

Wetlands and Shallow Lakes

Main Request for Funding Form

Lessard-Sams Outdoor Heritage Council
Fiscal Year 2012

Program or Project Title: Wetlands and Shallow Lakes

Funds Requested (\$000s)	Funding Request	OHF Out-Year Projections of Needs		
	FY 2012	FY 2013	FY 2014	FY 2015
Outdoor Heritage Fund	\$ 1,408,020	0	0	0

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County Location:

Ecological Planning Regions:

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

Activity Type:

- Protect Restore Enhance

Priority Resources addressed by activity:

- Wetlands Forests Prairie Habitat

Project Abstract

Engineering designs will be developed for 11 shallow lakes and wetlands (919 acres). 4 lakes and 4 wetlands (6,206 acres) will be enhanced with outlet structures or wild rice planting.

Project Narrative

Design and scope of work

An estimated 90% of Minnesota's prairie wetlands have been lost, and those that remain are often larger basins that were more difficult to drain. Throughout the state, these shallow lakes and large wetlands provide critical habitat for wetland wildlife production and migration, especially for waterfowl and other wetland-dependent birds. High quality shallow lakes and wetlands have clear water and abundant rooted aquatic vegetation. Emergent aquatic plants such as rushes and wild rice provide protective cover from weather and predators and over-water nesting habitat, while submerged plants provide food in the form of seeds and tubers and critical habitat for aquatic invertebrates. An abundance of aquatic invertebrates such as insects, amphipods, and snails are critical for breeding ducks and for duckling growth and survival. Protein and carbohydrates from seeds and tubers are critical foods during both spring and fall migration.

Seasonally flooded wetlands are particularly important as duck breeding areas in spring by providing critical invertebrate food sources and isolation for duck pairs. Wet autumns can reflood these areas providing access to abundant seeds of annual wetland plants and invertebrates during fall migration of waterfowl and shorebirds.

However, the quality of shallow lakes and wetlands providing wildlife habitat has declined markedly due to landscape changes, increased runoff carrying sediment and nutrients, and invasive plant and fish species. Invasive fish, such as bullheads, carp, and fathead minnows reduce the invertebrates and aquatic plants necessary for quality habitat. Highly altered landscape hydrology now allows these invasive fish to access and sustain populations in most of our remaining wetlands. Seasonal wetlands have been hit hard by drainage and invasive plant species such as hybrid cattail and reed canary grass.

The shallow lakes and wetlands identified in this proposal for design and enhancement were proposed by DNR Area Wildlife Supervisors through their respective Regional

Wildlife Managers. The proposals were reviewed by the Wetland Wildlife Program Consultant and the Wildlife Operations Consultant prior to inclusion in this proposal.

Final engineering designs and other pre-construction work such as permits and easements will be completed for 11 shallow lake and wetland projects. Construction will be completed for the replacement or upgrading of water control structures, dikes, and fish barriers on four shallow lakes totaling 6,206 acres. All of these lakes are in state owned wildlife management areas. Construction will also be completed for water control structure replacement on two wetlands within wildlife management areas. In addition, wetlands on wildlife management areas will be seeded with wild rice to enhance wildlife habitat.

The design and enhancement elements of this proposal reflect the strategies of the 2006 Duck Recovery Plan. This plan underwent substantial review by nearly all the major wetland wildlife conservation groups in Minnesota. Stakeholders have been generally supportive of the strategies outlined in the plan, although some have expressed frustration with the long timeline.

Planning

Several recent statewide Minnesota planning efforts have called attention to the dramatic loss in both quantity and quality of wetland and shallow lake habitat over the last century and a half. *Minnesota Statewide Conservation and Preservation Plan, A Fifty-Year Vision – Minnesota Campaign for Conservation, Tomorrow's Habitat for the Wild and Rare*, and *MN DNR Duck Recovery Plan* all emphasize the importance of shallow lakes and associated wetlands in creating viable wetland habitat complexes that are necessary for improvements in wetland wildlife populations.

The *Minnesota Statewide Conservation and Preservation Plan* identifies habitat loss and degradation as the number one driver of change for wildlife in Minnesota. This Plan specifically recommends fee acquisition for WMAs, protection of shallow lake shoreline, and restoring shallow lakes, wetlands, and wetland associated watersheds as important strategies. *Tomorrow's Habitat for the Wild and Rare - Minnesota's Comprehensive Wildlife Conservation Strategy* for species in greatest conservation need has identified significant loss and degradation of habitat as the number one management challenge and one of the principle strategies is to provide protection through selective acquisition of key habitats in each Ecological Section. Over 30 species that rely on shallow lakes and wetlands are listed as species of special concern. Minnesota's *Long Range Duck Recovery Plan* lists the objective of restoring a breeding population of 1 million ducks by 2056. The primary strategy is the protection and restoration of 2 million additional acres

of habitat including the restoration of 64,000 wetlands and actively managing 1,800 shallow lakes.

