

## **Little Sand Lake Stewardship Action Planning Guide 2015**

(Updated May 2015 from the 2005 Lake Management Plan developed through the Healthy Lakes and Rivers Partnership Program)

### **Background**

The original Little Sand Lake Management Plan was produced in 2005 by Little Sand Lake Area Association members (Wayne Gaustad, Jill Gilbertson, Dan Kittilson, Tom Pacholl, Jack Parisian, the late Vern Thompson, and Jim Thomsen) participating in a strategic planning session hosted by the Initiative Foundation's "Healthy Lakes and Rivers Partnership Program." Today this program continues under the auspices of the Freshwater Society. The original plan included a detailed physical description of Little Sand Lake and its watershed, the history of development and other impacts on Little Sand Lake, and an action plan focusing on water quality, fisheries management, aquatic vegetation, exotic species, wildlife, land use and zoning, managing water surface conflicts, and public access. These action plan categories were distilled into three key focus areas for our lake: water quality, vegetation/exotic species, and fishery management.

This update of the 2005 action plan eliminates the "fishery" category, because MN Department of Natural Resources fisheries experts manage our fishery well and we have opportunities to provide input to the DNR and to comment on their draft plans for Little Sand Lake (produced at approximately 5-year intervals). The other categories are maintained but reorganized to reflect past-completed actions (e.g., vegetation mapping, kiosk) and recent changes in the political and regulatory environment. Organizational responsibilities are separated out into a separate focus category to improve clarity. This update is a product of an ad hoc committee including Marshall Howe, Leah Pigatti, Rich Soderberg, Karen Netland, Dan Kittilson, and Don Catlin.

### **2014 Action Planning Guide:**

Note: Acronyms used in this guide are as follows:

AIS – Aquatic Invasive Species  
DNR – (Minnesota) Department of Natural Resources  
GIS – Geographic Information Systems  
GPS – Global Positioning System  
HCOLA – Hubbard County Coalition of Lake Associations  
LSL – Little Sand Lake

LSLAA – Little Sand Lake Area Association  
 MN – Minnesota  
 NGO – Non-government organization  
 RMBEL – RMB Environmental Laboratories (Detroit Lakes)  
 SWCD – Soil and Water Conservation District  
 UM – University of Minnesota

**Focus Area 1: Aquatic Vegetation/AIS**

Goal 1: Prevent introduction, monitor, and educate about aquatic invasive species (AIS).

<b>Action Steps for Task/Activity</b>	<b>Responsible Parties</b>	<b>Important Resources</b>	<b>Schedule</b>
1. Support watercraft inspection program for AIS: <ul style="list-style-type: none"> <li>● Review LSL public access watercraft inspection data by the SWCD, including data from car monitors.</li> <li>● Determine if changes are needed in number or distribution of inspection hours for the future.</li> <li>● Coordinate plans for future inspection needs with other lakes in the Mantrap chain through HCOLA.</li> <li>● Prepare cost-share grant application to Lake Emma Township to cover needed</li> </ul>	LSLAA Board, LSLAA Healthy Lakes Committee, LSLAA HCOLA Rep.	SWCD, DNR, HCOLA, Kiosk, Newsletter.	Annually.

<p>SWCD inspection hours.</p> <ul style="list-style-type: none"> <li>● If supplementary inspection volunteers are deemed necessary, arrange for required DNR training of volunteers.</li> <li>● Encourage self boat-checks with visitors, property owners.</li> </ul>			
<p>2. Monitor lake for AIS:</p> <ul style="list-style-type: none"> <li>● Train volunteers in aquatic plant identification through UM Extension.</li> <li>● Provide small cinder blocks to residents to hang from their docks. Ask them to examine them regularly for presence of zebra mussels.</li> <li>● Use established protocols to survey lake for curly- leaf pondweed and other AIS four times from ice-out to October.</li> <li>● Add sampling sites in littoral areas near the public access. Sample these</li> </ul>	<p>Aquatic plant experts, lake volunteers, all residents.</p>	<p>UM Extension, aquatic plant identification guides, herbarium of pressed plants, data forms, pontoon boat, sampling rakes, Newsletter.</p>	<p>Ongoing.</p>

<p>sites more frequently.</p> <ul style="list-style-type: none"> <li>● Conduct tow-new sampling for zebra mussel veligers (larvae) in July and August annually, using protocols established by RMBEL and HCOLA.</li> <li>● Place additional cinder blocks in the vicinity of the public access.</li> <li>● Identify and record native aquatic vegetation detected during each survey.</li> <li>● Encourage residents to watch for AIS when they use the lake.</li> </ul>			
<p>3. Provide AIS education:</p> <ul style="list-style-type: none"> <li>● Distribute identification flyers to residents.</li> <li>● Highlight AIS issues in postings on the kiosk. Consider placing actual specimens of AIS there.</li> <li>● Assure AIS is a prominent topic in Newsletters and annual meetings.</li> </ul>	<p>LSLAA Healthy Lakes and Communication and Education Committees.</p>	<p>Kiosk, Newsletter, ID flyers, meetings, welcome packet.</p>	<p>Ongoing.</p>

Goal 2: Explore opportunities for repeating the 2005 mapping of LSL aquatic vegetation.

