

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

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**LCCMR ID: 071-B4**

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**Project Title:** St. Louis River Sediment Assessment and Restoration Strategies

**Total Project Budget:** \$ \$196,125

**Proposed Project Time Period for the Funding Requested:** July 1, 2009 - June 30, 2011

**Other Non-State Funds:** \$ \$245,335.00

**Priority:** B4. Deep Water Lakes

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**Region:**

**County Name:**

**City / Township:**

NE

Carlton, St. Louis

St. Louis River and Duluth/Superior Harbor

**Summary:** A strategy to obtain data in the St. Louis River to conduct comparative analysis on a larger geographic scale that will be used for prioritization of cleanup and restoration activities.

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**Main Proposal:** 1008-2-036-proposal-LCCMR- 2009STLouisRiver3.doc

**Project Budget:** 1008-2-036-budget-StLouisriverLCCMR09Project Budget.xls

**Qualifications:** 1008-2-036-qualifications-Marc Hershfield PROJECT MANAGER QUALIFICATIONS.do

**Map:** 1008-2-036-maps-StLouis\_Final\_State\_Approved\_042007.pdf

**Letter of Resolution:** 1008-2-036-resolution-StLRLCMROverview.pdf

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## LCCMR 2009 Phase 2 RFP Main Proposal

### PROJECT TITLE: St. Louis River Sediment Assessment and Restoration Strategies

#### I. PROJECT STATEMENT

Lake Superior is a unique, vast resource of freshwater that has not experienced the same levels of development and pollution as the other Great Lakes. However, the lower St. Louis River, which includes the Duluth-Superior Harbor, has been affected by heavy industrial and commercial uses over the years that have left contamination in the sediments of the river system. These contaminants result in fish consumption advisories, fish tumors and deformities, beach closings, and loadings of pollutants to Lake Superior. Due to these impairments, the lower St. Louis River was identified binationally as one of 43 Areas of Concern (AOC) within the Great Lakes. Minnesota is participating in binational efforts to protect and restore the water quality and ecosystems of the Great Lakes. The St. Louis River Citizens Action Committee has been working since the 90's and has developed a lower St. Louis River Remedial Action Plan (RAP). The Remedial Action Plan identifies several areas located throughout the estuary as contamination "hot spots." Because of limited funding many areas within the lower St. Louis River, including the harbor, have minimal or no sample data associated with them.

Additionally, many critical sample parameters were not analyzed on an estuary-wide basis, making broad comparative analysis difficult. The MPCA, in cooperation with the US Corps of Engineers, has initiated a thorough sediment investigation to fill noted data gaps within the estuary. This will enable meaningful comparative data analysis to be conducted for purposes of prioritizing areas for future corrective actions and restoration opportunities. The goal is not to conduct rigorous and exhaustive research but rather to gather enough data to adequately screen the estuary for additional or little understood problems.

Two distinct types of study areas will be sampled: (1) Augmentation sites — known hot spots which possess data gaps; and (2) New assessment sites — sites which have no or minimal data and/or demand reasonable suspicion due to historic land use.

MPCA entered into a Partnership Agreement with the US Army Corps of Engineers (USACE) to assess targeted areas in the estuary from the Minnesota Harbor entry upriver to the City of Cloquet. Phase I is scheduled to be completed in October 2008 for 233 sample locations on Rice's Point (map attached). This Phase 2 LCCMR project proposal would fund sampling of the remaining upstream locations needed to complete all near shore areas in the study area, approximately 34 river miles.

Over the last two years regional stakeholders have been working to finalize the Delisting Targets for the lower St. Louis River by December 2008 in accordance with the Great Lakes Regional Collaboration. The final Delisting Targets will steer the process for creating the lower St. Louis River Remediation and Restoration Implementation Strategies Report with continued input from the individuals who worked on establishing the Targets.

#### II. DESCRIPTION OF PROJECT RESULTS

The overall proposed assessment strategy is to obtain a spatially diverse, consistent and representative data set in the lower St. Louis River, including the Duluth-Superior Harbor. This is necessary in order to conduct meaningful comparative analysis on a larger geographic scale. This analysis will enable a much sharper focus with broad application as to what are truly the hotspots within the estuary. This body of assessment work is considered an essential screening activity for prioritization of cleanup and restoration activities.

##### **Result 1: *Sediment Sampling***

Complete final phases of the Partnership Agreement with USACE regarding MN side of the lower St. Louis River collecting samples for chemical analysis. The innovative survey tool Laser Induced

##### **Budget**

**\$ 141,125**

Flourescence (LIF) will be used to streamline polyaromatic hydrocarbon (PAHs) field testing and minimize lab costs.

**Result 2: Remediation and Restoration Implementation Strategies \$ 55,000**

Contract with an environmental consultant to: facilitate stakeholders participation in developing remediation and restoration implementation strategies; synthesize sediment data and habitat data to prioritize remediation and restoration implementation strategies; and identify specific site recommendations as they relate to the delisting targets and contribute to an overall estuary health and ecosystem balance.

<b>Deliverable</b>	<b>Completion Date</b>
1. Sediment Sampling: Laboratory Data on Sediment Health	June 1, 2010
2. Remediation and Restoration Implementation Strategies: Final Report	June 30, 2011

**III. PROJECT STRATEGY AND TIMELINE**

**A. Project Partners**

**Task 1:** US Corps of Engineers-Detroit District: Technical, Planning and Engineering Assistance, MPCA: GIS, Data Correlation and Analysis.

