people are ignorant of issues. The survey doesn't seem to include ways to address issues property owners are aware of but do not have the resources to tackle.
- Climate change impacts (2)

Appendix

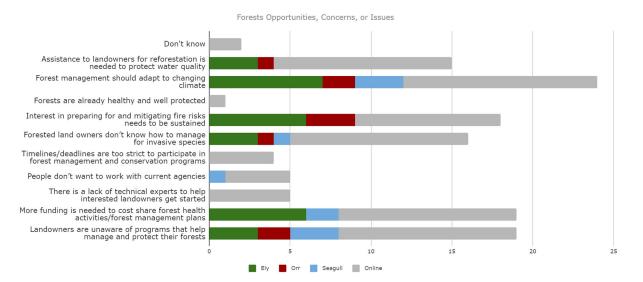
A compilation of issue statement voting questions, future condition voting questions, and the additional questions are listed below.

Lakes

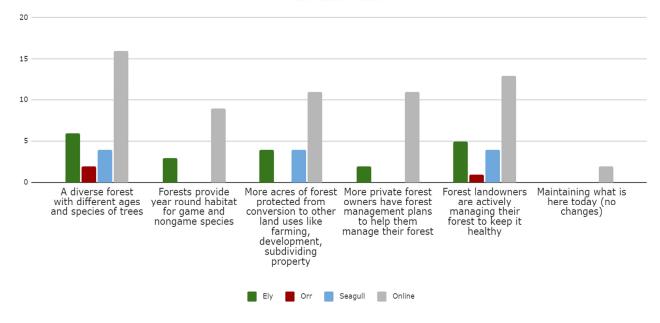




Forests

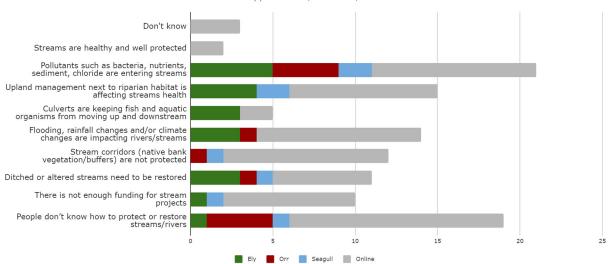


Forests Ideal Future

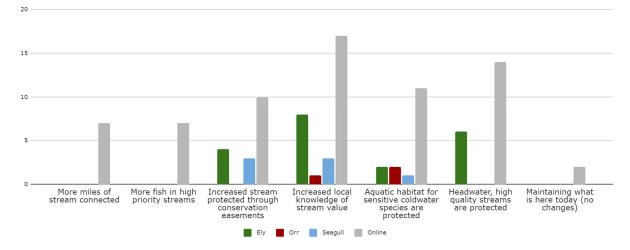


Rivers/Streams

Streams Opportunities, Concerns, or Issues

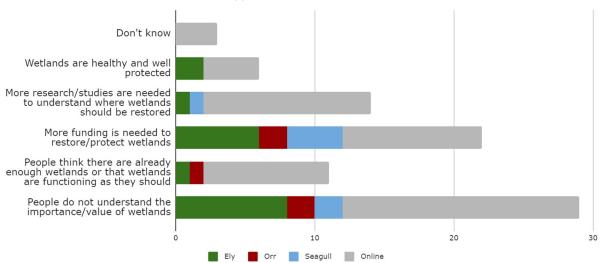


Streams Ideal Future

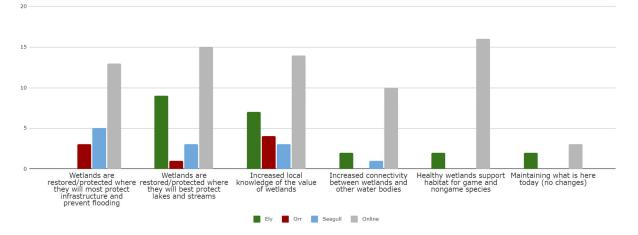


Wetlands



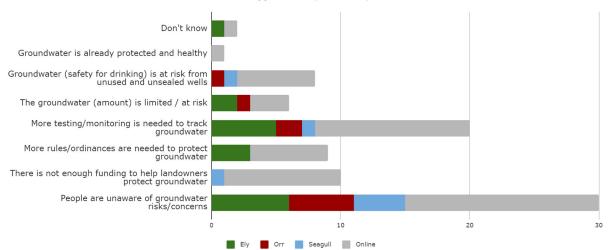


Wetlands Ideal Future

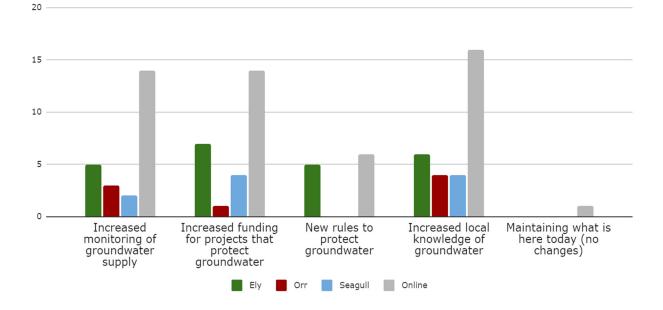


Groundwater



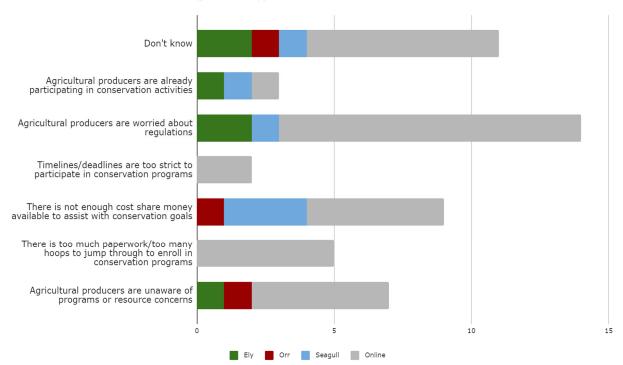


Groundwater Ideal Future

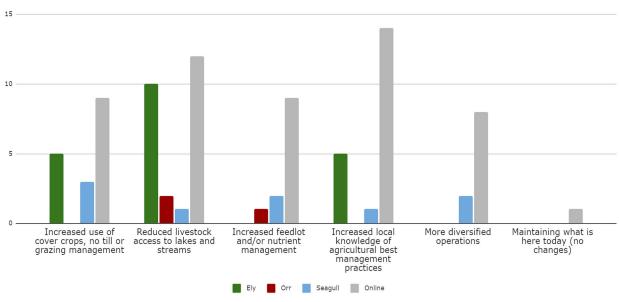


Agriculture



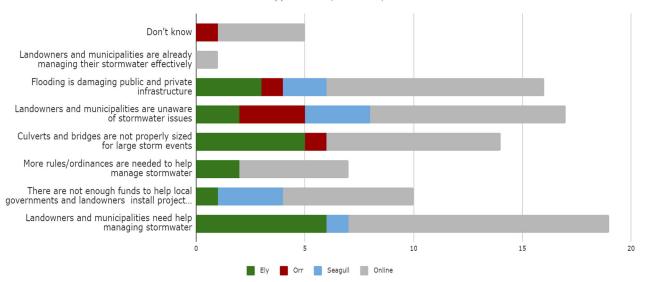


Agriculture Ideal Future

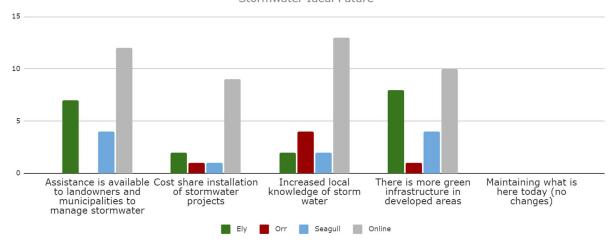


Stormwater





Stormwater Ideal Future



Additional Issues/Concerns provided by meeting attendees and survey respondents

- Lakes: Need more enforcement of "Get the Lead Out"
- Lakes: Impact of industrial activities
- Lakes: How do we begin to address septic systems not designed to handle pharmaceuticals (2)
- Lakes: Concern with water quality for drinking use
- Lakes: excessive motor use stirring bottom sediments
- Lakes: Need better surface water use management to co-exist motor and non-motorized activities. Both recreation value and safety concerns
- Forests: More involvement with USFS forest management
- Forests: Need to know issues first and then how to protect
- Forests: Tools and support in managing invasives species (including things like cow parsnip in open lands)
- Forests: Early detection and removal of buckthorn
- Forests: We need a way to employ prescribed burns across the area- both public and private lands
- Streams: Property owners adjacent to streams and river should be supported in best practices to maintain them
- Wetlands: More wetlands need to preserved and protected
- Wetlands: Practices to encourage and support good wetland management. Protect wetlands from abuse from ATVs. Educate people on how wetlands can be enjoyed
- Wetlands: Built projects win out
- Wetlands: Too eager to trade wetland credits
- Agriculture: Farmers should be encouraged to idle lands in sensitive areas
- Agriculture: Connect local communities with farmers that use regenerative agriculture to protect water quality
- Groundwater: More accessible resources for testing wells
- Groundwater: The City of Ely needs assistance to design and install energy efficient (solar) wastewater treatment facilities.

