



## Lessard-Sams Outdoor Heritage Council

Riparian Habitat Protection in the Kettle and Snake River Watersheds  
ML 2024 Request for Funding

---

### General Information

**Date:** 06/23/2023

**Proposal Title:** Riparian Habitat Protection in the Kettle and Snake River Watersheds

**Funds Requested:** \$3,033,800

**Confirmed Leverage Funds:** -

**Is this proposal Scalable?:** Yes

### Manager Information

**Manager's Name:** Paul Swanson

**Title:** District Manager

**Organization:** Pine County Soil and Water Conservation District

**Address:** 1610 Highway 23 North

**City:** Sandstone, MN 55072

**Email:** paul.swanson@co.pine.mn.us

**Office Number:** 320-216-4241

**Mobile Number:**

**Fax Number:**

**Website:** <https://www.pineswcd.com/>

### Location Information

**County Location(s):**

**Eco regions in which work will take place:**

- Northern Forest

**Activity types:**

- Protect in Easement

**Priority resources addressed by activity:**

- Wetlands
- Forest

## Narrative

### **Abstract**

We will utilize BWSR RIM conservation easements to protect approximately 1300 acres of high-quality private forests, wetlands, and shoreline in the Northern Forest Ecological Section. Sites will be selected utilizing minor watershed/RAQ scoring and an integrative ranking process developed through a collaborative process. By using this methodology, not only will we be stacking public benefits but also maximizing conservation benefits per dollar (return on investment). Development trends pose a serious threat to Lake Sturgeon, four-toed and spotted salamanders, Gilt Darter, Northern Long-eared Bat, Blanding's Turtles, and over 128 unique, rare, endangered, and threaten species that live in these watersheds.

### **Design and Scope of Work**

Watersheds in northern Minnesota benefit from public lands since they are mostly forested. The primary risk to habitat and water quality is on private lands. Private forestlands are key because they are more likely to be developed resulting in habitat fragmentation, loss of connectivity, increased pollution and stormwater runoff, and siltation or sedimentation of water bodies. Conversion of private forestlands to more intense land uses place negative impacts on both wildlife habitat and water quality. Both the Kettle and Snake river watersheds have experienced an increase in development and land use conversion in recent years. Since most of the prime lakeshore in the counties is developed, present and future development of river shoreland is expected.

The DNR Hinckley Area Fisheries Office has been tagging and monitoring Lake Sturgeon in the Kettle, St. Croix, and Snake rivers since the early 1990's. Populations appear to be stable and small sturgeon are recruiting into the fishery. While Lake Sturgeon populations appear to be healthy in the Kettle and Snake Rivers, their future relies on clean water. Healthy forests, wetlands, and shorelines in watersheds are vital to the water quality downstream. Thus, protecting private riparian forestland is critical to fish and wildlife habitat.

In 2016, the MN DNR and BWSR, working with SWCDs and partners developed a protection framework based on research developed by MN DNR Fisheries. The MN DNR identified a strong correlation between water quality and habitat that sustains fish populations and maintaining 75 percent forest cover in the watershed. The process works as follows: 1) Prioritize minor watersheds that have less than 75% protected watersheds, 2) Target specific parcels using RAQ scores and 3) over time, measure progress toward 75% forestland protection goal on watershed basis. We periodically measure the percent of the watersheds with permanent forest protection to illustrate this transformation on graphic dial like a speedometer. We call this moving the needle towards watershed protection.

To move the needle in Kettle and Snake watersheds, this program will utilize BWSR's Reinvest in Minnesota (RIM) conservation easements. To maximize the conservation benefit per dollar ("return on investment") the SWCDs will select parcels with the greatest conservation value. To accomplish this, we will use the methodology developed by BWSR and Mitch Brinks, a mapping specialist. The methodology applies RAQ scoring system (Riparian, Adjacent, Quality), each private forested parcel is scored on a 0-10 scale based on the parcel proximity to water ("Riparian") or protected lands ("Adjacency") and various local defined features ("Quality"), such as wild rice, trout, and biodiversity. In short, the RAQ tool prioritizes parcels with benefits overlapping – habitat, biodiversity, cost, water

quality, and resiliency to create and protect extensive habitat complexes. Therefore, using the minor watershed/RAQ methodology we are stacking public benefits and maximizing the conservation benefits per dollar. We will protect approximately 1300 acres (about 9 miles of shoreline) of high-quality private forests, wetlands, and shoreline habitat important for Lake Sturgeon and another 128 Species in Greatest Conservation Need that are known to occur within these watersheds.

