

**Environment and Natural Resources Trust Fund  
2011-2012 Request for Proposals (RFP)**

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**Subd: 05d**

**Project Title:** Itasca County Sensitive Lakeshore Identification

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**Category:** C3+4. Technical Assistance and Community-Based Planning

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**Total Project Budget: \$** \$160,000

**Proposed Project Time Period for the Funding Requested:** 2 yrs, July 2011 - June 2013

**Other Non-State Funds (secured): \$** 0

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**Summary:**

The identification of sensitive lakeshores within Itasca County through intensive biological surveys conducted on lakes, calibrating a Rapid Assessment Model which will be applied to a broader set of lakes.

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**Name:** Jim Gustafson

**Sponsoring Organization:** Itasca County Soil and Water Conservation District

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**Location:**

**Region:** NE

**Ecological Section:** No. Minnesota Drift and Lake Plains (212N)

**County Name:** Itasca

**City / Township:**

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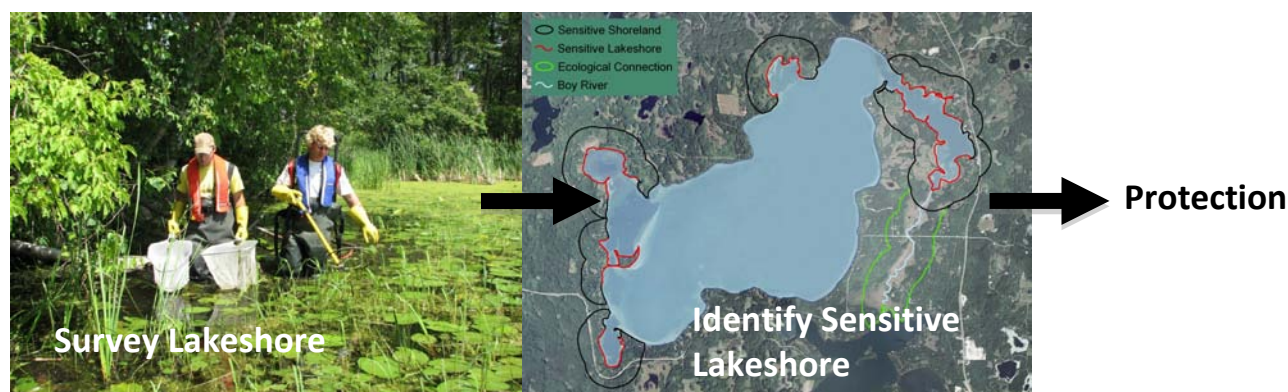
## 2011-2012 MAIN PROPOSAL

### PROJECT TITLE: *SENSITIVE LAKESHORE IDENTIFICATION IN ITASCA COUNTY*

To aid in the protection of high-value lake ecosystems in Minnesota, surveys to identify sensitive lakeshore and restorable shoreline will be conducted in collaboration with state and local partners.

#### I. PROJECT STATEMENT

The major impetus for this initiative is the need to better protect and manage functional lake ecosystems in Minnesota. There is widespread concern about the consequences of poorly planned development on water quality and fish and wildlife habitat. Given the increased demands for water and shoreland, continued habitat fragmentation, loss of species diversity, and exotic species expansion, protection of sensitive lakeshores is critical.



Data on the distribution and ecology of rare plants and animals, native plant communities, and vulnerable lakeshores are needed to prioritize actions to conserve and manage lake ecosystems. As Minnesota assesses the status of its natural resources, develops plans for priority resources, and invests millions of dollars in resource protection efforts, information that helps target conservation decisions along lakeshores will be vital. This project's intent is to deliver information specifically for that need. This county/state initiative already has:

- Developed objective, **science-based** criteria to identify sensitive lakeshores on large lakes using detailed on-site biological surveys and use of an ecological model;
- Completed detailed **biological surveys** and **identified sensitive areas** on 16 Cass County lakes, and by July 2011 will deliver interpretive products for 4% of Minnesota's largest lakes;
- Identified shoreland for **conservation easement and purchase**;
- Developed shoreland **conservation ordinances** that will provide greater protection of sensitive shoreland;
- Worked with state regulators to provide **additional safeguards** for sensitive lakeshore, including the recently promulgated Minnesota Rules, part 6280.0250 [Standards for Aquatic Plant Management Permit Issuance]; and
- Initiated a project to **restore shorelines** to more natural conditions in the Cass County lakes that sensitive lakeshore were identified [will use federal funds via a State Wildlife Grant].

