Main Request for Funding Form

Lessard-Sams Outdoor Heritage Council
Fiscal Year 2014 / ML 2013 Proposal

Program or Project Title: Lower Mississippi River Habitat Partnership

Funds Requested: $3,400,000

Manager's Name: Jim Nissen
Title:
Organization: U.S. Fish and Wildlife Service
Street Address: 555 Lester Avenue
City: Onalaska,, WI 54650
Telephone: 608-783-8401
E-Mail: James_Nissen@fws.gov
Organization Web Site:

County Locations: Dakota, Goodhue, and Houston.

Ecological Planning Regions:

- Southeast Forest

Activity Type:

- Restore
- Enhance

Priority Resources Addressed by Activity:

- Wetlands
- Prairie
- Habitat

Abstract
This proposal seeks to protect and enhance habitat along the Mississippi River Corridor through wetland restoration and enhancement; goat prairie restoration; and water level management, island construction, and backwater dredging.

Activity Detail
Design and Scope of Work
The Mississippi River, once one of our nation's most diverse ecosytems, has been degraded. Historically, the Mississippi River, from the Twin Cities to the Iowa border was an important travel corridor that attracted many cultures with its abundance of timber, fish and game, fertile prairies, floodplain wetlands, adjacent bluffs, and clear and numerous spring-fed streams. For centuries, native cultures traveled, camped, and lived along this magnificent reach of river. In the mid-1800s; however, European settlers arrived and forever

changed the landscape by logging forests, converting prairies to farmland, channelizing and constructing levees along tributaries, building cities and towns, and constructing wing dams and other structures for navigation.

Major tributaries, including the Root and Zumbro Rivers, were channelized and leveed in their lower reaches near the Mississippi River in the early 1900s, isolating them from their floodplains except during high water events. Forests, wetlands, and prairies behind the levees were converted to agriculture or urban uses. Over 15,000 acres of native habitats were lost, fragmenting the natural habitat corridors that connected the Mississippi River to its tributaries and their watersheds that were essential to the many species of fish and wildlife that roamed this area. This was especially damaging to high quality wetlands that were found in these floodplains.

Construction of locks and dams in the 1930s changed the river into a series of navigation pools. Pools 1 (Minneapolis) through 9 (MN/IA border) are located in Minnesota. Initially, these pools increased marsh and wetland areas, creating numerous islands and deep backwaters. Fish and wildlife were abundant, with waterfowl hunting and fishing in the backwaters world-renowned. Over time, the pools began filling with sediment and wind and boat waves eroded away islands. Increased drainage and turbid water runoff from southern Minnesota tributaries, especially the Minnesota River, along with urban pollution from the Twin Cities, caused the reach from the mouth of the Minnesota River to Lake Pepin to become very turbid and nearly void of dissolved oxygen. By the 1960s, few fish were able to survive, aquatic vegetation nearly disappeared, and hunting, fishing, and other recreational opportunities in the river above Lake Pepin wee almost non-existent.

The Clean Water Act in the 1970s helped reduce point source pollution, resulting in improved water quality and subsequent improvements to some fish and wildlife species. While conditions have improved from their worst levels, there remain serious problems. Sediment from non-point sources continues to be a detriment throughout this reach, currently filling Lake Pepin at a rate nearly ten times greater than occurred historically. Lake Pepin is now the sink for nearly 90,000 metic tons of sediment per year, mostly from the Minnesota River. At the current rate of filling, which is equivalent to one city block covered with 100 feet of sediment each year, Lake Pepin will fill in just 300 years. The channels and backwaters along this reach (Twin Cities to Lake Pepin? remain one of the most degraded sections of the entire Upper Mississippi River System (Minneapolis to the mouth of the Ohio River).

Floodplain forests and oak savannas have also been impacted. Where the Vermillion and Cannon Rivers join the Mississippi, considerable state, federal, and private lands create one of the largest contiguous blocks of forest near a metropolitan area in the entire Upper Mississippi River Basin. These forests have been impacted by encroachment, invasive species, lack of floodwater scouring resulting in reduced tree regeneration, and artificially high water levels from the locks and dams. Forest stand diversity (age and species of trees), along with interior forest birds that need large blocks of intact forest, have declined.

Combined these changes have resulted in the loss or degradation of approximately 700,000 acres (60%) of native prairie, wetland, and forest in the blufflands region of southeastern Minnesota, which includes the 170-mile reach of the Mississippi River from the Twin Cities to the Iowa border. Fish and wildlife populations have suffered, with 82 species now considered rare, threatened, or endangered. The Minnesota State Wildlife Action Plan lists more species in greatest conservation need for the blufflands subsection than for any other subsection in Minnesota.

The Lower Mississippi River Habitat Partnership includes over 20 agencies and organizations that have been working together to solve these problems. Each year a proposal is submitted to LSOHC that identifies specific

projects that represent immediate opportunities for habitat protection, enhancement or restoration along the Mississippi River Corridor. For the FY14 proposal, we have developed a comprehensive project list involving numerous habitat protection and enhancement tools. Funding is requested to complete the top 3 priority projects, which include wetland enhancement, goat prairie restoration, and island building and backwater dredging.

