

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2021 / ML 2020 Request for Funding

HA 06



Date: May 30, 2019

Program or Project Title: Targeted RIM Easement Program to the Individual Parcel: Pine and Leech Watersheds Phase 1

Funds Requested: \$4,853,000

Manager's Name: Melissa Barrick

Title: District Manager

Organization: Crow Wing Soil and Water Conservation District

Address: 322 Laurel St Ste 22

City: Brainerd, MN 56401

Office Number: 2188286197

Email: melissa.barrick@crowwingswcd.org

Website: <https://crowwingswcd.org/>

County Locations: Not Listed

Eco regions in which work will take place:

- Northern Forest

Activity types:

- Protect in Easement

Priority resources addressed by activity:

- Wetlands
- Forest
- Habitat

Abstract:

We will partner with the BWSR RIM Easement Program, Hubbard, Crow Wing, and Cass Counties and Soil and Water Conservation Districts (SWCD) to protect 2,280 acres of high-quality private forest, wetlands, and shoreline in the Northern Forest Ecological Section. This project will be successful because of the sophisticated RAQ scoring, integrative parcel selection, proven outreach tactics, SWCD landowner relationships, and BWSR and SWCD RIM partnership. Development trends pose a serious threat to Cisco, Golden-winged Warbler, Northern Long-eared Bat, Blanding's Turtles, and over 107 unique, rare, endangered, and threaten species that live in uplands, lowlands, and mature forests of these counties.

Design and scope of work:

This project will use Reinvest in Minnesota (RIM) easements on targeted private forest, wetlands, and shoreline within the Leech Lake and Pine River Major Watersheds (hydrologic unit codes 07010102 and 7010105). These watersheds contain over 1,250 lakes, which cover 354 square miles. There are 88 lakes with High to Highest Outstanding Biological Significance (Minnesota Department of Natural Resources (MN DNR)), 92 wild rice lakes, and 29 cisco lakes. The Leech Lake and Pine River Landscape Stewardship Plans (LSP) calculated property values surrounding these high-quality waterbodies are worth over 10 billion dollars. The Pine River and Leech Watersheds have some of the highest quality lakes and fisheries within the lower 48 States. The tourism industries within Hubbard, Cass, and Crow Wing Counties generates over \$393 million in sales per year (Explore Minnesota 2017). The private lands within these watersheds deserve protection strategies to ensure that the habitat stay intact and to protect the local tourism economy and tax base of Leech Lake and Pine River Watersheds. In 2016, the MN DNR, Board of Water and Soil Resources, Forest Resource Council, and Technical Service Area 8 developed a protection framework based on MN DNR Fisheries Cisco research. The MN DNR identified a strong correlation between lake water quality and habitat that sustains fish populations and maintaining 75 percent forest cover in the watershed. The LSPs determined existing protection levels in each of the 144 minor watersheds and the number of acres needed to achieve the 75 percent protection goal. The Leech and Pine River One Watershed One Plans (1W1P) adopted the 75 percent protection goal and pinpointed private woodlands as important to preserve. The 1W1Ps identified issues, concerns, and developed a targeted and measurable 10-year implementation plan. Both plans recognized conservation easements as an important tool to protect priority groundwater, habitat, and surface water. Mitch Brinks, a mapping specialist, developed a methodology for targeting specific

large-tract private forested parcels. The methodology is called RAQ (Riparian, Adjacent, Quality), each private forested parcel is scored on a 0-10 scale based on the parcel proximity to water ("Riparian") or other protected lands ("Adjacency") and various local defined features ("Quality"), such as wild rice, cisco, and biodiversity (terrestrial or aquatic). The greatest risk for development and fragmentation is riparian private forest lands. The RAQ tool prioritizes private parcels adjacent to state or federal lands (protected lands in the model). This will create extensive long-lasting habitat complexes. The LSPs calculated private ownership as 49 percent and 28 percent (Pine River and Leech Watersheds). Over 320,000 acres of high-quality private forest (over 20 acres in size) has no protection status within these watersheds. The LSPs and 1W1Ps selected Headwaters, Whitefish lake, Lower Pine, Little Pine River, Woman Lake, Steamboat River, and Kabekona River (7 of 12 minor Watersheds) for habitat protection. Staff will utilize RAQ scores to filter 320,000 acres to 2,280 acres within the minor watersheds. The 30-year-old BWSR RIM program has completed 7,000 easements. The project will implement 38 RIM easements.

