

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2022 / ML 2021 Request for Funding



Date: May 28, 2020

Program or Project Title: Riparian Habitat Protection in the Kettle and Snake River Watersheds (HA07)

Funds Requested: \$3,000,000

Manager's Name: Jill Carlier

Title: District Manager

Organization: Pine County Soil and Water Conservation District

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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

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.

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:

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

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 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 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. To date, the RAQ tool has not been developed for the Snake River Watershed, but will be if funded. 9,720 RAQ scores for all private parcels greater than 20 acres, RAQ score maps, databases, landowner outreach tables and percent of protected land 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. 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 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 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
- Outdoor Heritage Fund: A 25 Year Framework

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

The Outdoor Heritage Fund: 25 Year Vision expects an outcome that forestlands are protected from development and fragmentation. This program will secure 1300 acres of high quality habitat to restrict future development, sustain habitat connectivity, and maintain large forested habitat blocks within the project area.

This project compliments the Minnesota Forest Resource Council East Central Landscape Plan and the Kettle River and Snake River Landscape Stewardship Plans by addressing the ecological goals and strategies including: Strategy 1 – Protect and enhance existing high quality resources, Goal 1 – Protect Healthy Forest and Water Ecosystems, Objective A – Protect Forested Riparian Corridors. Support the protection and enhancement of existing forested riparian corridors.

The Snake River Plan calls for the support of healthy watershed protection easements in East Central Minnesota. Conservation easements like RIM can be a great option for conserving areas of high water quality or biodiversity significance without increasing public landholdings.

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.

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.

Relationship to other funds:

- Not Listed

Describe the relationship of the funds:

Not Listed

Does this program include leverage in funds:

No

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:

Not Listed

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
2024 and beyond	RIM Stewardship Fees	Monitoring	Enforcement as necessary	

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

Lake sturgeon, walleye, and Northern pike are expected to benefit from the protection of high quality riparian forest and wetland habitat that will continue to provide clean water and high-quality spawning, nursery and refuge habitat. Freshwater mussels such as the winged mapleleaf and round pigtoe will also benefit from this habitat protection. It is estimated that restored warmwater rivers will support 8000 mussels (all species) per acre.

Golden-winged Warblers

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.

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.

Will the land that you acquire (fee or easement) be restored or enhanced within this proposals funding and availability? - **Yes**

Land Use:

Have you received OHF dollars in the past through LSOHC? - **No**

Accomplishment Timeline

Activity	Approximate Date Completed
Minor Watershed Assessment and RAQ work for the Snake watershed	August 01, 2021
RIM easements secured on 1300 acres	June 30, 2024
Final Report Submitted	November 1, 2024

Budget Spreadsheet

Total Amount of Request: \$3,000,000

Budget and Cash Leverage

BudgetName	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$148,300	\$0		\$148,300
Contracts	\$51,200	\$0		\$51,200
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$2,618,100	\$0		\$2,618,100
Easement Stewardship	\$143,000	\$0		\$143,000
Travel	\$5,300	\$0		\$5,300
Professional Services	\$0	\$0		\$0
Direct Support Services	\$24,300	\$0		\$24,300
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$7,500	\$0		\$7,500
Supplies/Materials	\$2,300	\$0		\$2,300
DNR IDP	\$0	\$0		\$0
Total	\$3,000,000	\$0	-	\$3,000,000

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Program Administration	0.10	4.00	\$26,300	\$0		\$26,300
Program Management	0.10	4.00	\$48,000	\$0		\$48,000
Easement Processing	0.26	4.00	\$74,000	\$0		\$74,000
Total	0.46	12.00	\$148,300	\$0	-	\$148,300

Budget and Cash Leverage by Partnership

BudgetName	Partnership	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	Pine SWCD	\$26,300	\$0		\$26,300
Contracts	Pine SWCD	\$5,000	\$0		\$5,000
Fee Acquisition w/ PILT	Pine SWCD	\$0	\$0		\$0
Fee Acquisition w/o PILT	Pine SWCD	\$0	\$0		\$0
Easement Acquisition	Pine SWCD	\$0	\$0		\$0
Easement Stewardship	Pine SWCD	\$0	\$0		\$0
Travel	Pine SWCD	\$0	\$0		\$0
Professional Services	Pine SWCD	\$0	\$0		\$0
Direct Support Services	Pine SWCD	\$0	\$0		\$0
DNR Land Acquisition Costs	Pine SWCD	\$0	\$0		\$0
Capital Equipment	Pine SWCD	\$0	\$0		\$0
Other Equipment/Tools	Pine SWCD	\$0	\$0		\$0
Supplies/Materials	Pine SWCD	\$0	\$0		\$0
DNR IDP	Pine SWCD	\$0	\$0		\$0
Total	-	\$31,300	\$0	-	\$31,300