Planning

MN State-wide Conservation Plan Priorities

- H1 Protect priority land habitats
- H2 Protect critical shoreland of streams and lakes
- H5 Restore land, wetlands and wetland-associated watersheds
- H6 Protect and restore critical in-water habitat of lakes and streams

Plans Addressed

- Long Range Duck Recovery Plan
- Minnesota DNR Scientific and Natural Area's Long Range Plan
- Minnesota DNR Strategic Conservation Agenda
- North American Waterbird Conservation Plan
- North American Waterfowl Management Plan
- Tomorrow's Habitat for the Wild and Rare
- U.S. Fish and Wildlife Service Strategic Habitat Conservation Model
- Upper Mississippi River and Great Lakes Region Projects Joint Ventures Plan

LSOHC Statewide Priorities

- Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections
- Produce multiple enduring conservation benefits
- Are able to leverage effort and/or other funds to supplement any OHF appropriation
- Allow public access. This comes into play when all other things about the request are approximately equal
- Restore or enhance habitat on state-owned WMAs, AMAs, SNAs, and state forests
- Use a science-based strategic planning and evaluation model to guide protection, restoration and enhancement, similar to the United States Fish and Wildlife Service's Strategic Habitat Conservation model
- Address wildlife species of greatest conservation need, Minnesota County Biological Survey data, and rare, threatened and endangered species inventories in land and water decisions, as well as permanent solutions to aquatic invasive species
- Ensures activities for "protecting, restoring and enhancing" are coordinated among agencies, non profits and others while doing this important work
- Target unique Minnesota landscapes that have historical value to fish and wildlife

LSOHC Southeast Forest Section Priorities

- Protect, enhance, and restore habitat for fish, game, and nongame wildlife in rivers, cold-water streams, and associated upland habitat
- Protect, enhance, and restore remnant goat prairies

Relationship to Other Constitutional Funds

- Clean Water Fund

This partnership will primarily benefit habitat. However, there will be significant secondary benefits for clean water. Any related efforts will be coordinated with other funding sources, such as Clean Water Council and LCCMR.

Accelerates or Supplements Current Efforts

Funding is needed to begin implementing projects. On the Upper Mississippi River National Wildlife and Fish Refuge's Root River Tract, about 700 acres of land have recently been acquired. An "Evaluation of Ecosystem Restoration and Management Options" for the Root River Tract was completed in November 2010. Preliminary engineering work has also been completed. Funding would permit habitat enhancement work to proceed. Funding now would also allow habitat restoration efforts to begin on about 70 acres of goat prairie benefiting many rare species of native plants and animals. Water level management, island construction, and backwater dredging would benefit North and Sturgeon Lakes in Navigation Pool 3. Funds from LSOHC would be leveraged with funds from the U.S. Army Corps of Engineers to benefit nearly 1,500 acres of habitat.

Sustainability and Maintenance

Maintenance would be completed by partner agencies as part of their normal management schedule. For example, on the Upper Mississippi River National Wildlife and Fish Refuge, maintenance will be the responsibility of the U.S. Fish and Wildlife Service. On state-owned lands, it will be primarily the responsibility of the Minnesota Department of Natural Resources.

Is the activity on permanently protected land and/or public waters per MS 103G.005, Subd. 15? - **Yes (SNA, Refuge Lands, Public Waters, State Forests, Permanent conservation easement)**

Accomplishment Timeline

Activity	Approximate Date Completed
Wetland and forest enhancement	6/30/2016
Goat prairie enhancement	6/30/2016
Island construction and backwater dredging	

Outcomes

Programs in southeast forest region

- Healthier populations of endangered, threatened, and special concern species as well as more common species
- Improved aquatic habitat indicators
- Remnant goat prairies are perpetually protected
- Rivers, streams, and surrounding vegetation provide corridors of habitat
- Outdoor recreationists will benefit from these projects

Budget Spreadsheet

Total Amount of Request: $3,400,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
Personnel	$30,000	$30,000		$60,000
Contracts	$3,336,000	$5,200,000	USACE	$8,536,000
Fee Acquisition w/ PILT	$0	$0		$0
Fee Acquisition w/o PILT	$0	$0		$0
Easement Acquisition	$0	$0		$0
Easement Stewardship	$0	$0		$0
Travel (in-state)	$0	$0		$0
Professional Services	$0	$0		$0
Direct Support Services	$14,000	$0		$14,000
DNR Land Acquisition Costs	$0	$0		$0
Capital Equipment	$0	$0		$0
Other Equipment/Tools	$0	$0		$0
Supplies/Materials	$20,000	$10,000		$30,000
DNR IDP	$0	$0		$0
Total	$3,400,000	$5,240,000	-	$8,640,000

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
Bio Tech	1.00	2.00	$30,000	$30,000	USFWS	$60,000
Total	1.00	2.00	$30,000	$30,000	-	$60,000

Output Tables

Table 1. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	70	0	0	70
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	700	0	0	1,500	2,200
Total	700	70	0	1,500	2,270

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	$0	$150,000	$0	$0	$150,000
Protect in Fee with State PILT Liability	$0	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0	$0
Protect in Easement	$0	$0	$0	$0	$0
Enhance	$450,000	$0	$0	$2,800,000	$3,250,000
Total	$450,000	$150,000	$0	$2,800,000	$3,400,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	70	0	0	70
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	0	0	2,200	0	0	2,200
Total	0	0	2,270	0	0	2,270

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	$0	$0	$150,000	$0	$0	$150,000
Protect in Fee with State PILT Liability	$0	$0	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0	$0	$0
Protect in Easement	$0	$0	$0	$0	$0	$0
Enhance	$0	$0	$3,250,000	$0	$0	$3,250,000
Total	$0	$0	$3,400,000	$0	$0	$3,400,000

Table 5. Target Lake/Stream/River Miles

0 miles

Parcel List

Section 1 - Restore / Enhance Parcel List

Goodhue

Name	TRDS	Acres	Est Cost	Existing Protection?
Pool 3 islands and drawdown	11416225	0	$2,800,000	Yes

Houston

Name	TRDS	Acres	Est Cost	Existing Protection?
Goat prairie enhancement	10405225	70	$150,000	Yes
Root River Tract Miss Refuge	10404235	700	$450,000	Yes

Section 2 - Protect Parcel List

No parcels with an activity type protect.

Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.