

# **Lessard-Sams Outdoor Heritage Council**

Woods Creek Restoration ML 2026 Request for Funding

# **General Information**

Date: 06/26/2025

Proposal Title: Woods Creek Restoration

Funds Requested: \$750,000

Confirmed Leverage Funds: \$63,200

Is this proposal Scalable?: No

#### **Manager Information**

Manager's Name: Robert Kimmel-Hass Title: County Engineer Organization: Cook County Address: 609 4th Ave E City: Grand Marais, MN 55604 Email: robert.hass@co.cook.mn.us Office Number: 218-387-3014 Mobile Number: 218-264-9122 Fax Number: Website:

#### **Location Information**

County Location(s): Cook.

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

Northern Forest

#### Activity types:

Restore

#### Priority resources addressed by activity:

Habitat

# **Narrative**

#### Abstract

The project will restore and protect cold-water streams for natural occurring brook trout, a sensitive and semirare species, by removing two undersized crossings. Each crossing is undersized compared to the natural stream geomorphology. The project is part of a larger countywide collaborative initiative with local and state partners to protect water quality by ensuring crossings are correctly sized. Removing these two undersized crossings and installing correctly sized structures will improve stream connectivity, ensure future fish passage, improve climate resiliency, reduce sediment loading, eliminate further stream bank erosion, and contribute to fully restoring Woods Creek back to its natural state.

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

Northeast Minnesota contains many pristine lakes and rivers which support robust populations of wild brook trout, steelhead, and other sensitive or semi-rare aquatic organisms. Brook trout are significant to aquatic ecosystems, recreational fishing, and an indicator of healthy watersheds. Ecological functions of streams are diminished by roads, development, and impairments that degrade the aquatic ecosystem leading to reductions in brook trout populations. Tributaries provide critical services by providing thermal refugia to brook trout populations.

Woods Creek is a tributary to Devil Track River, a tributary to Lake Superior. Two crossings (North and South) have been identified as a local priority for replacement for several reasons: to better facilitate aquatic organism passage (AOP), being undersized for the streams they carry, creating high stream velocities, and causing sediment loading in the water. AOP is defined as the ability of fish and other aquatic organisms to migrate and swim freely upstream and downstream through or beneath human infrastructure such as culverts, bridges, diversion, dams, etc. Currently, trout and other fish are unable to pass through these crossings due to high velocities and perched bottoms. The bankfull width measurements for the North crossing is 22 feet and the South crossing is 20 feet with the current structures spanning 10-ft and 11.5-ft respectively. Cook County will install an AOP and climate resilient North crossing and the South crossing will become a bottomless concrete arch crossing to improve native brook trout habitat, build for climate resiliency with increased precipitation events, and aid in maintaining and improving water quality. The bottomless arch crossing will accommodate the bedrock located at the South crossing. Cook County and Cook County Soil and Water Conservation District (SWCD), with input from the local MN DNR fisheries, agree that the upsized crossings will be the most beneficial for the water quality and aquatic habitat. This project is directly in line with the MN DNR Fisheries priorities of restoring fish passage in our streams. Wild brook trout have been identified as the primary species in the project area. Steelhead have also been identified in the project area. Downstream, near the mouth at Lake Superior, brook trout, rainbow trout, pink salmon, coho (silver) salmon, chinook salmon have all been identified. While both crossings are part of the larger project, the South crossing will be funded with OHF funds. This is because the South crossing has been identified as priority by our local partners and is not scheduled to be replaced for 50 years from a transportation lens.

The current crossings are impeding AOP, pinching the river at two locations since it is not at bankfull width, causing high stream velocities, and increasing sediment loading in the river. Because it is pinching the river at these locations, it is causing an increase in velocity of stream flow. The velocity is creating shear stress on downstream banks, causing erosion, unnatural pools and contributing to sediment loading in the river. The inlet and outlet banks of each crossings show extreme erosion due to the undersized crossings.

