

**Environment and Natural Resources Trust Fund
2016 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 167-F

Implementing/Showcasing Shoreline BMP's on Parks and Trails Lands

Category: F. Methods to Protect, Restore, and Enhance Land, Water, and Habitat

Total Project Budget: \$ 1,035,491

Proposed Project Time Period for the Funding Requested: 3 years, July 2016 to June 2019

Summary:

Streams and lakes in southern and western MN fall below water quality standards. This proposal will improve water quality by restoring shoreline at 25-30 sites managed by the division.

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Sponsoring Organization: MN DNR

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Location

Region: NW, SW, Central, Metro, SE

County Name: Chisago, Douglas, Nicollet, Otter Tail, Wadena

City / Township:

Alternate Text for Visual:

This visual includes a map of MN showing the prairie and eastern broadleaf provinces along with the state parks, water access sites and other units managed by the Division of Parks and Trails. In addition it specifically highlights 5 high priority shoreline restoration sites at Ft. Ridgely, Glendalough, Lake Carlos and Wild River State Parks and Huntersville Forest Landing Campground. The visual also includes two pictures. One shows an example of a degraded stream bank and the other depicts a restored shoreline.

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ TOTAL	_____ %



Environment and Natural Resources Trust Fund (ENRTF)

2016 Main Proposal

Project Title: Implementing and Showcasing New Shoreline Buffer BMP’s on Parks and Trails Lands

PROJECT TITLE:

Implementing and Showcasing New Shoreline BMP’s on Parks and Trails Lands

I. PROJECT STATEMENT

Recent reports indicate that only 16%-37% of streams in central, southern and western MN meet water quality standards for aquatic life. Studies have also shown that only 18%-50% of lakes in the same areas of the state meet water quality standards for aquatic recreation. Land uses, such as rural/urban runoff, erosion caused by loss of shoreline vegetation and agricultural drainage are a major factor in these current water quality problems according to the MN Pollution Control Agency.

The DNR Division of Parks and Trails (MNDNR-PAT) manages 44 state parks, state recreation areas, state waysides and nearly 800 public water access sites, containing hundreds of miles of shoreline, within the area described above. The division is seeking funding to accelerate the restoration and improvement of shoreline at MNDNR-PAT managed public water access sites, lakes and streams. Monies will also be used to showcase examples of sites where best management practices have been implemented. This effort will complement 2013 legislative direction to develop and post on the DNR’s website best management practices to improve water quality at public water access sites by reducing/preventing shoreline erosion and runoff.

Some high priority restoration sites, largely on state park lands, have already been identified and are included in the 2016 Acquisition/Restoration worksheet. An additional 20-25 sites potential sites for restoration on MNDNR-PAT lands will be identified utilizing analysis tools such as the MNDNR Watershed Health Assessment Framework and coordination with agencies/organizations such as the MN Pollution Control Agency, which are involved in assessing water quality and developing/implementing plans to improve the ecological health of water bodies.

Following a resource assessment of each proposed site, plans will be prepared and implemented on approximately 30 shoreline restoration sites on MNDNR-PAT managed lands. The projects will involve activities such as: establishing/widening existing buffer areas, installing shoreline protection materials, planting and maintaining native species and managing visitor access. Selected sites in high use areas will be showcased via on-site signage and the DNR website.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Identification of Sites for Shoreline Restoration

Budget: \$103,549

Additional sites for restoration on MNDNR-PAT lands will be identified utilizing analysis tools such as the MNDNR Watershed Health Assessment Framework and coordination with agencies/organizations such as the MN Pollution Control Agency. The results of this analysis will be reviewed and refined by Parks & Trails staff to create a list of Parks and Trails administered sites for shoreline restoration that will provide the greatest benefits in terms of water quality improvement and to showcase best management practices.

Outcome	Completion Date
1. Identification of potential shoreline restoration sites on MNDNR-PAT lands utilizing analysis tools and coordination with MPCA and others.	November 2016
2. Review and refinement of a list of 20-25 additional shoreline restoration sites on MNDNR-PAT lands to be improved between 2017-2019.	December 2016



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Activity 2: Conduct Resource Assessments of Natural/Cultural Resources and Develop Shoreline Restoration Plans for Selected Sites Budget: \$207,098

Resource assessments will be conducted for proposed sites to insure protection of important natural and cultural resources. Detailed restoration plans will be prepared for sites providing the greatest benefits for water quality.