The primary focus of this proposal is to identify priority areas in northern Minnesota for shoreland reclassification and potential purchase or conservation easement, as well as provide interpretive products to shoreland property owners and state and local governments, and assist with regional planning efforts.

## II. DESCRIPTION OF PROJECT RESULTS

### Result 1: *Assessment of at least 20 Itasca County Lakes*

**Budget: \$130,000**

Sensitive lakeshore assessments will target a minimum of 20 high priority lakes in northern Minnesota selected by Itasca County. Two approaches from Minnesota's Sensitive Lakeshore Survey Protocol will be used. First, detailed on-site biological survey work will be completed on a few selected lakes. Second, **a new, fast, more efficient method** based on the protocol's Rapid Assessment Model will be used to identify sensitive lakeshores on the remaining high priority lakes. Itasca County can then use this model on any of their moderate to large lakes.

#### **Deliverable**

- 1. Loon Nesting Surveys will be enhanced and completed on selected lakes*
- 2. Fish and Aquatic Plant Surveys completed on selected lakes*
- 3. County will compile available geomorphic GIS data for use with the Rapid Assessment Model*
- 4. Identify sensitive lakeshores for all high priority lakes selected*

#### **Completion Date**

*Nov 2012*  
*June 2013*  
*Nov 2012*  
*June 2013*

### Result 2: *Identify Restorable Shorelines and Guide Conservation*

**Budget: \$30,000**

By working cooperatively with lake associations and other groups to identify restorable shorelines, improve capacity of project outputs to effectively inform state and local government decisions that impact the conservation and management of lake ecosystems. Itasca County Environmental Services would update zoning and ordinances to provide higher standards for new developments and additional protection to sensitive shoreland.

#### **Deliverable**

- 1. Restorable shoreline identified for selected lakes*
- 2. Work with lake associations, riparian property owners, and others to deliver targeted conservation and restoration efforts to sensitive lakeshores*
- 3. Engage in land use planning and zoning*

#### **Completion Date**

*June 2013*  
*June 2013*  
*June 2013*

## III. PROJECT STRATEGY

### A. Project Team/Partners

Project Manager: Jim Gustafson, Itasca County Soil and Water Conservation District  
*Partners:* Itasca County, Environmental Services Department, Don Dewey, Director; Leech Lake Reservation, Division of Resources Management; U.S.F.S., Chippewa National Forest, Fish and Wildlife Program; Itasca Water Legacy Partnership, and the DNR.

DNR Technical Services would be provided by Paul Radomski, Research Scientist; Donna Perleberg, Aquatic Plant Ecologist; Pam Perry, Nongame Wildlife Lake Specialist; Kristin Carlson, Nongame Wildlife Lake Specialist; Kevin Woizeschke, Nongame Wildlife Lake Specialist; and Stephanie Loso, Aquatic Biologist.

### B. Timeline Requirements

This is a two-year project ending on June 30, 2013.

### C. Long-Term Strategy

This project is related to the LCCMR funded project on 'Intra-Lake Zoning to Protect Sensitive Lakeshores' [ML 2007, Chap. 30, Sec. 2, Subd. 5(h) and MN Laws 2008, Chapter 367, Section 2, Subd. 4(e)]. Similar work in Crow Wing County has been initiated with a State Wildlife Grant (federal funds). Over the long-term, a mix of funding sources would be used to conduct future sensitive lakeshore assessments in lake-rich counties around the state.

