

Main Request for Funding Form
Lessard-Sams Outdoor Heritage Council
Fiscal Year 2012

Program or Project Title: Benton Lake Restoration Project

Funds Requested (\$000s)	Funding Request	OHF Out-Year Projections of Needs		
	FY 2012	FY 2013	FY 2014	FY 2015
Outdoor Heritage Fund	\$ 415,000	0	0	0

Manager's Name: Paul Moline
Organization: Carver County
Street Address: 600 Street East
City: Chaska **State:** MN **Zip:** 55318
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Organization Web Site: www.co.carver.mn.us

County Location: *Carver County*

Ecological Planning Regions: *[check all that apply – [to Map](#)]*

- | | | |
|---|--|--------------------------|
| <input type="checkbox"/> Northern Forest | <input type="checkbox"/> Forest/Prairie Transition | <input type="checkbox"/> |
| <input type="checkbox"/> Southeast Forest | | |
| <input type="checkbox"/> Prairie | <input checked="" type="checkbox"/> Metro/Urban | |

Activity Type: *[check all that apply]*

- | | | |
|----------------------------------|---|---|
| <input type="checkbox"/> Protect | <input checked="" type="checkbox"/> Restore | <input checked="" type="checkbox"/> Enhance |
|----------------------------------|---|---|

Priority Resources addressed by activity: *[check all that apply]*

- | | | |
|--|----------------------------------|----------------------------------|
| <input checked="" type="checkbox"/> Wetlands | <input type="checkbox"/> Forests | <input type="checkbox"/> Prairie |
| <input checked="" type="checkbox"/> Habitat | | |

Project Abstract

The Benton Lake restoration project will install an outlet/fish barrier allowing the ecological restoration of Benton Lake enhancing the public's use and access.

Project Narrative

Design and scope of work

Benton Lake is a shallow lake on the Impaired Waters List that has a draft TMDL nearing approval from the MPCA and EPA. A key outcome of the TMDL and a major factor for the impairment is the large internal phosphorus load and carp population within the lake ecosystem. The Benton Lake TMD's Implementation sections first priority is to target the internal phosphorus load and carp population within the lake. Studies have shown that effectively managing a large carp population (carp) can help transform a shallow lake from turbid phase to clear water. Carver County is currently implementing watershed BMP's (SSTS upgrades, Buffers, etc...) to improve the quality of water entering the lake system and the need to address the internal phosphorus loading has led us to controlling rough fish as a key component to minimizing the impacts of internal loading.

To effectively address this issue Carver County and its partners plan to install a water level management device/fish barrier at the outlet of Benton Lake. Due to the landscape of the project area (within the City of Cologne), a traditional outlet structure is not feasible requiring a much more complex design at this site. The structure will be designed to allow lake managers to fluctuate water levels based on the management plan (TMDL) for the lake. Having the ability to lower the lake will expose bottom sediments allowing for compaction of lake sediments. The structure will be designed to manage carp and other rough fish migrating to the lake, isolating the Benton Lake Watershed from future downstream rough fish interactions.

Removal of rough fish in the Benton Lake Watershed (Benton and Meuwissen Lakes) will occur after the completion of the structure, removal will be completed by both mechanical and chemical means. Estimates of the total amount of rough fish, namely carp, removed from the lake will be available to the public through the use of the Carver County website. Following draw down and rough fish removal, we will work with the Minnesota Department of Natural Resources to complete the last step in the project which will introduce a new healthy fish and plant community to the lake. The final phase will be to install a fishing/viewing pier on the lake to greater enhance the public's use of the lake and allow for a canoe and fishing access point.

Monitoring will occur throughout the project timeline. Lake monitoring will be conducted to study the chemical and physical lake response to this project. The goal of the project is to allow for Benton Lake to start its return to a clear lake status and help the lake to be de-listed from the impaired waters list in the future. Lab and field data for each monitoring season will be included within the annual Carver County Water Quality Report, which is posted on the Carver County Website.

