# Environment and Natural Resources Trust Fund (ENRTF) 2010 Work Program

Date of Report: Nov. 20, 2009 Date of Next Progress Report: Nov. 1, 2010 Date of Work Program Approval: Project Completion Date: Nov. 1, 2011

I.	PROJECT TITLE:	HCP Phase VI Supplemental – Shallow Lake Habitat
		Enhancement and Wild Rice Enhancement and Monitoring
		(2f)

Project Manager: Affiliation:	Steve Mortensen Leech Lake Band of Ojibwe
Mailing Address:	115, 6 <sup>th</sup> St. NW
City / State / Zip:	Cass Lake, MN 56633
Telephone Number:	218-335-7421
E-mail Address:	smortensen@lldrm.org
FAX Number:	218-335-7430
Web Site Address:	www.lldrm.org

**Location:** Leech Lake Reservation, Cass, Itasca, Beltrami and Hubbard Counties (see enclosed map)

Total ENRTF Project Budget:	ENRTF Appropriation	\$ 50000
	Minus Amount Spent:	\$
	Equal Balance:	\$ 50000

Legal Citation: M.L. 2010, Chap. 362, Sec. 2, Subd. 4f2f

## Appropriation Language:

\$1,344,000 is added to Laws 2009, chapter 143, section 2, subdivision 4, paragraph (e), from the trust fund for the acceleration of agency programs and cooperative agreements. Of this appropriation, \$308,000 is to the commissioner of natural resources for agency programs and \$1,036,000 is for agreements as follows: \$425,000 with Ducks Unlimited, Inc.; \$50,000 with National Wild Turkey Federation; \$164,000 with the Nature Conservancy; \$102,000 with Minnesota Land Trust; \$200,000 with the Trust for Public Land; \$45,000 with Friends of Detroit Lakes Wetland Management District; and \$50,000 to the Leech Lake Band of Ojibwe to plan, restore, and acquire fragmented landscape corridors that connect areas of quality habitat to sustain fish, wildlife, and plants. The United States Department of Agriculture Natural Resources Conservation Service is an authorized cooperating partner in the appropriation. Expenditures are limited to the project corridor areas as defined in the work program. Land acquired with this appropriation must be sufficiently improved to meet at least minimum habitat and facility management standards as determined by the commissioner of natural resources. This appropriation may not be used for the purchase of residential structures, unless expressly approved in the work program. All conservation easements must be perpetual and have a natural resource management plan. Any land acquired in fee title by the

1

commissioner of natural resources with money from this appropriation must be designated as an outdoor recreation unit under Minnesota Statutes, section 86A.07. The commissioner may similarly designate any lands acquired in less than fee title. A list of proposed restorations and fee title and easement acquisitions must be provided as part of the required work program. All funding for conservation easements must include a long-term stewardship plan and funding for monitoring and enforcing the agreement.

**II. PROJECT SUMMARY AND RESULTS**: The goals of this project will be to continue to improve shallow lakes and marshes and especially forested impoundment habitats for nesting and feeding waterfowl within the Leech Lake Reservation (LLIR) boundaries. Due to changes and degradation in waterfowl brood habitats, competition of invasive species, uncontrolled and fluctuating water levels, and more recently drought conditions in these forested habitats, waterfowl production has been negatively impacted. Management activities to improve habitat conditions for waterfowl include prescribed burns, water level control including summer drawdown, bog and beaver dam removal to restore flow and seeding of wild rice to reestablish habitat.

Building directly on a recent LLIR Division of Resources Management project, we will refine newly developed methodology and technical capacity to produce a 17-yearlong data set of natural wild rice, *Zizania purpurea*, productivity on the Leech Lake Reservation based on aerial photography from standardized photos taken by Pro West and Assoc. annually since 1981. We will also implement long-term monitoring of this resource, which is of very high value to the Ojibwe people, spiritually, culturally, and economically. The high value of wild rice habitat to fish, waterfowl, and other aquatic animals has long been recognized by the stakeholders of Minnesota as well. We are committed to partner with the USFWS and the MNDNR to analyze regional species counts of mallard and ring-necked ducks for the same 17-year period. Through this analysis, the relationship between waterfowl abundance and wild rice productivity will be explored. Completing these analyses could ultimately lead to better management and land use practices. Methodology could be then be implemented on a statewide basis if so desired.