### **Explain how the proposal addresses habitat protection, restoration, and/or enhancement for fish, game & wildlife, including threatened or endangered species conservation**

Most of the project area falls within the Mille Lacs Uplands Subsections. 128 Species in Greatest Conservation Need (SGCN) are known or predicted to occur within the Mille Lacs Uplands, the third most of all subsections in Minnesota. According to the species problem analysis in the Tomorrow's Habitat for the Wild and Rare: An Action Plan for Minnesota Wildlife, habitat loss and degradation is the most significant challenge facing SGCN populations in this subsection. This project seeks to address this challenge by protecting the healthy riparian lands from the threat of development, habitat loss or degradation through the use of RIM conservation easements.

The project area has a mixed representation of extensive forest lands and riparian habitats that are home to many Species of Greatest Conservation Need including: Lake Sturgeon, Blanding's turtle, wood turtles, gray wolves, bald eagles, ospreys, sandhill cranes, trumpeter swans, and yellow rails. The St. Croix River Basin is also globally-recognized for its mussel diversity, over 40 known mussels occur within the St. Croix River Basin, including 5 federally endangered, and 20 state-listed species such as rare mussels like the winged mapleleaf, spike, and round pigtoe.

The Kettle and Snake Rivers are also home to populations of Lake Sturgeon (*Acipenser fulvescens*). These bony-plated, ancient-looking fish prefer moderately clear, large rivers and lakes, where they can migrate long distances to spawning areas and foraging for the invertebrates and small fish that make up their diet. Their large sizes and fighting qualities make them a favorite among catch and release anglers. Sturgeons are long-lived, slow growing, and can take many years to mature and be able to reproduce. They are vulnerable to degraded water quality and over exploitation, as well as to dams which block fish passage. Therefore, protecting high-quality private forests, wetlands, and shoreline is critical to maintain fish and wildlife habitat.

### **What are the elements of this proposal that are critical from a timing perspective?**

Because of its proximity to the Twin Cities and its vast network of roads, this area is under increasing pressure from human activities, including the expansion of residential development, some of it affecting river shoreline. While Lake Sturgeon populations appear to be healthy in the Kettle and Snake Rivers, their future relies on clean water. Healthy forests, wetlands, and shorelines in watersheds are vital to the water quality. If we do nothing this type of development along the rivers will continue. Increases in housing density and associated development on rural forest lands can be linked to numerous changes to private forest services across watersheds, including decreases in native wildlife; changes in forest health; and reduced water quality, forest carbon storage, timber production, and recreational benefits. Protecting healthy watersheds with conservation easements now is a cost-effective strategy to ensure that the ecosystem and economic services provided by healthy watersheds remain intact.

## **Describe how the proposal expands habitat corridors or complexes and/or addresses habitat fragmentation:**

This project will utilize the Landscape Stewardship Plans minor watershed science-based targeting to expand important habitat corridors and complexes on private lands. The RAQ tool scores each private forested parcel on a 0-3 scale for each of common characteristics; “Riparian”--the parcels proximity to water, “Adjacency”--the parcels location in relation to contiguous tracts of existing state, county, or federal land in preference to parcels scattered across the landscape, knowing that a forest community is healthier and more diverse with less fragmentation, and “Quality”-- is the locally determined value of the land (1-3 Points), which can include a number of criteria, such as biodiversity from the MN County Biological Survey, trout/cisco, wild rice, old growth forests, rare species, and groundwater recharge and sensitive areas.