Which sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this project:

- H2 Protect critical shoreland of streams and lakes
- H7 Keep water on the landscape

Which other plans are addressed in this proposal:

- Minnesota Forest Resource Council Landscape Plans
- National Fish Habitat Action Plan

Describe how your program will advance the indicators identified in the plans selected:

The MN DNR Cisco research indicates that near shore and upland land protection is crucial to long term fish and aquatic habitats. This project will directly implement the National Fish Habitat Action Plan by enrolling 2,280 acres into permanent conservation easements. This project meets both Goal 1 and 2 which are:

- Protect and maintain intact and healthy aquatic systems.
- Prevent further degradation of fish habitats that have been adversely affected.

Furthermore, this project compliments the Minnesota Forest Resource Council North Central Landscape Plan. The project will address Ecological Resource Initiatives Goal 2. Maintain or increase the area of forest land, Goal 3. Retain contiguous blocks of forest land, 4. Protect and prevent the loss of sensitive and undeveloped lake and river shorelines.

Which LSOHC section priorities are addressed in this proposal:

Northern Forest:

- Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas

Describe how your program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife as indicated in the LSOHC priorities:

This project will directly implement priority actions for the Northern Forest Section which include:

- Forestlands are protected from development and fragmentation
- Increased availability and improved condition of riparian forest and other habitat corridors
- Lakes and wetlands support health fish populations
- Lakes and streams with protected shoreland and forestland will produce quality warm and cold-water aquatic systems.
- Protect shallow and critical wild rice habitat

Describe how the proposal uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

This project will utilize LSPs and 1W1P minor watersheds science-based targeting to expand important habitat corridors and complexes on private lands. The RAQ Tool will score individual private, forested parcels in the following manner: Riparian is whether the parcels is next to a priority water resource (1-3 points), Adjacency is whether it is next to existing state, county, or federal land (1-3 points), and Quality is the locally determined value of the land (1-3 Points), which can include a number of criteria, such as trout/cisco lakes, wild rice, old growth forests, MN DNR phosphorus sensitivity, rare species, biodiversity, and groundwater recharge and sensitive areas. The LSPs provided: 62,000 RAQ scores for all private parcels, RAQ score maps, databases, landowner outreach tables, percent of protected land, rare and unique species, species of concern, cisco and wild rice, and easement acre goal for each subwatershed. This data targets RIM easements to the parcel level and this allows us to hand select the best parcels for habitat value and prevent future fragmentation in the entire watershed. This methodology is proven through Environmental Natural Resource Trust Fund and Clean

Water Fund RIM easement program. The local government units will utilize LSPs to complete the following items:

Step 1: Filter outreach database to find parcel RAQ scores 7-9 within a prioritized HUC 10 subwatershed that are adjacent to selected high quality lakes.

Step 2: Review selected parcels and scores.

Step 2: Develop individual maps for each landowner with the specific easement boundary and price associated with the easement.

Step 3: Mail information on RIM easement program and map to selected landowners.

Step 5: Host landowner meeting and invite partnering state agencies and landowners to attend the event.

Step 4: Rank and score RIM applications with internal scoring sheet.

Step 5: Host interagency committee meeting to review all applications.

Step 6: Begin RIM easement application process with BWSR.

The Crow Wing SWCD has utilized this mythology and has protected over 12 miles of shoreline and 1,245 acres of habitat. The BWSR RIM is one of the most efficient and effective Minnesota easement programs.

How does the proposal address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species:

The MN DNR rare species guide indicated Leech and Pine River Watersheds contain over 108 rare species of fish, invertebrates, plants, reptiles, and mammals. These species depend on the fringe wetlands, forested corridors, high quality lakes, and shoreland vegetative habitat.

Blanding's Turtles need both upland and wetlands to complete their life cycle. This habitat includes calm shallow water bodies (type 1-3 wetlands) which are important amphibian and invertebrate breeding grounds food sources for the Blanding's Turtle. The turtles build their nest on undeveloped land in open grassy or brushy sand.

Wild rice provides some of the most important habitat for Minnesota's migrating and breeding waterfowl. More than 17 species of Species of Greatest Conservation Need (SGCN) use wild rice areas as habitat for breeding, migration, and/or foraging. They include: Common Loon, Trumpeter Swan, Bald Eagle, American Bittern, Least Bittern, Red-necked Grebe, Sora Rail, Virginia Rail, Yellow Rail, Black Tern, Rusty Blackbird, Sedge Wren, Lesser Scaup, Northern Pintail, and American Black Duck. Wild Rice grows in shallow lakes, rivers, and shallow bays of deeper lakes.

Recently, the Northern Long-eared Bat was added to federal threatened species list because of the lack of roosts. The MN DNR and US Fish and Wildlife Service identified over 11 townships in Cass, Crow Wing, and Hubbard Counties that contain mature roost trees for the Northern Long-eared Bat. Approximately, 230 mature roost trees were identified in Minnesota. An estimated 30 percent of the trees were identified in Hubbard, Cass and Crow Wing Counties.

