

**Environment and Natural Resources Trust Fund
2011-2012 Request for Proposals (RFP)**

LCCMR ID: 106-D-2e

Project Title: 2e - HCP 7 - Wild Rice/Waterfowl Habitat: Enhancement and Long-term Monitoring

Category: D. Land Acquisition for Habitat and Recreation

Total Project Budget: \$ 50,000

Proposed Project Time Period for the Funding Requested: 2 yrs, July 2011 - June 2013

Other Non-State Funds: \$ 65,000

Summary:

To enhance/monitor 15,000 acres of wild rice/waterfowl habitat on Leech Lake Reservation, we will regulate water levels; reseed restored habitat; and digitize a 19-year-long set of aerial imagery.

Name: Steve Mortensen

Sponsoring Organization: Leech Lake Band of Ojibwe

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Cass Lake MN 56633

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Web Address: www.lldrm.org

Location

Region: NW, NE, Central

Ecological Section: No. Minnesota Drift and Lake Plains (212N)

County Name: Beltrami, Cass, Hubbard, Itasca

City / Township:

<input type="checkbox"/> Funding Priorities	<input type="checkbox"/> Multiple Benefits	<input type="checkbox"/> Outcomes	<input type="checkbox"/> Knowledge Base
<input type="checkbox"/> Extent of Impact	<input type="checkbox"/> Innovation	<input type="checkbox"/> Scientific/Tech Basis	<input type="checkbox"/> Urgency
<input type="checkbox"/> Capacity Readiness	<input type="checkbox"/> Leverage	<input type="checkbox"/> Employment	<input type="checkbox"/> TOTAL <input type="checkbox"/> %

2011-2012 MAIN PROPOSAL

PROJECT TITLE:

HCP7-2E Wild Rice/Waterfowl Habitat: Enhancement and Long-term Monitoring

I. PROJECT STATEMENT

This project addresses losses or degradation of aquatic habitat that has historically supported abundant wild rice (*Zizania* L.) and waterfowl across the Leech Lake Reservation (LLR) in north-central Minnesota. Approximately 15,000 acres of natural wild rice in shallow lakes, marshes, and forested impoundments on the LLR provide food, refuge, and nesting opportunities for numerous species of waterfowl, fish, and other animals. Natural wild rice is a key element of Ojibwe culture and is highly valued by Leech Lake Band members spiritually, culturally, and economically. The high value of wild rice habitat for fish and wildlife is well-documented and has been long recognized by diverse stakeholders of Minnesota resources.

Natural wild rice in northern Minnesota faces numerous threats (2008 MNDNR Report to Legislature: Natural Wild Rice in Minnesota). Waterfowl production has been negatively impacted in this region in recent decades because of changes and degradation of brood habitat; uncontrolled fluctuations in water levels; competition from invasive species; and changing weather patterns. Management activities to improve habitat for natural wild rice and waterfowl include prescribed burning; regulation of water levels; reseeding of wild rice in restored habitat; and long-term monitoring of wild rice productivity.

The overall goal of this project is to conserve and enhance natural *Zizania* habitat on the LLR and the native species of waterfowl, fish, and other wildlife that rely on it. This project builds directly on recent projects conducted by LLR Division of Resource Management (LLDRM) through which we developed methodology and technical capacity to enhance and monitor wild rice habitat across the LLR. With LCCMR support, we will regulate water levels in forested impoundments and waterways (approx. 600 acres); reseed restored habitat with local wild rice (approx. 200 acres); and digitize and analyze aerial imagery of natural wild rice on the LLR (approx. 13,000 acres; annual imagery from 1993 through 2012). Specific goals of this project include refining methodology for interpreting wild rice on aerial imagery; implementing adaptive management based on trend analysis; and continuing work with the MNDNR-led Wild Rice Working Groups to standardize region-wide monitoring of wild rice productivity.

II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1: Waterfowl Habitat Enhancement and Management

Budget: \$ 9435

Description 1: Controlling and managing water levels on forested impoundments and waterways of the Leech Lake Reservation to improve habitat for reproducing waterfowl. Tasks include beaver management; beaver dam removal; and periodic drawdown of water.

Cass County sites include Bag Lake (17 acres); Highland Creek (48 acres); Cuba (44 acres); Sucker Bay (51 acres); Brush Lake (13 acres); Ketchum (38 acres); Middle Sucker (7); Ojibwe I (3 acres); Ojibwe II (4 acres); West Banks I (42 Acres); West Banks II (17 acres); Snake Brook (33 acres); Bear Brook (18 acres); and Six Mile (8 Acres).

Itasca County sites include Upper Third River (28 acres); Amik Lake (68 acres); Pigeon River (53); and Ball Club (82 acres).

Continued habitat maintenance will be provided through a cooperative agreement between the LLBO and the USFS.