This project is directly tied to the LCCMR funding priorities of restoring high quality habitat for wildlife and open to public use in addition to re-establishing habitat impacted by invasive species. This project would also further Minnesota Habitat Conservation Partnership strategic objectives by complementing investments of the US Forest Service and the Leech Lake Indian Reservation in managing waterfowl production areas in forested habitats. Additional leveraged funding from the Leech Lake Band and in-kind services from the US Forest Service will facilitate partnerships between the State of MN and these entities to bring conservation benefits to a variety of public user groups. The wild rice analysis project is a direct result of the legislatively mandated Minnesota statewide Wild Rice Study in 2008.

#### **III. PROGRESS SUMMARY AS OF**

#### IV. OUTLINE OF PROJECT RESULTS:

**RESULT/ACTIVITY 1:** 

2

**1. Description:** Water level control and management on forested impoundments and water ways will continue. The goal is to provide better habitat for reproducing waterfowl by regulating water levels, controlling beaver activity and conducting periodic water level drawdowns. Much of this work will be conducted on forest impoundments including the following:

In Cass County: 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), Six Mile (8 Acres).

In Itasca County: Upper Third River (28 acres), Amik Lake (68 acres), Pigeon River (53), Ball Club (82 acres)

This is an important project due to declining waterfowl habitat in the forested region of MN. Continued maintenance will be provided using a cooperative agreement between the LLIR and USFS.

#### Summary Budget Information for Result/Activity 1:

ENRTF Budget:\$9435Amount Spent:\$Balance:\$ 9435

Deliverable/Outcome	Completion Date	Budget
1.Waterfowl habitat management and improvement	Nov. 1, 2011	\$9435

Result Completion Date: Nov. 1, 2011

Result Status as of Nov. 1, 2010

Result Status as of May 1, 2011

Final Report Summary: Nov. 1, 2011

**RESULT/ACTIVITY 2:** 

#### Description: Wild rice reseeding on 200 acres

Several locations within the Leech Lake Reservation totaling about 200 acres will be reseeded with native wild rice. This will enhance habitat for waterfowl cover and foraging over the time period of this program. Due to high water levels in the recent past the wild rice in this area has been degraded. Beaver control efforts are currently underway in this area, so now is an opportune time to reseed wild rice. Once established it is anticipated that by continued management of water levels the rice will prosper and acreage will expand.

### Summary Budget Information for Result/Activity 1:

ENRTF Budget: \$4333 Amount Spent: \$ Balance: \$4333

Deliverable/Outcome	Completion Date	Budget
2.Wild rice reseeding and management	Nov. 1, 2011	4333

Result Completion Date: Nov. 1, 2011

Result	Status	as	of	Nov.	1,	2010
--------	--------	----	----	------	----	------

Result Status as of May 1, 2011

Final Report Summary: Nov. 1, 2011

#### **RESULT/ACTIVITY 3:**

**Description:** Monitoring wild rice and the relationship between rice abundance and waterfowl abundance.

Wild rice is likely an important cover and food source for waterfowl in the forested regions of Minnesota. The Leech Lake Reservation is located in the heart of wild rice country in the state, and climate change predictions indicate that this region will become increasingly important in the future for waterfowl. By gaining a better understanding of historical trends and what is needed to maintain healthy wild rice waters, we will be in a better position to maintain this resource in the future.

Using aerial photos of major rice beds, which have been photographed annually for the past 18 years, we will analyze changes in rice beds and whether or not the abundance of rice relates to an increase in waterfowl usage in and around these locations. Waterfowl abundance data will be provided by the MN DNR from waterfowl surveys that have been conducted over the same time period.

#### Summary Budget Information for Result/Activity 1:

ENRTF Budget: Amount Spent:	\$36232 \$	
Balance:	\$ 36232	

Deliverable/Outcome	Completion Date	Budget
2. Wild rice monitoring and relation to waterfowl abundance study	Nov. 1, 2011	36232

Result Completion Date: Nov. 1, 2011

Result Status as of Nov. 1, 2010

Result Status as of May 1, 2011

## V. TOTAL ENRTF PROJECT BUDGET:

Personnel: \$ 39902 Botanist 10% GIS Technician 57% Field Technicians (2) for rice ground truthing 10% Field Technicians (2) for other field work 10%

Contracts: \$ 1000 USDA Wildlife Service's Beaver trapping 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)) Acquisition (Fee Title or Permanent Easements): \$ 0.00 Travel: \$ 1000 Additional Budget Items:

## TOTAL ENRTF PROJECT BUDGET: \$50,000

### **Explanation of Capital Expenditures Greater Than \$3,500:**

## VI. PROJECT STRATEGY:

**A. Project Partners:** Various parts of this project will partern with other agencies including US Forest Service, Impoundment, management, water and beaver control, MN DNR Waterfowl Research, Provide data on waterfowl for rice/duck usage of rice beds. Neither of these agences will receive any funding from this proposal

USDA, Wildlife Services will receive up to \$1000 for beaver trapping to keep them from replugging streams and impoundments.