The MN DNR identified the Golden-winged Warbler as a SGCN due to a population that has declined by 60 percent across the United States and Canada. Minnesota's critical upland, lowland, and mature forest habitats support over 47 percent of the species 'global population'. This bird is a Minnesota icon and symbol of private land stewardship. These unprotected private forest and upland habitats are a mecca for all these species. This project will protect these crucial habitats.

Identify indicator species and associated quantities this habitat will typically support:

This project will permanently protect following indicator species:

Cisco (*Coregonus artedii*)

In 2010, Peter Jacobson, MNDNR, published research on cisco lakes in Minnesota and prioritized 29 tier 1 and 2 lakes in the Pine River and Leech Watersheds as high priority lakes to protect. The cisco are essential food source to walleyes, small and large mouth bass, and loons. These fish are very sensitive to pollutants and thermal pollution. The MNDNR research indicated the land protection is key to ciscoes surviving the predicted climate impacts.

Golden-winged Warblers (*Vermivora Chrysoptera*)

Often associated with shrubland habitat and regenerating forests, more current research indicates a variety of forest habitats are required by Golden-winged Warblers (a matrix of shrubby wetlands and uplands, regenerating forests, and mature forests). While territories vary in size, an average of 4 pairs for every 10 hectares, may be translated to roughly 6 pairs for every 40 acres.

Blanding's turtle (*Emydoidea blandingii*)

This species also requires upland habitat, relying on open sandy areas covered in grasses or shrubs for nesting. Due to their high mobility, Blanding's turtles occupy large areas (12.8-38.4 hectares).

Northern Long-eared Bat (*Myotis septentrionalis*)

They prefer to roost in tall trees with a dynamic forest structure including old growth and some young trees. The summer home range can vary from 50-150 acres and increase to 289 acres when the bats are pregnant. The northern long-eared bat chooses day roosts in

tall trees and snags. Individual bats switch summer roosts every two days.

Outcomes:

Programs in the northern forest region:

- Forestlands are protected from development and fragmentation *This project will measure the number acres of forestland, wetlands, and habitat enrolled into RIM easements. We also will measure the number of miles of shoreline protected and the individual minor watershed 1W1P plan percent protection goal. The other evaluation will include scoring sheet for each conservation easement, public meeting evaluation forms, and anecdotal information from landowners on species on their land, habitat value, and might also include cultural resource protection. This project will employ lessons learned from past easement program which include: excellent communication, direct and correct landowner responsibility information, maps, standard payment rate, direct mailing, and partnering meeting.*

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended:

Once a RIM easement is acquired, BWSR is responsible for monitoring and enforcement into perpetuity. The BWSR partners with local SWCDs to carry-out oversight, monitoring and inspection of its conservation easements. Easements are inspected for the first five consecutive years beginning in the year after the easement is recorded. Thereafter, on-site inspections are performed every three years and compliance checks are performed in the other two years. SWCDs report to BWSR on each site inspection conducted and partners' staff document findings. A non-compliance procedure is implemented when potential violations or problems are identified. Perpetual monitoring and enforcement costs have been calculated at \$6,500 per easement. This value is based on using local SWCD staff for monitoring and landowner relations and existing enforcement authorities. The amount listed for Easement Stewardship cover costs of the SWCD regular monitoring, BWSR oversight, and any enforcement necessary.

Explain the things you will do in the future to maintain project outcomes:

Year	Source of Funds	Step 1	Step 2	Step 3
2023 beyond	RIM Stewardship Fees	Monitoring	Enforcement as necessary	

What is the degree of timing/opportunistic urgency and why it is necessary to spend public money for this work as soon as possible:

The Highway 371 expansion (Nisswa to Jenkins) increased travel capacity and decreased travel time by 20 minutes. Now, 3.6 million people (Twin Cities and Fargo) are two hours or less from lake country. According to the Minnesota State Demographic Center, from 1990-2017, on average Cass, Hubbard, and Crow Wing Counties populations increased by 140 percent (an average increase of 500 people per year). Family owned cabins are transforming into lake homes. The cabin foot print increased by 479 percent (700 to 3,350 square feet, WI DNR Study). Vegetative buffers have been converted to manicured lawns re-contoured towards the lake. These changes have big impacts on bird nesting, fish spawning, frogs, rare and endangered species, forest health, and water quality. The cost will increase and opportunities will be less if we wait to protect these key habitats. This program seeks to protect these sensitive areas before they are lost.

Does this program include leverage in funds:

No

Relationship to other funds:

- Not Listed

Describe the relationship of the funds:

Not Listed

Per MS 97A.056, Subd. 24, Any state agency or organization requesting a direct appropriation from the OHF must inform the LSOHC at the time of the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose:

This funding request is not supplanting existing funding or a substitution for any previous funding.