Outcome 1	Completion Date
1. Water level control and management on forested impoundments and waterways, including control of beaver activity and periodic drawdown of waters (approx. 600 acres)	June 30, 2013

Activity 2: Wild Rice Habitat Enhancement and Management

Budget: \$ 4333

Description 2: Reseeding approximately 200 acres of restored habitat with local ecotypes of native wild rice (*Zizania* species) to improve wild rice production and to enhance cover and foraging opportunities for waterfowl on the LLR. Once established, and with continued management of water levels by LLBO and USFS, the wild rice should naturally reseed.

Outcome 2	Completion Date
1. Native wild rice reseeded on restored habitat (approx. 200 acres)	June 30, 2013

Activity 3: Long-term Monitoring and Analysis of Wild Rice Productivity Budget: \$ 36232

Description 3: Digitizing and analyzing aerial imagery acquired from 1993 through 2012 to produce a 19-year-long historical record of natural wild rice on the LLR (approx. 13,000 acres). Tasks include refining methodology for interpreting wild rice on aerial imagery; and continuing work with the MNDNR-led Wild Rice Working Groups to standardize and implement region-wide, long-term monitoring of wild rice productivity. We will partner with the MNDNR, USFWS, BIA, USFS, and other stakeholders to implement adaptive management of wild rice basins based on trend analyses to protect, enhance, or restore wild rice habitat on the LLR.

Outcome 3	Completion Date
1. Historical record of aerial imagery of natural wild rice on the LLR interpreted and analyzed (1993-2012; approx. 13,000 acres).	June 30, 2013

III. PROJECT STRATEGY

A. Project Team/Partners

1. LLDRM (Fish, Wildlife, and Plants Department and GIS Department): Project Lead on Activities 1, 2, and 3 of this proposal (to receive entire funds budgeted except for up to \$1000 paid for beaver trapping; to contribute \$12998 in-kind).
2. USDA Wildlife Services: beaver trapping to prevent replugging of streams and impoundments (to receive up to \$1000 from this proposal).
3. USFS Chippewa National Forest: impoundment management, including water level and beaver control (to receive no funds from this proposal; to contribute \$40000 through Cooperative Agreement).
4. MNDNR Shallow Lakes and Wildlife Programs and Wild Rice Working Groups: development and implementation of region-wide monitoring methodology for natural wild rice (to receive no funds from this proposal; to contribute \$3200 for waterfowl research and \$2200 in-kind).
5. BIA Circle of Flight Program: waterfowl and wild rice habitat enhancement (to receive no funds from this proposal; to contribute \$25000 for habitat management).

B. Timeline Requirements

With LCCMR support, Activities 1, 2, and 3 will begin July 2011. Field activities will occur until approximately November 1 each year of the project. Activity 3 will continue year-round throughout the full period of the project (July 2011 – Jun 2013).

C. Long-Term Strategy and Future Funding Needs

With LCCMR support, this project will provide continuation of previous management activities aimed at enhancing natural wild rice productivity and waterfowl nesting and brood habitat. The LLDRM has a strong record of grant awards from tribal, federal, state, and non-profit entities. We also have a strong record of active participation in technical committees, regional and nation-wide strategic planning teams, and academic research. Our efforts to obtain funding to conserve the natural resources of the LLR are continuous and ongoing.

2011-2012 Detailed Project Budget

Leech Lake Reservation

HCP7-2E - Wild rice/Waterfowl Habitat: Enhancement and Long-term Monitoring

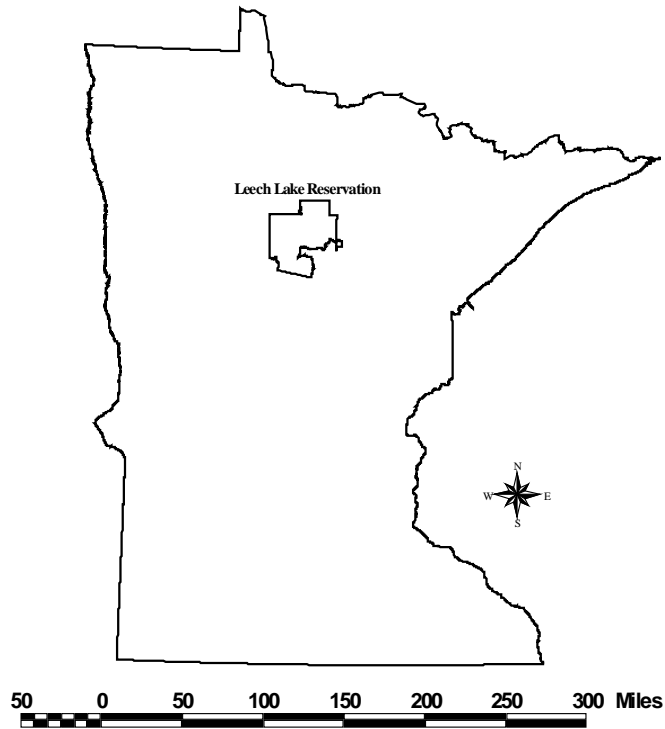
IV. TOTAL PROJECT REQUEST BUDGET (2 years)