To this point there is no known opposition to this project. This is a cooperative project that will focus the efforts and resources of multiple agencies and groups including Carver County, The City of Cologne, Benton Lake Watershed Conservancy Group (recent MN Waters award recipient), and MNDNR. It is the goal of the project to provide the residents of the City of Cologne and Carver County with a lake that has improved water quality that can provide wildlife observation and habitat along the City pathways adjacent to the lake. Installation of a public pier will provide increased fishing and recreational opportunities. Signage with the Outdoor Heritage Fund Logo will be placed next to the outlet structure highlighting the Outdoor Heritage Funds used to complete the project.

Links to project data and progress will be posted on the Carver County Website, found under the Land and Water Services page. Through this link, public users will be able to find pertinent information about the status of the project, monitoring results, and future steps still needing to be done. Estimated amounts of rough fish removal

will be found on this webpage, as well as lab and field data of lake monitoring for Benton Lake. This data will be used to determine the success of the project.

An Open House will be hosted by Carver County Staff and the Benton Lake Conservancy Group to educate residents in and around Benton Lake of the project and outcomes before construction of the outlet structure. Public meetings will occur a year after the re-stocking of desired fish species to discuss what the future of Benton Lake will be and to give an overview of the completed project.

Carver County has means and staff necessary to accomplish a project of this nature and has acted as project manager for multiple Capital Improvement Projects through the County's CIP Program. Through this, Local Government Units can apply for financial assistance on various capital improvement projects that improve water quality within the County. In addition to financial assistance for LGUs, engineering and technical assistance are offered in order for each project to be successfully implemented. The County has managed several large scale TMDL projects to date, each of which required detailed fiscal responsibility.

The State of Minnesota Office of the State Auditor completes a yearly audit of Carver County, reporting those findings to the County and is included within the County's Comprehensive Annual Financial Report. The State conducts each audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Planning

Through the TMDL science based modeling process impairment contributors were identified and aided in selecting the scope of this work. By restoring this shallow lake, Carver County will directly implement habitat recommendations number 4 (page 78) and 6 (page 81) of the Minnesota Conservation and Preservation Plan. The project is also identified in Carver County's draft Water Management Plan on pages 4-18 (Table 4-3, Project 3) which is scheduled to be finalized in October 2010.

The Metro Urbanizing Vision states "Where possible, the habitats will connect, making corridors for wildlife and species in greatest need of conservation, and hold wetlands and shallow lakes open to public recreation and hunting". The LSOHC priority section addressed is listed under the Metro Urbanized Area Ecological Section and specifically states within the priority action: "Protect, enhance and restore riparian and littoral habitats on lakes to benefit game and non-game fish species". Each of these statements would be accomplished by completing this project as proposed.

Relationship to Other Constitutional Funds

Carver County has and will continue to utilize and seek Clean Water Funds to restore the land and water under its jurisdiction. Currently the County is implementing BMP's using Clean Water Funds to address water quality concerns associated with fecal coliform bacteria, nutrient, and sediment impairments in the Carver Creek Watershed. Benton Lake is located within this watershed and is a benefactor of the work that is currently underway around it, this project would only enhance current efforts to improve the entire watershed and it's receiving waters.

Relationship to Current Organizational Budget

Outdoor Heritage Funding would be the sole source of funding for this project and will not supplant any traditional funding sources that would have been utilized for a project of this magnitude. As stated previously, this is a collaborative project with several partners each providing funding and/or in-kind services to make this project a reality.

Sustainability and Maintenance

The location of the outlet structure is within the public right of way, so access and maintenance will not be an issue for the life of the structure. This project has been a high priority for all the parties involved, especially the Benton

Lake Conservancy and City of Cologne who have been diligent at seeking funding and spreading the word of the importance of Benton Lake to the community. To solidify its long term use, agreements will be in place outlining ownership of the structure, maintenance of the structure, as well as an operational (stewardship) plan to be developed in conjunction of the local DNR staff, the City of Cologne, Benton Conservancy and Carver County.

The structure itself will require monthly checks to make sure that screens remain clear. These routine checks will be completed by the City of Cologne Public Works staff, with irregular checks from Carver County and the Carver County Soil and Water District

Carver County Staff will conduct annual checks to ensure structure is functional and sound. Long term costs associated with operating and maintaining the structure will be minimal, estimated at \$3,000 annually at a maximum which will be included in the budgets of the City and/or County to ensure the sustainability of the project.

