Request for Funding

Lessard-Sams Outdoor Heritage Council Fiscal Year 2016 / ML 2015

Program or Project Title: White Bear Lake

Funds Requested: \$236,000

Manager's Name: James Markoe Title: President Organization: White Bear Lake Homeowners Association, Inc. (DNR Participation Requested) Street Address: PO Box 10662 City: , MN Telephone: E-Mail: sue.hartinger@stinsonleonard.com Organization Web Site: N/A

County Locations: No Counties Listed

Ecological Planning Regions:

• Metro / Urban

Activity Type:

- Restore
- Protect in Fee

Priority Resources Addressed by Activity:

- Wetlands
- Habitat

Abstract:

As directed by the Ramsey County District Court, evaluate feasibility of interim measures to prevent further decline of lake levels in White Bear Lake, to be implemented while long-term regional solutions to groundwater and surface water conservation are developed by the the DNR, the MPCA, the Metropolitan Council and affected municipalities.

Design and Scope of Work:

Preliminary feasibility analysis of interim steps that could be taken to provide augmentation of the water in White Bear Lake to prevent further deterioration of the Lake's ecosystem and to mitigate continuing water loss; including the following:

1. Use of treated groundwater pumped from aquifers for pollution containment which is currently discharged to rivers to restore aquifer depletion and augment surface water until long-term regional solutions are implemented.

2. Diversion and treatment of storm water flows nearby to White Bear Lake which are now flowing to other watersheds to augment White Bear Lake.

3. Use of large cooling water discharge (estimated 200,000 gpd) from an industrial water appropriation well near White Bear Lake, which is currently discharge to surface water drainage systems in other watersheds, to augment White Bear Lake.

4. Use of seasonal high flow excess surface water in the SPRWS collection system to augment White Bear Lake, after appropriate treatment.

5. Use of seasonal high flow excess surface water in Bald Eagle Lake to augment White Bear Lake.

6. Evaluation of the potential of existing stormwater collection systems in the White Bear Lake watershed to be modified to provide water flows of acceptable quality to White Bear Lake.

7. Evaluation of residential mico-treatment systems to separate and treat residential gray water for discharge into White Bear Lake.

8. Evaluate direct connection of municipalities SPRWS potable water.

How the request addresses MN habitats:

It will develop feasible interim methods to prevent further loss and potential restoration of currently lost ittoral areas of White Bear Lake.

Please explain the nature of urgency:

The lake level of White Bear Lake is significantly below its ordinary high water mark which has resulted in the closure of public swimming beaches, the loss of large portions of the littoral area of the lake, the loss of recreational boating access and use and the increase of invasive species in the lake. A concern is that continuing decline in water levels could cause the lake to reach an ecological "tipping point" beyond which restoration of the lake and its habitat and wildlife could not occur. In currently pending litigation, the Court has asked the parties to mediate the nature of relief that could be implemented to restore and prevent further decline in the lake levels, with specific focus on interim steps to preserve and improve the lake while the litigation proceeds.

Planning

MN State-wide Conservation Plan Priorities:

- H3 Improve connectivity and access to recreation
- H6 Protect and restore critical in-water habitat of lakes and streams

Plans Addressed:

- Long Range Plan for Fisheries Management
- Midwest Glacial Lakes Partnership

Please describe the science based planning and evaluation model used:

Models developed by DNR and other public agencies for characterizing groundwater and surface water flow systems will be used to assess the feasibility of interim methods to restore and prevent further deterioration of the lake.

LSOHC Metro Urban Section Priorities:

 Protect, enhance, and restore riparian and littoral habitats on lakes to benefit game and nongame fish species

Accelerates or Supplements Current Efforts:

The grant will accelerate the identification of interim measures that prevent further deterioration of the lake habitat while long-term groundwater and surface water management solutions are developed.

Non-OHF Money Spent in the Past:

| Appropriation Year | Source | Amount |
|-----------------------|--------|--------|
|-----------------------|--------|--------|

Sustainability and Maintenance:

Not currently known - will supplement.

Maintain Project Outcomes:

| Year | Source of Funds | Step 1 | Step 2 | Step 3 |
|------|-------------------------------|--|--------|--------|
| 2015 | WBLHA | Complete Trial to determine a long- term solution | | |
| 2016 | Legislative bonding authority | Seek capital funding for systems to connect certain municipalitis to SPRWS and to construct new drinking water facilities to serve the NE metro area | | |

Applicable Criteria:

If funded, this proposal will meet all applicable criteria set forth in MS 97A.056? - Yes

Government Approval:

Will local government approval be sought prior to acquisition? - Yes

Permanent Protection:

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

Current Hunting and Fishing Plan:

Is this land currently open for hunting and fishing? - **Yes** Hunting and Fishing Regulations Not Listed