Currently, the creek has two crossings that are undersized, causing erosion and preventing AOP. The new structures will be wide enough to accommodate bankfull width and be able to handle larger flood events. It will restore the area back to a more natural state. The instream area of the new structures will have natural channel design to aid in AOP and aquatic habitat. Engineering design work is already being done to ensure proper stream velocity and AOP is incorporated into the project. A MN DNR report highlighted that the more favorable habitat that is created in Woods Creek that the Brook Trout can (and have been) persisting there. Better habitat creates a healthier ecosystem which benefits the surrounding environment.

The reduction in the velocity of water passing through the structure will reduce the shear stress on the inlet and outlet banks. Currently, there is severe erosion occurring which is causing sediment loading into the river. This prohibits a clean and habitable river for trout and other species. 2 miles of river and tributaries will be opened up with the replacement of these structures.

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

With increased precipitation in rain and snow melt events, it is important to be proactive and complete the work now before additional issues arise from improperly sized crossings. Work has already begun to design these crossings to meet AOP needs and if this project doesn't happen now then resources will have been expended for nothing and the problems associated with increased sediment loading, lack of AOP, and increased erosion will continue. The south crossing isn't scheduled for replacement for 50+ years so the problem would continue to persist. Funding for the North crossing is covered through state bridge bonds while the South crossing is covered by OHF funds. Combining the projects saves in mobilization costs and minimizes disturbing the surrounding environment. Cook County is working on the design as we speak and the project is construction ready within 6 months of appropriation.

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

Woods Creek is a tributary to Devil Track River, a tributary to Lake Superior. There are smaller tributaries that flow into Woods Creek as well. The project will connect 2 miles of river and its tributaries, thus reducing habitat fragmentation. According to the MN Department of Natural Resources, there are healthy numbers of brook trout in Woods Creek and a small number of rainbow trout and steelhead. By replacing the two undersized crossings and incorporating natural channel design the remainder of Woods Creek would open up to this population thus creating more upstream habitat and creating a more diverse genetic pool with more mobility in the river.

# Which top 2 Conservation Plans referenced in MS97A.056, subd. 3a are most applicable to this project?

Minnesota's Wildlife Action Plan 2015-2025

Other : Lake Superior North, One Watershed One Plan

# 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.

By incorporating natural channel design, meeting bankfull width, and floodplain connection, the creek will return to a natural state and be more climate resilient to handle precipitation challenges. Natural sediment deposition will be less disrupted, providing a more natural channel evolution of the river. The stream will not be pinched to a confined area in two locations causing upstream and downstream issues. Flood waters will be able to flow in a more natural way, allowing the stream to function and adapt more naturally. The long-term benefits of this project include reducing habitat fragmentation, preventing sediment loading and bank erosion, reducing water velocity and reducing warming water trends. Climate resiliency is addressed through riparian planting, natural channel design, floodplain connection, and crossings that are designed to handle larger storm events.

## 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:

The area of the project is part of Cook County land in County right of way and will be protected indefinitely. The area is known for cold waters and native brook trout streams. Over time, the inlet and outlets banks of each of these crossings have been eroding away due to the undersized nature of the crossings. This has contributed to sediment loading in the river. With higher rain events and a trend to warming waters, now is the time to be proactive and try and protect aquatic habitats, having structures, practices and vegetation in place to provide climate resiliency to try and maintain cold water habitats. While two crossings (North and South) make up the larger project, the South crossing was identified with Cook SWCD and local MN DNR fisheries as a priority to include in the project. Replacing the South crossing is not needed structurally, it is needed solely from an environmental standpoint to eliminate a fish barrier, reduce erosion, and return Woods Creek to a more natural state.

#### **Outcomes**

#### Programs in the northern forest region:

Improved aquatic habitat indicators ~ The project will eliminate impediments for AOP to 2-miles of upstream headwaters habitat by removing two undersized crossings. Modeling of the current crossing conditions indicate the current bankfull widths are not being met and velocities are too high, prohibiting AOP. To fully restore AOP, the project proposes to restore Woods Creek back to its natural habitat in this area.