Types of Projects

Fee Acquisition Projects

Will local government approval be sought prior to acquisition?

Yes No, please explain not applicable

If no, please explain here:

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

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?

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), or Wildlife Management Area (WMA)?

Yes, which ones applicable No, please explain not

If so, please indicate which ones:

Accomplishment Timeline

<u>Activity</u>	<u>Milestone</u>	<u>Date</u>
Installation of Outlet Structure	Completion of work	Fall 2011
Removal of Rough Fish	Completion of work	Fall – Winter 2011 - 2012
Monitor Lake	Annual Water Quality Report Completed	Spring – Fall 2010, 2011, 2012, 2013, and 2014
Removal of Rough fish as needed	Completion of work	Fall – Winter 2012 - 2013
Introduction of New Fish Community	Completion of work	Spring 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 \$ 415,000 *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>Project Manager</i>	0.5	2	\$ 20,000	\$ 5,000	County WMO	\$ 25,000
<i>SWCD Staff</i>	0.5	2	\$ 30,000	\$ 5,000	County WMO	\$ 35,000
<i>position 3</i>						\$ -
<i>position 4</i>						\$ -
<i>position 5</i>						\$ -
<i>position 6</i>						\$ -
<i>position 7</i>						\$ -
Total			\$ 50,000	\$ 10,000	\$ -	\$ 60,000

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	\$ 50,000	\$ 10,000	\$ -	\$ 60,000
Contracts	\$ 230,000	\$ 20,000	County WMO	\$ 250,000
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	\$ 75,000			\$ 75,000
DNR Land Acquisition Costs				\$ -
Other				\$ 65,000
Capital Equipment	\$ 50,000			\$ 50,000
Other Equipment/Tools				\$ -
Supplies/Materials	\$ 10,000	\$ 5,000	Local Conservation gra	\$ 15,000
	\$ 415,000	\$ 35,000	\$ -	\$ 450,000

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	36				36
Protect					0
Enhance	35				35
Total	71	0	0	0	

Total Acres (sum of Total column)

71

Total Acres (sum of Total row)

71

These two cells should be the same figure.

Table 2. Total Requested Funding by Resource Type

	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$ 355,000				\$ 355,000
Protect					\$ -
Enhance	\$ 60,000				\$ 60,000
Total	\$ 415,000	\$ -	\$ -	\$ -	

Total Dollars (sum of Total column)

\$ 415,000

Total Dollars (sum of Total row)

\$ 415,000

These two cells should be the same figure.

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	36					36
Protect						0
Enhance	35					35
Total	71	0	0	0	0	

Total Acres (sum of Total column)

71

Total Acres (sum of Total row)

71

Total Acres from Table 1.

71

These three cells should be the same figure.

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	\$ 355,000					\$ 355,000
Protect						\$ -
Enhance	\$ 60,000					\$ 60,000
Total	\$ 415,000	\$ -	\$ -	\$ -	\$ -	

Total Dollars (sum of Total column)

\$ 415,000

These two cells should be the same figure.

Total Dollars (sum of Total row)