Personnel - Pine SWCD

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Program Administration	0.10	4.00	\$26,300	\$0		\$26,300
Total	0.10	4.00	\$26,300	\$0	-	\$26,300

BudgetName	Partnership	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	BWSR	\$122,000	\$0		\$122,000
Contracts	BWSR	\$46,200	\$0		\$46,200
Fee Acquisition w/ PILT	BWSR	\$0	\$0		\$0
Fee Acquisition w/o PILT	BWSR	\$0	\$0		\$0

Easement Acquisition	BWSR	\$2,618,100	\$0	\$2,618,100
Easement Stewardship	BWSR	\$143,000	\$0	\$143,000
Travel	BWSR	\$5,300	\$0	\$5,300
Professional Services	BWSR	\$0	\$0	\$0
Direct Support Services	BWSR	\$24,300	\$0	\$24,300
DNR Land Acquisition Costs	BWSR	\$0	\$0	\$0
Capital Equipment	BWSR	\$0	\$0	\$0
Other Equipment/Tools	BWSR	\$7,500	\$0	\$7,500
Supplies/Materials	BWSR	\$2,300	\$0	\$2,300
DNR IDP	BWSR	\$0	\$0	\$0
Total	-	\$2,968,700	\$0	\$2,968,700

Personnel - BWSR

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Program Management	0.10	4.00	\$48,000	\$0		\$48,000
Easement Processing	0.26	4.00	\$74,000	\$0		\$74,000
Total	0.36	8.00	\$122,000	\$0	-	\$122,000

Amount of Request: \$3,000,000
Amount of Leverage: \$0
Leverage as a percent of the Request: 0.00%
DSS + Personnel: \$172,600
As a % of the total request: 5.75%
Easement Stewardship: \$143,000
As a % of the Easement Acquisition: 5.46%

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. It also covers the cost for Mitch Brinks to develop RAQ scoring in the Snake River Watershed.

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

Describe and explain leverage source and confirmation of funds:

Not Listed

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.

Has funding for these positions been requested in the past? - No

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	200	0	1,100	0	1,300
Enhance	0	0	0	0	0
Total	200	0	1,100	0	1,300

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	\$462,000	\$0	\$2,538,000	\$0	\$3,000,000
Enhance	\$0	\$0	\$0	\$0	\$0
Total	\$462,000	\$0	\$2,538,000	\$0	\$3,000,000

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	1,300	1,300
Enhance	0	0	0	0	0	0
Total	0	0	0	0	1,300	1,300

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	\$3,000,000	\$3,000,000
Enhance	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$0	\$3,000,000	\$3,000,000

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	\$2,310	\$0	\$2,307	\$0
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	\$2,308
Enhance	\$0	\$0	\$0	\$0	\$0

Automatic system calculation / not entered by managers

Target Lake/Stream/River Feet or Miles

9 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.

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.*

Parcel List

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

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.