Future Hunting and Fishing Plan:

Will the land be open for hunting and fishing after completion? - Yes Hunting and Fishing Regulations Not Listed

Best Management Practice:

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program? - **Yes**

Permanent Protection:

Is the activity on permanently protected land per 97A.056, *subd* 13(f), *tribal lands, and/or public waters per* MS 103G.005, *Subd.* 15? - **Yes (Public Waters)**

Accomplishment Timeline

| Activity | Approximate Date |
|----------|------------------|
| Activity | Completed |

Outcomes

Programs in metropolitan urbanizing region:

• Improved aquatic habitat indicators Because of persistent low lake levels, White Bear Lake has lost a significant portion of its littoral area. The loss of littoral habitat has and will adversely affect the fishery and increase the impacts of invasive specieis in the lake. The grant will identify the interim steps that can be taken to prevent further loss of littoral habitat and restore some of littoral areas now lost.

Relationship to Other Funds:

• No Relationships Listed

Budget Spreadsheet

Total Amount of Request: \$236,000

Budget and Cash Leverage

| Budget Name | LSOHC Request | Anticipated Leverage | Leverage Source | Total |
|-------------------------------|------------------|-------------------------|--------------------|-----------|
| Personnel | \$0 | \$0 | | \$0 |
| Contracts | \$0 | \$0 | | \$0 |
| 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 | \$0 | \$0 | | \$0 |
| Professional Services | \$236,000 | \$0 | | \$236,000 |
| Direct Support Services | \$0 | \$0 | | \$0 |
| DNR Land Acquisition Costs | \$0 | \$0 | | \$0 |
| Capital Equipment | \$0 | \$0 | | \$0 |
| Other Equipment/Tools | \$0 | \$0 | | \$0 |
| Supplies/Materials | \$0 | \$0 | | \$0 |
| DNR IDP | \$0 | \$0 | | \$0 |
| Total | \$236,000 | \$0 | - | \$236,000 |

| Amount of Request: | \$236,000 |
|---------------------------------------|-----------|
| Amount of Leverage: | \$0 |
| Leverage as a percent of the Request: | 0.00% |

Output Tables

Table 1a. Acres by Resource Type

| Туре | Wetlands | Prairies | Forest | Habitats | Total |
|--|----------|----------|--------|----------|-------|
| Restore | 0 | 0 | 0 | 2,427 | 2,427 |
| 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 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 2,427 | 2,427 |

Table 2. Total Requested Funding by Resource Type

| Туре | Wetlands | Prairies | Forest | Habitats | Total |
|--|----------|----------|--------|-----------|-----------|
| Restore | \$0 | \$0 | \$0 | \$236,000 | \$236,000 |
| 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 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | \$0 | \$0 | \$0 | \$236,000 | \$236,000 |

Table 3. Acres within each Ecological Section

| Туре | Metro/Urban | Forest/Prairie | SE Forest | Prairie | Northern Forest | Total |
|---|-------------|----------------|--------------|---------|--------------------|-------|
| Restore | 2,427 | 0 | 0 | 0 | 0 | 2,427 |
| 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 | 0 | 0 | 0 | 0 |
| Total | 2,427 | 0 | 0 | 0 | 0 | 2,427 |

Table 4. Total Requested Funding within each Ecological Section

| Туре | Metro/Urban | Forest/Prairie | SE Forest | Prairie | Northern Forest | Total |
|---|-------------|----------------|--------------|---------|--------------------|-----------|
| Restore | \$236,000 | \$0 | | | \$0 | \$236,000 |
| 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 | \$0 | \$0 | \$0 | \$0 |
| Total | \$236,000 | \$0 | \$0 | \$0 | \$0 | \$236,000 |

Table 5. Average Cost per Acre by Resource Type

| Туре | Wetlands | Prairies | Forest | Habitats |
|--|----------|----------|--------|----------|
| Restore | \$0 | \$0 | \$0 | \$97 |
| Protect in Fee with State PILT Liability | \$0 | \$0 | \$0 | \$0 |
| Protect in Fee W/O State PILT Liability | \$0 | \$0 | \$0 | \$0 |
| Protect in Easement | \$0 | \$0 | \$0 | \$0 |
| Enhance | \$0 | \$0 | \$0 | \$0 |

Table 6. Average Cost per Acre by Ecological Section

| Туре | Metro/Urban | Forest/Prairie | SE Forest | Prairie | Northern Forest |
|---|-------------|----------------|--------------|---------|--------------------|
| Restore | \$97 | \$0 | \$0 | \$0 | \$0 |
| 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 | \$0 | \$0 | \$0 | \$0 | \$0 |

Target Lake/Stream/River Feet or Miles

0

Parcel List

Section 1 - Restore / Enhance Parcel List

No parcels with an activity type restore or enhance.