Additional Ideal Futures provided by meeting attendees and survey respondents

- Lakes: Maintain what is here, be good stewards as is possible and practical
- Forests: Forest management plan & assistance opportunities for smaller properties (<10 acres)
- Forests: More information about current forest conditions and what needs to be done to improve. Why are there so many dead trees??
- Forests: More fire as a management tool
- Streams: Don't presume property owners don't know what to do; support good practices
- Streams: Identify areas with diversity and/or environmental pressures needing protection
- Streams: Focus on areas with highest chance for protection success as waters warm with climate change
- Streams: Aquatic Habitat

- Wetlands: Prohibit mining and developers from destroying wetlands. Do not accept mitigation agreements.
- Agriculture: Learning from farmers what would help them most- there may not be one solution for all areas depending on what watershed components are on or adjacent to their properties

In a sentence or two, what do you think could be done to protect or improve lake water quality?

- More education & resources for property owners on proper land & lake management.
 Better enforcement of the existing rules as well as better understanding by county leaders on existing rules and need for regulations.
- Educate each property owner on keeping water clean but also allowing access, swimming, and boating. Encourage volunteer compliance and monitoring.
- More Natural Resource staff helping at each lake & lake association
- Stronger standards for water quality degradation
- Study water quality and contaminants; identify issues; propose solutions or measures to reduce issues
- Being aware and careful
- Support water quality improvements
- Better monitoring of snowpack & rainfall throughout this watershed to mitigate flooding. Assist property owners develop stable, protected dock systems that meet current and potential needs. Address septic issues as they become known in a way that supports both year-round and seasonal residents and businesses.
- Better control of levels in ifalls, eliminate man made chokes
- Teach us what to do on our properties, how to be good stewards, encourage and reward good stewardship in some way
- enforcement and education
- Intense information campaign followed by input from informed citizens and then an action program based on this input with financial assistance in areas where absolutely necessary, e.g. professionally evaluating septic systems with remediation grants for low income property owners.
- mandate four-cycle outboard motors and provide assistance to boaters who live here.
- No copper nickel mining.
- Permanently ban sulfide mining in the watershed.
- Given climate change, the lakes will change. Our focus will have to shift from preservation to managing for resiliency.
- More laws to protect quality; more effective enforcement of existing regulations; no mining

In a sentence or two, what do you think could be done to protect Rainy River Headwaters/Vermilion River Watershed forests?

- Avoidance of forest fragmentation due to selling public properties (eg tax forfeited) or more strategic approach to land sales. Not all property should be passed into private ownership just to increase the tax base. The watershed is a unique area and value should be placed on the availability of public properties for use and enjoyment of residents and visitors alike.
- Educate landowners closest to rivers and lakes how to keep runoff of water under control.
 Keep pollutants contained and educate how to lessen them.
- More Natural Resource staff & funding to help protect forests & educate people.
- restoration of fire to the landscape
- Really unsure don't know enough about existing issues
- Awareness
- Listen to a broad range of property owners, large and small. Encourage plans flexible enough to allow for farming, development and enjoyment in ways that let forests flourish for all to enjoy.
- Preventing forest fires by harvesting timber in the watershed when it's mature
- hopefully both
- Incentivize private land owners to form local cooperatives via sustained monetary and technical assistance.
- More assistance and protection.
- Protect and conserve old growth forests for animal/bird species habitat. Regulate for sustainable logging. Reforest with climate adaptive tree species. Protect forested riparian areas.
- Prescribed burns for ecological benefits.
- County could work in partnership with the University of MN Extension and land owners to educate and engage citizens.
- More Education
- More education of all landowners both private and commercial

In a sentence or two, what do you think could be done to protect or improve fish habitat?

- Education on stream value and how adjacent land uses can effect streams and fish habitats.
- Eliminate as much erosion as possible to keep soil and forests healthy. Educate the landowners how to use but not abuse their land. Contain or lessen pollutants.
- More Natural Resource staff & funding is needed to help educate people
- stronger standards for water quality, limited industrial activity, forest health
- Reduce sources of contaminated runoff into streams. Improve awareness of the watershed's streams - location, animals/fish, value to environment
- Clean water
- Work with property owners to support good practices already in use, and encourage better practices where appropriate
- Natural damns at pike river and winton

- I am not an expert but want all people involved in protecting our waters, people, animals and fish. Knowledge is power and I believe your people have that to share.
- More information!
- More education for fishermen and women
- Stop trapping beavers.

In a sentence or two, what do you think could be done to protect or improve wetlands?

- Increased knowledge of the important role wetlands play on the unique watersheds in our area. Wetlands could be considered valuable resources to ecosystems & not as heavily viewed for the monetary value associated with such things as wetland banks or wetland mitigation in other areas outside watershed boundaries.
- More monitoring sites to gauge wetland quality and a process to repair when feasible. Do not decrease total wetland area.
- More Natural Resource staff & funding is needed to educate people so positive change happens.
- no wetland destruction allowed
- Public education on how wetlands function and their value to other watershed resources; map of the most important wetlands in the watershed?
- Protection
- Educate and support ways people can access and enjoy wetlands appropriately, so they are not just seen as wasted areas.
- Nothing, maintain
- sorry to be repetitive but enforcement and education and funding are what comes to mind
- More information!
- More education about wetlands
- Permanent protection against sulfide mining in the watershed
- Higher governmental regulations to protect Wetlands.
- Don't fill them in for construction

In a sentence or two, what do you think could be done to protect water quality with agriculture?

- Support good agricultural practices in use, listen to farmers about their needs and concerns.
- Nothing
- feed lot damage needs to be addressed and business needs to be worked with to reach a shared win win goal for all
- More information about current situation and potential impact of making changes.
- More education
- Keep cattle away from streams and lakes. Two-stage ditches to reduce erosion and buffers between ag land and water.
- No till management.
- Education

In a sentence or two, what do you think could be done to protect or improve groundwater quality?

- More education and funding for land owners. Increased enforcement of regulations for large industries that may impact groundwater capacity and quality.
- Increase well water quality testing and educate well owners on protecting the water.
- More Groundwater staff & funding is needed to educate the public
- stronger rules to protect groundwater
- Watershed wide sampling to determine a baseline of existing issues or concerns; determine action steps from those results?
- Anything and everything
- Increased ability for property owners to get water tested more conveniently
- Build industry and bring more money to the local economy for improvements to infrastructure
- enforcement at the township levels would be a good start with penalties for non compliance with the law. This should go all the way up!
- More opportunities for residents to monitor and improve (where needed) private wells.
- More education about ground water.
- Increase citizen awareness. Cost-share with local governments on treatment facilities.
- More Education on ground water.

In a sentence or two, what do you think could be done to protect or improve water quality when it comes to stormwater?

- Monitor areas prone to flooding and fix where feasible but always educate landowners
- More Stormwater staff & funding is needed to educate the public & make changes
- less impervious surface
- Insufficient knowledge to formulate a response.
- All is well
- Helping property owners understand their impact on neighboring property how their changes in storm water flow can impact others
- engineer reports that get some notice
- more information
- More education
- Increase culverts and drainage area, also improving wetlands alleviates this problem.