Describe the source and amount of non-OHF money spent for this work in the past:

Activity Details

Requirements:

If funded, this proposal will meet all applicable criteria set forth in MS 97A.056 - **Yes**

Is the land you plan to acquire (easement) free of any other permanent protection - **Yes**

Do you anticipate federal funds as a match for this program - **No**

Land Use:

Will there be planting of corn or any crop on OHF land purchased or restored in this program - **No**

Will the eased land be open for public use - **No**

Are there currently trails or roads on any of the acquisitions on the parcel list - **Yes**

Describe the types of trails or roads and the allowable uses:

This appropriation is funding a program that will have a parcel list identified at a later time. Roads or trails are typically excluded from the easement area if they serve no beneficial purpose to easement maintenance, monitoring, or enforcement. Existing trails and roads are identified during the easement acquisition process. Some roads and trails, such as agricultural field accesses, are allowed to remain.

Will the trails or roads remain and uses continue to be allowed after OHF acquisition - **Yes**

How will maintenance and monitoring be accomplished:

The easements secured under this project will be managed as part of the BWSR RIM Reserve Program that has over 7,000 easements currently in place. Easements are monitored annually for each of the first 5 years and then every 3rd year after that. BWSR, in cooperation with SWCD, implement a stewardship process to track, monitor quality and assure compliance with easement terms. Under the terms of the RIM Easement Program, landowners are required to maintain compliance with the easement. A conservation plan is developed with the landowner and maintained as part of each easement. Basic easement compliance costs are borne by the landowner, periodic enhancements may be cost shared from a variety of sources.

Will new trails or roads be developed or improved as a result of the OHF acquisition - **Yes**

Describe the types of trails or roads and the allowable uses:

Though uncommon, there could be a potential for new minimal use trails, if they contribute to easement maintenance or benefit the easement site (e.g. firebreaks, berm maintenance, etc). Unauthorized trails identified during the monitoring process are in violation of the easement.

How will maintenance and monitoring be accomplished:

The easements secured under this project will be managed as part of the BWSR RIM Reserve Program that has over 7,000 easements currently in place. Easements are monitored annually for each of the first 5 years and then every 3rd year after that. BWSR, in cooperation with SWCD, implement a stewardship process to track, monitor quality and assure compliance with easement terms. Under the terms of the RIM Easement Program, landowners are required to maintain compliance with the easement. A conservation plan is developed with the landowner and maintained as part of each easement. Basic easement compliance costs are borne by the landowner, periodic enhancements may be cost shared from a variety of sources.

Accomplishment Timeline

Activity	Approximate Date Completed
Prioritize RAQ scores 7-9 within a specific HUC 10 subwatershed that are adjacent to selected high quality lakes.	August 2021
Outreach and Mailing for specific parcels	September 2021
Rank Score Applications/Interagency Team Meetings	January-March 2022
Work with BWSR and Landowner to complete RIM easements	January 2022-2024
Completed required reporting for LSOHC	Semiannual basis

Budget Spreadsheet

Total Amount of Request: \$4,853,000

Budget and Cash Leverage

BudgetName	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$510,300	\$0		\$510,300
Contracts	\$79,800	\$0		\$79,800
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$3,941,600	\$0		\$3,941,600
Easement Stewardship	\$247,000	\$0		\$247,000
Travel	\$13,100	\$0		\$13,100
Professional Services	\$0	\$0		\$0
Direct Support Services	\$38,200	\$0		\$38,200
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$10,000	\$0		\$10,000
Supplies/Materials	\$13,000	\$0		\$13,000
DNR IDP	\$0	\$0		\$0
Total	\$4,853,000	\$0		\$4,853,000

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Administrative	0.10	4.00	\$40,000	\$0		\$40,000
Outreach to Landowners	0.65	3.00	\$200,000	\$0		\$200,000
Program Management	0.35	4.00	\$168,000	\$0		\$168,000
Easement Processing	0.49	3.00	\$102,300	\$0		\$102,300
Total	1.59	14.00	\$510,300	\$0		\$510,300

Budget and Cash Leverage by Partnership

BudgetName	Partnership	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	SWCD	\$240,000	\$0		\$240,000
Contracts	SWCD	\$0	\$0		\$0
Fee Acquisition w/ PILT	SWCD	\$0	\$0		\$0
Fee Acquisition w/o PILT	SWCD	\$0	\$0		\$0
Easement Acquisition	SWCD	\$0	\$0		\$0
Easement Stewardship	SWCD	\$0	\$0		\$0
Travel	SWCD	\$5,000	\$0		\$5,000
Professional Services	SWCD	\$0	\$0		\$0
Direct Support Services	SWCD	\$0	\$0		\$0
DNR Land Acquisition Costs	SWCD	\$0	\$0		\$0
Capital Equipment	SWCD	\$0	\$0		\$0
Other Equipment/Tools	SWCD	\$0	\$0		\$0
Supplies/Materials	SWCD	\$8,000	\$0		\$8,000
DNR IDP	SWCD	\$0	\$0		\$0
Total	-	\$253,000	\$0		\$253,000