This proposal is largely based on the Department of Natural Resources 2006 Duck Recovery Plan. This plan is similar to the Strategic Habitat Conservation model adopted by the US Fish and Wildlife Service in that it establishes a statewide duck population goal, identifies the challenges to be met in achieving that goal, proposes specific strategies and objectives for habitat restoration and protection, and selects specific metrics for evaluating progress.

The LSOHC specifically recognizes the importance of shallow lakes in the Forest, Forest Prairie Transition, and Prairie ecological sections. In addition, wetland complexes and improving wildlife habitat on WMAs were noted as important strategies within the Forest Prairie Transition, and Prairie ecological sections.

Relationship to Other Constitutional Funds

This proposal targets the enhancement of wetland wildlife habitat on shallow lakes and associated wetlands that contribute to wetland habitat complexes. These are basins are managed by wildlife agencies explicitly for high quality wildlife habitat. The DNR will consult and coordinate with partners to ensure that strategic conservation actions are prioritized within L-SOHC planning sections and that the allocation of available resources is optimized with all available funding sources. Although this work will compliment the goals of other Constitutional Funding, the selection of specific projects is prioritized based on the potential benefits to wildlife rather than consideration of other goals.

Relationship to Current Organizational Budget

Current DNR Division of Fish and Wildlife expenditures for wetland and shallow lake work for wildlife habitat total approximately \$2,360,000 out of a total Division budget of \$33,100,000. The total DNR annual budget approximates \$200,000,000. These figures do not include bonding.

Sustainability and Maintenance

The design component of this proposal will prepare sites for future construction or treatment proposals. The management and maintenance of basins with completed construction will fall on existing staff of the Department of Natural Resources. These

staff are funded through license fees and legislative appropriations. Periodic enhancements such as invasive species removal, supplemental vegetation planting or water control structure installation and replacements will be accomplished through annual funding requests to a variety of funding sources including, but not limited to, the Game and Fish Fund, bonding, gifts, the Environment and Natural Resources Trust Fund, the Outdoor Heritage Fund, and federal sources such as North American Wetland Conservation Act grants.

Types of Projects

Fee Acquisition Projects

Will local government approval be sought prior to acquisition?

Yes No, please explain X not applicable

If no, please explain here:

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

Yes No, please explain X not applicable

If no, please explain here:

Easement Acquisition Projects

Will the eased land be open for public use?

Yes X No, please explain not applicable

If no, please explain here: Not necessarily. Easements will be limited to those needed to complete construction and allow future management. These easements typically involve very small acreages.

Will the conservation easement be permanent?

Yes No, please explain X not applicable

If no, please explain here: The easements required for construction and management are typically perpetual in nature. Rarely, an agreement may be established only for construction.

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: All are on wildlife management areas: Crooked Road, Ereaux, Roseau River, Staples, Teardrop, Thostenson, and Tyler.

Accomplishment Timeline

Activity	Milestone	Date
Design Work	Complete 11 projects	June 30,2013
Construction	Complete 6 projects	June 30,2013
Plant wild rice	Complete 2 projects	June 30,2013

Attachments:

- A. Budget**
- B. Proposed Outcome Tables 1-5**
- C. Map**
- D. Parcel List**

Attachment A. Budget Spreadsheet

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

Total Amount of Request \$ 1,408,020 *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>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			\$ -	\$ -	\$ -	\$ -

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	\$ -	\$ -	\$ -	\$ -
Contracts	\$ 1,062,500			\$ 1,062,500
Fee Acquisition w/ PILT <i>(breakout in table 6 & 7)</i>				\$ -
Fee Acquisition w/o PILT <i>(breakout in table 6 & 7)</i>				\$ -
Easement Acquisition				\$ -
Easement Stewardship				\$ -
Travel (in-state)				\$ -
Professional Services	\$ 345,520			\$ 345,520
DNR Land Acquisition Costs				\$ -
Other				\$ -
Capital Equipment				\$ -
Other Equipment/Tools				\$ -
Supplies/Materials				\$ -
	\$ 1,408,020	\$ -	\$ -	\$ 1,408,020

Attachment B. Proposed Outcome Tables

Only enter data in the outlined cells

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					0
Enhance	7,105				7105
Total	7105	0	0	0	0

Total Acres (sum of Total column)

7105

These two cells should be the same figure.

Total Acres (sum of Total row)

7105

Table 2. Total Requested Funding by Resource Type

	Wetlands	Prairies	Forest	Habitats	Total
Restore					\$ -
Protect					\$ -
Enhance	\$ 1,408,020				\$ 1,408,020
Total	\$ 1,408,020	\$ -	\$ -	\$ -	-

Total Dollars (sum of Total column)

\$ 1,408,020

These two cells should be the same figure.

Total Dollars (sum of Total row)

\$ 1,408,020

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						0
Enhance	205	5,817		941	142	7105
Total	205	5817	0	941	142	7105

Total Acres (sum of Total column)

7105

These three cells should be the same figure.

Total Acres (sum of Total row)

7105

Total Acres from Table 1.