\$ 415,000

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

1.75 # 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

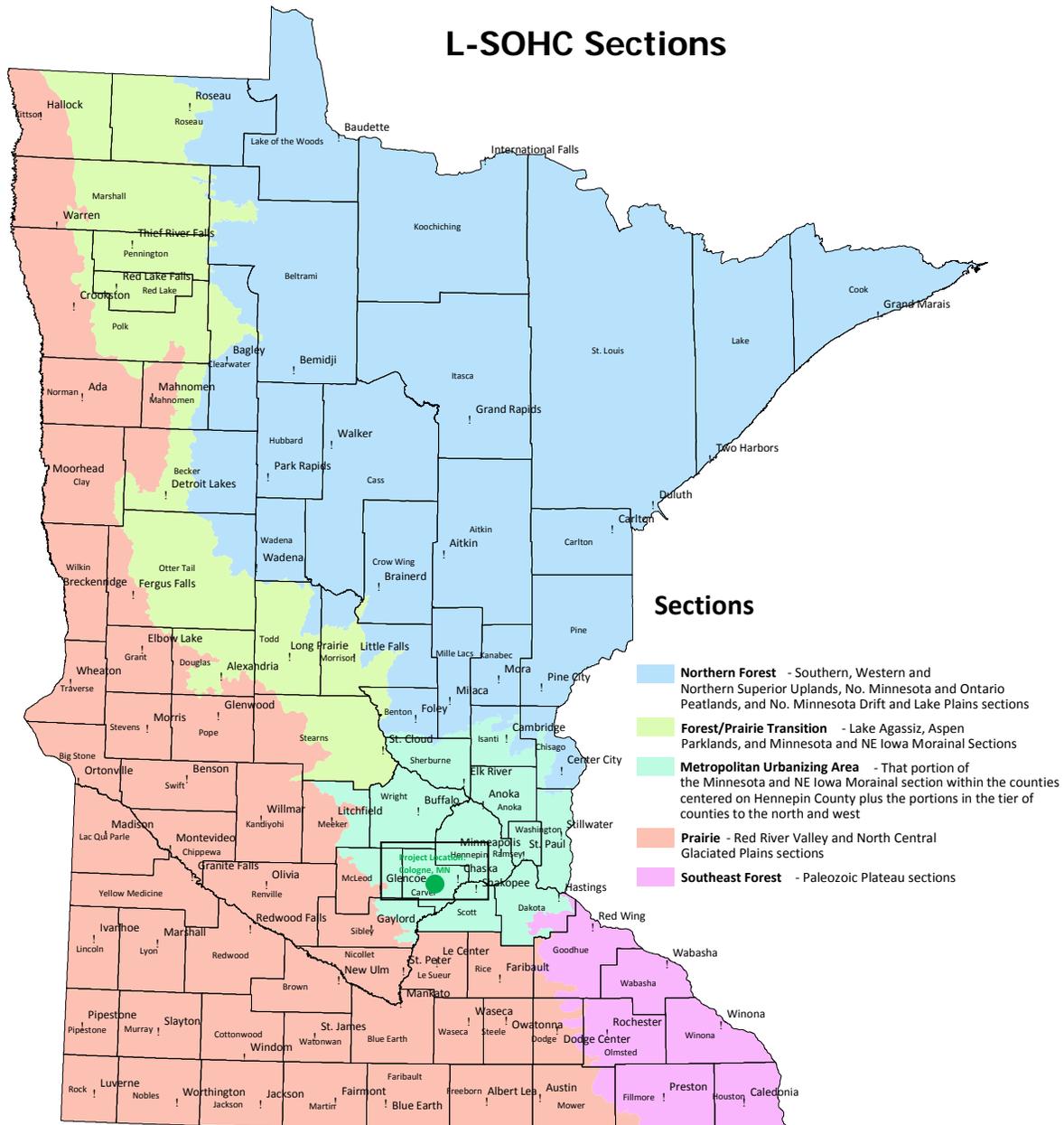
Table 7. Estimated Value of Acquisition by PILT Status (enter information in dollars)

	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					\$ -

Attachment C.

Instructions: Double left click to bring up the map editor. Symbols should be on the left side of the pop-up banner at the top of your screen or at the bottom left depending on your software.

If you can't bring up the interactive map editor: 1) Make a paper copy of the map, 2) By hand place symbols on the map corresponding to the location of the projects in your proposal, 3) Scan the marked map to a pdf, 4) Attach to web form.



Attachment D. Parcel List

Program Title

County	Township	Range	Direction	Section	TRDS	# of acres	Estimated Cost to OHF	Description	Activity R=Restore P=Protect E=Enhance	Any existing protection? (yes/no)	Open to hunting and fishing? (yes/no)
Parcel Name											
<i>Example Lambertson WMA Addition</i>	<i>Redwood</i>	<i>109</i>	<i>37</i>	<i>2</i>	<i>13</i>	<i>10937213</i>	<i>114</i>	<i>\$5,500,000</i>		<i>P</i>	
Project area does not have a parcel ID											