Environment and Natural Resources Trust Fund
2017 Request for Proposals (RFP)

Project Title: **ENRTF ID: 024-A**

Development of Comprehensive Wetland Restoration Planning Framework

Category: A. Foundational Natural Resource Data and Information

Total Project Budget: $ 600,000

Proposed Project Time Period for the Funding Requested: 2 years, July 2017 – June 2019

Summary:

Development of a statewide framework for prioritizing wetland restoration resulting in a prioritization tool based on natural resource data at a watershed scale.

Name: Les Lemm

Sponsoring Organization: Board of Water and Soil Resources

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Web Address

Location

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Sequential Task Flow Chart

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

I. PROJECT STATEMENT

This project will develop a statewide framework for prioritizing wetland restorations, and result in a prioritization tool based on natural resource data at a watershed scale. The framework will identify priority wetland restoration sites in order to maintain and improve watershed integrity. It will also result in the development of a set of standards for local governments to identify and designate local priorities within the context of the statewide framework. This initiative will improve the targeting and quality of wetland restoration projects to achieve specific watershed goals.

Existing conservation and regulatory programs generally choose wetland restoration projects from a set of available projects, which may or may not be the best projects to achieve program goals. Moreover, this approach does not address the specific goals of watersheds identified through an analysis of wetland functional losses.

This project will establish a statewide framework for prioritization of wetland restorations that focus on the watershed goals and identifies priority projects to meet those goals. Both conservation and regulatory compliance efforts can use this framework to proactively target wetland restoration activities to achieve overall watershed goals.

The 2008 Federal Mitigation Rule (33 CFR Parts 325 and 332) as well as other contemporary conservation planning initiatives focus on watershed-based planning and prioritization efforts for wetland restorations. This focus is intended to proactively identify and address watershed impairments by targeting wetland restoration efforts. It represents a more holistic approach to replacing and improving wetland functions based on identified watershed functional goals. As a result, wetland restoration projects are selected to replace lost wetland *functions,* rather than just replacing lost wetland *acres*. The ultimate goal of this initiative is to increase the public value of wetland restoration through improved targeting of projects to maintain and improve watershed integrity. This will provide a more informed decision-making process, and increase coordination among wetland conservation and regulatory programs.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Develop a Web-based Geographic Information System (GIS) tool to guide and prioritize wetland restoration opportunities with a focus on providing wetland functions that meet specific watershed needs.

Budget: $310,000

This web-based GIS tool can be used by private and public entities to identify the highest priority wetland restoration projects possible.

Budget: $290,000

Activity 2: Incorporate existing natural resource data into the GIS-based tool to identify watershed functional goals and priority wetland restorations.

A watershed analysis will be conducted for the state which will include the following:

- Threats to wetland resources
- Loss of historic wetlands and their functions
- Current wetland conditions
- Wetland function goals and desired outcomes
- Prioritization strategy for selecting restoration activities

The framework will be constructed to allow for the incorporation of new information and continuous improvement. Specifically, data associated with the new National Wetlands Inventory (NWI) for Minnesota (a LCCMR funded project), and other natural resource data sources that become available, will be utilized in future modifications to the framework.

Outcome	Completion Date
1. Development of a GIS model that establishes wetland restoration goals and priorities.	June, 2018
2. Develop decision support tools to aid in the vetting of potential restoration projects.	December, 2018
3. Finalize the Compensation Planning Framework.	June, 2019

III. PROJECT STRATEGY

A. Project Team/Partners

Les Lemm, BWSR Wetland Section Manager and Ken Powell, BWSR Wetland Banking Coordinator will serve as co-project managers. Funding will be utilized approximately as follows:

- $290,000 to BWSR to develop the framework and manage the project.
- $310,000 to MNIT and/or a natural resources consulting firm (to be determined) for GIS analysis and tool development.

Project partners contributing to development of the framework and providing advice on wetland restoration will include:

- Local Soil and Water Conservation Districts
- Watershed Districts
- Counties
- MN Department of Natural Resources
- MN Pollution Control Agency
- MN Department of Agriculture
- U.S. Army Corps of Engineers
- U.S Environmental Protection Agency
- U.S Department of Agriculture's Natural Resources Conservation Service

B. Project Impact and Long-Term Strategy

The framework will guide wetland restoration decisions of local, state, and federal regulatory and conservation programs to improve watershed integrity. It will be adaptable to address changing resource needs and scientific knowledge.

C. Timeline Requirements

The project will be completed by July 1, 2018.