Additional Questions

What is your biggest concern related to your experiences related to the Rainy River Headwater/Vermilion River Watershed (DOES NOT HAVE TO BE WATER RELATED)

- Lack of understanding of watershed issues by policy makers.
- Large weather or fire events
- Too many uninformed people causing more damage in our watershed.
- Sulfide mining (2)

- sulfide-ore copper mining (2)
- Aquatic Invasive Species (2)
- Government overreach
- Poor lake level management
- Causing undue burdens to property owners because of perceived concerns by visitors. Educating people who do not live in the watershed about their impact while helping them understand that things like invasive species are ALSO spread by wildlife, waterfowl and more. Concerned about increased ATV use and the erosion that can be caused by these vehicles.
- People buying shoreline and building cabins
- That the people who live on the water, have business on or related to the water, use the waters for recreation, etc. care about now and future generations use of these lovely waters.
- Pollution and invasive species in water and forests.
- fire management. we were lucky this summer but the time is coming when Greenwood fire like events will be harder and harder to dodge
- Copper nickel mining potential for damaging watershed
- Proposed sulfide mining (2)
- Wildfire danger due to excessive fuel loads in our forests logging is not the solution because it increases smaller more fire prone forest types.
- My biggest concern for the area is seasonal home owners who do not stay in their homes lengths at a time and are not connected with the community. They have a large stake and ability to help with a variety of problems but will not be involved due to their accessibility.
- Toxic mining!
- Sulfide mining- the real elephant in the room
- Maintaining and improving water quality
- Maintaining assessing and improving water quality where needed

If you could magically improve one water resource in the watershed today, which problem would you fix?

- Better management and protection of lake and stream shorelines/ Lake Pollution
- Pelican Lake
- Wetland restoration/ Wetlands (3)/ The removal of wetlands
- Water quality degradation by industrial activities/ Permanent ban on sulfide mining
- Water quality- lakes then rivers/streams then wetlands
- Aquatic Invasive Species (2)
- Rivers / River-less flooding
- Groundwater (2)
- Mitigating flooding
- Restore forests using prescribed burns
- Water entering Vermilion, too much sulfate from mining
- Buckthorn removal and early detection
- Keeping livestock and feedlots a good distance from waterways

- Ensure all wastewater treatment systems are built correctly and are maintained to meet all contaminants regulated
- Better wastewater treatment by cabins/homes

Considering the current rate of land use change in the watershed, what do you think Rainy River Headwaters/Vermilion River Watershed will look like in 50 years?

- Decreased protection of valuable water resources or status quo.
- Slowly decline in quality
- If too many people destroy watershed instead of protect it or restore it, things will get bad.
- more residential impact
- Sudbury Ont
- Not drastically different than today
- More developed than today
- More users will be enjoying the watershed, which will hopefully make more resources available to manage it. Property owners will be good stewards. Government will work to support private landowners in their stewardship efforts.
- Lake minnetonka
- Improving each year with financial support from federal and private contributions.
- Degraded by invasive species and water pollution.
- More diverse forest, more protected waterways
- Decreased biodiversity and pollution from sulfide mining
- Oak savanas
- I think there will be a lot more large seasonal homes that get used once or twice a summer. This will have more used land but not people present and ready for managing their land. I see a lot more extreme droughts and floods occurring, and the need to adapt to those "problems"
- If mining is allowed, the future is doomed.
- Too much concrete in the world
- Depends on mining
- Decreased biodiversity due to climate change and invasives
- Warmer water temps, unsafe drinking water in some BWCA lakes. Hopefully same # homes
 BWCA protection
- Hopefully it changes less than other areas with climate change given our less structured (concrete) environment.
- Expect vegetation and wildlife changes

What would you like the watershed to look like in 50 years?

- Increased protection
- Stay the same or slightly improve
- I would like much more watershed, streams, rivers, lakes, forests, wetlands protected.
- ecologically healthy
- Improved water and forest conditions for human and wildlife use. Hopefully, only a limited amount of further development
- No change

- A similar blend of developed and wilderness areas as we have today
- Developed without significant negative impact
- A thriving mix of woods, meadows, peat bogs, streams, rivers and lakes that have some developed areas and undeveloped areas. Where people are thoughtful about their impact on the watershed
- Rainy lake shoreline currently
- Better and more understood in order to be cared for by all people.
- Better plant, tree and wildlife diversity and health. Protection of water quality.
- Pristine water, careful management of resources.
- Permanently protected from sulfide mining and protections/regulations that maintain the current water quality.
- Clean water with oak svanas
- In 50 years I would love this watershed to have great protection and a community that wants to do the best for the watershed and not just their property.
- As pristine as possible. Drink straight from the lakes



Appendix C. Issue Statement mp ementation ead

During the November 2022 Advisory Committee Meeting, groups were tasked with identifying the lead agencies for the issue statements outlined earlier in the planning process. The table below represents the compiled results of that meeting. The answers brainstormed by the group were then used to develop leads for actions later in the planning process.

Issue Statement	Local Government	Federal or State Government	Other	Rationale
Pollutants have the potential to impact water quality, aquatic recreation, and aquatic life.	SWCDS, Counties City of Ely, Burntside, Cities/road authorities	MPCA/EPA, DNR, MDH, NRCS, NPS	Lake associations WICOLA	SWCDs for implementation, DNR, MPCA, Counties (permitting), MDH (groundwater), Forested land partners being identified (managers of that public land)
Individual waste treatment systems contribute pollutants to groundwater and surface water.	Counties, SWCDs (outreach)	MPCA,(Regs, funding)		MPCA (rules/regulation) Counties lead, SWCDs in support IPHT
Stormwater runoff increases peak flows and contributes pollutants to streams and lakes.	SWCDs, Counties, Cities	MPCA, DNR, MDH, FS	Sportsman groups Municipalities Lake associations	SWCDs- implementation (lead?) Counties (ordinances) In support MDH, FS, DNR (logging)
Shoreline erosion caused by increased development and the removal of natural buffers impacts habitat and water quality.	SWCDs, Counties (shoreland ordinance enforcement) (Development Org)	DNR, FS, MDH	Contract or support of native staff, Lake association, townships, Fisherman groups	DNR-permitting (lead?) Counties-ordinances SWCDs- implementation MDH (drinking water)

Issue Statement	Local Government	Federal or State Government	Other	Rationale
Land use change from development, resource extraction, and outdoor recreational use can impact water quality and habitat.	Counties, Cities, SWCD	USACE, BWSR. FS, DNR, TEP-WCA		Cities (ordinances), SWCDs (wetlands)
Groundwater quality and sustainability needs protection.	Counties, SWCDs	NRCS, MDH		Counties-ordinances MDH
Eroding streambanks contribute to turbidity impairments and reduced habitat quality.	SWCDs	DNR, USACE, NRCS, MPCA	Sportsman group	DNR- permitting SWCDs (cattle issues) MPCA-studies
Connectivity barriers impact biological communities and stream geomorphology.	SWCD	DNR		Road authorities generally- (Counties, DNR or anyone else who takes part in this), DNR permitting, USACE, FS for crossings
Altered hydrology including channelized streams and ditch systems, increase erosion and flow, with the potential to impair water bodies.	Road authorities, County	DNR, USACE, IJC		DNR/USACE (permitting), road authorities, IJC flooding
Forest management is needed to improve forest health, resiliency, habitat, and diversity.	Counties, SWCDs.	USFS, DNR, NRCS	Loggers' association groups	NRCS/SWCDs (private landowners)
Wild Rice requires protection from climatic changes, contaminants, and invasive species.	Counties, SWCDs	DNR, BWSR, USFS, MPCA/EPA		DNR- ordinances (development), BWSR easements, private orgs as well for easements, MPCA/EPA (sulfate)

Issue Statement	Local Government	Federal or State Government	Other	Rationale
Sufficient protection is needed for outstanding resources and sensitive species to maintain water and habitat quality.		NPS, USFS, MPCA, DNR		NPS/USFS- all waters in the park are outstanding Easement programs for implementation
Aquatic invasive species impact recreational activities and may result in reduced biodiversity in lakes and streams.	Counties, SWCDs	DNR, NPS, USFS,		DNR- regulations NPS regulations (above state regulations) SWCDs programming

Appendix D. Shoreline Ownership



For plan implementation, identifying areas for lakeshore management programs is essential. In this appendix, a map for each priority lake has been created, identifying land parcels and their ownership. Private lands will be the focus for lakeshore management implementation.

