

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

LCCMR ID: 090-C3+4

Project Title: Restoring the North Shore Lost Forest

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

Total Project Budget: \$ 63,000

Proposed Project Time Period for the Funding Requested: 2.5 yrs, July 2011 - Dec 2013

Other Non-State Funds: \$ 32,500

Summary:

Provide forest stewardship plans, training and tree planting assistance for Lake Superior coastal landowners with property sizes less than 20 acres, which are not eligible for other state stewardship programs.

Name: Molly Thompson

Sponsoring Organization: Sugarloaf: The North Shore Stewardship Association

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Location

Region: NE

Ecological Section: Northern Superior Uplands (212L)

County Name: Cook, Lake

City / Township:

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ Employment	_____ TOTAL _____%

2011-2012 MAIN PROPOSAL

PROJECT TITLE: Restoring the North Shore's Lost Forest

I. PROJECT STATEMENT

The North Shore of Lake Superior is home to a unique native forest, dominated by conifers such as spruce, fir, and cedar and is ecologically classified as *The North Shore Highlands*. Minnesota's Comprehensive Wildlife Conservation Strategy for the North Shore Highlands notes that "there is tremendous development pressure along the highly environmentally sensitive Lake Superior shoreline..." and that the North Shore Highlands "also contains the highest density of designated trout streams in Minnesota." It also states, "habitat loss and degradation...are the most significant challenges facing species in greatest conservation need populations."

The combination of lakeshore microclimate, bare glacial-scoured soils, and periodic fire created the North Shore Highlands forest type, but human factors including logging and slash fires in the last 120 years have seriously set it back. The new second growth forest of birch and aspen brought in whitetail deer, which replaced the native woodland caribou. The natural periodic fires have been suppressed, and large blocks of land have been divided multiple times into small, privately held parcels served by busy Highway 61. The original conifer forest is not returning on its own, due to intense deer predation, choking undergrowth of grasses and shrubs that would have been cleared by fire, and development pressures that clear land and alter drainage patterns. As the birch trees die off, there is little new conifer growth to succeed it. Historically, at this point in the forest's lifecycle conifer species like red and white pine, spruce and cedar that are capable of living for centuries would assume dominance maintaining a well stocked and diverse forest until the next major fire starts the cycle again. Without this conifer component to carry the forest into a natural state of maturity, the modern aspen and birch dominated forest reaches maturity almost 100 years before its time and fades relatively quickly leaving an undesirable woodland of brush, grass, and dying trees on our productive soil. A concerted effort is needed to for the long-term restoration and preservation of this forest and the protection of the streams associated with it.

To make this effort possible, private landowners with small parcels will need to be involved. Approximately 80% of the property in the Lake Superior watershed is privately owned and second-tier development continues. The average lot size is in the range of 5-10 acres. These lot sizes are less than 20 acres and many are residential, therefore not qualifying for SFIA assistance. Additionally, these landowners currently do not have the expertise to manage their own forest restoration. There are significant obstacles in lack of knowledge, lack of access to appropriate plant sources and lack of technical forestry skills.

The overall goal of this project is to enable landowners to restore the native forest along the North Shore of Lake Superior. The outcomes will be 1) Increased stewardship of Lake Superior's Coastal Forest by private landowners; and 2) restoration of at least 500 acres of native Lake Superior Coastal Forest.

To achieve this goal Sugarloaf will conduct the following activities: 1) Develop Forest Stewardship Plans for 15-20 private landowners; 2) Provide 45 hours of woodland stewardship training for landowners; 3) Provide on-the-ground restoration assistance to landowners.

II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1: Develop and implement Forest Stewardship Plans **Budget:** \$ 31,500

Sugarloaf will contract with a certified forester who will work with 15-20 landowners to develop and implement Forest Stewardship Plans for their sites, with coastal forest restoration as the primary desired outcome. These sites may range in size from 1 acre to 20 acres resulting in up to 500 acres restored. Participants will be selected based on the ecological need of their property, and their agreement to participate in stewardship training. Effort will be made to select properties from diverse locations. Minnesota Conservation Corp (MCC) crews will be available to help landowners with site preparation, tree planting and invasive plant control.