2016 Detailed Project Budget

Project Title: *Development of Comprehensive Wetland Planning Framework*

IV. TOTAL ENRTF REQUEST BUDGET 5 years

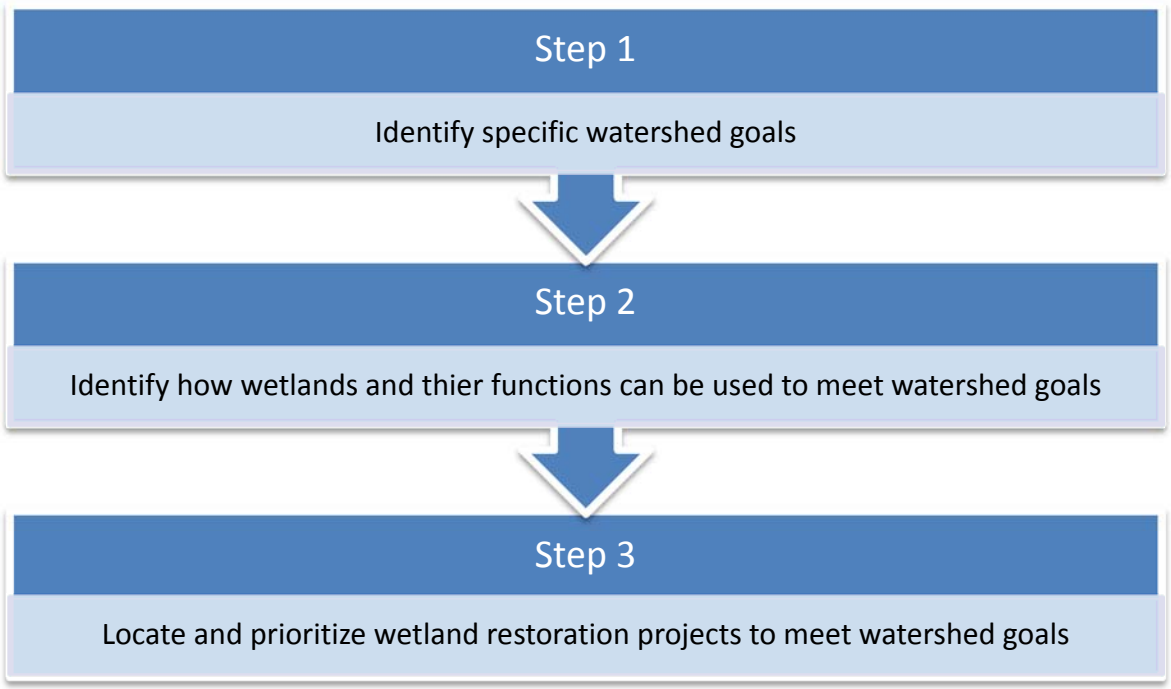
BUDGET ITEM	AMOUNT
Personnel:	
Project Management; aproximately 10% FTE for three years.	$40,000
BWSR staff development of the Wetland Planning Framework; 1 FTE for two years.	$250,000
Professional/Technical/Service Contracts:	
MNIT or a Natural Resources Consulting firm TBD based on RFP to perform GIS analyisis and develop the data-dependent aspects of the Wetland Planning Frameork.	$310,000
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND $ REQUEST =	$ 600,000

V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State $ To Be Applied To Project During Project Period:	NA	NA
Other State $ To Be Applied To Project During Project Period:	NA	NA
In-kind Services To Be Applied To Project During Project Period:	NA	NA
Funding History:	NA	NA
Remaining $ From Current ENRTF Appropriation:	NA	NA

Comprehensive Wetland Planning Framework

Figure 1. Sequential steps to complete the Comprehensive Wetland Planning Framework



Project Manager Qualifications and Organization Description

Co-Project Manager: Les Lemm
Wetland Conservation Act (WCA) Coordinator
Minnesota Board of Water and Soil Resources

Education: M.S., Natural Resources Management, North Dakota State University, 2003
B.S., Environmental and Natural Resources Management, University of Minnesota, 1995

Background: Les has served as the WCA Coordinator since 2007. Prior to that, Les served 4 years as a Board Conservationist for BWSR in the metropolitan area where he worked with WCA, local water planning, implementing soil and water conservation practices, and other resource management programs. Previous experience includes working as a Natural Resource Scientist with the consulting firm of Widseth-Smith-Nolting in Brainerd and serving as the District Manager of the Lake of the Woods Soil and Water Conservation District. Les has experience and expertise both in natural resource policy and technical procedures, including wetland delineation methods.

Co-Project Manager: Ken Powell
Wetland Banking Coordinator
Minnesota Board of Water and Soil Resources

Education: M.S., Biology, Kansas State University, 1992
B.S., Wildlife, University of Wisconsin – Stevens Point, 1989

Background: Ken has served as the Minnesota Wetland Banking Coordinator for the past 4 years where he reviews wetland mitigation projects and develops wetland banks as the administrator and project manager of Minnesota's Local Road Wetland Replacement Program. Prior to that, Ken served 2 years as a Senior Wetland Specialist for BWSR where he worked with WCA policy issues and wetland impact and mitigation projects. Previous experience includes working as a Wetland Specialist and Permitting Coordinator with the Rice Creek Watershed District, a Wetland Specialist with several environmental consulting firms, and an endangered species biologist with the U.S. Fish & Wildlife Service. Ken has experience and expertise in the policy and technical aspects of wetland science.

Organization Description

The Minnesota Board of Water and Soil Resources (BWSR) is the state soil and water conservation agency. It administers programs that prevent sediment and nutrients from entering our lakes, rivers, and streams; enhance fish and wildlife habitat; and protect wetlands. BWSR is the state's administrative agency for 91 soil and water conservation districts, 46 watershed districts, 23 metropolitan watershed management organizations, and 80 county water managers.

The BWSR mission is to improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners. Core functions include implementing the state's soil and water conservation policy, comprehensive local water management, and the Wetland Conservation Act as it relates to the 41.7 million acres of private land in Minnesota.