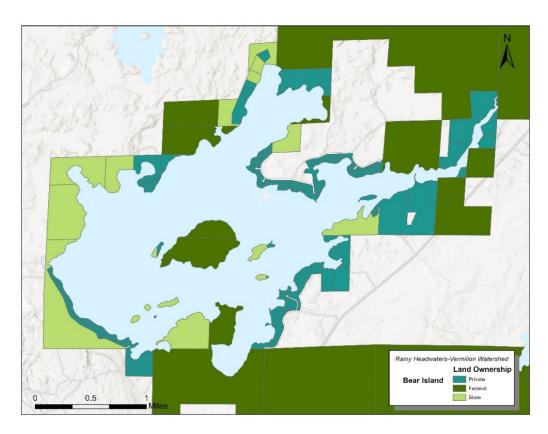


Figure 1. Bear Island lakeshore land ownership.

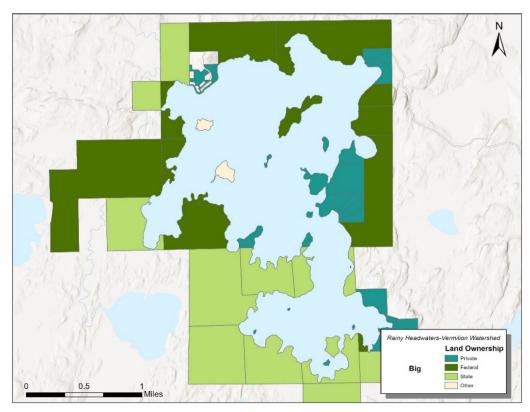


Figure 2. Big lakeshore land ownership.

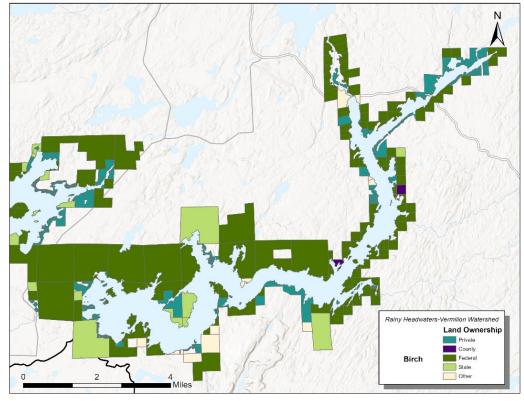


Figure 3. Birch lakeshore land ownership.

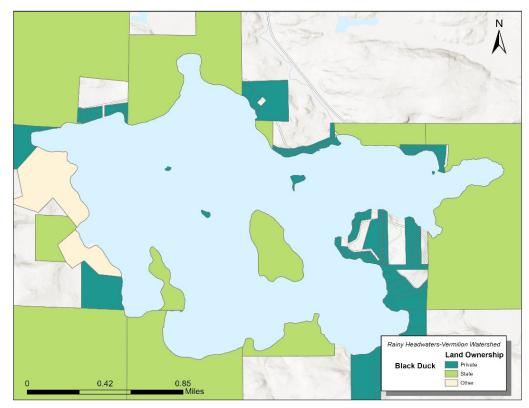


Figure 4. Black Duck lakeshore land ownership.

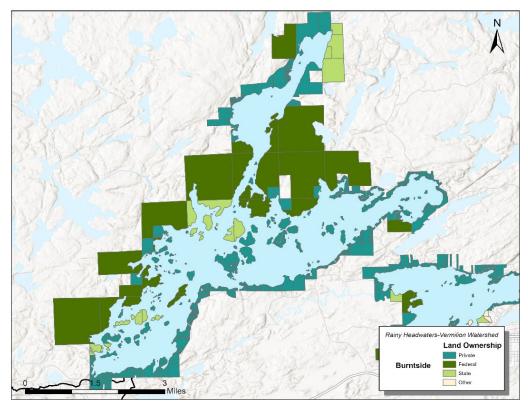


Figure 5. Burntside lakeshore land ownership.

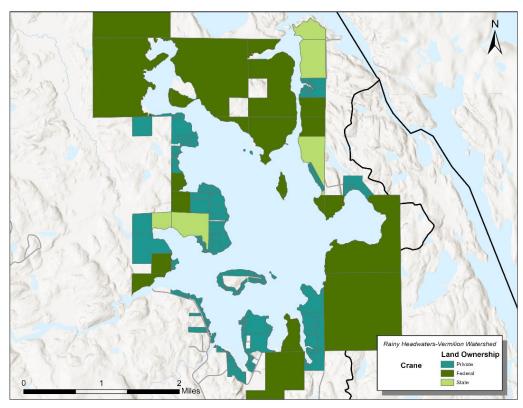


Figure 6. Crane lakeshore land ownership.

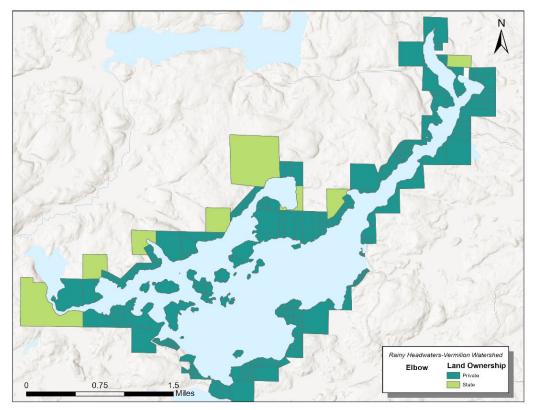


Figure 7. Elbow lakeshore land ownership.

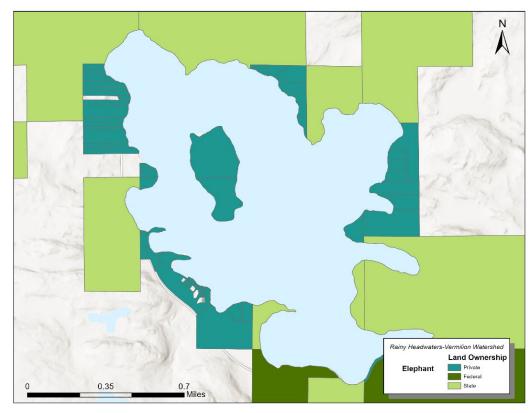


Figure 8. Elephant lakeshore land ownership.

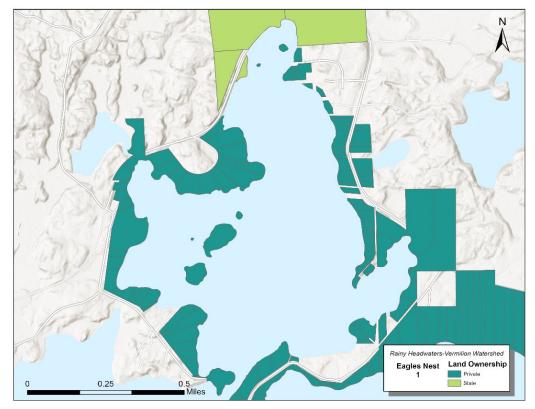


Figure 9. Eagles Nest #1 lakeshore land ownership.

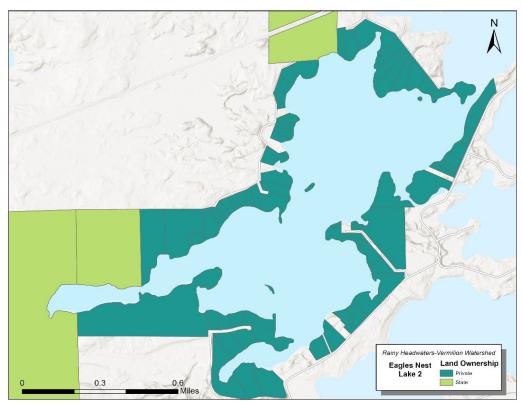


Figure 10. Eagles Nest #2 lakeshore land ownership.

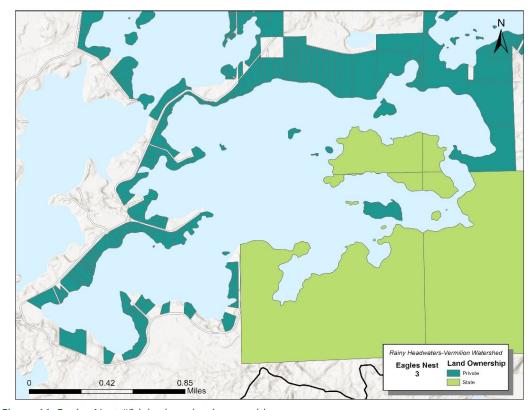


Figure 11. Eagles Nest #3 lakeshore land ownership.