## 2011-2012 Detailed Project Budget

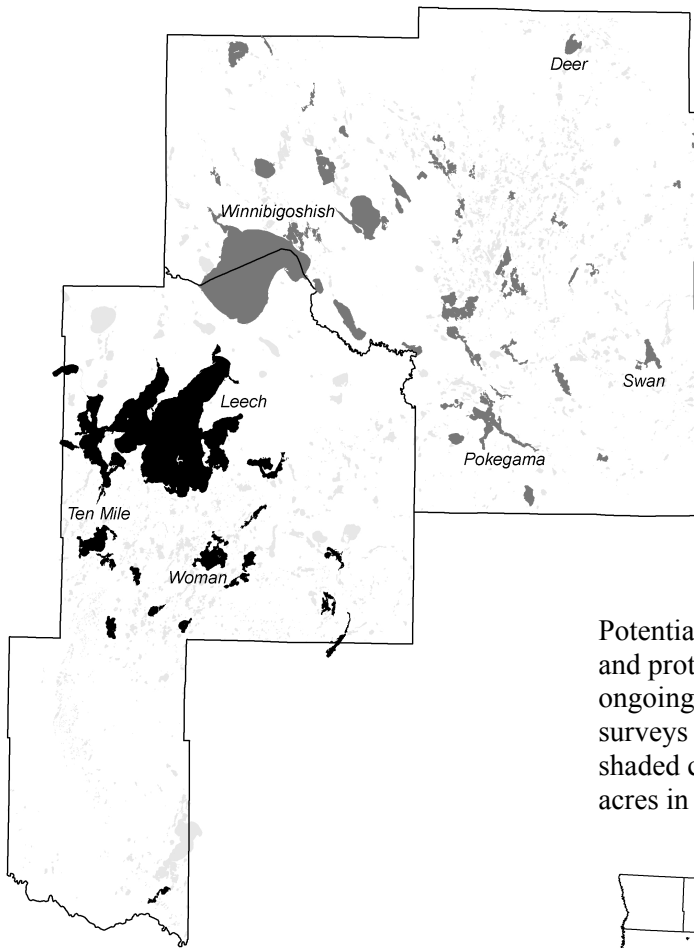
### IV. TOTAL PROJECT REQUEST BUDGET (2 years)

| <b>BUDGET ITEM</b>   | <b>AMOUNT</b>     |
|--|-------------------|
| <b>Personnel:</b>  | \$ -              |
| Itasca County SWCD staff (Administration, 100% salary) 0.2 FTE   | \$ 16,000         |
| Itasca County Environmental Service staff (Admin, 100% salary) 0.15 FTE  | \$ 13,000         |
| <b>Contracts:</b> DNR, Sensitive Lakeshore Identification (aprox. 1.5 FTE from ETF\$)<br>Intensive Biological surveys, calibration and application of Rapid Assessment Model<br>on larger set of lakes | \$ 130,000        |
| <b>Equipment/Tools/Supplies:</b> printing costs  | \$ 1,000          |
| <b>Acquisition (Fee Title or Permanent Easements):</b>   | \$ -              |
| <b>Travel:</b>   | \$ -              |
| <b>Additional Budget Items:</b>  | \$ -              |
| <b>TOTAL ENVIRONMENT &amp; NATURAL RESOURCES TRUST FUND \$ REQUEST</b>   | <b>\$ 160,000</b> |

### V. OTHER FUNDS

| <b>SOURCE OF FUNDS</b>  | <b>AMOUNT</b> | <b>Status</b> |
|---|---------------|---------------|
| <b>Other Non-State \$ Being Applied to Project During Project Period:</b>   | \$ -          |               |
| <b>Other State \$ Being Applied to Project During Project Period:</b> Federal funding<br>via State Wildlife Grant (per year) (up to 3.0 FTE expected)     | \$ 90,000     | Pending       |
| Game & Fish (per year)  | \$ 15,000     | Pending       |
| State (Nongame funds; per year)   | \$ 10,000     | Pending       |
| State (Heritage funds; per year)  | \$ 10,000     | Pending       |
| <b>In-kind Services During Project Period:</b>  | \$ -          |               |
| <b>Remaining \$ from Current Trust Fund Appropriation (if applicable):</b>  | \$ -          |               |
| <b>Funding History:</b> Federal funding (State Wildlife Grants)   | \$ 325,000    |               |
| State (Heritage and Game & Fish funds)  | \$ 350,000    |               |
| State funding: LCCMR \$110,000 (2007; MN Laws 2007, Chapter 30, Section 2, Subd. 5h) and \$125,000 (2008; MN Laws 2008, Chapter 367, Section 2, Subd. 4e) | \$ 235,000    |               |

Sensitive Lakeshore Identification study lakes and potential Itasca County study lakes. The 17 lakes in Cass County (shaded) are part of ongoing LCCMR-funded study; shaded lakes in Itasca County are potential study lakes.

