

# Lessard-Sams Outdoor Heritage Council

## Fiscal Year 2017 / ML 2016 Request for Funding



**Date:** June 04, 2015

**Program or Project Title:** Root River Restoration

**Funds Requested:** \$1,058,000

**Manager's Name:** Chad Erickson

**Title:** President

**Organization:** Root River Restoration & Preservation

**Address:** 30103 Huckster Drive

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**County Locations:** Fillmore

**Regions in which work will take place:**

- Southeast Forest

**Activity types:**

- Restore
- Enhance

**Priority resources addressed by activity:**

- Wetlands
- Habitat

### Abstract:

To restore and improve habitat for Smallmouth Bass, Brown Trout, Walleye, Sauger, Channel Catfish, and other game and non-game species in the Root River.

### Design and scope of work:

The Root River is a medium sized river located in the Driftless Area of Minnesota. The Driftless Area is known for its many cold water streams and almost complete lack of lakes. The Root River is unique in the fact that it is one of the few systems that provide habitat for a large mix of cold and warm water fish and wildlife species, often in the same river segment. The North Branch of the Root River has historically provided that unique habitat mix.

Over the last several decades, the North Branch of the Root River has experienced significant bank erosion and channel widening. This has resulted in degraded habitat for a large variety of game and non-game fish and wildlife species. During this same period, utilization of the North Branch of the Root River has increased dramatically with the popularity of canoeing and kayaking. Ideally this project will be the first of many similar projects to restore and improve the North Branch of the Root River. This project could focus interest on this valuable and highly utilized resource, potentially resulting in the implementation of an ongoing program to monitor populations while leveraging available funding to improve habitat.

The proposed project will employ commonly accepted practices to restore channel depth and structural complexity, stabilize eroding banks, and protect against future degradation on a 4800 foot segment downstream from the DNR's Moen Bridge canoe launch. Techniques employed may include, but are not limited to, bank armoring, bank shaping, rock weirs, cross vanes, j-hook vanes, root wads, woody debris, and native vegetation establishment. These techniques are designed to work with the natural hydraulic process of the river to create and maintain habitat for various fish and wildlife species, and require minimal maintenance. The project will consult with the Minnesota DNR to ensure that best practices are followed during design, implementation, maintenance, and evaluation.

The project is planned to be completed in two major phases over three years to allow for constructability, flood damage and erosion

mitigation, and vegetation establishment. The project could be constructed in three major phases if high water conditions hinder completion. Signing identifying the project funding sources will be displayed during project implementation and after project completion.

Property owners in and around the proposed project have been generally supportive of the project, and verbal access agreements have been secured with affected property owners. Local river users have also voiced support for the project. Local outreach will be conducted to solicit input from other stakeholder groups as the project moves forward. Project experience and evaluation data will be shared with stakeholder groups such as the Root River Watershed One Watershed One Plan Committee and The Friends of the Root River.

The project is on a navigable waterway, and is accessible to the public for all uses through multiple DNR access points and many road right-of-way access points. The project location was selected due its potential for major habitat improvement, high level of access and utilization by the public, and ease of securing landowner access.

## **Crops:**

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

## **How does the request address MN habitats that have: historical value to fish and wildlife, wildlife species of greatest conservation need, MN County Biological Survey data, and/or rare, threatened and endangered species inventories:**

The request proposes to restore and improve habitat in the Root River. The Root River has historically provided habitat for a variety of warm and cold water fish species, resident and migrating waterfowl, and many reptile and amphibian species. Game and non-game species include, but are not limited to: Smallmouth Bass, Brown Trout, Walleye, Sauger, Channel Catfish, Rainbow Trout, Rock Bass, Wood Duck, Canada Geese, Mallard, Pintail, Blue Wing Teal, Green Wing Teal, Snapping Turtle.

Recent flooding events have significantly degraded this habitat through severe bank erosion, channel widening, and a the associated reduction in normal water depths. The request would stabilize banks and reduce erosion, restore a normal channel cross section, and protect this habitat from future flooding events.

## **What is the nature of urgency and why it is necessary to spend public money for this work as soon as possible:**

The Root River supports a unique mix of warm and cold water fish species. However, the aquatic habitat that supports these species has been steadily degraded over recent years. There is significant expense involved in restoring river habitat, and private funding sources are very limited.

## **Describe the science based planning and evaluation model used:**

Minnesota Department of Natural Resources stream habitat restoration guidelines.