The RAQ tool has been developed for the entire Kettle River Watershed and includes a series of RAQ maps for each major HUC-10 subwatershed. The RAQ tool will be a helpful tool to target areas where public investments will have the most benefit. This scoring was updated in 2022 with a new Landscape Stewardship Plan for the Kettle and Upper St. Croix watersheds. RAQ was developed for the Snake River Watershed with the first round of funding for this program. 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. The following additional factors are considered to ensure site selection reflects current science-based measures for riparian habitat protection: feet of shoreline protected, development potential of site, depth from shore, watershed considerations, and easement size relative to the parcel. This played an integral part in outreach, interested and successful enrollment the first round of funding. This 2-step methodology is proven through Environmental Natural Resource Trust Fund and Clean Water Fund RIM easement programs. The Aitkin and Carlton SWCDs have utilized this methodology and have protected over 21 miles of shoreline and 2,742 acres of habitat. The BWSR RIM is one of the most efficient and effective easement programs in Minnesota.

## **Which Conservation Plans referenced in MS97A.056, subd. 3a are most applicable to this project?**

- Minnesota Forest Resource Council Landscape Plans
- Outdoor Heritage Fund: A 25 Year Framework

## **Explain how this proposal will uniquely address habitat resilience to climate change and its anticipated effects on game, fish & wildlife species utilizing the protected or restored/enhanced habitat this proposal targets.**

Protecting riparian habitat along important waterways helps build streambank resiliency. Native riparian habitat is better suited to sustain and protect streambank from erosion during flooding events, which seem to happen more frequently. This protects the water health of these waterways as well as the habitat of lake sturgeon. Riparian habitat also protects water temperatures as they can block sunlight and provide shade, which is important for many species. This includes the lake sturgeon. As the climate continues to warm, this will become an even more important component of habitat protection.

## **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 this project/program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife, and if not permanent outcomes, why it is important to undertake at this time:**

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 healthy fish populations
- Lakes and streams with protected shoreland and forestland will produce quality warm and cold-water aquatic systems.

By implementing these priority actions, this project will produce a significant and permanent conservation legacy as forestlands provide multiple enduring conservation benefits in the face of climate change and other major stressors. These enduring benefits include healthy terrestrial and aquatic habitat for fish, game, and other wildlife species, healthy watersheds and clean water, and enhanced recreational opportunities for all Minnesotans.

**Outcomes**

**Programs in the northern forest region:**

- Forestlands are protected from development and fragmentation ~ *Forestlands are protected from development and fragmentation This project will measure the number acres of forestland and wetland habitat enrolled into RIM easements. We also will measure the number of miles of shoreline protected and the individual minor watershed percent protection goal.*

**What other dedicated funds may collaborate with or contribute to this proposal?**

- N/A

**Per MS 97A.056, Subd. 24, Please explain 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.

**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 \$10,000 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.

**Actions to Maintain Project Outcomes**

Year	Source of Funds	Step 1	Step 2	Step 3
2024 and beyond	RIM Stewardship Fees	Monitoring	Enforcement as necessary	-

**Provide an assessment of how your program may celebrate cultural diversity or reach diverse communities in Minnesota, including reaching low- and moderate-income households:**

Lake sturgeon have long held importance in Native American cultures, including the bands of Ojibwe who call this area of Minnesota, home. Lake sturgeon are also a favored catch-and-release fish species in some circles of anglers. By protecting habitat that protects sturgeon populations, we are able to provide opportunities for many Minnesota communities to continue practice of their culture and recreational opportunities.

**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

**Land Use**

**Will there be planting of any crop on OHF land purchased or restored in this program?**

No

**Will neonicotinoid pesticide products be used within any activities of this proposal?**

No

**Will the eased land be open for public use?**

No

**Are there currently trails or roads on any of the proposed acquisitions?**

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 7,500 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 7,500 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 the land that you acquire (fee or easement) be restored or enhanced within this proposal's funding and availability?**

Yes

**Other OHF Appropriation Awards**

**Have you received OHF dollars in the past through LSOHC that are current OPEN appropriations?**

No

**Timeline**

<b>Activity Name</b>	<b>Estimated Completion Date</b>
Final Report Submitted	November 1, 2027
RIM easements secured on 1300 acres	June 30, 2027