7105

Attachment B. Proposed Outcome Tables

Table 4. Total Requested Funding within each Ecological Section

	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore						\$ -
Protect						\$ -
Enhance	\$ 11,850	\$ 900,885		\$ 482,760	\$ 12,525	\$ 1,408,020
Total	\$ 11,850	\$ 900,885	\$ -	\$ 482,760	\$ 12,525	

Total Dollars (sum of Total column)

\$ 1,408,020

These two cells should be the same figure.

Total Dollars (sum of Total row)

\$ 1,408,020

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

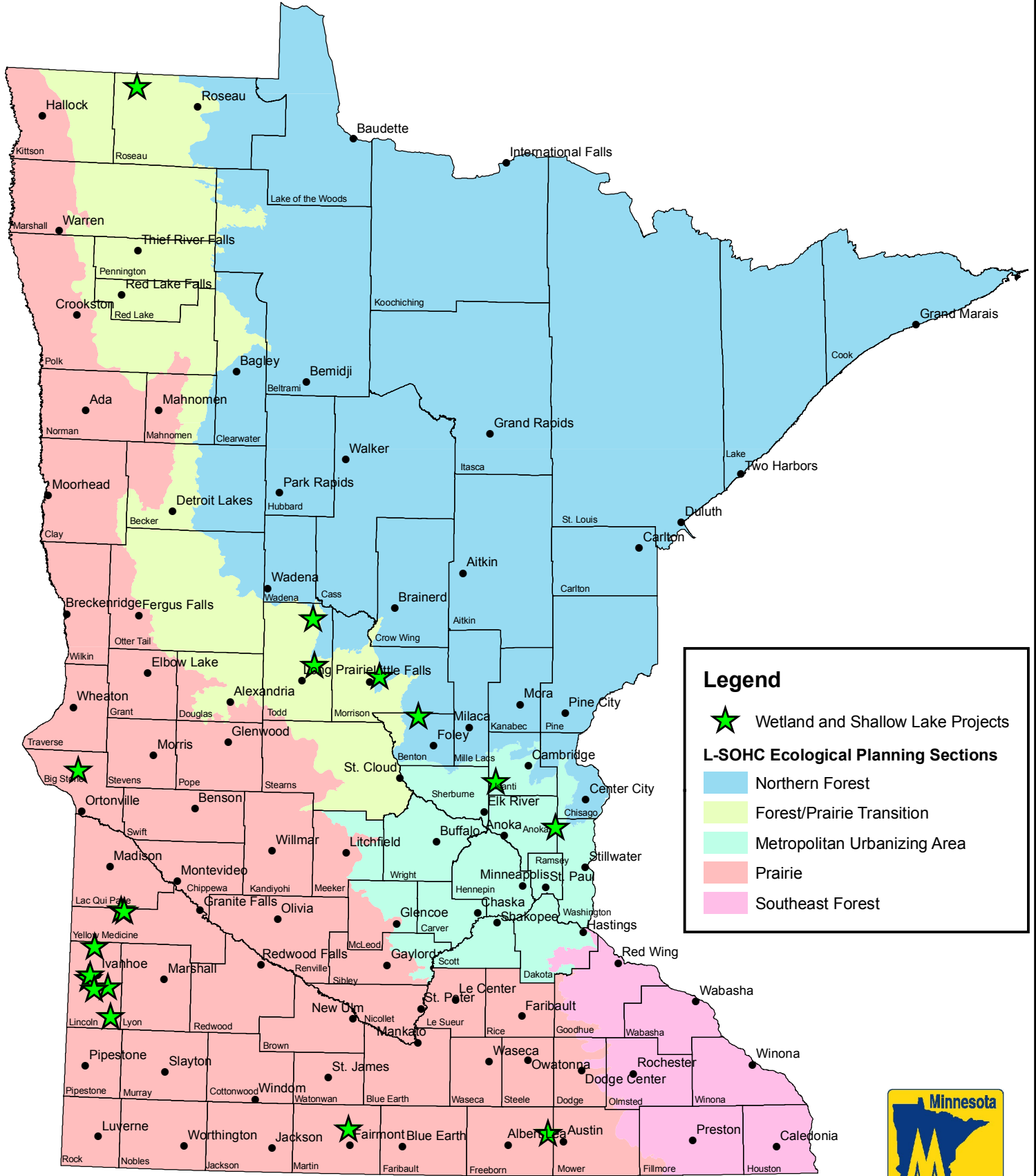
Table 6. Acquisition by PILT Status (enter information in acres)

	Wetlands	Prairies	Forests	Habitats	Total
Acquired in Fee with State PILT Liability					0
Acquired in Fee without State PILT Liability					0
Permanent Easement NO State PILT Liability					0

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

	Wetlands	Prairies	Forests	Habitats	Total
Acquired in Fee with State PILT Liability					\$ -
Acquired in Fee without State PILT Liability					\$ -
Permanent Easement NO State PILT Liability					\$ -

Wetlands and Shallow Lakes



Legend

- ★ Wetland and Shallow Lake Projects
- L-SOHC Ecological Planning Sections**
 - Northern Forest
 - Forest/Prairie Transition
 - Metropolitan Urbanizing Area
 - Prairie
 - Southeast Forest