Personnel - SWCD

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Administrative	0.10	4.00	\$40,000	\$0		\$40,000
Outreach to Landowners	0.65	3.00	\$200,000	\$0		\$200,000
Total	0.75	7.00	\$240,000	\$0		\$240,000

BudgetName	Partnership	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	BWSR	\$270,300	\$0		\$270,300
Contracts	BWSR	\$79,800	\$0		\$79,800

Fee Acquisition w/ PILT	BWSR	\$0	\$0	\$0
Fee Acquisition w/o PILT	BWSR	\$0	\$0	\$0
Easement Acquisition	BWSR	\$3,941,600	\$0	\$3,941,600
Easement Stewardship	BWSR	\$247,000	\$0	\$247,000
Travel	BWSR	\$8,100	\$0	\$8,100
Professional Services	BWSR	\$0	\$0	\$0
Direct Support Services	BWSR	\$38,200	\$0	\$38,200
DNR Land Acquisition Costs	BWSR	\$0	\$0	\$0
Capital Equipment	BWSR	\$0	\$0	\$0
Other Equipment/Tools	BWSR	\$10,000	\$0	\$10,000
Supplies/Materials	BWSR	\$5,000	\$0	\$5,000
DNR IDP	BWSR	\$0	\$0	\$0
Total		\$4,600,000	\$0	\$4,600,000

Personnel - BWSR

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Program Management	0.35	4.00	\$168,000	\$0		\$168,000
Easement Processing	0.49	3.00	\$102,300	\$0		\$102,300
Total	0.84	7.00	\$270,300	\$0		\$270,300

Amount of Request: \$4,853,000
Amount of Leverage: \$0
Leverage as a percent of the Request: 0.00%
DSS + Personnel: \$548,500
As a % of the total request: 11.30%
Easement Stewardship: \$247,000
As a % of the Easement Acquisition: 6.27%

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program:

BWSR calculates direct support services costs that are directly related to and necessary for each request based on the type of work being done.

What is included in the contracts line?

The contract line includes costs covered under the SWCD MIPA, \$2000 for staff time per easement acquisition.

Does the amount in the travel line include equipment/vehicle rental? - No

Explain the amount in the travel line outside of traditional travel costs of mileage, food, and lodging:

The travel line will only be used for traditional travel costs for mileage and food.

Describe and explain leverage source and confirmation of funds:

To date, we do not have any leverage funds. We will continue to seek other source such as Federal US Forest Service Funds and Clean Water Funds to match this project. The SWCD has leverage \$2 million dollars of Clean Water Fund RIM Easement for Source Water Protection.

Does this proposal have the ability to be scalable? - Yes

Tell us how this project would be scaled and how administrative costs are affected, describe the “economy of scale” and how outputs would change with reduced funding, if applicable:

A reduction in funding would reduce number of acres protected, number of completed easements, and the long term easement monitoring cost which is directly related to number easements. Program management costs would be the exception, due to program development and oversight remaining somewhat consistent regardless of appropriation amount.

What is the cost per easement for stewardship and explain how that amount is calculated?

Perpetual monitoring and enforcement costs have been calculated at \$6,500 per easement. This value is based on using local SWCD staff for monitoring and landowner relations and existing enforcement authorities. The amount listed for Easement Stewardship cover costs of the SWCD regular monitoring, BWSR oversight, and any enforcement necessary.

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Protect in Easement	456	0	912	912	2,280
Enhance	0	0	0	0	0
Total	456	0	912	912	2,280

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$970,600	\$0	\$1,941,200	\$1,941,200	\$4,853,000
Enhance	\$0	\$0	\$0	\$0	\$0
Total	\$970,600	\$0	\$1,941,200	\$1,941,200	\$4,853,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	2,280	2,280
Enhance	0	0	0	0	0	0
Total	0	0	0	0	2,280	2,280

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$4,853,000	\$4,853,000
Enhance	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$0	\$4,853,000	\$4,853,000

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0
Protect in Easement	\$2,129	\$0	\$2,129	\$2,129
Enhance	\$0	\$0	\$0	\$0

Table 6. Average Cost per Acre by Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	\$0	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$2,129
Enhance	\$0	\$0	\$0	\$0	\$0

Automatic system calculation / not entered by managers

Target Lake/Stream/River Feet or Miles

10 miles

I have read and understand Section 15 of the Constitution of the State of Minnesota, Minnesota Statute 97A.056, and the Call for Funding Request. I certify I am authorized to submit this proposal and to the best of my knowledge the information provided is true and accurate.