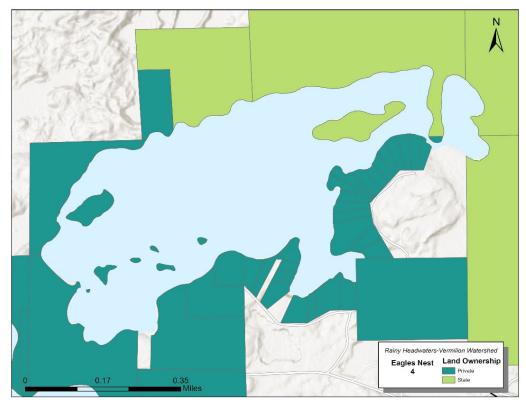


Figure 12. Eagles Nest #4 lakeshore land ownership.

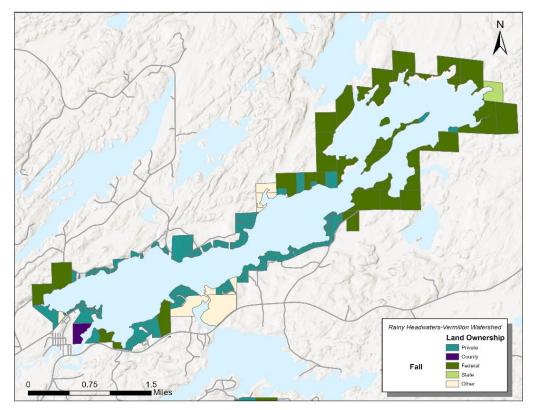


Figure 13. Fall lakeshore land ownership.

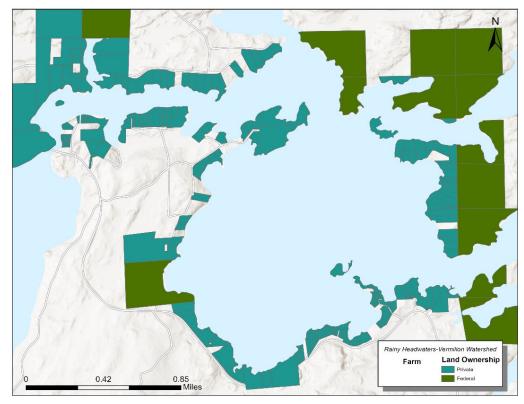


Figure 14. Farm lakeshore land ownership.

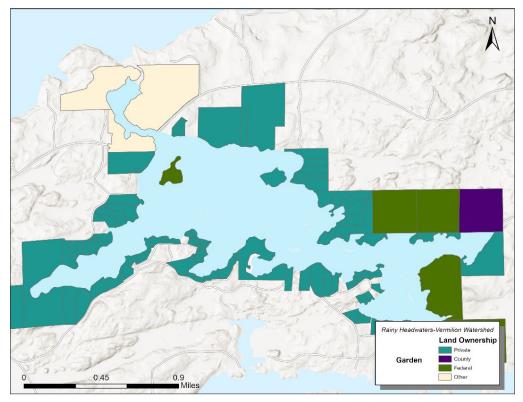


Figure 15. Garden lakeshore land ownership.

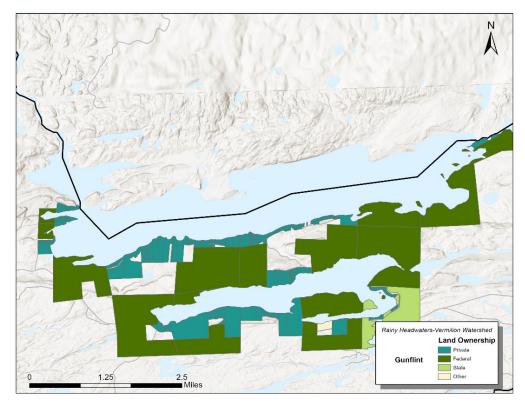


Figure 16. Gunflint lakeshore land ownership.

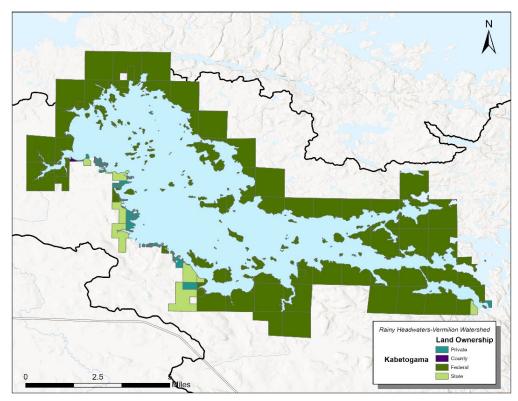


Figure 17. Kabetogama lakeshore land ownership.

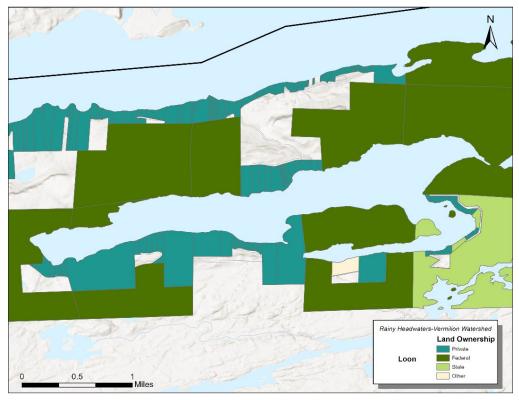


Figure 18. Loon lakeshore land ownership.

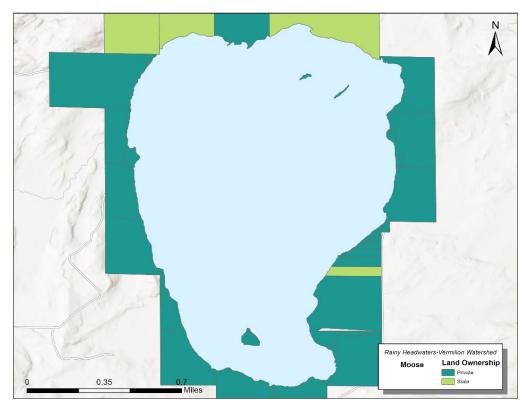


Figure 19. Moose lakeshore land ownership.

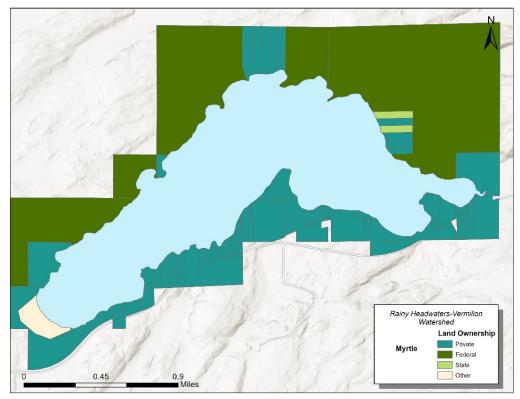


Figure 20. Myrtle lakeshore land ownership.

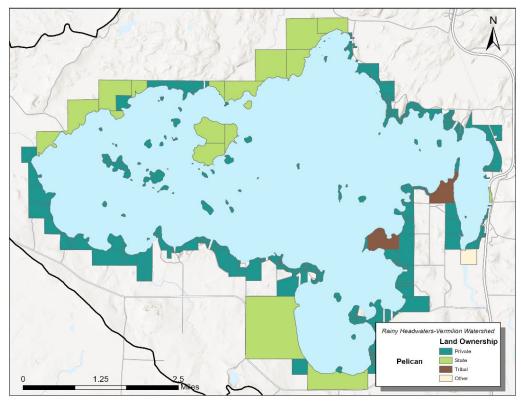


Figure 21. Pelican lakeshore land ownership.