**B. Project Impact and Long-term Strategy:** This project in part is the continuation of managemnt of forested wetlands for the enhancement of waterfowl nesting and brood habitat. This habitat is of critical importance to the success of nesting waterfowl in the forested region of the state. The rice bed monitroing and the relationship of waterfowl to rice abundance will help to assess changes in rice beds and waterfowl abuancnce patterns over time.

C. Other Funds Proposed to be spent during the Project Period:

## BIA Circle of Flight \$25,000

USFS Cooperative agreement for impoundment management \$40,000

MN DNR Waterfowl Research \$3,200 and \$2,200 inkind

Leech Lake Res. DRM inkind \$12,998

## **D. Spending 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

#### VII. DISSEMINATION:

Information will be disseminated through the HCP web site as well as other publication appropriate for the information.

VIII. REPORTING REQUIREMENTS: Periodic work program progress reports will be submitted not later than May 1 and Nov.1 of each year. A final work program report and associated products will be submitted between June 30 and August 1, 2012 as requested by the LCCMR.

### IX. RESEARCH PROJECTS:



Attachment A: Budget Detail for Phase VII 200	9 Projects - Summa	ry and a Bud	dget page f	or each partner							
Project Title: Shallow Lake Habitat Enhanceme	nt and Wild rico Enha	ncomont and Mo	nitoring to As	soss Polationshin to V	Vatorfowl Abund	anco (2f)					
	Minnesota's Habitat				Valenowi Abunu						
Project Manager Name: Steve Mortensen			rthership (vii)								
Trust Fund Appropriation: \$50,000											
1) See list of non-eligible expenses, do not	include any of these	items in your bue	dget sheet								
2) Remove any budget item lines not applic	cable										
2009 Trust Fund Budget	Result 1 Budget:	Amount Spent (date)	Balance	Result 2 Budget:	Amount Spent (date)	Balance	Result 3 Budget:	Amount Spent Ba (date)	alance (date)	TOTAL BUDGET	TOTAL BALANCE
	Waterfowl habitat management and improvement		\$9,435	Wild rice reseeding	0	4,333	Monitoring wild rice and waterfowl abundance	0	36232		
BUDGET ITEM			0			0			0	0	0
PERSONNEL: wages and benefitsFieldTechnicians @ \$19.59/hrGISTechnician @ \$20.02Botanist@ 30.23Stanist		0	3,004	1,000		1,000	35,898		35,898	39,902	39,902
			0						0	0	0
Professional/technical: Beaver trapping, USDA Wildlife Services	1,000		1,000						0	1,000	1,000
<b>Other contracts</b> (with whom?, for what?) list out: personnel, equipment, etc.			0			0			0	0	0
Other direct operating costs (for what? – be specific)			0			0			0	0	0
Equipment / Tools			0			0			0	0	0
Office equipment & computers - NOT ALLOWED unless unique to the project Other Capital equipment (list specific items)			0			0			0	0	0
			0			Ũ			Ŭ	0	0
Land acquisition			0			0			0	0	0
Land rights acquisition (less than fee)						0			0	0	0
Professional Services for Acq.			0			0			0	0	0
Printing			0			0			0	0	0
Other Supplies :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))	5,098		5,098	3,000		3,000			0	8,098	8,098
Travel expenses in Minnesota	333		333	333		333	334		334	1,000	1,000
Travel outside Minnesota (where?)			0			0			0	0	0
Construction (for what?)			0			0			0	0	0
Other land improvement (for what?) Other (Describe the activity and cost)			0			0			0	0	0
be specific			0			0			U	0	0
COLUMN TOTAL	\$9,435	\$0	\$9,435	\$4,333	\$0	\$4,333	\$36,232	\$0	\$36,232	\$50,000	\$50,000