Parcel List

Explain the process used to select, rank and prioritize the parcels:

The Pine RIM Easement Source Water Protection sheet is attached as an example of the scoring sheet that will be used to rank RIM Easements. Once the grant is awarded we will develop a scoring sheet for both the Leech and Pine River Watersheds.

Section 1 - Restore / Enhance Parcel List

No parcels with an activity type restore or enhance.

Section 2 - Protect Parcel List

No parcels with an activity type protect.

Section 2a - Protect Parcel with Bldgs

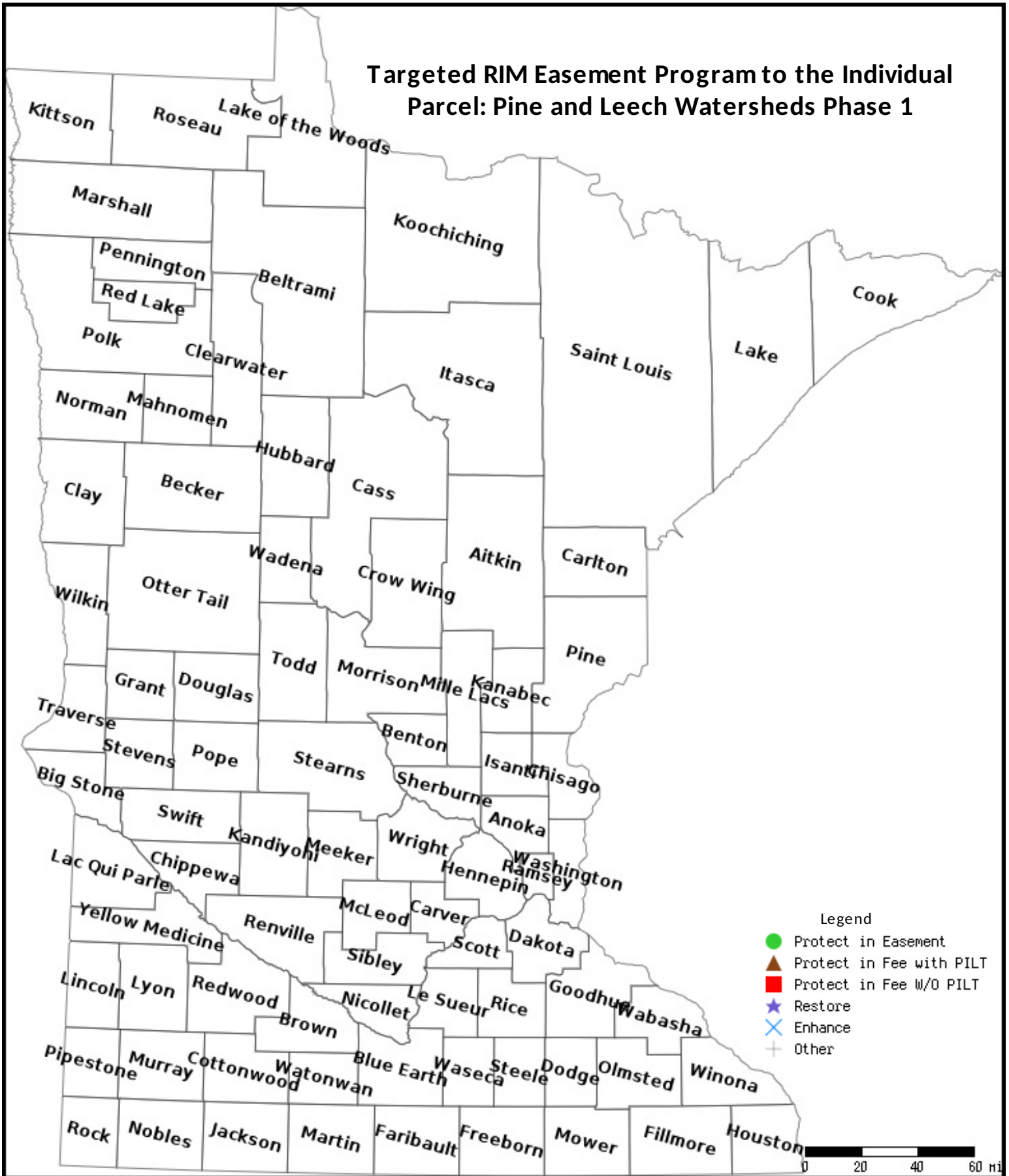
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map

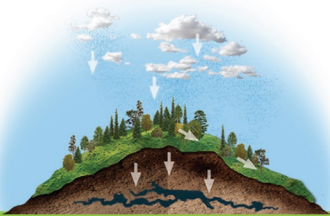
Targeted RIM Easement Program to the Individual Parcel: Pine and Leech Watersheds Phase 1



Data Generated From Parcel List

Protecting water, by protecting land

Goal: Complete 38 BWSR Rim easements on private lands, protect over 2,280 acres of high quality forest upland habitat, and protect 10 miles of shoreline.