**Task 2:** Continued committee participation from federal, state, local, tribal, commercial and nonprofit entities including, but not limited to: US Environmental Protection Agency, US Fish and Wildlife Service, Wisconsin and MN Departments of Natural Resources, St. Louis River Citizens Action Committee, Harbor Technical Advisory Committee, St. Louis County, Cities of Duluth, MN and Superior, WI, Fond du Lac Tribe and 1854 Treaty Authority, The Nature Conservancy and Environmental Consultant.

**B. Project Impact**

The lower St. Louis River sediment clean-up and habitat restoration will have a positive economic and social impact for the Harbor, Duluth's 85,000 inhabitants, and the 4 million tourists recreating in the estuary. It also will serve as the benchmark for headwaters to the Great Lakes and other contaminated areas on Lake Superior. Fishable, swimmable waters will increase property values, improve species diversity and assure quality of life improvements in the region. The project will also advance recommendations in the citizen driven Lower St. Louis River Habitat Plan (2002), a cooperative effort delivered by the stakeholders listed above in Task 2.

**C. Time**

The project will span two years from July 1, 2009 to June 30, 2011. The sediment sampling will occur during the first year providing adequate data needed for the development of the strategies report in year two.

**D. Long-Term Strategy**

The lower St. Louis River was named an Area of Concern in 1987. Many projects have been implemented to remove the Beneficial Use Impairments contributing to its designation. However, no overall strategy has been in place to prioritize sites, measure specific advances and monitor overall success. Based on sound data, this project would act as the road map for the next 20 years of stakeholder involvement culminating in the restoration and delisting of the Area of Concern.

The underlying key to improving water quality in the lower St. Louis River is addressing the contaminated sediments in a prudent and orderly fashion. Data generated from this effort will be used for years to ensure critical habitats are protected and restored for native fish and wildlife species. Working with an array of competent engaged partners, a comprehensive remediation to restoration action plan will be collaboratively developed making the large challenge more manageable.

## Project Budget

### St. Louis River Sediment Assessment and Restoration Strategies

#### IV. TOTAL PROJECT REQUEST BUDGET

<b>BUDGET ITEM</b>	<b>AMOUNT</b>
<b>Contracts:</b> Remediation and Restoration Strategies Report (contract w/ environmental consultant)	\$ 55,000
<b>Other:</b> Sediment Sampling in St. Louis River AOC (match funds for approved Sediment Assessment Partnering Agreement w/ Corps)	\$ 141,125
<b>TOTAL PROJECT BUDGET REQUEST TO LCCMR</b>	<b>\$ 196,125</b>

#### V. OTHER FUNDS

<b>SOURCE OF FUNDS</b>	<b>AMOUNT</b>	<b>Status</b>
<b>Other Non-State \$ Being Leveraged During Project Period:</b> Existing Cost Share Agreement (Approved by Commissioner Moore May 2008) enables a federal match of 65% Federal for 35% State dollars. Corps of Engineers - Detroit Office \$245, 335 available for continuation of work.	\$ 245,335	<i>Pending</i>
<b>In-kind Services During Project Period:</b> EPA GLNPO office approved (September 2008) LaMP/RAP-MPCA grant amendment for 3 year period ending October 2011. 0.3 FTE dedicated Project Manager salary(including fringe benefits) for two years during project.	\$ 50,453	
<b>Past Spending:</b> USEACE Phase I (\$129,665) and MPCA Phase I Match (\$55,436), EPA GLNPO CAC Delisting Public Meetings (\$22,000), MPCA In-Kind Staff (\$53,384), MPCA Project Dollars for the Following: NRRI GIS Reference Mapping (\$15,000) Harbor Technical Advisory Committee Coordination(\$5,000), Botanical Validation (\$10,000), So. St. Louis Co. SWCD Identification of Water Resources Protection/Restoration Locations(\$5,000)	\$ 295,485	

## **PROJECT MANAGER QUALIFICATIONS**

### Present Position

Marc Hershfield is the coordinator for the bi-national, multi-state effort to address the St. Louis River/ Harbor Area of Concern at the Minnesota Pollution Control Agency. In addition he has managed the Lake Superior Hazardous Waste Initiative which focused on reducing mercury, and outreach aimed at protecting water quality. Marc has been with the Minnesota Pollution Control Agency for three years coming to the Agency from the Minnesota Board of Water and Soil Resources where he served as a Coastal Specialist managing the coastal non-point source pollution program in the Lake Superior watershed for BWSR. Prior to his work in Minnesota, he worked at the Wisconsin Department of transportation and the Waste Management of Wisconsin organization for 13 years in a variety of environmental programs.

### Education

Bachelor of Science University of Wisconsin – Stevens Point, 1987

Major: Natural Resource Management

Minors: Water Resources/Geography

## **ORGANIZATIONAL DESCRIPTION**

The Minnesota Pollution Control Agency (MPCA) was established as a state agency in 1967 to protect the air, waters and land of Minnesota. The mission of the MPCA is to work with Minnesotans to protect, conserve and improve our environment and enhance our quality of life. To continue moving Minnesota toward environmental excellence, the MPCA monitors environmental quality, offers technical and financial assistance, and enforces environmental regulations.

