

Main Request for Funding Form
Lessard-Sams Outdoor Heritage Council
Fiscal Year 2013

Program or Project Title: Lower Mississippi River Habitat Partnership

Funds Requested: \$4,058,000

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County Location: Houston, Wabasha, Winona, Goodhue

Ecological Planning Regions: [to](#)

- Northern Forest Forest/Prairie Transition X Southeast Forest
 Prairie Metro/Urban

Activity Type:

- X Protect - Fee Protect - Easement Protect - Other
 Restore X Enhance

Priority Resources addressed by activity:

- X Wetlands X Forests X Prairie X Habitat

Project Abstract

This proposal seeks to protect and enhance habitat along the Mississippi River corridor through wetland restoration and enhancement, fee title acquisition, goat prairie enhancement, water level management, island construction and dredging, and fisheries habitat improvements.

Project Narrative

Design and scope of work

The Mississippi River, once one of our nation's most diverse ecosystems, has been degraded. Historically, the Mississippi 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 1800's, however, European settlers arrived and forever changed the landscape by logging forests, converting prairies to farmland, channelizing and constructing levees along the tributaries, building cities and towns, and constructing wing dams and other structures for navigation.

Major tributaries, including the Root River and Zumbro River were channelized and levied in their lower reaches near the Mississippi River in the early 1900's, 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 1930's 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, however, 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 1960's, few fish were able to survive, aquatic vegetation nearly disappeared, and hunting, fishing, and other recreational opportunities in the river above Lake Pepin were almost non-existent.

The Clean Water Act in the 1970's 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 900,000 metric 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 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 MN, 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 fiscal year 2013 proposal, we have developed a comprehensive project list involving numerous habitat protection and enhancement tools. Funding is requested to complete the top 5 priority projects, which include island building and dredging, wetland enhancement, acquisition, small scale fisheries habitat improvements, and goat prairie restoration.

Planning

This proposal helps meet the goals and objectives in the Minnesota Conservation and Preservation Plan by focusing on the acquisition of shorelines in southeast Minnesota (page 74). This effort will restore wetlands, forests, and prairies and protect critical shorelines of major tributaries and the Mississippi River main stem. LSOHC Section priorities for the Southeast Forest Section will be met by restoring Mississippi River tributary rivers to their floodplains, increasing the size of habitat complexes, supporting rare species, and expanding the Richard J. Dorer Memorial Forest.

It also meets the goals and objectives of a variety of regional, statewide, and basin-wide plans including: MN State Wildlife Action Plan; 50-year Conservation Vision; Richard J. Dorer Memorial Forest Acquisition Plan; The Nature Conservancy Zumbro/Weaver Dunes and Root River Conservation Action Plans; Lower Cannon River, Root River, Zumbro River, Lower Vermillion River, and Lake Pepin Total Maximum Daily Load (TMDL) studies; Metro Greenways Conservation Corridors; Mississippi Makeover Project; Vermillion River Watershed Management Plan; Basin Alliance for the Lower Mississippi in Minnesota (BALMM) Basin Plan Scoping Document; Zumbro River Watershed Management Plan; County Local Water Plans; River Resources Forum's Mississippi River Environmental Pool Plans; Upper Mississippi River National Wildlife and Fish Refuge Comprehensive Conservation Plan; Upper Mississippi River

Conservation Committee “A River that Works and a Working River”; US Army Corps of Engineers Habitat Needs Assessment; UMR-IWW System Navigation Feasibility Study; and Minnesota Forest Resource Council Landscape Plans for the Blufflands Subsection. Many of the actions recommended in these plans have been successfully used in other areas along the Mississippi River. By meeting these goals, protection and restoration of the Mississippi River corridor will ensure a healthy floodplain ecosystem and abundant populations of fish, game, and wildlife.

While the US Fish and Wildlife Service’s Strategic Habitat Conservation Model (SHC) was not used specifically, all of the projects in this proposal are based on scientific understanding and models developed for other purposes. The plans and models used to develop this proposal include partnering and adaptive management which are fundamental to the intent, and in the spirit of the SHC model.

Relationship to Other Constitutional Funds

This partnership will benefit primarily 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.

Relationship to Current Organizational Budget

This program does not supplant existing budgets.

Sustainability and Maintenance

Maintenance will be completed by partner agencies as part of their normal management schedule. For state owned lands, it will be primarily the responsibility of the MN Dept. of Natural Resources. For federal lands, it will be primarily the responsibility of the US Fish and Wildlife Service.

Outcomes

Island construction and dredging projects in the Mississippi River will restore and protect aquatic vegetation, increase depth diversity for overwintering fish, and provide nesting cover for waterfowl. Hunters and fishermen will benefit directly with better duck hunting and improve fishing, especially during winter.

Enhanced natural wetlands and floodplain forest will improve habitat for waterfowl and furbearers, as well as provide fish spawning habitat. Hunting and fishing quality will improve.