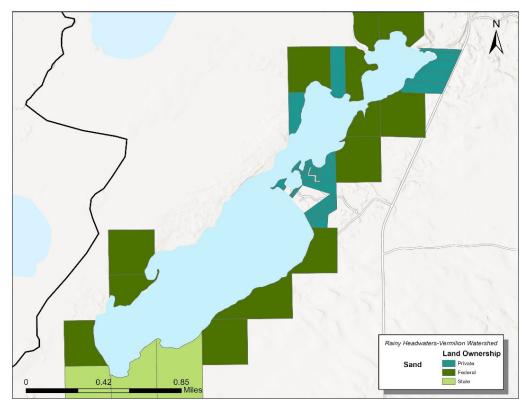


Figure 22. Sand lakeshore land ownership.

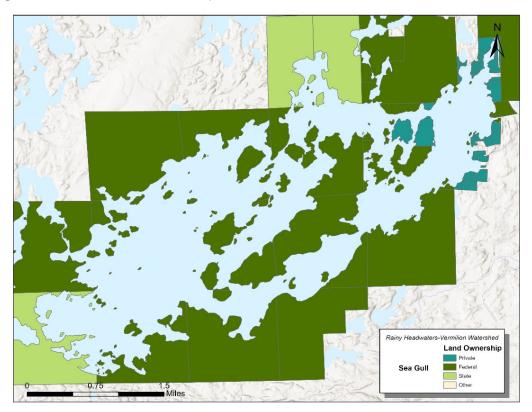


Figure 23. Sea Gull lakeshore land ownership.

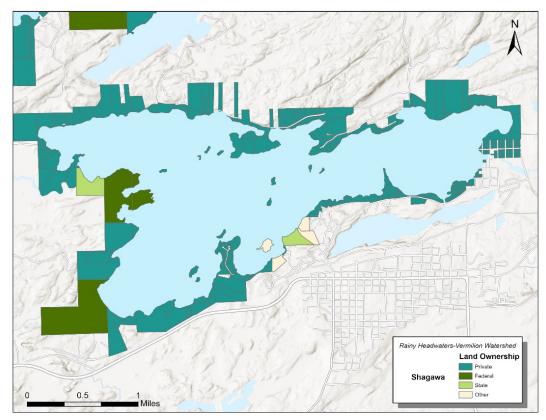


Figure 24. Shagawa lakeshore land ownership.

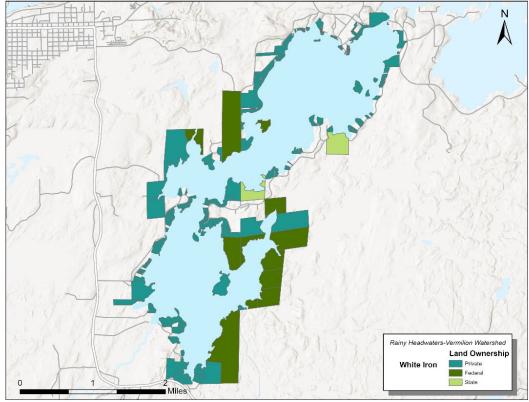


Figure 25. White Iron lakeshore land ownership

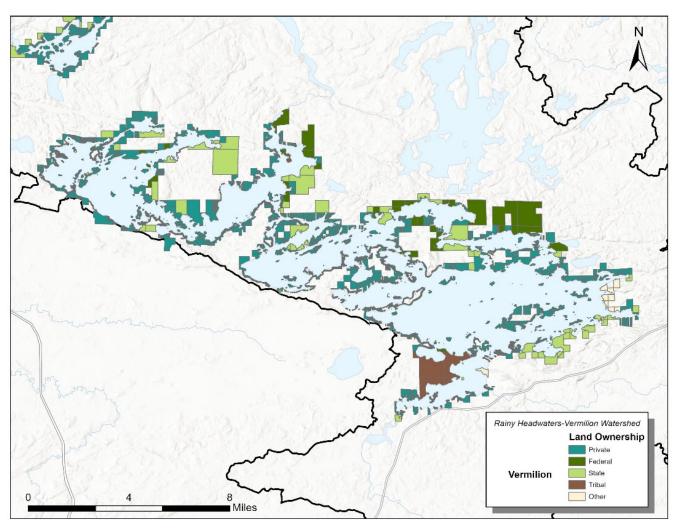


Figure 26. Vermilion lakeshore land ownership.

Appendix E. Source Water Protection Areas



Drinking Water

Drinking water is important in any watershed in Minnesota. The majority of Minnesotans (75%) rely on groundwater for their drinking water source, and whether the source is a public or private well, that groundwater quality can be highly impacted by nearby surface water features. The remaining 25% of Minnesotans rely on surface water, primarily from the 23 city-owned and operated community public water suppliers active throughout the state. These surface water-using communities are highly dependent on the health of the watersheds in which they are located. Therefore, protection of drinking water should be a high priority for all watersheds in Minnesota.

The Rainy-Headwaters Vermilion (RH-V) Watershed contributes to one downstream community public water supply—International Falls—and five noncommunity public water supplies that use surface water or groundwater under the direct influence of surface water (GWUDI) as a source for drinking water. The city of International Falls, while not in the watershed, relies on the Rainy River for their drinking water and likewise benefits from restoration and protection of surface water in the watershed. The RH-V Watershed is a major tributary to the Rainy River.

Many of the implementation activities conducted by the MPCA, SWCDs, logging and mining industries, private landowners, and local entities can help address surface water quality. The main issues for public water suppliers in this watershed include:

- Naturally-generated elevated organic carbon concentrations in many waterbodies. These elevated concentrations, when combined with drinking water disinfection via chlorination, lead to disinfection byproduct formation.
- Some waterbodies have elevated nutrient concentrations.
- Algal blooms have impacted Lake Kabetogama. These blooms can contain harmful
 cyanobacteria species that create cyanotoxins that can lead to illness in humans and
 animals when water containing those toxins is consumed. Blooms generally occur when
 higher nutrient concentrations are available in a clear, stagnant or slow-moving water
 column.

Noncommunity Public Water Supplies

The noncommunity public water supplies in the watershed rely on surface water from the many lakes and rivers present in the watershed for drinking water. Noncommunity public water supplies include bars, restaurants, camps, and resorts that serve customers for shorter periods of time. The following waterbodies either serve as drinking water sources or appear to contribute flow to nearby drinking water wells:

- Big Lake
- Burntside Lake
- Crane Lake
- Farm Lake
- Fenske Lake
- Gunflint Lake
- Johnson Lake
- Kabustasa (and/or Echo) Lake
- Kawishiwi River
- Lake Kabetogama
- Mitchell Lake
- Moose Lake
- Pelican Lake
- Sea Gull Lake
- Sea Gull River
- Shagawa Lake
- Snowbank Lake
- Lake Vermilion
- White Iron Lake

Community Public Water Supplies

The city of Ely relies on water from Burntside Lake for their drinking water, and is therefore dependent on the ongoing restoration and protection of the watershed to supply clean and drinkable water to their citizens. The city of International Falls, while not in the watershed, relies on the Rainy River for their drinking water and likewise benefits from restoration and protection of surface water in the Rainy Headwaters watershed.

The city of International Falls, while not in the watershed, relies on the Rainy River for their drinking water and likewise benefits from restoration and protection of surface water in the RH-V watershed.

The figures below highlight the Source Water Assessment areas for Ely and International Falls. The areas were delineated using the following criteria:

- The Inner Emergency Response Area is defined as the area in which the public water supply utility would have little or no time to respond to a direct discharge of contamination, other than to close the intake. The area closest to the intake was designed to help the public water supplier address contaminant releases which present an immediate (acute) health concern to water users. The geographic area is defined by the amount of notification time the PWS would need to close the surface intake and a "buffer time" to accommodate unanticipated delays in notification and shut down. Three different sets of criteria were developed and used to delineate an ERA for different types of surface water bodies including: 1) rivers and streams, 2) lakes, and 3) mine pits. Information about the intake, water supply treatment system, water storage capacity, and treatment methods were also considered.
- The Outer Source Water Management Area is defined as the area where the impacts to drinking
 water from point and nonpoint sources of contamination can be minimized by preventive
 management. This area was delineated to protect water users from long-term (chronic) health
 effects related to low levels of chemical contamination or the periodic presence of contaminants
 at low levels in the surface water used by the PWS.

Figure 1 shows the city of Ely and the surface runoff and watershed area that contributes to the city's drinking water intake. Each of the streams and lakes inside the two Source Water Assessment areas are important places to focus on when planning implementation and restoration activities.