#### 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.

These funds are not supplanting or substituting previous funds allocated for this project.

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

The project is part of a larger countywide effort to protect water quality. The crossings in this project will allow the river to be restored to a more natural state and will be maintained by Cook County for the lifespan of the structure and any subsequent replacements into perpetuity.

#### **Actions to Maintain Project Outcomes**

Year	Source of Funds	Step 1	Step 2	Step 3
2027 and beyond	local	initial bridge	document	continue inspections
		inspection	observations	and documentation
				for lifespan of
				structure
2027 and beyond	local	monitor restored	document	continue to monitor
		banks	observations	banks and make
				necessary
				adjustments

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

Enhancing and protecting water quality is in direct alignment with the goals set out by the 1854 Treaty Authority to protect, preserve, and enhance the hunting, fishing and gathering rights of the Grand Portage and Bois Forte bands of Lake Superior Chippewa in the 1854 Treaty area. By improving the water quality, creating better fish habitat, and reducing bank erosion this project is directly benefiting the Grand Portage and Bois Forte bands of Lake Superior Chippewa.

# **Activity Details**

#### Requirements

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program?

Yes

Is the restoration and enhancement activity on permanently protected land per 97A.056, Subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 or on lands to be acquired in this program? Yes

Where does the activity take place?

**Public Waters** 

County/Municipal

#### Land Use

Will there be planting of any crop on OHF land purchased or restored in this program, either by the proposer or the end owner of the property, outside of the initial restoration of the land? No

Will insecticides or fungicides (including neonicotinoid and fungicide treated seed) be used within any activities of this proposal either in the process of restoration or use as food plots? No

# **Other OHF Appropriation Awards**

# Have you received OHF dollars through LSOHC in the past?

Yes

# Are any of these past appropriations still OPEN?

Yes

Approp Year	Funding Amount	Amount Spent to	Funding Remaining	% Spent to Date
	Received	Date		
2025	\$1,348,000	-	-	-
2024	\$3,000,000	-	-	-
Totals	\$4,348,000	-	\$4,348,000	0.0%

# **Timeline**

Activity Name	Estimated Completion Date
Design, engineering, permitting	September 2026
Bid letting	December 2026
Begin construction	June 2027
End construction	October 2027

## **Budget**

#### **Totals**

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	-	\$112,400	county levy/tax	\$112,400
Contracts	\$750,000	\$600,000	state bridge bonds	\$1,350,000
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	-	-	-	-
Grand Total	\$750,000	\$712,400	-	\$1,462,400

#### Personnel

Position	Annual FTE	Years	Funding	Total	Leverage	Total
		Working	Request	Leverage	Source	
Cook County	1.0	1.0	-	\$49,200	county	\$49,200
Inspector					levy/tax	
Cook County	1.0	1.0	-	\$49,200	county	\$49,200
Inspector					levy/tax	
Cook County	1.0	1.0	-	\$14,000	county	\$14,000
Engineer					levy/tax	

Amount of Request: \$750,000 Amount of Leverage: \$712,400 Leverage as a percent of the Request: 94.99% DSS + Personnel: -As a % of the total request: 0.0% Easement Stewardship: -As a % of the Easement Acquisition: -

Total Leverage (from above)	otal Leverage (from Amount Confirmed bove)		Amount Anticipated	% of Total Leverage	
\$712,400	\$63,200	8.87%	\$649,200	91.13%	

Detail leverage sources and confirmation of funds:

Leverage sources for personnel come from local levy/tax dollars. State bridge bonds are appropriated from the legislature.

Does this proposal have the ability to be scalable?

No

#### Please explain why this project can NOT be scaled:

Cook County is covering engineering design and engineering construction inspection. The county does have additional resources to cover construction costs. Cook County is committed to securing bridge bonds in order to bring a robust match to the project.