Outcome	Completion Date
1. Conduct a resource assessment for high priority restoration projects already identified.	December 2016
2. Prepare a detailed restoration plan and site-specific cost estimate for high priority sites.	December 2016
3. Conduct resource assessments for each of the 20-25 additional proposed projects.	July 2017
4. Prepare a detailed restoration plan & site-specific cost estimate for additional locations.	December 2017

Activity 3: Implement Restoration Plans at Selected Sites Budget: \$647,005

Implement shoreline restoration plans at approx. 30 sites on MNDNR-PAT lands and conduct follow-up activities to insure successful completion of projects. Projects will include activities such as: establishing/widening buffer areas, installing shoreline protection, planting and maintaining native species and managing visitor access.

Outcome	Completion Date
1. Conduct shoreline restoration projects at identified high priority sites.	November 2017
2. Conduct shoreline restoration projects at 10-12 sites	December 2018
3. Conduct shoreline restoration projects at an additional 10-12 sites	October 2019
4. Conduct follow-up activities on initial sites.	October 2019

Activity 4: Showcase Restored Sites that can be used as examples of BMP's for shoreline restoration/management for lake/riparian landowners (public & private) Budget: \$77,839

Projects that provide excellent examples of BMP's for shoreline restoration will be incorporated into the DNR's Stormwater & Shoreline Best Mgmt. Practices web pages (http://www.dnr.state.mn.us/water_access/bmp/index.html). On-site signage and/or other materials will be developed to complement online content.

Outcome	Completion Date
1. Develop and post text and photos of sites exemplifying shoreline rest. BMP's	July 2019
2. Design and install signage at sites exemplifying shoreline rest. BMP's.	July 2019

III. PROJECT STRATEGY

A. Project Team/Partners

The project team consists of DNR staff. MNDNR-PAT staff will be connecting with MPCA staff and likely similar agencies (watershed districts, etc.) to aid in site selection and to determine if there are sites on MNDNR-PAT lands that can be used to support larger projects. Only DNR will be receiving project funds.

B. Project Impact and Long-Term Strategy

MNDNR-PAT has been managing shorelines and public water access sites for many years. The intent of this project is to accelerate efforts to restore shorelines on MNDNR-PAT lands most in need of improvement and provide increased communication to the public related to shoreline restoration BMP's. Examples of funding that supported similar efforts in the past includes Water Recreation, Game & Fish and Parks & Trails Legacy funding.

C. Timeline Requirements

It is fully anticipated that all aspects of the proposed project will be completed within a 39 month period of receiving funding. Shoreline restoration projects themselves will take place in 2017-19 due to the need to complete project selection and resource assessments prior to restoration. The additional months will provide time needed for follow-up care to insure successful completion of the restoration projects.

2016 Detailed Project Budget

Project Title: *Implementing and Showcasing New Shoreline BMP's on Parks and Trails Lands*