Wetlands and floodplain forest will be protected, expanding hunting opportunities along the Lower Root River.

Increased depth diversity and protection of shorelines in Mississippi River backwaters will provide immediate improvements in angling quality and success.

Restored goat prairie will provide habitat for rare and endangered species and improve biodiversity of plants and animals.

Aquatic vegetation, especially critical species like bulrush and arrowhead will provide food and cover for waterfowl, furbearers, and fish, increasing fishing and hunting opportunities.

All of the above will provide both short and long-term outcomes. Better habitat and increased recreational opportunities will be provided immediately, and improved fish and wildlife populations for better hunting and fishing, and increased biodiversity, long-term.

Activity Type Detail

Fee Acquisition Projects

Will local government approval be sought prior to acquisition?

X Yes No, please explain not applicable

If no, please explain here:

Is the land you plan to acquire free of any other permanent protection?

X Yes No, please explain not applicable

If no, please explain here:

Easement Acquisition Projects

Will the eased land be open for public use?

Yes No, please explain not applicable

If no, please explain here:

Will the conservation easement be permanent?

Yes No, please explain not applicable

If no, please explain here:

Restoration and Enhancement Projects

Is the activity on permanently protected land and/or public waters?

X Yes No, please explain not applicable

If no, please explain here:

Does the activity take place on an Aquatic Management Area (AMA), Scientific and Natural Area (SNA), Wildlife Management Area (WMA), or State Forests?

X Yes, which ones No, please explain not applicable

If so, please indicate which ones: SNA, State Forest, WMA

Past Outdoor Heritage Fund Appropriations Received for this program

ML 2009	ML 2010	ML 2011
\$	\$1,000,000	\$707,000 (recommended by LSOHC)

Accomplishment Timeline

Activity	Milestone	Date
Island construction and dredging	Complete island construction and dredging	6/30/2015
Wetland and forest enhancement	Complete enhancements	6/30/2014
Fee title acquisition 1 parcel	Complete acquisition	6/30/2013
Fisheries habitat improvement	Complete improvements	6/30/2014
Goat prairie enhancement	Complete enhancements	6/30/2014

Attachments:

- A. Budget
- B. Proposed Output Tables 1-5
- C. Parcel List

Attachment A. Budget Spreadsheet

Name of Proposal:	Lower Mississippi Habitat Partnership
Date:	6/30/2011

[Link HERE to definitions of the budget items below.](#)

Total Amount of Request \$ 4,058,000 *From page 1 on the funding form.*

Personnel

Position breakdown here	FTE	Over # of years	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
	<i>Contract Manager</i>	1	2	\$ 160,000		\$
<i>Admin Asst</i>					\$	-
<i>position 3</i>					\$	-
<i>position 4</i>					\$	-
<i>position 5</i>					\$	-
<i>position 6</i>					\$	-
<i>position 7</i>					\$	-
Total	1		\$ 160,000	\$ -	\$ -	\$ 160,000

Budget and Cash Leverage *(All your LSOHC Request Funds must be direct to and necessary for program outcomes.)*

Please describe how you intend to spend the requested funds.

Budget Item	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
	Personnel - auto entered from above	\$ 160,000	\$ -	\$ -
Contracts	\$ 2,657,000		\$	\$ 2,657,000
Fee Acquisition w/ PILT (breakout in table 7)	\$ 1,146,000		\$	\$ 1,146,000
Fee Acquisition w/o PILT (breakout in table 7)			\$	\$ -
Easement Acquisition			\$	\$ -
Easement Stewardship			\$	\$ -
Travel (in-state)			\$	\$ -
Professional Services	\$ 57,000		\$	\$ 57,000
Direct Support Services	\$ 38,000		\$	\$ 38,000
DNR Land Acquisition Costs (\$3,500 per acquisition)			\$	\$ -
Other			\$	\$ -
Capital Equipment <i>(auto entered from below)</i>	\$ -	\$ -	\$	\$ -
Other Equipment/Tools			\$	\$ -
Supplies/Materials			\$	\$ -
	\$ 4,058,000	\$ -	\$ -	\$ 4,058,000

Capital Equipment *(single items over \$10,000 - auto entered into table above)*

Item Name	LSOHC Request	Leverage
<i>Item 2 enter here</i>		
<i>Item 3 enter here</i>		
<i>Item 4 enter here</i>		
<i>Item 5 enter here</i>		
<i>Item 6 enter here</i>		
<i>Item 7 enter here</i>		
<i>Item 8 enter here</i>		
Total	-	-

Attachment B. Output Tables

Name of Proposal:	Lower Mississippi Habitat Partnership
Date:	6/30/2011

Table 1 and Table 3 column totals should be the same AND Table 2 and Table 4 column totals should be the same