#### Contracts

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

Included in the contracts line are costs associated with mobilizing equipment, removing existing crossings, excavation of fill material, stream bank restoration, stream diversion, riprap, structure replacement for south crossing.

# **Federal Funds**

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

# **Output Tables**

# Acres by Resource Type (Table 1)

Туре	Wetland	Prairie	Forest	Habitat	Total Acres
Restore	0	0	0	1	1
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	0
Enhance	0	0	0	0	0
Total	0	0	0	1	1

#### **Restoration/Enhancement Acres Breakdown of Existing Protected Lands (Table 1a.2)**

	RESTORE		ENHANCE	
	Lands acquired with OHF	Lands NOT acquired with OHF	Lands acquired with OHF	Lands NOT acquired with OHF
DNR Lands (WMA, State Forests, etc)	-	-	-	-
Non-DNR Lands (city, state, federal, etc.)	-	-	-	-
Easements	-	-	-	-
Total	-	-	-	-

# Total Requested Funding by Resource Type (Table 2)

Туре	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	\$750,000	\$750,000
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-
Total	-	-	-	\$750,000	\$750,000

# Acres within each Ecological Section (Table 3)

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	<b>Total Acres</b>
Restore	0	0	0	0	1	1
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	0	0
Enhance	0	0	0	0	0	0
Total	0	0	0	0	1	1

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

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total
						Funding
Restore	-	-	-	-	\$750,000	\$750,000
Protect in Fee with State	-	-	-	-	-	-
PILT Liability						
Protect in Fee w/o State	-	-	-	-	-	-
PILT Liability						
Protect in Easement	-	-	-	-	-	-
Enhance	-	-	-	-	-	-
Total	-	-	-	-	\$750,000	\$750,000

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

Туре	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	\$750,000
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	-	-	-	-

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

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	-	\$750,000
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-

# Target Lake/Stream/River Feet or Miles

2 miles

# **Parcels**

# Sign-up Criteria?

No

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

The parcel identified below are the locations of the fish barriers.

#### **Other Parcels**

Name	County	TRDS	Acres	Est Cost	Existing Protection
Remove South AOP barrier: Tax PID: 53-112- 1200	Cook	06101E12	1	\$750,000	-

# Parcel Map





0 2 4 6 mi

# **Woods Creek Restoration Project**

Restoring stream connectivity and fish habitat for naturally occurring brook trout in the Lake Superior Basin

**Synopsis:** The proposed project is located in the Arrowhead region just outside the city limits of Grand Marais on County Road (CR) 60 and CR 58. Two undersized crossings carry county roads over Woods Creek, a 3.5 mile river whose waters feed directly into Devil Track River, a tributary to Lake Superior.

The undersized crossings are causing bank erosion, high stream velocities, sediment runoff into the river, and prohibiting aquatic organism passage (AOP). Replacing the crossings with larger structures is the only way the river can be restored back to its natural condition and gain increased resiliency from the impacts of climate change, flooding, and intense rain events, while also restoring needed fish habitat for naturally occurring brook trout. This project is in direct alignment with the high priority goals of restoring fish passage laid out by MN DNR Fisheries.





**Project Lead**: Cook County

**Project Partner:** Cook County Soil and Water Conservation District



Above: The project site location.

**Above:** From top to bottom: natural, existing, and proposed river crossings.

Cook County has already funded engineering and project development expenses. This is a chance for the Council to make this a habitat project instead of just a highway project. With this funding, the project is a stream restoration project, going beyond the usual culvert replacement of putting back what is currently there. The project will be shovel ready when funds are appropriated.



**Above:** The undersized north crossing inhibits AOP and cause bank erosion at the inlet and outlets.

**Right:** Another view of the north crossing showing undersized culverts inhibiting flow and causing erosion.





**Above:** Views looking at inlet (left) and outlet (right) at the south crossing. The inlet shows the crossing not meeting bankfull width requirements and being misaligned, causing higher water velocities through the culvert. The outlet is perched approximately 8-inches which inhibits AOP and causes scour pools to develop.