5/7/2015

IV. TOTAL ENRTF REQUEST BUDGET: 3 years

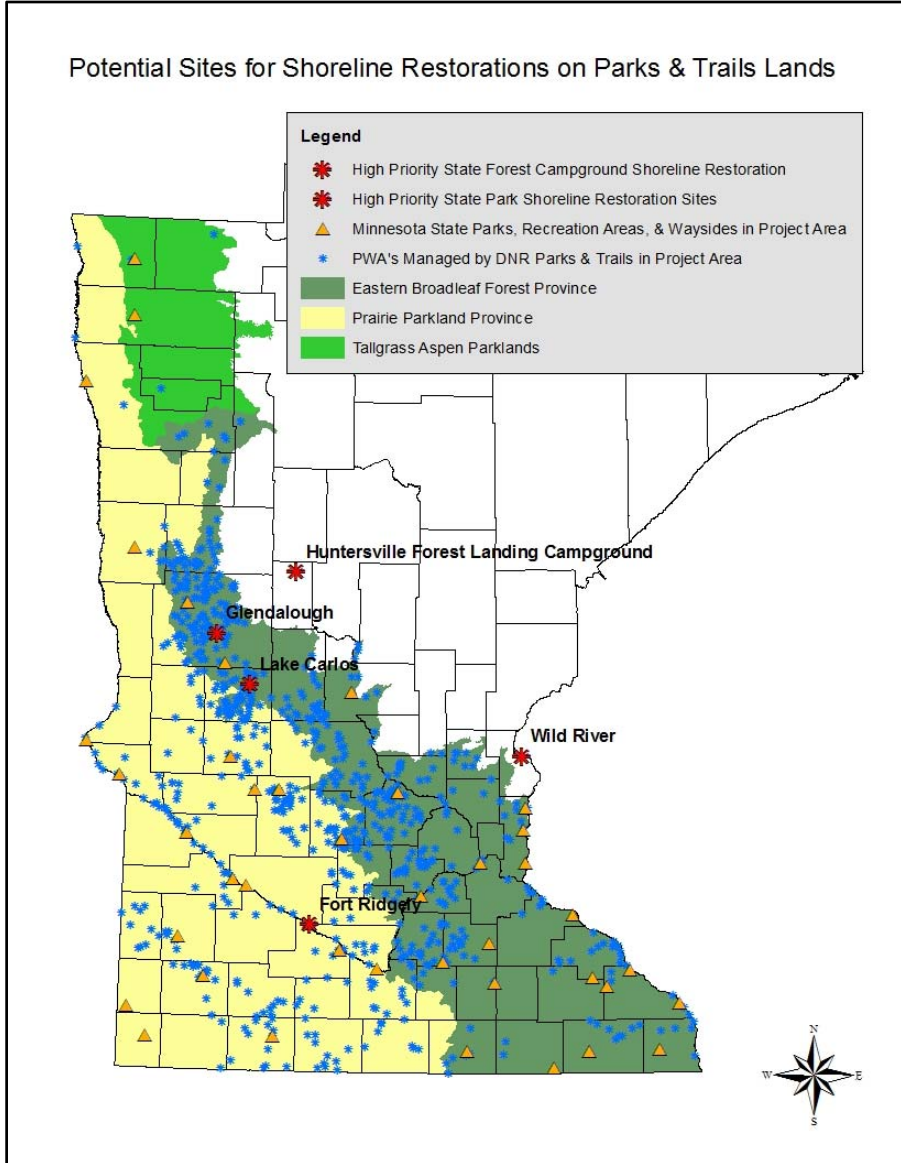
<u>BUDGET ITEM</u>	<u>AMOUNT</u>
Personnel:	\$ -
Natural Res. Specialist Intermediate (67% salary, 33% benefits/support). 1 FTE for 3 years	\$ 210,000
NR Wildlife Technician (67% salary, 33% benefits/support). 0.3 FTE for 3 years	54,000
Contracts:	\$ -
Contract with MN Historical Society for cultural resource review of proposed project sites and recommendations for avoidance, mimimization, mitigation.	\$ 102,000
Contract with organizations, companies experienced in natural resource management and specifically shoreline management to implement 25-30 projects to restore shorelines on MNDNR-PAT lands using BMP's already prepared by the division.	\$ 303,000
Contract with Conservation Corps MN to assist in implementing shoreline restoration projects.	\$ 135,000
Equipment/Tools/Supplies:	
Signage highlighting shoreline restoration projects	\$ 75,000
Plant materials, erosion control matting, shoreline stabilization supplies	\$ 175,000
Additional Budget Items:	\$ -
Direct and Necessary expenses: HR Support (\$5,675), Safety Support (\$1,338), Financial Support (\$10,682), Communication Support (\$3,708), IT Support (\$10,897), Planning Support (\$2,487) and Procurement Support (\$705.)	\$ 35,491
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 1,035,491