Woodlands are giant water filters

Forests and well vegetated lands serve as a giant natural sponge, filtering and retaining storm water. The root system and vegetative base of woodlands protect both groundwater and surface water.



Land use affects water quality

The "Disturbance" of land has an effect on its ability to slow down and filter storm water runoff. As woodlands are developed or converted to crop or pasture lands the soil loses its ability to retain and filter water.

25%

The tipping point for water quality

Studies show that when more than 25% of the forest within a watershed is converted to other land uses, the water quality, begins to decline. Much of the decline is due to greater amounts of phosphorus entering the water.



75%

The protection goal is 75%

Because of water quality decline at 25% land disturbance, the protection goals for a watershed are then 75%. If this land percentage can be maintained, a certain quality of water can usually be reached.

Measure Success:

Protect 75% of the forested land within the minor watershed from land conversion or development.



36% of Minnesota's forests are private, they are 100% essential for clean water!



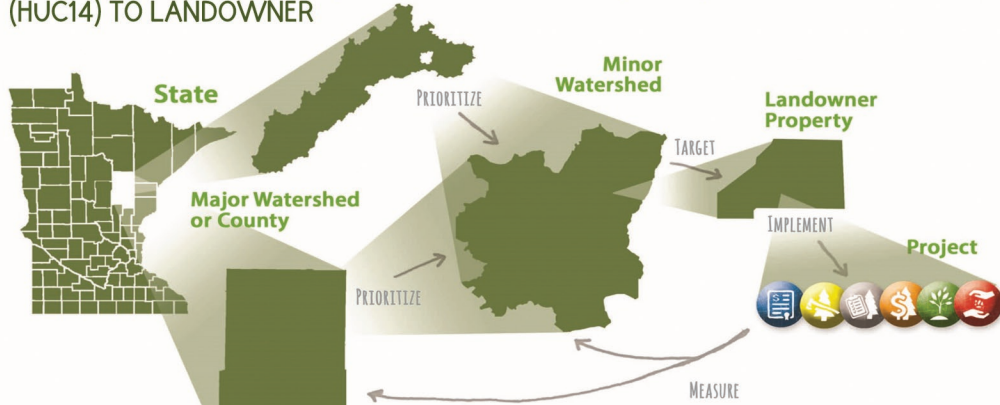
Northern Minnesota is the headwaters for most of the state's clean drinking water!



We need to protect priority lakes and increase permanent protection funding for the iconic symbols of Minnesota's natural heritage... our lakes!

Prioritization and Scoring Process

MAJOR WATERSHED (HUC8) TO SUB-WATERSHED (HUC10) TO MINOR WATERSHED (HUC14) TO LANDOWNER

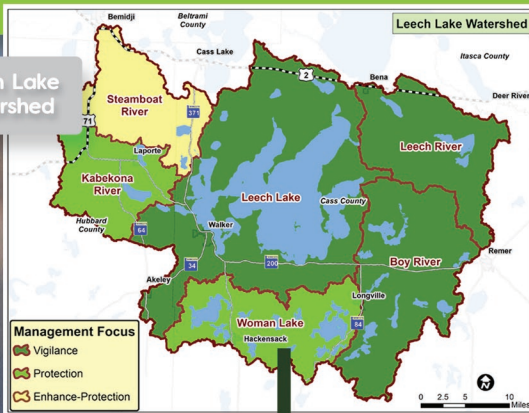


Drilling Down from the Major Watershed to the Parcel Scale

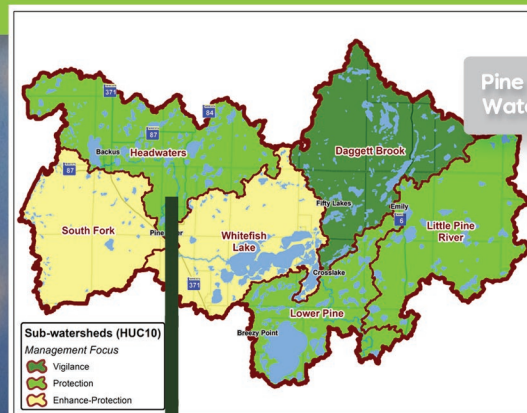
Prioritization by Watershed

- Cisco Lakes, Wild Rice Lakes, Lakes of High/Outstanding Biodiversity
- "Protection" Watersheds (< 75% Protected: source One Watershed One Plan, DNR Landscape Stewardship Plan)