<b>Action Steps for Task/Activity</b>	<b>Responsible Parties</b>	<b>Important Resources</b>	<b>Schedule</b>
1. Littoral vegetation inventory: <ul style="list-style-type: none"> <li>● Discuss with DNR opportunities for re-assessing LSL aquatic vegetation over the long-term.</li> </ul>	LSLAA Healthy Lakes Committee.	DNR, SWCD, handheld GPS.	To be determined.

**Focus Area 2: Water Quality**

(Note: Many of the following recommendations are based on a 2012 water quality report by RMBEL, commissioned by LSLAA . That report concludes that, because of LSL’s very high water quality, the management emphasis should be on “**protection**” rather than mitigation or restoration approaches that other lakes might warrant.)

Goal 1: Monitor, summarize, and report water quality data

<b>Action Step for Task/Activity</b>	<b>Responsible Parties</b>	<b>Important Resources</b>	<b>Schedule</b>
1. Test lake water quality: <ul style="list-style-type: none"> <li>● Use established protocols 5x per year to test for phosphorus, chlorophyll-a and water clarity (Secchi disk) at designated location(s).</li> <li>● In collaboration with the DNR,</li> </ul>	LSLAA HCOLA Rep, LSLAA Healthy Lakes Committee.	HCOLA, RMBEL, SWCD, hand-held GPS, dissolved oxygen and temperature monitoring equipment, Secchi disk.	May through September, annually.

<p>conduct dissolved oxygen/water temperature bi-weekly throughout open-water season.</p> <ul style="list-style-type: none"> <li>● Sample water from stormceptors near Zorbaz for chloride, phosphorus, and suspended solids (RMBEL will analyze).</li> <li>● Take additional Secchi disk readings weekly if possible.</li> <li>● Attend annual HCOLA training sessions.</li> </ul>			
<p>2. Review &amp; report water quality data:</p> <ul style="list-style-type: none"> <li>● Monitor long-term changes in water quality.</li> <li>● Include a permanent spot for water quality data/graphs in LSLAA newsletter.</li> <li>● Present information at meetings.</li> <li>● Use HCOLA monitoring matrix to identify gaps in desirable water monitoring activities on LSL.</li> </ul>	<p>LSLAA HCOLA Rep, LSLAA Healthy Lakes Committee.</p>	<p>HCOLA, RMBEL, SWCD, Hand-held GPS.</p>	<p>May-September, annually.</p>

Goal 2: Educate property owners about lake hazards posed by improperly maintained septic systems and by the use of fertilizers and soap products.

<b>Action Step for Task/Activity</b>	<b>Responsible Parties</b>	<b>Important Resources</b>	<b>Schedule</b>
1. Provide information about use of fertilizers and maintenance of septic systems. <ul style="list-style-type: none"> <li>● Incorporate in “new resident” welcome packet.</li> <li>● Distribute to all lake residents via email, identifying both a contact person in LSLAA as well as on-line or other resources.</li> <li>● Include reminders in Newsletters.</li> <li>● Encourage attendance at workshops on septic maintenance.</li> </ul>	LSLAA Board, LSLAA Healthy Lakes and Communication and Education Committees.	DNR (Division of Trails & Waterways), HCOLA, SWCD, UM Extension Service, welcome packet, Newsletter, Kiosk.	Ongoing.

Goal 3: Educate property owners about the value of maintaining or restoring natural vegetation on their shorelines and littoral areas.

<b>Action Step for Task/Activity</b>	<b>Responsible Parties</b>	<b>Important Resources</b>	<b>Schedule</b>
1. Shoreline restoration and implementation: <ul style="list-style-type: none"> <li>● Inform lake residents about the value of and opportunities for shoreline</li> </ul>	LSLAA Healthy Lakes Committee (Restore-the-Shore coordinator), LSLAA Communication and Education Committee.	HCOLA, DNR, UM Extension Service, Newsletter, email, Kiosk.	Ongoing.

<p>restoration. Include list of on-line and other resources, especially the DNR's "Score the Shore" program.</p> <ul style="list-style-type: none"> <li>● Inform lake residents about the value of maintaining aquatic vegetation for fish spawning and other natural lake processes.</li> <li>● Recruit volunteers for attending educational workshops.</li> </ul>			
<p>2. Purchase trees/shrubs from "Restore-the-Shore"</p> <ul style="list-style-type: none"> <li>● Display information on Kiosk.</li> <li>● Recruit participants through newsletters, get-togethers, meetings.</li> <li>● Monitor long-term changes in Restore-the-Shore participation.</li> </ul>	<p>LSLAA Healthy Lakes Committee (Restore-the-Shore coordinator).</p>	<p>HCOLA, Newsletter, Kiosk.</p>	<p>Annually.</p>