V. OTHER FUNDS

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ To Be Applied To Project During Project Period:	N/A	
Other State \$ To Be Applied To Project During Project Period:	N/A	
In-kind Services To Be Applied To Project During Project Period:		
It is anticipated that 10% of time of two resource specialists in each region will be needed annually to help select and provide project oversight and support. Amount is for 3 regions for 3 years.	\$ 108,000	<i>Pending</i>
Funding History:		
Approximately 30 small-scale shoreline restoration projects are planned for implementation between June 2015-June 2016. The bulk of these projects are on public water access sites.	\$ 110,000	Secured
Approximately \$75,000 is utilized annually to conduct invasive species control and other resource management work on public water access sites. Amount shown is for 3 years.	\$ 225,000	<i>Pending</i>
Remaining \$ From Current ENRTF Appropriation:	N/A	
	\$ 443,000	

Environment and Natural Resources Trust Fund											
2016 Proposed Acquisition/Restoration List											
Project Title: Implementing and Showcasing New Shoreline BMP's on Parks and Trails Lands											
Project Manager Name: Ed Quinn											
Organization: Department of Natural Resources - Division of Parks & Trails											
ENRTF \$ Request: \$1,035,491											
#	Acquisition or Restoration Parcel Name	Geographic Coordinates Format: [Deg.]° [Min.]' [Sec.]" [Hemis.]		Estimated Cost	County	Ecological Significance	Activity Description	# of Acres	# of Shoreline Miles	Type of Landowner	Proposed Fee Title or Easement Holder (if applicable)
		Latitude	Longitude								
1	Huntersville Forest Recreation Area	46, 44' 20.4"	94, 55' 42.9"	\$12,000	Wadena	Crow Wing River Shore	Live cribwall construction to mitigate erosion plus vegetation restoration	0.15	0.02	State Of MN	N/A
2	Glendalough State Park	46, 20' 3.2"	95, 39' 51.7"	\$30,000	Ottertail	Annie Battle Lake, (UPs24 along adjacent shoreline)	Restore mowed lawn to native plants; create designated access points to shoreline; interpret native shoreline vegetation	0.35	0.3	State Of MN	N/A
3	Lake Carlos State Park	45, 59' 50.1"	95, 20' 11"	\$2,000	Douglas	Lake Minnewaska shoreline	Restore native plants on shoreline to repair visitor impacts	0.1		State Of MN	N/A
4	Wild River SP	45°31'14"	92°43'43.7"	\$30,000	Chisago	St. Croix River shoreline and floodplain wetland	Replace failing culvert-impaired connectivity, improve shoreline stability with a toewood bench, re-align trail to reduce impact, and plant deep rooted vegetation above and below outlet.	1	1	State of MN	N/A
5	Ft Ridely State Park	44.47243	-94.73316	\$30,000	Renville-Nicollet	Ft Ridgely Creek is stocked as a trout stream, and runs through the park.	Stabilize stream and protect shoreline using natural channel design		0.5	State Owned	N/A
NOTES: The above list is preliminary and includes high priority projects largely on state park lands. An additional 20-25 projects will be identified through GIS analysis and coordination with other agencies as described in the proposal.											
5/7/2015											

Implementing and Showcasing New Shoreline Buffer BMP's on Parks and Trails Lands
 LCCMR Proposal Visual - 2016



Example of Degraded Stream Bank



Example of Restored Shore Line



Environment Trust Fund 2016 Project Proposal

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Project Manager Qualifications

Ed Quinn oversees the natural/cultural resource management program for the Division of Parks & Trails. He provides direction for and coordination of 16 Parks & Trails resource management specialists and technicians. The program is responsible for protecting, managing and restoring natural/cultural resources on division-administered lands. Annually the division restores approximately 890 acres of prairie, forest & wetlands, conducts prescribed burns on about 5,600 acres and manages invasive species on approximately 8,700 acres.

Ed has worked in the natural resource field for over 20 years. He has been employed as a naturalist, wildlife biologist and natural areas manager. He has overseen the MNDNR Parks & Trails resource program since 1998. He holds a bachelor's degree in Fish & Wildlife from Michigan State University and a master's degree from the University of Minnesota. He has been a certified wildlife biologist since 1994.

Organization Description

The Department of Natural Resources-Division of Parks and Trails operates 67 state parks, 9 state recreation areas, 25 state trail segments, 1,496 water access sites, 33 water trails and 8 state waysides throughout Minnesota. The Division is responsible for protecting, managing & restoring natural and cultural resources and providing outstanding park, trail and water recreation experiences for visitors.