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

- H2 Protect critical shoreland of streams and lakes
- H6 Protect and restore critical in-water habitat of lakes and streams

## **Which other plans are addressed in this proposal:**

- Driftless Area Restoration Effort
- Outdoor Heritage Fund: A 25 Year Framework

## **Which LSOHC section priorities are addressed in this proposal:**

### **Southeast Forest:**

- Protect, enhance, and restore habitat for fish, game, and nongame wildlife in rivers, cold-water streams, and associated upland habitat

## **Relationship to other funds:**

- Not Listed

### How does this proposal accelerate or supplement your current efforts in this area:

This proposal would greatly accelerate efforts in restoring and improving habitat for warm and cold water fish other aquatic species in the North Branch of the Root River. If selected the proposal will allow RRRP to implement the bank and in-channel improvements described in the scope of work. This work will almost certainly not occur without this proposal due to limited interest from other groups and the significant cost of the work.

### 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:

The proposed project is not expected to have significant maintenance needs, as river restoration projects are designed to be maintained by the natural hydraulic process. RRRP will inspect the project area for damage after significant flooding events. If maintenance is needed it will be performed through several methods. Low cost maintenance will be performed on a volunteer basis by members of RRRP. High cost maintenance is not expected to occur frequently, but will be addressed by a mix of volunteer work and contracts. Funding for contract work will be secured through fundraising, donations, partnerships with other like minded organizations, and public funding available at such time.

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

Year	Source of Funds	Step 1	Step 2	Step 3
2018	Volunteer	Inspect and evaluate	Coordinate repairs if necessary	Share outcomes with stakeholder groups
2019	Volunteer	Inspect and evaluate	Coordinate repairs if necessary	Share outcomes with stakeholder groups
2020	Volunteer	Inspect and evaluate	Coordinate repairs if necessary	Share outcomes with stakeholder groups
2021	Volunteer	Inspect and evaluate	Coordinate repairs if necessary	Share outcomes with stakeholder groups
2022	Volunteer	Inspect and evaluate	Coordinate repairs if necessary	Consult with DNR for future evaluation. Share outcomes with stakeholder groups

### Activity Details:

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

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program - **Yes**

Is the activity on permanently protected land per 97A.056, subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 - **Yes (Public Waters)**

### Accomplishment Timeline:

Activity	Approximate Date Completed
Secure access agreements	February 2016
Engineering and Design completed and approved	July 2016
In stream work and bank restoration - Phase 1	September 2016
In stream work and bank restoration - Phase 2	September 2017
Final vegetation and tree establishment	June 2018
Performance Measures Report	June 2019

### Federal Funding:

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

### Outcomes:

Programs in southeast forest region:

- Rivers, streams, and surrounding vegetation provide corridors of habitat. Ideally, long term before and after studies of fish and wildlife populations would be completed and evaluated. However, this type of data is extremely limited for the project location. Therefore, the primary evaluation measurements will be river characteristics. Channel width, channel depth, structural complexity, and bank erosion will be surveyed in each of the years prior to the project, and yearly for a minimum of 5 years after the project. Significant increases in channel depth and structural complexity, along with reduced channel width and bank erosion shall indicate that the project was successful.

# Budget Spreadsheet

**Total Amount of Request: \$1,058,000**

## Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$0	\$60,000	RRRP Volunteers	\$60,000
Contracts	\$668,000	\$0		\$668,000
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$0	\$0		\$0
Easement Stewardship	\$0	\$0		\$0
Travel	\$0	\$0		\$0
Professional Services	\$95,000	\$0		\$95,000
Direct Support Services	\$0	\$0		\$0
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$295,000	\$0		\$295,000
DNR IDP	\$0	\$0		\$0
Total	\$1,058,000	\$60,000	-	\$1,118,000

## Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Project Manager	0.20	3.00	\$0	\$60,000	RRRP Volunteers	\$60,000
Total	0.20	3.00	\$0	\$60,000	-	\$60,000

Amount of Request: \$1,058,000

Amount of Leverage: \$60,000

Leverage as a percent of the Request: 5.67%

## 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	0	0	0	0	0
Enhance	0	0	0	11	11
Total	0	0	0	11	11

**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	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$1,058,000	\$1,058,000
Total	\$0	\$0	\$0	\$1,058,000	\$1,058,000