Figure 2 shows the city of International Falls and the surface runoff and watershed area that contributes to the city's drinking water intake. Each of the streams and lakes inside the two Source Water Assessment areas are important places to focus on when planning implementation and restoration activities.

Both Source Water Assessments will be updated using new guidance and definitions by 2025. The current documents, which will be replaced by amended Assessments as they are completed, are available at the MDH Source Water Assessment webpage:

https://www.health.state.mn.us/communities/environment/water/swp/swa.html.

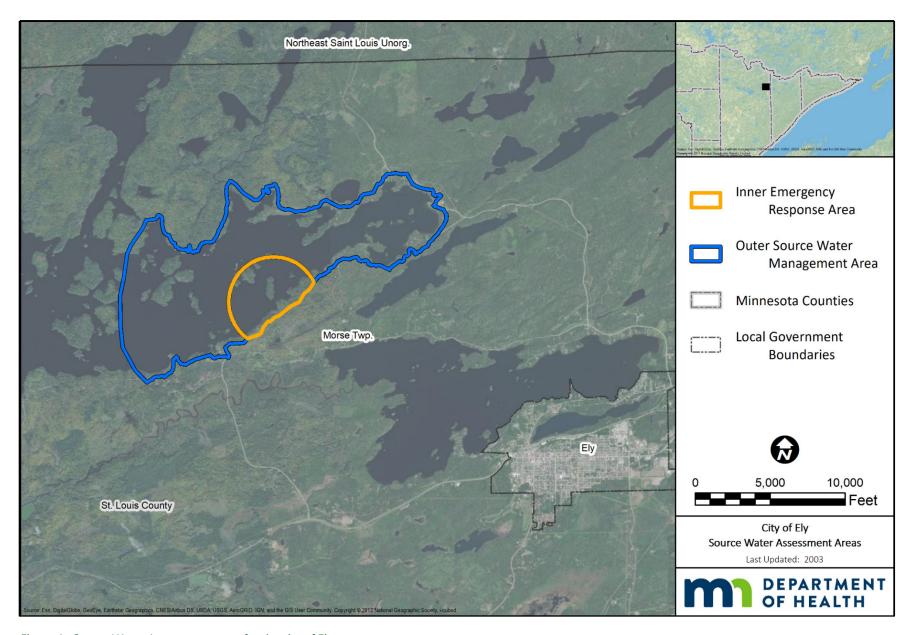


Figure 1. Source Water Assessment areas for the city of Ely.

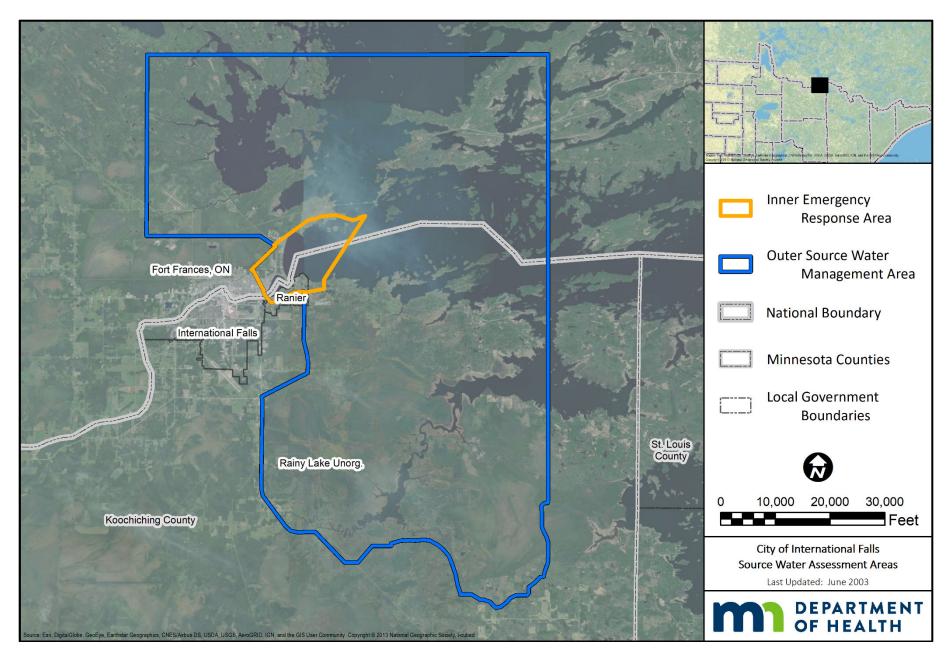


Figure 2. Source Water Assessment areas for the city of International Falls.





Main points:

- Invasive species can introduce diseases and parasites, which alter nutrient cycling within lakes (see above for how that impacts water quality). Altering the nutrient cycles in aquatic ecosystems by altering where nutrients occur within lakes, and can trigger algal blooms (Heller).
- Invasive species can lower the water table, as some invasive species consume more water than others on shorelines. This can even dry up streams. Alternatively, some invasive species can cause flooding on the other extreme (Heller).
- Invasive species can destabilize streambanks and increase erosion on streambanks. This can increase stream temperature, which can destroy habitats for native fish (Heller).
- Destabilizing streambanks also increases flow volumes and nutrient loading into streams, leading to downstream water quality concerns such as algal blooms (EPA).
- Terrestrial invasive species can cause low dissolved oxygen levels, as it can become depleted when these invasive species have large mats of vegetation (Mayfield)

Sources:

Effects of Invasive Species on Water Quality in Freshwater Ecosystems by Laura Heller '20 | Soka University of America

<u>Invasive Non-Native Species | US EPA</u>

https://www.stcroix360.com/wp-content/uploads/2019/01/An-Assessment-of-Invasive-Buckthorn-and-Water-Quality.pdf

https://www.ser.org/news/567622/SER-Webinar-Invasive-Japanese-knotweed-as-a-catalyst-for-streambank-erosion.htm

https://www.sciencedaily.com/releases/2013/05/130501145153.htm

Appendix G. Deep Questions



Near the end of the planning process, a set of future-focused questions about plan implementation and plan goals were developed. These questions were then answered by the Policy and Advisory committees. Their answers are tabulated below.

Policy Committee Questions

What does success look like in 10 years?

- Many septic systems replaced and wells sealed
- Improved understanding how to keep waters healthy
- Collaboration and shared values including with tribes
- Public recognition of 1W1P
- Measurable progress in each area
- Citizen/Landowner buy-in
- Participation from tribes
- Implementation of plan
- Good plan implementation
- Projects completed
- Continued engagement with public, agencies, and stakeholders
- Data that measures change
- Looking forward and not reworking too many mistakes
- Project success stores to be shared

If you could choose just one thing for this plan to be considered a success, what would it be?

- Collaboration and focus on the long term goals.
- Watershed will be healthier than it is now ~ 50 years.
- We live here and have visitors here share and maintain.
- Voluntary implementation of programs we are modeling and heightened awareness on how development affects the watershed.
- Modeling for others- other people using our methods and process.
- Positive tribal relations.
- Broad implementation by the public.
- Vested, engaged, aware of the choices that we make, intentional of what we do.
- Spread the word, make sure people know what 1W1P is and how to incorporate it in their lives and explain to others.
- Publicity and public engagement.
- Climate consideration.

- Collaboration and communication.
- Attention to underserved communities. Outreach programs to ensure inclusion.
- Stakeholder outreach to get quality attendance at upcoming meetings.
- Inclusion of tribes at every stage.
- Outreach for all to engage public.
- Plan communication to all stakeholders.
- Ensure stakeholders are engaged and giving input.
- Engagement of stakeholders.
- Staying the course with top priorities.

Advisory Committee Questions

What do you see as your agency's role in implementation? How can we support each other in taking the next steps?

- MDH: Technical assistance via staff planers and hydrologists. Financial assistance through Clean Water Fund Drinking Water Sub-grants.
- VNP: Continue to collaborate with the St. Louis and Koochiching Counties on AIS prevention and will contribute all their water quality monitoring data.
- Cook SWCD: Implementation of activities in this plan.
- USFS: Superior National Forest partnering on projects, including potential funding assistance, and internal implementation that meets plan goals; landscape level management as well. AIS control and water quality monitoring.

Who is missing from the table? How can we bring them in?