If your project has lakes or shoreline miles instead of land acres, convert miles to acres for Tables 1 and 3 using the following conversion:

Lakeshore = 6 acres per lakeshore mile / Stream & River Shore = 12 acres per linear mile, if both sides

Table 1. Acres by Resource Type

Describe the scope of the project in acres (use conversion above if needed)

	Wetlands	Prairies	Forest	Habitats	Total	
Restore					0	
Protect Fee	100			258	358	
Protect Easement					0	
Protect Other					0	
Enhance	614	66	50	1,520	2250	
Total	714	66	308	1520		
Total Acres (sum of Total column)					2608	<i>These two cells should be the same figure.</i>
Total Acres (sum of Total row)					2608	

Table 2. Total Requested Funding by Resource Type

	Wetlands	Prairies	Forest	Habitats	Total	
Restore					\$ -	
Protect Fee	\$ 336,000		\$ 867,000		\$ 1,203,000	
Protect Easement					\$ -	
Protect Other					\$ -	
Enhance	\$ 370,000	\$ 132,000	\$ 30,000	\$ 2,323,000	\$ 2,855,000	
Total	\$ 706,000	\$ 132,000	\$ 897,000	\$ 2,323,000		
Total Dollars (sum of Total column)					\$ 4,058,000	<i>These two cells should be the same figure.</i>
Total Dollars (sum of Total row)					\$ 4,058,000	

Check to make sure this amount is the same as the Funding Request Amount on page 1 of Main Funding Form.

Table 3. Acres within each Ecological Section

	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total	
Restore						0	
Protect Fee				358		358	
Protect Easement						0	
Protect Other						0	
Enhance			2,250			2250	
Total	0	0	2608	0	0		
Total Acres (sum of Total column)						2608	<i>These three cells should be the same figure.</i>
Total Acres (sum of Total row)						2608	
Total Acres from Table 1.						2608	

Attachment B. Output Tables

Table 4. Total Requested Funding within each Ecological Section

	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore						\$ -
Protect Fee			\$ 1,203,000			\$ 1,203,000
Protect Easement						\$ -
Protect Other						\$ -
Enhance			\$ 2,855,000			\$ 2,855,000
Total	\$ -	\$ -	\$ 4,058,000	\$ -	\$ -	

Total Dollars (sum of Total column) \$ 4,058,000 *These two cells should be the same figure.*
 Total Dollars (sum of Total row) \$ 4,058,000
 Check to make sure these amounts are the same as the Funding Request Amount on page 1 of Main Funding Form.

Table 5. Target Lake/Stream/River Miles

miles of Lakes / Streams / Rivers Shoreline

Table 6. Acquisition by PILT Status (enter information in acres)

	Wetlands	Prairies	Forests	Habitats	Total
Acquired in Fee with State PILT Liability	100		258		358
Acquired in Fee w/o State PILT Liability					0
Permanent Easement <i>PILT Liability</i> <i>NO State</i>					0
	100	0	258	0	

Table 7. Estimated Value of Land Acquisition by PILT Status (enter information in dollars)

	Wetlands	Prairies	Forests	Habitats	Total	
Acquired in Fee with State PILT Liability	\$ 320,000		\$ 826,000		\$ 1,146,000	\$ 1,146,000
Acquired in Fee w/o State PILT Liability					\$ -	\$ -
Permanent Easement <i>PILT Liability</i> <i>NO State</i>					\$ -	\$ -
	\$ 320,000	\$ -	\$ 826,000	\$ -		

FYI: should match total in budget table that is auto entered below

Attachment C. Parcel List

Name of Proposal: _____
 Date: _____

County	Township (25-258)	Range (01-51)	Direction most parcels are 2 with the exception of some areas of Cook County which is 1	Section (01 thru 36)	TRDS	# of acres	Budgetary Estimate (includes administrative, restoration or other related costs and do not include matching money contributed or earned by the transaction)	Description	Activity PF=Protect Fee PE=Protect Easement PO=Protect Other R=Restore E=Enhance	If Easement, what is the easement cost as a % of the fee acquisition?	Any existing protection? (yes/no)	Open to hunting and fishing? (yes/no)
Parcel Name												
Spring Lake Islands	Dakota					500	\$1,185,000	construct islands	E		Y	Y
Root River Tract Miss Refuge	Houston					665	\$400,000	wetland and forest enhancement	E		Y	Y
Root River WMA	Houston					358	1,203,000	Acquisition and restoration	PF		N	Y
Fisheries backwater improvements	Wabasha, Winona					20	\$100,000	small scale dredging	E		Y	Y
Goat prairie enhancement	Houston					66	132,000	prescribed burns and invasive species rem	E		Y	Some
Pool 3 drawdown	Goodhue, Dakota					1000	1,000,000	summer water level drawdown	E		Y	Y

Information provided will be used to map project locations. Incomplete or inaccurate information will result in that parcel or program not being mapped.