Leech Lake Watershed

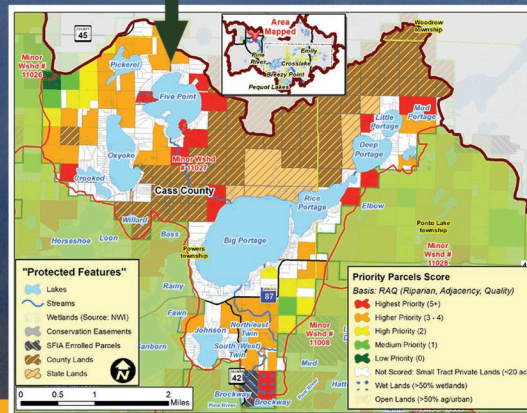
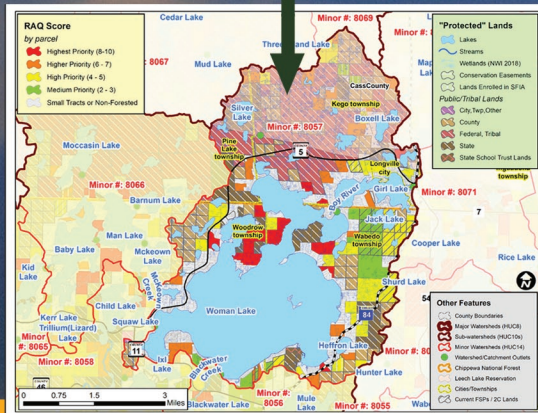


Pine River Watershed



Light Green = Protection Priority Sub-watershed

Red/Orange = High Priority Parcels



RAQ Scoring Method Targets to the Private Parcel

- R = Riparian to Lake or Stream
- A = Adjacent to Public Lands (for larger habitat blocks)
- Q = Quality (High or Outstanding Terrestrial Biodiversity/DNR Wildlife Action Plan, Trout, Native, Muskie, Wild Rice, Old Growth Forests, + other locally important features)

Healthy Waters Protection - Pine River Watershed Ranking

<u>Score</u>	<u>Max Score</u>	<u>Criteria</u>	<u>Guidelines:</u>	<u>Our Guidelines</u>
30		# Feet of Shoreline _____ Feet	5 points for minimal river frontage on Little Pine, Upper Pine, or Lower Pine Rivers (<500ft) 10 points for at least 500 - 999 feet of shoreland on a Little Pine, Upper Pine, or Lower Pine Rivers 15 points for 1,000 - 2,000 feet of shoreland on a Little Pine, Upper Pine, or Lower Pine Rivers 20 points for 2,000 - 3,000 feet of shoreline on a Little Pine, Upper Pine, or Lower Pine Rivers 30 points for more than 3,000 feet of shoreland on a Little Pine, Upper Pine, or Lower Pine Rivers	
15		% of Tract Developable	1-15 points base on the proportion of the tract that is developable (10%=1.5pts)	
10		Wetland fringe width	1-10 points based on the distance between upland & the bank/water (0'=10pts, 300'=0pts, -1pt/30' wet)	
20		Urgency	Property opportunity is likely to be lost if we do not act quickly	
20		Professional Judgement	0-20 Points based on Landowner actively managing their land & Riparian/Streamshore Needs	
15		Drinking Water Score	5 Points for Second Quartile Drinking Water Benefits 10 Points for Third Quartile Drinking Water Benefits 15 Points for Fourth Quartile Drinking Water Benefits	TNC Arc GIS Map
15		Adjoining Applications	15 points for land adjoining another application	
15		Adjoining Public Land	15 points for land adjoining public land on the Little Pine, Upper Pine, or Lower Pine Rivers adjoining land permanently protected by other easement program	
5		Habitat Value	1-5 points based on the habitat value of the property, uniqueness, and lack of existing development and shoreline alterations	Wild Rice, Cisco, TNC Maps
10		% of Parcel/Tract	1-10 points based on the proportion of the parcel enrolled (10% = 1 pt)	
10		% Forest of the parcels	1-10 points based on the proportion of parcel that is forest (10% = 1 pt)	
15		Minor Watershed Risk Classification County Waterplan	1-15 Points for Classification Enhancement and Protection. Less points for Villigance. Additional points for moving that needle.	
20		Bargain Sale/Leverage	1-20 Points based on percent discount or other funds leveraged	
200		TOTAL GROSS SCORE	*Other factors may raise or lower the priority of a parcel	
100		Final Score (Total / 2)		