

# Environment and Natural Resources Trust Fund 2009 Phase 2 Request for Proposals (RFP)

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**LCCMR ID: 055-B1**

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**Project Title:** Mustinka River Rehabilitation, Reconnection, and Water Quality Enhancement

**Total Project Budget:** \$ \$58,590

**Proposed Project Time Period for the Funding Requested:** July 2009 to July 2011

**Other Non-State Funds:** \$ \$0.00

**Priority:** B1. Reduce Soil Erosion

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**Region:**

**County Name:**

**City / Township:**

Central

Traverse

Redpath Twp

**Summary:** The Mustinka River (ditch 14) will be restored and water quality improved as part of a combined flood damage reduction and natural resource enhancement project in the Red River Basin.

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**Main Proposal:** 1008-2-056-proposal-Redpath LCCMR proposal.pdf

**Project Budget:** 1008-2-056-budget-Redpath LCCMR Project Budget.pdf

**Qualifications:** 1008-2-056-qualifications-org description.pdf

**Map:** 1008-2-056-maps-redpath proposal map.pdf

**Letter of Resolution:**

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# **PROJECT TITLE: Mustinka River Rehabilitation, Reconnection, and Water Quality Enhancement.**

## **I. PROJECT STATEMENT**

The Bois de Sioux Watershed District (BDSWD) identified flood damage reduction (FDR) and natural resource enhancement (NRE) goals for the Mustinka River subwatershed in their comprehensive watershed district plan. As part of the Red River Basin mediation process, the BDSWD established a project team to identify FDR and NRE needs and to find opportunities for comprehensive solutions to these problems in this subwatershed. The project team is composed of local officials and staff, citizens, and state and federal agency staff. In 2008, the project team identified substantial needs for flood damage reduction, water quality enhancement, river habitat restoration, wetland/upland habitat restoration, and river connectivity in the Mustinka River subwatershed.

This project overall project will provide comprehensive, long term solutions to needs identified in the watershed plan and by the project team. The overall project includes four primary components:

1. Rehabilitation and reconnection of the Mustinka River channel.
2. Sediment reduction and water quality monitoring.
3. Flood damage reduction impoundment.
4. Modification of the Pine Ridge Park dam.

This project proposal concentrates efforts planning and implementing items 1, 2, and 4 in this list.

## **II. DESCRIPTION OF PROJECT RESULTS**

**Result 1:** Plan for Rehabilitation/reconnection of the Mustinka River **Budget:** \$ 18,720

The Mustinka River was channelized more than 40 years ago and almost 91 miles of river channel was also bypassed with a cutoff channel. This project will reestablish a natural functioning two-stage channel along five miles of the existing ditch and reconnect the disconnected loop of the original channel (8.8 miles). This rehabilitation will result in the creation of almost 20 miles of new channel and floodplain that will provide fish and wildlife habitat, improve water quality, and be sustainable with little maintenance.

<b>Deliverable</b>	<b>Completion Date</b>
<b>1. Rehabilitation and reconnection plan</b>	<b>November, 2009</b>
<b>2. Implement plan to design and secure funding and partners and implementation.</b>	<b>September, 2010</b>

**Result 2:** Sediment Reduction **Budget:** \$ 23,750

MPCA has listed this reach of the Mustinka River is listed as impaired for turbidity. Installation of watercourse buffers and other effective best management practices (BMPs) within the upstream watershed will reduce sediment loads to the watercourse. The Traverse and Grant County Soil and Water Conservation Districts will intensify efforts to implement BMP's and work with the Minnesota Pollution Control Agency (MPCA) on Total Maximum Daily Load (TMDL) development and implementation. Geographic Information Systems (GIS) tools and remote sensing will be used to identify and prioritize areas for BMPs.

Deliverable	Completion Date
1. Assessment and prioritization of areas that need BMPs	September, 2009
2. BMP marketing and implementation	October, 2010
3. Results reporting	October, 2010

**Result 3: Coordinate modification of the Pine Ridge Park dam \_ Budget: \$ 12,480**

The dam on the Mustinka River at Pine Park creates a recreational area for local residents but blocks fish passage to more than 30 miles of the Mustinka River. Modification of the dam with a rock-slope fishway will reconnect the upper and lower reaches of the Mustinka River while maintaining the existing function of the dam with substantially improved safety.

Deliverable	Completion Date
1. Dam restoration plan	December, 2010
2. Dam modification	Fall, 2011

### III. PROJECT STRATEGY AND TIMELINE

#### A. Project Partners

Project partners include the 20 members of the BDSWD Redpath project team including private citizens, and SWCD, County, DNR, DOT, USFWS, NRCS, and non-profit organizations.

#### B. Project Impact

*This project is the beginning phase of an overall effort that will reduce flood peaks and flood damages to farm land and residents in the BDSWD, including the City of Breckenridge. Specifically, the project components proposed here, will provide substantial water quality benefits, restore fish and wildlife habitat, and reconnect sections of the Mustinka River that were severed 40 years ago.*

#### C. Time

The components of this project will facilitate the developed and implementation of this long term project. This project will complete sediment reduction on private lands, plan and initiate the river rehabilitation and reconnection, and plan and initiate the dam modification by the end of 2010.