- Resorts and outfitters
- Bois Forte Band of Chippewa: keep communication open and include them in updates, meeting notices, etc.
- A presentation from Paul Radomski (MN DNR) on how to best protect water quality in lakes
- Specialty groups: trail groups, biking and hiking, sleds, B2B

What does success look like in 10 years?

- The City of International Falls, while not in the watershed, relies on the Rainy River for their drinking water and likewise benefits from protection of surface waters.
- Improved water quality in at least some of the impaired or at-risk waters, and no degradation in the others.
- Completion of a Surface Water Intake Protection Plan (SWIPP) for the city of Ely.
- Keeping track of progress toward the measurable goals that have been identified.
- Informed landowners that are understanding benefits like buffers.
- Increased agency coordination for planning and implementation. Seamless would be fabulous, smoother would be acceptable.
- Strengthened partnerships achieving plan activities and goals.

Appendix H. Memorandum of Agreement

RAINY RIVER – HEADWATERS/ VERMILION RIVER WATERSHED PLANNING FOR ONE WATERSHED ONE PLAN MEMORANDUM OF AGREEMENT

This AGREEMENT is made and entered into by and between the following PARTIES:

The Minnesota Counties of Cook, Lake and St. Louis, by and through their respective County Board of Commissioners, and the following Soil and Water Conservation Districts: Cook County Soil and Water Conservation District, Lake County Soil & Water Conservation District, and North St. Louis Soil and Water Conservation District, by and through their respective Soil and Water Conservation District Board of Supervisors, 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 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 Rainy River – Headwaters/Vermilion River Watershed (See Attachment A-map) 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 Chapters 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 (1W1P)* in the Rainy River — Headwaters/Vermilion River Watershed.

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 Rainy River – Headwaters/ Vermilion River Watershed. The purpose of this Agreement is to collectively develop and adopt, as local government units, a coordinated watershed management plan (the

- Plan") for implementation consistent with the Board of Water and Soil Resources Operating Procedures for One Watershed, One Plan.
- 2. **Term:** This Agreement is effective upon signature of the Parties and will remain in effect until adoption of the Plan by all parties OR, the end date of the potential Board of Water and Soil Resources 1W1P Planning Grant Agreement, unless cancelled 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. The additional 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. **Withdraw 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 resolution by that party. Notice must be made at least 30 days in advance of leaving the Agreement.

5. General Provisions:

- a. **Compliance with Law/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 provision of the Municipal Tort Clam 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." For the purpose of liability, as set forth in Minnesota Statutes §471.59, subd. 1a(a), it is the intent that the Parties are considered a single governmental unit and the total liability for the participating governmental units and the joint board, if established, shall not exceed the limits on governmental liability for a single governmental unit and that this Agreement does not create any liability or exposure of one party for the acts or omissions of any other party.
- c. Record 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 this 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 fiscal agent for continued retention. Each Party may also request and receive, at no cost, copies of all the records.
- 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.

f. **Amendment of Memorandum of Agreement:** This MOA may be amended by approval of the amendment(s) by the Policy Committee with final approval by the each above listed County Boards of Commissioners and SWCD Boards of Supervisors.

6. Administration:

- a. **Establishment of Policy Committee for Approval of the Plan:** The Parties agree to designate one representative and alternate(s), who must be an elected or appointed member of the governing board, to a Policy Committee for the development of the watershed-based 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 Party, through its representative, shall have one (1) vote.
 - ii. A Party's alternative will serve on the Policy Committee as needed in the absence of the designated representative.
 - iii. The Policy Committee will establish bylaws to describe the functions and operations of the committee and any other committees created in furtherance of this Agreement.

b. Establishment of Advisory Committee for Development of the Plan:

- i. Each Party may appoint no more than two technical representative(s) to an Advisory Committee for development of the Plan.
- ii. The appointed technical representatives of the Advisory Committee, in consultation with each other, may recommend additional stakeholders to serve on the Advisory Committee. These stakeholders need to be approved by the Policy Committee.
- iii. 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.
- iv. Members of the Advisory Committee may be a current board member of any of the Parties.
- c. **Submittal of the Plan**: The Advisory Committee will recommend the plan to the Policy Committee. 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 The Policy Committee will recommend the approved plan to the Parties of this Agreement.
 - 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 to the Board of Water and Soil Resources for its review and approval.
- d. **Adoption of Plan**: The Parties agree to adopt the plan within 120 days of receiving notice of state approval, and provide notice of plan adoption pursuant to Minnesota Statutes 103B and 103D.
- 7. **Fiscal Agent:** North St. Louis Soil and Water Conservation District will act as the fiscal agent for the purposes of this Agreement and agrees to:

- Accept all responsibility associated with the implementation of the Board of Water and Soil Resources grant agreement for developing a watershed-based plan, if awarded.
- b. Perform financial transactions as part of the 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 its records retention schedule and Minnesota Statutes 138.17.
- 8. **Grant Administration:** North St. Louis Soil and Water Conservation District 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 Board of Water and Soil Resources grant agreement for developing a watershed-based plan, including being the primary Board of Water and Soil Resources 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 conditions of the Board of Water and Soil Resources grant agreement.
 - c. Enter into consulting or services contracts with third parties as necessary to achieve the goals of this Agreement, as approved by the Policy Committee.
- 9. **Secretary:** North St. Louis Soil and Water Conservation District will act as the secretary for the purposes of this Agreement and agrees to provide the following services:
 - a. Coordinate or delegate the coordination and facilitation of Policy Committee meetings, including establishing date, location, time and any necessary accommodations.
 - Coordinate or delegate the coordination and facilitation of Advisory Committee meetings including establishing date, location, time, and any necessary accommodations.
 - c. Development of bid specifications and management of contracts for any consulting firms the selected by the Policy Committee.
 - d. Assistance with data compilation, meeting facilitation, and plan writing.
- 10. **Multiple Counterparts:** The Parties may sign multiple counterparts of this Agreement. Each signed counterpart shall be deemed an original, but all of them together represent the same Agreement.
- 11. **Authorized Representatives:** The following persons will be the primary contacts for all matters concerning this Agreement:

Signature Page For each county/SWCD

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

LAKE COUNTY		
APPROVED:		
BY: MMM M CANAL COLOR OF COLOR		6-8-71
RICHSVE, AF TO MTY COMMISSIONER	d. Acting Cha	Date
Attest: Sauce Bruchana	- Clerk of the	Board 8,2021
LAKE COUNTY SOIL & WATER CONSERVATION	DISTRICT	, 8, 2021
APPROVED:		
BY: LOCAL COUNTY SOIL & WATER CON	VSERVATION DISTRICT BOARD	5/27/21
bood flaus, yake count I soil a water cor	NSERVATION DISTRICT BOARD	CHAIR Plate
COOK COUNTY		
APPROVED:		
BY: David Mills, Board Chair PRINTED NAME, TITLE	8/16/2 Date	
ADD OTHER REQUIRED SIGNATURES		
APPROVED AS TO FORM (use if necessary)		
Molly Hicken	119/21	
PRINTED NAME, COUNTY ATTORNEY	Date .	
COOK COUNTY SOIL & WATER CONSERVATION	N DISRTICT	
APPROVED:DocuSigned by:		
BY: Joan Farnam	5/10/2021	
SIGNATURE A5128050D815465	Date	
Joan Farnam Cook SWCD Board Chair	5/10/2021	
PRINTED NAME TITLE	Date	

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

ST LOUIS COUNTY

APPROVED:
BY: Mallant popular 1/14/22
St. Louis County Planning Director Date
Printed Name: Matthew E. Johnson
BY: Vacce Willoward 1-25-12 St. Louis County Board Chair Date
Printed Name: PAUL MclowAca
BY: Nancy Mulses / 1/25/22 St. Louis County Auditor Date
Printed Name: Nancy Nilsen
APPROVED AS TO FORM (use if necessary)
BY: 1 2-4-22
St. Louis County Attorney Date
Printed Name: Thomas Staylar 2022-15206
Signature Page For North St. Louis Soil & Water Conservation District
IN TESTIMONY WHEREOF the parties have duly executed this agreement by their duly authorized office
North St. Louis Soil & Water Conservation District
APPROVED:
BY: Margaret Pearson, Board Chair 9/8/2021 Date

Appendix I. References



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