**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	0	0
Enhance	0	0	11	0	0	11
Total	0	0	11	0	0	11

**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	\$0	\$0
Enhance	\$0	\$0	\$1,058,000	\$0	\$0	\$1,058,000
Total	\$0	\$0	\$1,058,000	\$0	\$0	\$1,058,000

**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	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$96,182

**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	\$0
Enhance	\$0	\$0	\$96,182	\$0	\$0

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

4,800

# Parcel List

## Section 1 - Restore / Enhance Parcel List

### Fillmore

Name	TRDS	Acres	Est Cost	Existing Protection?
Root River Restoration	10410227	11	\$1,118,000	Yes

## 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.

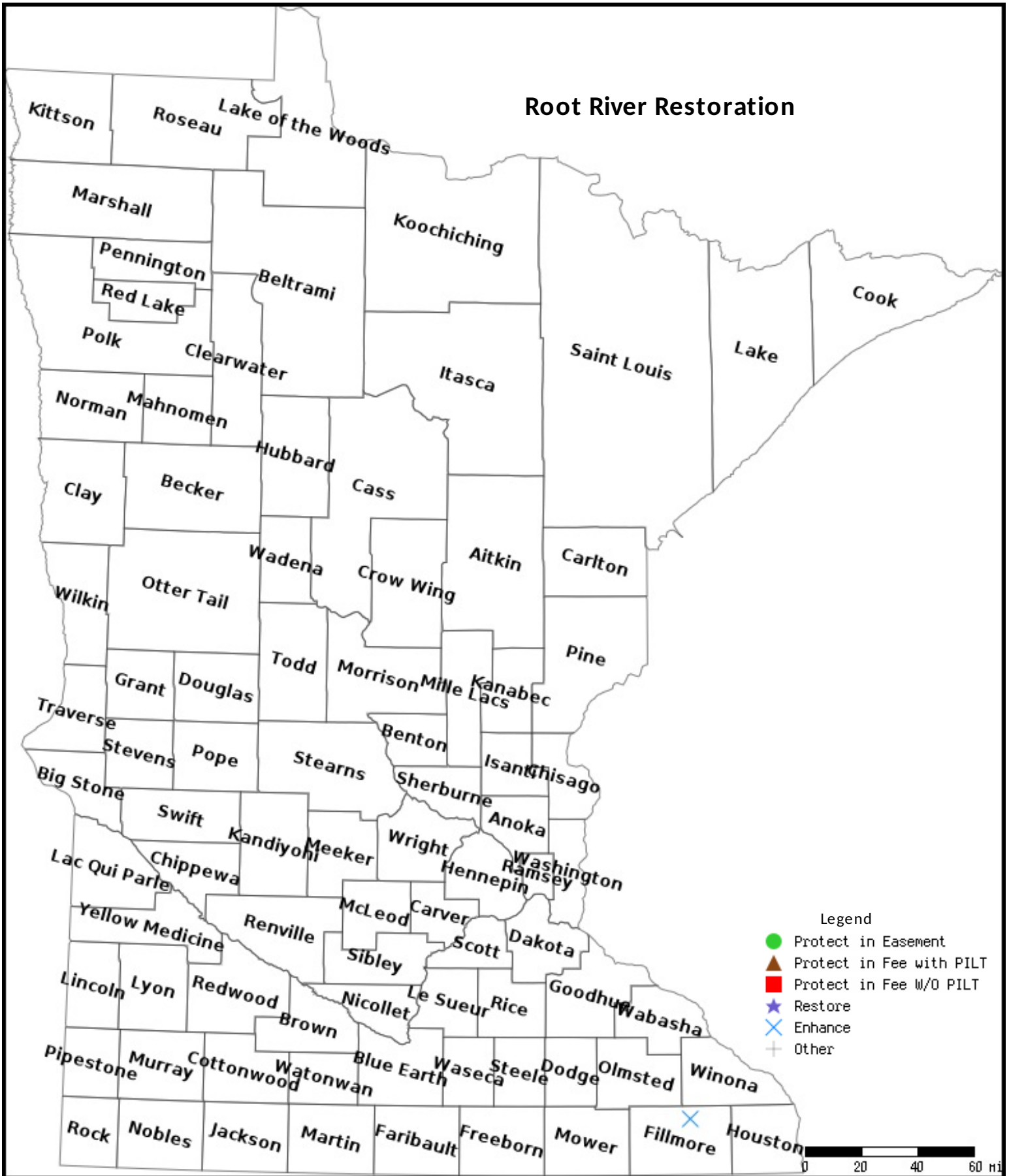
## Section 3 - Other Parcel Activity

No parcels with an other activity type.