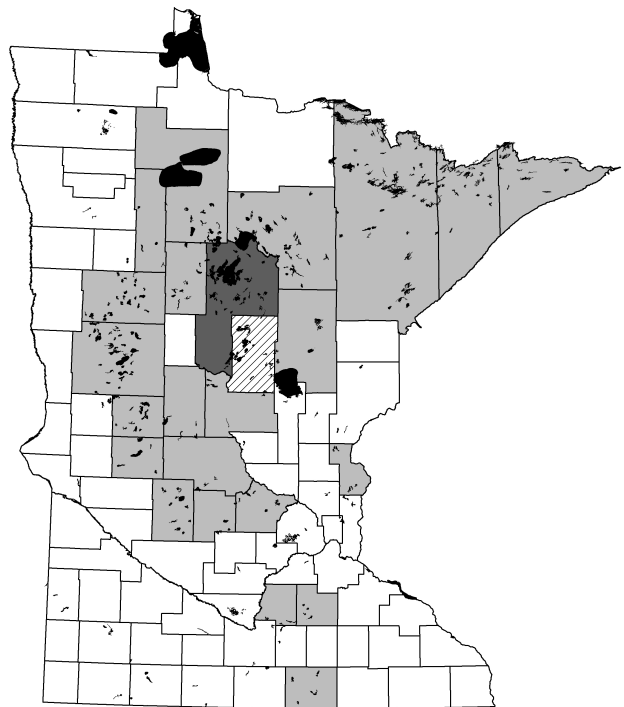


### Itasca County Large Lakes:

Number = 45  
 Shoreline in Private Ownership = 70%  
 Private Shoreline Miles = 420  
 Total Lake Acreage = 76,000

Potential counties for sensitive lakeshore assessments and protection. Cass County (dark shaded) is part of ongoing study. Crow Wing County (diagonal hatch) surveys will take place beginning in spring 2010. Light-shaded counties have the greatest number of lakes >850 acres in size.

Example of product: Ten Mile Lake, Cass County, with identified Sensitive Shoreline (dark line) and Potential Resource Protection Districts (diagonal hatch).



## **Project Manager Qualifications & Organization Description**

Organization Description: Itasca County Soil and Water Conservation District.

Mission Statement: The Mission of the Itasca County Soil and Water Conservation District (SWCD) is to provide a local organization through which landowners and operators, local units of government and state and federal agencies can cooperate to improve, develop and conserve soil, water, wildlife and recreational resources.

The SWCD will encourage adoption of proper land use practices as needed, recognizing that these measures are essential for maintenance of permanent and prosperous natural resource-based industries in Itasca County.

The Itasca SWCD is a local agency that provides access to conservation and resource management services. In cooperation with federal, state and local agencies, the District provides technical assistance, cost-sharing and natural resource management information and education. Urban and rural landowners, businesses, industry and agencies may request these services.

Project Manager: Jim Gustafson, Itasca County SWCD Manager

Itasca County SWCD has been proactive in surface water assessments since the early 1990s and has successfully accomplished a majority of its surface water monitoring and projects through state grants. Itasca SWCD, under the management of Jim Gustafson, has cooperated with MPCA on water monitoring contracts including the Jessie Lake Clean Water Partnership and is currently working on the Jessie Lake Total Maximum Daily Load Study, two Bigfork River Watershed SWAGs (47 lakes and 5 stream sites), and the Deer and Pokegama Lake Clean Water Partnership study. These contracts and their activities are similar to the proposed project and have given staff the necessary experience to successfully complete this project.