Budget

**Grand Totals Across All Partnerships**

<b>Item</b>	<b>Funding Request</b>	<b>Total Leverage</b>	<b>Leverage Source</b>	<b>Total</b>
Personnel	\$230,900	-	-	\$230,900
Contracts	\$75,000	-	-	\$75,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	\$2,372,400	-	-	\$2,372,400
Easement Stewardship	\$300,000	-	-	\$300,000
Travel	\$5,300	-	-	\$5,300
Professional Services	-	-	-	-
Direct Support Services	\$40,400	-	-	\$40,400
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$7,500	-	-	\$7,500
Supplies/Materials	\$2,300	-	-	\$2,300
DNR IDP	-	-	-	-
<b>Grand Total</b>	<b>\$3,033,800</b>	<b>-</b>	<b>-</b>	<b>\$3,033,800</b>



**Partner: Pine SWCD**

**Totals**

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	\$33,800	-	-	\$33,800
Contracts	-	-	-	-
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	-	-	-	-
Professional Services	-	-	-	-
Direct Support Services	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	-	-	-	-
DNR IDP	-	-	-	-
<b>Grand Total</b>	<b>\$33,800</b>	<b>-</b>	<b>-</b>	<b>\$33,800</b>

**Personnel**

Position	Annual FTE	Years Working	Funding Request	Total Leverage	Leverage Source	Total
Program Administration	0.1	4.0	\$33,800	-	-	\$33,800

**Partner: BWSR**

**Totals**

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	\$197,100	-	-	\$197,100
Contracts	\$75,000	-	-	\$75,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	\$2,372,400	-	-	\$2,372,400
Easement Stewardship	\$300,000	-	-	\$300,000
Travel	\$5,300	-	-	\$5,300
Professional Services	-	-	-	-
Direct Support Services	\$40,400	-	-	\$40,400
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$7,500	-	-	\$7,500
Supplies/Materials	\$2,300	-	-	\$2,300
DNR IDP	-	-	-	-
<b>Grand Total</b>	<b>\$3,000,000</b>	<b>-</b>	<b>-</b>	<b>\$3,000,000</b>

**Personnel**

Position	Annual FTE	Years Working	Funding Request	Total Leverage	Leverage Source	Total
Program Management	0.59	4.0	\$197,100	-	-	\$197,100

**Amount of Request:** \$3,033,800

**Amount of Leverage:** -

**Leverage as a percent of the Request:** 0.0%

**DSS + Personnel:** \$271,300

**As a % of the total request:** 8.94%

**Easement Stewardship:** \$300,000

**As a % of the Easement Acquisition:** 12.65%

**Does this proposal have the ability to be scalable?**

Yes

**If the project received 50% of the requested funding**

**Describe how the scaling would affect acres/activities and if not proportionately reduced, why?**

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.

**Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?**

Program management costs would be the exception, due to program development and oversight remaining somewhat consistent regardless of appropriation amount.

## If the project received 30% of the requested funding

### **Describe how the scaling would affect acres/activities and if not proportionately reduced, why?**

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.

### **Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?**

Program management would likely be slightly reduced at this level of funding. Although development and oversight still would be necessary and would not be reduced proportionately compared to the acres and activities.

## Personnel

### **Has funding for these positions been requested in the past?**

Yes

### **Please explain the overlap of past and future staffing and position levels previously received and how that is coordinated over multiple years?**

The district manager at Pine SWCD has taken on the administrative and coordination efforts to manage the program at a local level. This effort is needed to continue the progress of easement acquisition and local partner coordination.

## Contracts

### **What is included in the contracts line?**

Payments to SWCDs for easement acquisition assistance and title insurance.

## Easement Stewardship

### **What is the number of easements anticipated, cost per easement for stewardship, and explain how that amount is calculated?**

Perpetual monitoring and enforcement costs have been calculated at \$10,000 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.

