

Lessard-Sams Outdoor Heritage Council

2012 Accomplishment Plan

Program Title: Lower Mississippi Habitat Partnership

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Funds Recommended: \$707,000

Legislative Citation: ML 2011, Ch. X, Art. X, Sec. X, Subd. X (x): *(to be completed when signed by Governor)*

Abstract:

Funding will protect habitat through fee title acquisition of key parcels within the Lower Root and Lower Zumbro River floodplains as part of a broad partnership working to improve habitat quality and connectivity in critical areas along the Mississippi River corridor.

Program Narrative

Design and Scope of Work

Problem to address:

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.

Scope of work:

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 2012 appropriation, two parcels totaling 180 acres in the Lower Zumbro River floodplain, and one 358 acre parcel in the Lower Root River will be targeted for acquisition and protection of forests and wetlands. These are high priority sites that will connect to existing state owned lands. Cost estimates are pre-appraisal and each acquisition is contingent upon landowner acceptance of offers based on final appraisals. Funding is

sufficient for the top two priority parcels (Lower Zumbro River), and if cost share is available remaining LSOHC funding would be allocated toward the third parcel (Lower Root River).

Setting priorities:

Partners work cooperatively to implement state, federal, and local programs and projects through a variety of funding sources. Overall priorities are set by the partnership based upon the level of biodiversity significance, proximity to existing state or federal lands, and current opportunities with willing landowners. The overall partnership effort compliments the recent NRCS decision to spend over \$8 million on permanent wetland conservation easements in the Root River watershed, with the Lower Root River area one of the top priority sub-watersheds.

Urgency and opportunity:

Without these actions, life history needs will not be met for important bird, fish, and other wildlife species that depend on large tracts of intact and healthy forests, wetlands, rivers, and prairies. Game species will benefit with increased habitat for deer, turkeys, pheasant and other important species. Rare species will especially benefit from increased habitat and greater connectivity. Protection will also prevent the habitat degradation and soil erosion that would result from urban developments in this fragile region.

There are immediate opportunities for fee title acquisition of floodplain lands near the Lower Root and Lower Zumbro Rivers. Landowners have been working with field managers from the various partners and are interested in selling. Without state funding, these parcels are likely to be sold to private parties for agricultural or other uses.

Habitat benefits:

These parcels will add to the protection and enhancement of existing forests and wetlands in the Lower Root and Zumbro River floodplains. Conversion of agricultural lands in flood prone areas to wetland or forest is an important objective of the overall effort. This will have direct benefits to fish and wildlife by increasing the size and connectivity of critical habitat. Increased numbers of game and non-game species will result as habitat area increases.

Stakeholder opposition and involvement:

The Lower Mississippi River Habitat Partnership includes over 20 organizations and agencies working along the Mississippi River corridor. Combined, these partners have a large constituent base and are working closely with landowners, local governments, watershed districts, non-government organizations and other interests on natural resource issues. Support for conservation through easements and fee title acquisition is generally high, however, some concerns remain within county governments regarding Payment in Lieu of Taxes.

Planning

Relationship to other plans:

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.

Science based planning approach:

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. Funding would allow acquisition of additional WMA and State Forest lands.

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.

Accomplishment Timeline

Activity	Milestone	Date completed
Fee title acquisition	Complete acquisition	6/30/2013

Attachments (*on spreadsheet workbook – 3 separate tabs*):

- A. Budget
- B. Proposed Outcome Tables
- C. Parcel List

No Map is needed for the accomplishment plan

Attachment A. Budget Spreadsheet

Name of Proposal:	Lower Mississippi Habitat Partnership
Date:	4-Nov-10
Legal Citation / Proposal Number:	F-06

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

Total Amount of Request \$ 707,000 *From page 1 on the funding form.*

Personnel

Position breakdown here	FTE	Over # of years	LSOHC Request	Anticipated Cash		Total
				Leverage	Cash Leverage Source	
<i>Manager of Programs</i>					\$	-
<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	0		\$ -	\$ -	\$ -	\$ -

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		Total
		Leverage	Cash Leverage Source	
Personnel - auto entered from above	\$ -	\$ -	\$ -	\$ -
Contracts				\$ -
Fee Acquisition w/ PILT (breakout in table 6 & 7)	\$ 660,200			\$ 660,200
Fee Acquisition w/o PILT (breakout in table 6 & 7)				\$ -
Easement Acquisition				\$ -
Easement Stewardship				\$ -
Travel (in-state)				\$ -
Professional Services	\$ 46,214			\$ 46,214
DNR Direct Support Services (DNR programs only)	\$ 586			\$ 586
DNR Land Acquisition Costs				\$ -
Other				\$ -
Capital Equipment <i>(auto entered from below)</i>	\$ -	\$ -		\$ -
Other Equipment/Tools				\$ -
Supplies/Materials				\$ -
	\$ 707,000	\$ -	\$ -	\$ 707,000

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

Item Name	LSOHC Request	Leverage
<i>Item 1 enter here</i>		
<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	0	0

Attachment B. Outcome Tables

Name of Proposal:	Lower Mississippi Habitat Partnership
Date:	4-Nov-10
Legal Citation / Proposal Number:	F-06

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	100		100		200
Enhance					0
Total	100	0	100	0	0

Total Acres (sum of Total column)

200

These two cells should be the same figure.

Total Acres (sum of Total row)

200

Table 2. Total Requested Funding by Resource Type

	Wetlands	Prairies	Forest	Habitats	Total
Restore					\$ -
Protect	\$ 353,500		\$ 353,500		\$ 707,000
Enhance					\$ -
Total	\$ 353,500	\$ -	\$ 353,500	\$ -	\$ -

Total Dollars (sum of Total column)

\$ 707,000

These two cells should be the same figure.

Total Dollars (sum of Total row)

\$ 707,000

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			200			200
Enhance						0
Total	0	0	200	0	0	0

Total Acres (sum of Total column)

200

These three cells should be the same figure.

Total Acres (sum of Total row)

200

Total Acres from Table 1.

200

Attachment C. Parcel List

Name of Proposal: Lower Mississippi Habitat Partnership
Date: 4-Nov-10
Legal Citation / Proposal Number: F-06

County	Township	Range	Direction	Section	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 R=Restore P=Protect E=Enhance	Any existing protection? (yes/no)	Open to hunting and fishing? (yes/no)
Parcel Name											
Zumbro Bottoms State Forest	Wabasha	110	10 W	19		100	\$344,000	Addition to Richard J. Dorer Memorial	P	no	yes
McCarthy Wildlife Management Area	Wabasha	110	10 W	36		80	\$276,000	Addition to McCarthy WMA	P	no	yes
Root River WMA*	Houston	104	5 W	35		358	\$1,241,237	Addition to Root River WMA	P	no	yes

Parcels are listed in priority order.

*LSOHC funding is not sufficient to acquire all three parcels. If cost share can be secured any remaining LSOHC funding would be used towards the Root River WMA parcel.

Cost estimates are pre-appraisal