Section 2 - Protect Parcel List

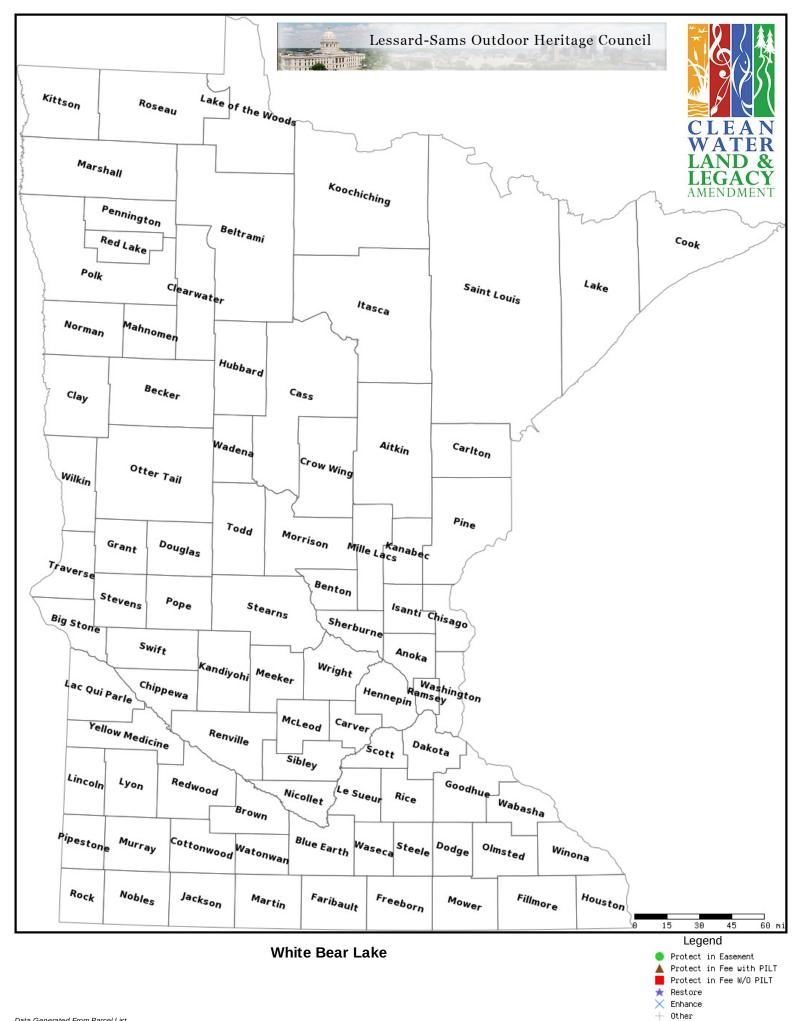
No parcels with an activity type protect.

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.



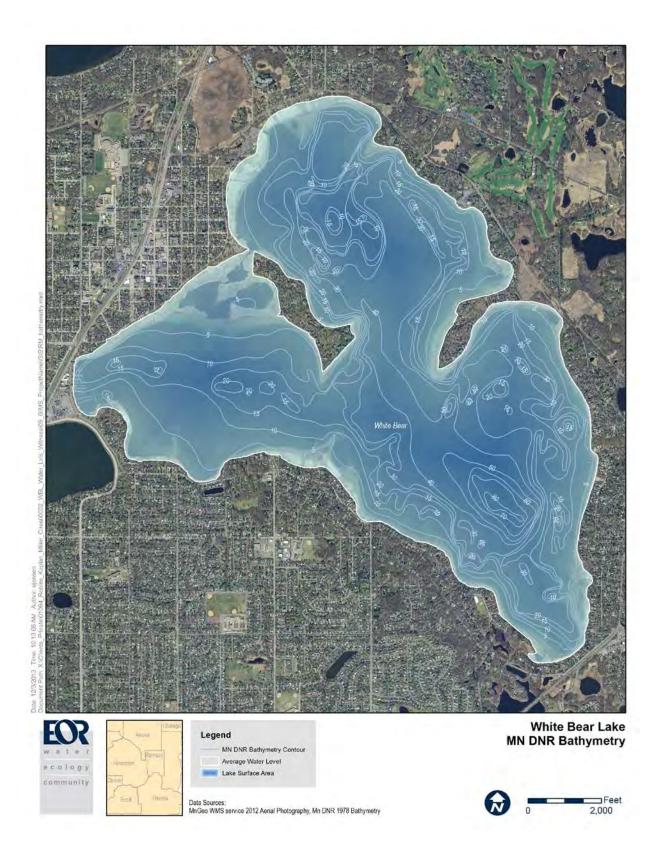


Figure 1. White Bear Lake Bathymetry