## Travel

### **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.

### **I understand and agree that lodging, meals, and mileage must comply with the current MMB Commissioner Plan:**

Yes

## Direct Support Services

### **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.

### **Other Equipment/Tools**

**Give examples of the types of Equipment and Tools that will be purchased?**

### **Federal Funds**

**Do you anticipate federal funds as a match for this program?**

No

**Output Tables**

**Acres by Resource Type (Table 1)**

Type	Wetland	Prairie	Forest	Habitat	Total Acres
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	200	0	1,100	0	1,300
Enhance	0	0	0	0	0
<b>Total</b>	<b>200</b>	<b>0</b>	<b>1,100</b>	<b>0</b>	<b>1,300</b>

**Total Requested Funding by Resource Type (Table 2)**

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	\$466,700	-	\$2,567,100	-	\$3,033,800
Enhance	-	-	-	-	-
<b>Total</b>	<b>\$466,700</b>	<b>-</b>	<b>\$2,567,100</b>	<b>-</b>	<b>\$3,033,800</b>

**Acres within each Ecological Section (Table 3)**

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
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	1,300	1,300
Enhance	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,300</b>	<b>1,300</b>

**Total Requested Funding within each Ecological Section (Table 4)**

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	\$3,033,800	\$3,033,800
Enhance	-	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$3,033,800</b>	<b>\$3,033,800</b>

**Average Cost per Acre by Resource Type (Table 5)**

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	\$2,333	-	\$2,333	-
Enhance	-	-	-	-

**Average Cost per Acre by Ecological Section (Table 6)**

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-

Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	\$2,333
Enhance	-	-	-	-	-

**Target Lake/Stream/River Feet or Miles**

9 Miles

## Parcels

### **Sign-up Criteria?**

[Yes - Sign up criteria is attached](#)

### **Explain the process used to identify, prioritize, and select the parcels on your list:**

The SWCDs will mail letters to eligible landowners utilizing RAQ scoring. Once the SWCD has an interested landowner the easement will be ranked using the integrative ranking process. The Kettle and Snake RIM Easement ranking sheet is attached as an example of the scoring sheet that will be used to rank RIM Easements. The SWCD then brings the parcel to the project technical committee for comments and recommendations. This committee reviews easement proposals and sorts through them for the parcels that provide the greatest public benefit possible. We always look for areas with high quality habitat, where a limited public investment can leverage a larger area of public benefit. The result is an increase in resiliency to the habitat base. The parcels that rank the highest tend to be adjacent to public lands, in a river corridor, or both.

# Riparian Habitat Protection in the Kettle and Snake River Watersheds

**Phase 2- \$3,033,800 request** May 2023



## Program Goals and Request

- This project is a partnership between BWSR and the Aitkin, Carlton, Pine, Kanabec, and Mille Lacs SWCDs, with the Pine SWCD acting as the project administrator.
- These watersheds need protection as most of the prime lakeshore is developed and present and future development of river shoreland is expected.
- In phase 1, we will protect approximately 1300 acres (about 9 miles of shoreline) of high-quality private forests, wetlands, and shoreline habitat.
- Protection will be accomplished by utilizing habitat-focused RIM Easements that restrict development and land use conversion.
- RIM easement will permanently protect resources while private ownership is maintained.
- Outcomes – this project will produce a significant and permanent conservation legacy for all Minnesotans.
  - Healthy terrestrial and aquatic habitat for fish, game, and other wildlife species.
  - Healthy watersheds and clean water that support healthy fish populations
  - Enhanced recreational opportunities for all Minnesotans.



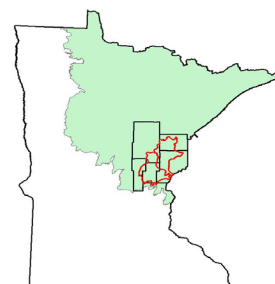
**1** Example of Kettle River where biological communities are excellent. The fish scored far about the exceptional use threshold and the macroinvertebrates also scored beyond their exceptional use threshold here.