BUDGET ITEM <i>(See list of Eligible & Non-Eligible Costs, p. 13)</i>	AMOUNT
Personnel:	\$ -
Plant Ecologist (200 hrs) @ \$23.25. + 30% fringe rate, Project oversight, staff supervision, analysis of rice/waterfowl abundance	\$ 6,045
GIS technician for rice photo rectification and interpretation (1178 hours) @ \$15.40/hr. + 30% fringe rate	\$ 23,584
2 Field Technicians for ground truthing rice bed interpretation (320 hours) @ \$15.07/hr. + 30% fringe rate	\$ 6,269
2 Field Technicians for rice seeding, water level management, beaver work, etc (200 hours) @ 15.40/hr. + 30% fringe rate	\$ 4,004
Contracts:	\$ -
USDA Wildlife Services beaver trapping	\$ 1,000
Equipment/Tools/Supplies: \$ 8098, (Clemson levelers kits (3-5@\$549), stop logs for controls (\$200), road and dike culverts (2-4@\$303), water control parts, hardware (\$541), gasoline (\$400), rice seed (1500@\$2))	\$ 8,098
Acquisition (Fee Title or Permanent Easements):	\$ -
Travel: 2000 miles @ \$0.50/mi for travel to project sites	\$ 1,000
Additional Budget Items:	\$ -
TOTAL PROJECT BUDGET REQUEST TO LCCMR	\$ 50,000

V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ Being Applied to Project During Project Period: We will be using Tribal funding from Circle of Flight BIA dollars to assist in completing this project and providing the administrative oversight.	\$ 25,000	Pending
Other Non-State \$ Being Applied to Project During Project Period: We will be using USFS Cooperative Agreement Funding to assist in completing water level management and rice restoration portions of this project.	\$ 40,000	Secured
Other State \$ Being Applied to the Project During the Project Period: MNDNR Waterfowl Research Group waterfowl population estimates and assistance	\$ 3,200	Secured
In-kind Services During Project Period: Tribal In-Kind for wild rice surveys	\$ 12,998	Pending
MN DNR waterfowl abundance estimates for wild rice segment	\$ 2,200	Secured
Remaining \$ from Current Trust Fund Appropriation (if applicable):	\$ -	
Funding History		
2001 Phase I	\$ 76,910	
2003 Phase II	\$ 34,700	
2005 Phase III	\$ 28,000	
2007 Phase IV	\$ 30,000	
2008 Phase V	\$ 30,000	

Location of the Leech Lake Reservation in Minnesota



Map of the Leech Lake Reservation where projects funded under the 2011-2013 LCCMR funding will occur.

Project Manager Qualifications

The Project Manager for Phase VII of the Habitat Conservation Partnership project proposed by the Leech Lake Band of Ojibwe is Steve A Mortensen. Steve received his BS in Biology from Bemidji State University in 1982. He was employed by the MN DNR for several years before accepting a position with the Leech Lake Reservation Division of Resources Management in 1984. He worked as a biologist for the Band until 2009, at which time; he was promoted to the Fish, Wildlife, and Plant Resources Program Director/Biologist. This program provides comprehensive fish, wildlife, and plant resources management aimed at species and habitats of importance to members of the Leech Lake Band. As such he has been involved in the development of programs for the reservation that protect, enhance, and manage human utilization of plant and animal resources on the reservation. Wildlife habitat and wild rice are both critical components of our management. He has also been involved in the oversight and implementation of numerous grants that work with wildlife and plants. Steve oversees a staff of 9 full time employees with an annual budget exceeding \$700,000.

The LLBO Fish, Wildlife, and Plants Resources Program were an original member of the LCCMR Habitat Conservation Partnership in 2001 and have been an active partner over the first five phases. As a partner, the Leech Lake FW&P Department has successfully managed \$199,000 in previous HCP grant projects.

Organization Description

The Leech Lake Fish, Wildlife and Plant Resources Program is an integral program of the Leech Lake Band of Ojibwe, Division of Resources Management (DRM). The Leech Lake DRM provides comprehensive natural resources management in many areas in addition to Fish, Wildlife and Plant Management including Conservation Enforcement with four Conservation Officers cross-deputized with the State of Minnesota, Forest Management, Land Management, Water Resources Management, and Wildland Firefighting, as well as a whole host of Environmental Service programs designed to protect and enhance the lands and natural resources within the boundaries of the Leech Lake Reservation. A detailed description of our programs and mission is available on our website at www.lldrm.org.