#### D. Long-term Strategy

The BDSWD and the Redpath project team have developed a comprehensive long term plan to reduce flood peaks and flood damages and enhance natural resources including water quality in this watershed area. In addition to the efforts describe here, the watershed is in the process of acquiring land and engineering the development of 16,000 acre-feet of flood storage associated with the river rehabilitation and is pursuing engineering of the river rehabilitation. The timeline to complete all project components is 2013 to 2018 depending on land acquisition and funding.

# Project Budget

Mustinka River Rehabilitation, Reconnection, and Water Quality Enhancement.

## IV. TOTAL PROJECT REQUEST BUDGET

<b>BUDGET ITEM</b>	<b>AMOUNT</b>	<b>% FTE</b>
Grant County SWCD staff to market and implement erosion control measures on private lands.	\$ 12,500	25%
Traverse County SWCD staff to market and implement erosion control measures on private lands.	\$ 11,250	25%
Coordinate, develop, and plan the natural resource enhancement components of the channel rehabilitation and reconnection project.	\$ 18,720	15%
Coordinate, develop, and plan the dam modification.	\$ 12,480	10%
Red River Water Management board water quality monitoring and planning	\$ 3,640	5%

<b>Contracts:</b>	\$ -	
	\$ -	
	\$ -	
<b>Equipment/Tools:</b>	\$ -	
<b>Acquisition (Including Easements):</b> Note: No funding requested at this time. The watershed district will purchase lands for the impoundment and will use RIM for acquisition of most lands needed for the channel rehabilitation	\$ -	
<b>Restoration:</b>	\$ -	
<b>Other:</b>	\$ -	
	\$ -	
<b>TOTAL PROJECT BUDGET REQUEST TO LCCMR</b>	<b>\$ 58,590</b>	

## V. OTHER FUNDS

<b>SOURCE OF FUNDS</b>	<b>AMOUNT</b>	<b>Status</b>
<b>Remaining \$ From Previous Trust Fund Appropriation (if applicable):</b>		
<b>Other Non-State \$ Being Leveraged During Project Period:</b> Note: The Red River water management board historically has funded 25% of Red River Water Management Board	\$ -	<i>Pending</i>
<b>Other State \$ Being Spent During Project Period:</b> Note: It is anticipated that 50% of impoundment and channel rehabilitation costs will be funded in the future by the DNR FDR program.		<i>Pending</i>
<b>In-kind Services During Project Period:</b> Overall		
project coordination by BDSWD staff and engineering	\$ 35,000	
In Kind services from DNR, USFWS, SWCD, and other NR agencies	\$ 40,000	
<b>Past Spending:</b> Development of the Redpath project by the BDSWD staff and project team.	\$ 29,000	

## **ORGANIZATIONAL DESCRIPTION**

MCEA fills a unique niche in Minnesota's environmental community, with a focus on using law, science, and research to protect our natural resources, wildlife, and public health. We focus on work that produces tangible environmental improvements, often using unusual coalitions to achieve these results. The citizens of Minnesota and its natural resources are the beneficiaries of our work.

MCEA is a 501(c)(3) tax-exempt nonprofit corporation controlled at the policy level by a 17-member Board of Directors. MCEA was formed in 1974 as Project Environment Foundation (PEF). In 1993, the Board of Directors changed PEF's name to the Minnesota Center for Environmental Advocacy (MCEA) and undertook an ambitious strategic plan to expand and strengthen MCEA and better coordinate the entire Minnesota environmental community. In the past 15 years, MCEA has continued its record of successfully challenging environmental degradation and creating innovative partnerships to improve Minnesota's natural environment. Today, MCEA works in five program areas: Water Quality, Land Use and Transportation, Public Health, Clean Energy, and Wildlife and Natural Resources. A brief description of each program area can be found at [www.mncenter.org](http://www.mncenter.org). MCEA currently has a 22-person staff including policy experts, attorneys, scientists and a geographic information system specialist.

## **PROJECT MANAGER QUALIFICATIONS**

Henry VanOffelen joined MCEA in June, 2002 as Natural Resource Scientist. His work is focussed on Red River Basin flood reduction and natural resource enhancement projects. Prior to working with MCEA he worked for the Minnesota Department of Natural Resources (DNR) for 12 years, where he worked as the Red River fisheries specialist, the 1837 Treaty Biologist, a fisheries research biologist and as fisheries specialist. He has experience working with landowners and local, state and federal officials to develop comprehensive watershed management plans to enhance natural resources and reduce flood damage. He has authored several natural resource assessments for watershed district plans and participates on several watershed project teams. He has a Master's in fisheries biology from Cornell University and a Bachelor's in fisheries from the University of Minnesota.

# SITE PLAN

## BDSWD - Redpath Project