**Focus Area 3: Internal and External Organizational Strategies**

Goal 1: Maintain/strengthen LSLAA membership involvement in lake health issues



<b>Action Step for Task/Activity</b>	<b>Responsible Parties</b>	<b>Important Resources</b>	<b>Schedule</b>
<p>1. Increase participation &amp; communication in LSLAA activities:</p> <ul style="list-style-type: none"> <li>● Share lake management plan with members.</li> <li>● Regularly solicit new volunteers for committees and other tasks.</li> <li>● Send out information through email regularly but selectively (no overload!). Consider a regular, periodic email highlighting progress in implementing the Plan and how residents can participate.</li> </ul>	<p>LSLAA Board, LSLAA Communication and Education and Social Committees, LSLAA Email Coordinator.</p>	<p>Newsletter, email, Kiosk, annual meetings, social events.</p>	<p>Ongoing.</p>
<p>2. Continue lake stewardship education and strive to develop more effective communication tools:</p> <ul style="list-style-type: none"> <li>● Maintain kiosk at public access and update information each spring.</li> <li>● Refer members to the information resources on the HCOLA website.</li> <li>● Keep apprised as new educational materials become available.</li> </ul>	<p>LSLAA Board, LSLAA Communication and Education and Social Committees, LSLAA Email Coordinator.</p>	<p>DNR, SWCD, HCOLA, Freshwater Society, MN Lakes and Rivers Advocates.</p>	<p>Ongoing.</p>

Goal 2: Engage with other organizations relevant to LSL health.

<b>Action Step for Task/Activity</b>	<b>Responsible Parties</b>	<b>Important Resources</b>	<b>Schedule</b>
<p>1. Cooperate with other lake associations:</p> <ul style="list-style-type: none"> <li>● Meet with area lake representatives, especially those in the Mantrap watershed, to</li> </ul>	<p>LSLAA Board, Healthy Lakes Committee</p>	<p>HCOLA, Freshwater Society</p>	<p>Ongoing</p>

<p>identify strategies for cooperation.</p> <ul style="list-style-type: none"> <li>● Share lake management plans.</li> <li>● Invite to annual meeting.</li> </ul>			
<p>2. Engage with state and local governments:</p> <ul style="list-style-type: none"> <li>● Share Lake Management Plan with Hubbard County Environmental Services Office.</li> <li>● Encourage Hubbard County Commissioners and Board of Adjustment to enforce the Shoreland Management Ordinance.</li> <li>● Participate in county &amp; township hearings/meetings.</li> <li>● Monitor variance requests from LSL and participate in hearings as warranted.</li> <li>● Keep apprised of changes in relevant state and local ordinances and regulations.</li> <li>● Keep apprised of government grant opportunities and timelines.</li> </ul>	<p>LSLAA Board</p>	<p>DNR, SWCD, Hubbard County, Lake Emma Township, <i>Northwoods Press</i> (for announcements of public hearings and meetings)</p>	<p>Ongoing</p>
<p>3. Keep apprised of programs and actions of NGOs involved in lake conservation:</p> <ol style="list-style-type: none"> <li>a. Minnesota Waters (a program of Conservation Minnesota).</li> <li>b. Freshwater Society.</li> </ol>	<p>LSLAA Board, LSLAA Healthy Lakes Committee, LSLAA HCOLA Rep.</p>	<p>MN Waters, HCOLA, Freshwater Society, Northwest MN Foundation.</p>	<p>Yearly.</p>

c. HCOLA. d. NW Minnesota Foundation (grant opportunities).			
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**APPENDIX**

**LITTLE SAND LAKE AREA ASSOCIATION CONTACTS**

**Board of Directors:**

President	Wayne Swanson	(218) 699-3447
Vice-President	Luanne O'Neill	(612) 280-3723
Treasurer	Punky Catlin	(218) 732-4268
Secretary	Diane Johnson	(612) 723-1656
Past President	Maggi Yerkes	(218) 699-3193
At-Large	MaJeana Hallstrom	(218) 732-2770
	Marshall Howe	(218) 699-3230
	John Kisser	(218) 732-9678
	Steve Trutna	(218) 699-3320

**Committee Chairs:**

Healthy Lakes	Marshall Howe	(218) 699-3230
Restore the Shore	John Kisser	(218) 732-9678
Communication and Education	Renee Bexell	(218) 732-8577

Membership

Maggi Yerkes

(218) 699-3193

OTHER ORGANIZATIONAL SUPPORTERS OF LAKE CONSERVATION

Minnesota Waters

<http://minnesotawaters.org/>

Minnesota Lakes and Rivers Advocates

<http://mnlakesandrivers.org/>

Freshwater Society

<http://freshwater.org/>

Hubbard County SWCD

<http://www.hubbardswcd.org/>

MN Dept. of Natural Resources (AIS)

<http://www.dnr.state.mn.us/invasives/ais/prevention.html>