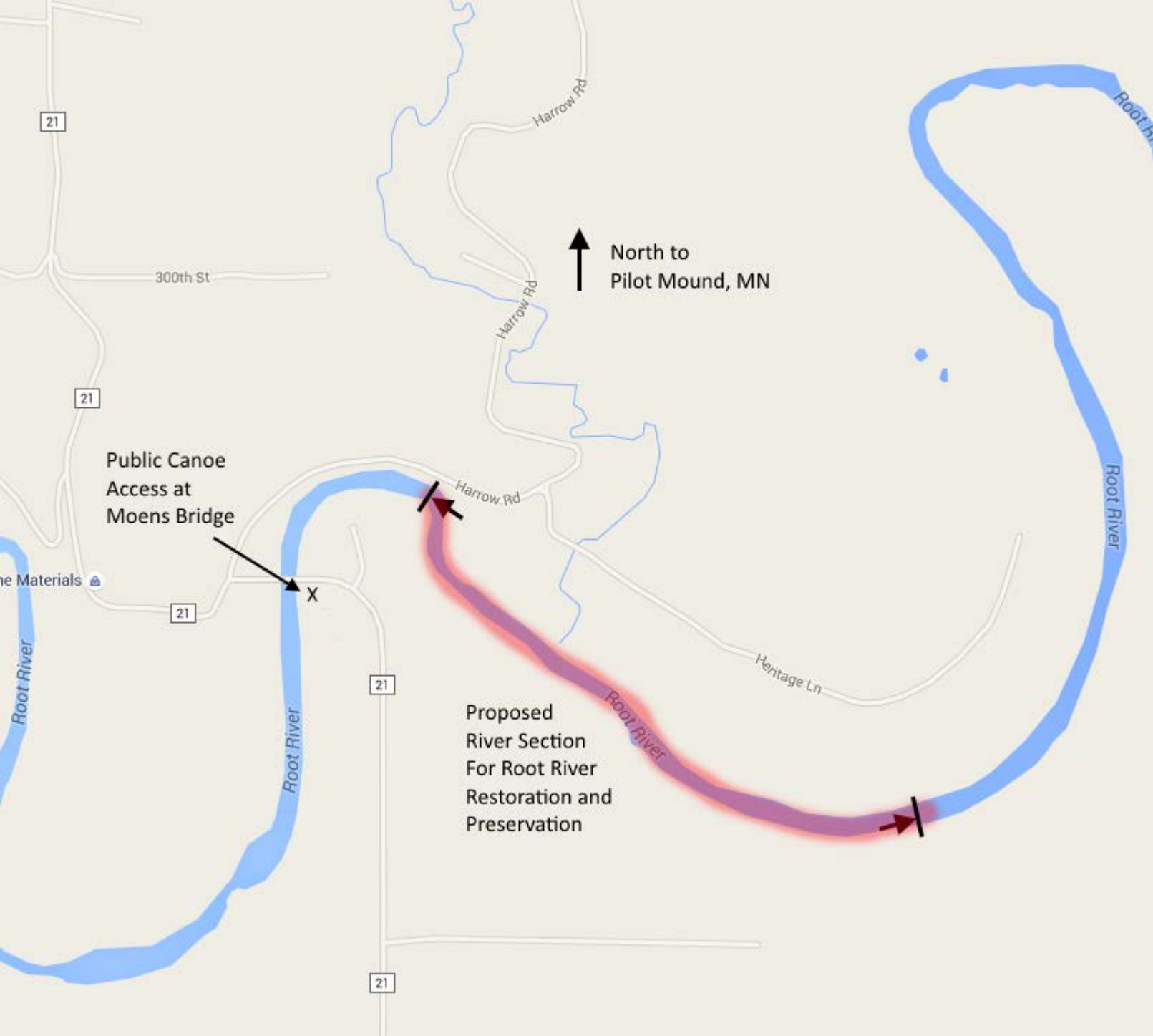


# Parcel Map

## Root River Restoration



Data Generated From Parcel List



21

300th St

Harrow Rd

North to  
Pilot Mound, MN

Harrow Rd

21

Public Canoe  
Access at  
Moens Bridge

Harrow Rd

X

21

21

Heritage Ln

Proposed  
River Section  
For Root River  
Restoration and  
Preservation

Root River

Root River

21