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

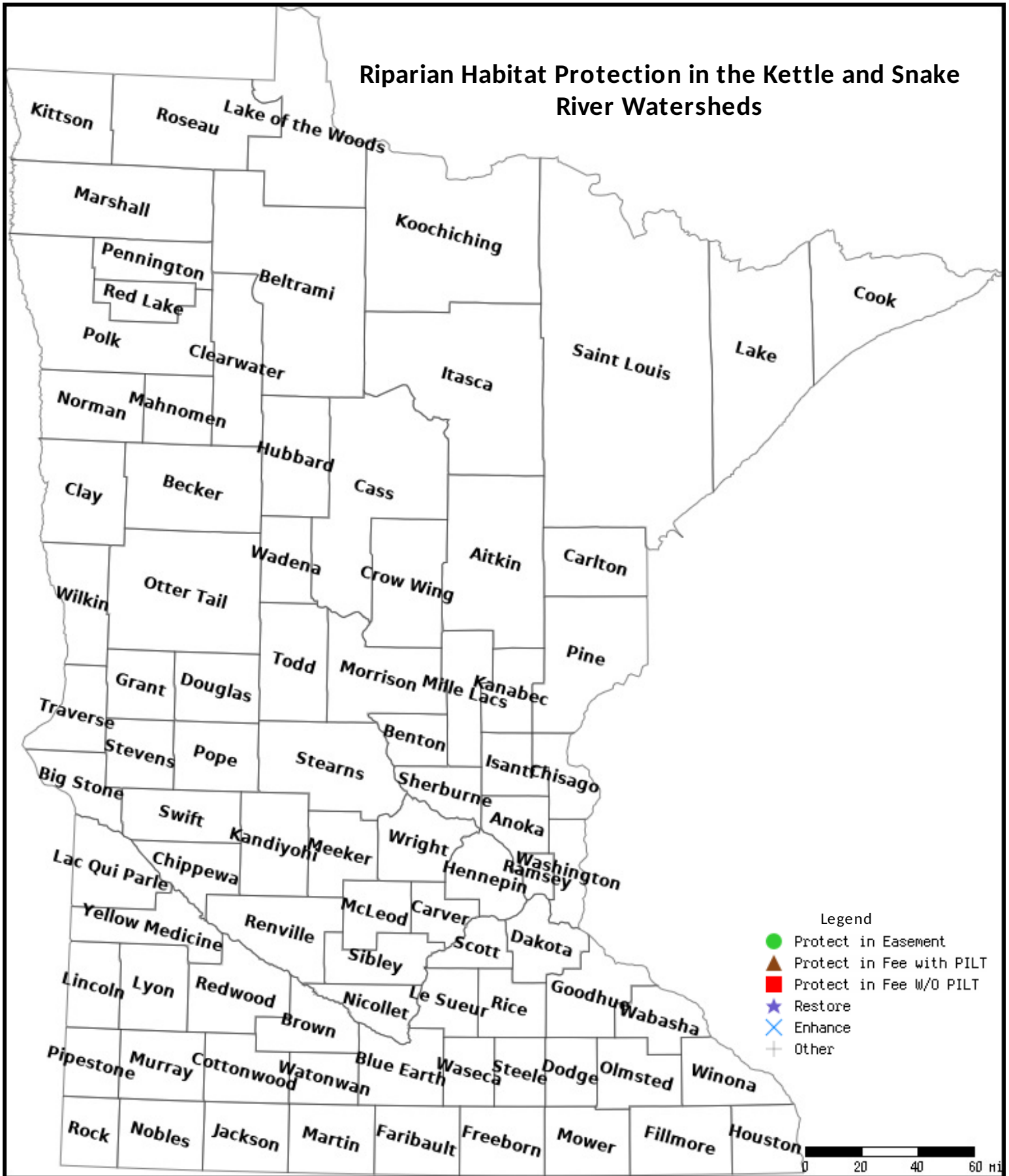
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map

Riparian Habitat Protection in the Kettle and Snake River Watersheds



Data Generated From Parcel List

Riparian Habitat Protection in the Kettle and Snake River Watersheds

Phase 1- \$3,000,000 request May 2020

Program Goals and Request

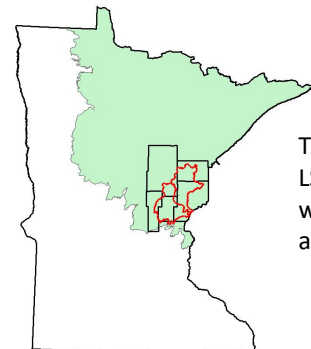
- This project is a partnership between BWSR and the Aitkin, Carlton, Pine, Kanabec, and Mille Lacs SWCDs, with the Pine SWCD acting as the project administrator.
- These watersheds need protection as most of the prime lakeshore is developed and present and future development of river shoreland is expected.
- 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.



Pictured, top: Example of Kettle River where biological communities are excellent. The fish scored far above the exceptional use threshold and the macroinvertebrates also scored beyond their exceptional use threshold here (Kettle River Watershed Stressor Identification Report, April 2020 Minnesota Pollution Control Agency). Pictured, bottom: 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



Pictured top left: Confluence of the Kettle and St. Croix Rivers.

Pictured middle left: 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.



Pictured bottom left: A Lake Sturgeon caught while fishing on the Kettle River. Sturgeons' large sizes and fighting qualities make them a favorite among catch and release anglers. The Kettle and Snake are one of the few rivers in Minnesota with lake sturgeon.

Pictured right: Endangered winged maple leaf mussels.

Kettle and Snake River Watersheds Easement Ranking Sheet				5/20/2020
LANDOWNER				
PARCEL # (S)				
COUNTY				
Score	Max Score	Criteria	Guidelines:	Field Comments
Habitat Protection Priorities				
Habitat Biodiversity				
	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.	
Parcel Size & Suitability				
	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))	
Habitat Corridor Connectivity & Continuity				
	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.	
Potential for Habitat Fragmentation (Urgency) & Opportunity for Protection				
	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	Opporotuntiy 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)	
Professional Judgement				
	15	Professional Judgement	0-15 points based on landowner management of land; tributary flowage to river; other special considerations and general project suitability.	
Financial Leverage				
	5	Bargain Sale/Leverage	5 Points based on percent discount or other funds leveraged	
	200	MAXIMUM		
			*Other factors may raise or lower the priority of a parcel	