2 Lake Sturgeon

## Prioritizing

- Use RAQ methodology to prioritize parcels with multiple benefits overlapping – habitat, biodiversity, cost, water quality, and resiliency to create and protect extensive habitat complexes.
- This methodology achieves maximum wildlife habitat benefits and conservation benefits per dollar.
- Prioritizes parcels with the following characteristics:
  - Proximity to water
    - Adjacent to other protected lands
    - Currently intact and forested
- Additional screening Committee of State and local partners



Targeted  
LSOHC section,  
watersheds,  
and counties

For more information, please contact Paul Swanson, District Manager at 320-216-4241 Pine County Soil and Water Conservation District • <https://www.pineswcd.com>





6 Confluence of the Kettle and St. Croix Rivers



5 Paddlers enjoying the Kettle River. Both the Kettle and Snake Rivers are state water trails and the Kettle in Pine County is a state wild and scenic river.



3 A lake sturgeon caught while fishing on the Kettle River. They make a quality catch and release species for anglers. The Kettle and Snake Rivers are one of the few rivers in Minnesota with lake sturgeon.



4 Endangered winged maple leaf mussels.

For more information, please contact Paul Swanson, District Manager at 320-216-4241 Pine County Soil and Water Conservation District • <https://www.pineswcd.com>

Kettle and Snake River Watersheds Easement Ranking Sheet				5/20/2020
LANDOWNER				
PARCEL # (S)				
COUNTY				
Score	Max Score	Criteria	Guidelines:	Field Comments
<b>Habitat Protection Priorities</b>				
<b>Habitat Biodiversity</b>				
	25	General Habitat Biodiversity	Habitat biodiversity significance (MCBS ranking); rare, endangered, or species of greatest concern (MN Wildlife Action Network); uniqueness of resources on the property and lack of shoreland disturbance.	
	15	RAQ Score	(3) Riparian, (3) Adjacency, (3) Quality. Every eligible parcel has been technically ranked. 5 points for RAQ of 1-3, 10 points for RAQ of 3-6, and 15 points for RAQ of 6-10.	
	15	Forest/Land Cover	1-15 points based on the proportion of parcel that is undisturbed forest; priority forest type (important for some species) and/or perennial grasses.	
<b>Parcel Size &amp; Suitability</b>				
	10	Parcel Size	1-10 points base on the size of the parcel (10 acres=1 pt; >100 acres=10 pts)	
	30	# Feet of Shoreline	10 points for at least 500 - 999 feet of shoreland on the Kettle River, Snake River or Tributaries	
			15 points for 1,000 - 2,000 feet of shoreland on the Kettle River, Snake River or Tributaries	
			20 points for 2,000 - 3,000 feet of shoreline on the the Kettle River, Snake River or Tributaries	
			30 points for more than 3,000 feet of shoreland on the Kettle River, Snake River or Tributaries	
	10	% of Parcel/Tract	1-10 points based on the proportion of the parcel enrolled in easement (10% = 1 pt; 100%= 10 points) )	
<b>Habitat Corridor Connectivity &amp; Continuity</b>				
	20	Adjoining Public Land	Up to 20 points for land adjoining other public land on the Kettle & Snake Rivers, and major tributaries to create enhanced habitat protection corridors and continuity of habit features.	
	15	Adjoining Other Privately Protected Land	15 points for land adjoining privately protected land (easement, SFIA) or another easement application.	
<b>Potential for Habitat Fragmentation (Urgency) &amp; Opportunity for Protection</b>				
	10	% of Tract Developable	1-10 points base on the proportion of the tract that is developable (10%=1 pt, >80%=10 pts )	
	10	Threat	Important habitat that, because of its location or surrounding land use/practices, will be lost to development if not protected.	
	10	Opporotunty for Protection	1-10 Points for Parcel's Minor Watershed Classification. More points for Enhancement and Protection; less points for vigilance (already largely protected and thus less urgency). Consistency with other County water plan priorities and/or 1W1P.	
	10	Wetland Fringe	1-10 points based on the distance between upland & the bank/water (0'=10pts, 300' or greater=0pts)	
<b>Professional Judgement</b>				
	15	Professional Judgement	0-15 points based on landowner management of land; tributary flowage to river; other special considerations and general project suitability.	
<b>Financial Leverage</b>				
	5	Bargain Sale/Leverage	5 Points based on percent discount or other funds leveraged	
	<b>200 MAXIMUM</b>			
*Other factors may raise or lower the priority of a parcel				