Outcome	Completion Date
1. 15-20 landowners will agree to participate in program	October 2011
2. Forester will develop Forest Stewardship Plans	August 2013
3. Landowners will plant native trees with MCC and forester assistance	October 2013

Activity 2: Woodland stewardship training

Budget: \$ 28,000

Participating landowners will agree to enroll in a custom designed Woodland Advisors program provided by University of Minnesota Extension consisting of 15 classes and 4 discussions, which will take place at Sugarloaf Cove, near Schroeder, MN. The classes will be designed to complement the learning and action landowners are taking toward restoration of coastal habitats on the North Shore of Lake Superior. The discussions will be designed to increase landowner understanding of their plans, how they will implement the plans and include evaluation of the project. Each class will be between 2 and 3 hours long and the discussions will be full day sessions. A wrap up seminar for the community will be held to bring together participants and community members. An assistant will be trained to teach additional classes in the future.

Evaluation will be an important part of this project. Qualitative Evaluation: Pre and post surveys of the participants will be conducted during the discussion sessions, to assess their behavioral changes and intellectual awareness of this restoration effort. Landowners will be surveyed about the efficacy and quality of the site visits and the hands-on assistance. Quantitative evaluation will track the number of trees planted, acres of forest restored, number of training events held, training event participants, number of landowner participants, number of landowner volunteer hours worked and landowner financial investment (i.e., purchase of trees and supplies). All results will be summarized in a report.

Outcome	Completion Date
<i>1. Participants will complete training program</i>	<i>August 2013</i>
<i>2. Evaluation and report submission</i>	<i>December 2013</i>

III. PROJECT STRATEGY

A. Project Team/Partners. Classroom sessions will be taught by a Minnesota forestry extension educator, funded in 2011 by a current federal funding source. LCCMR funding will be used to contract with an additional educator who will assist the 2011 educator and the project forester and be trained to teach these courses in 2011 and 2012. Sugarloaf will contract with a certified forester who will work with the landowners to conduct an on-the-ground evaluation of their property and provide them with forest stewardship plans. LCCMR will fund this position beginning in October 2011 and continuing through the end of the project. Sugarloaf’s Executive Director, Molly Thompson, will manage the project, funded by Sugarloaf. As Director, Molly has the authority to manage the project. Sugarloaf’s naturalist will assist with the management of the project, including design of landowner recruiting documents, management of landowner database, web site content, and classroom site preparation. The naturalist’s project time will be funded by this grant. Participating landowners will be required to volunteer their time helping other landowners with their properties and to purchase tree planting supplies and seedlings.

OTHER PARTNERS: Minnesota Pollution Control Agency will provide contact addresses for potential landowner participants from their watershed landowner database.

B. Timeline Requirements - This project will take place from July 2011-October 2013. The activities will take place during the spring, summer, and fall of those years when planting is feasible.

C. Long-Term Strategy and Future Funding Needs - From 2006-2006, a grant from the EPA Great Lakes National Program Office allowed Sugarloaf to work with 11 local landowners in an intense combination of training, planning, and technical assistance. Restoration was conducted on over 300 acres and 2000 seedlings were planted. Numerous landowners have approached Sugarloaf since that time requesting assistance with forest restoration on their properties. Sugarloaf is restarting this program in 2010 with funding from the Sustain our Great Lakes Initiative a collaborative effort funded by several federal agencies as part of the Great Lakes Restoration Initiative. Funding from the LCCMR will allow Sugarloaf to train an additional educator in 2011 who will recruit and train a new 2012/13 landowner cohort. LCCMR funding will also allow Sugarloaf to retain the services of the same forester that is funded with the 2010 federal funding. After 2013, Sugarloaf will continue to seek funding from a variety of sources to continue this program including funding from the Great Lakes Restoration Initiative.

2011-2012 Detailed Project Budget

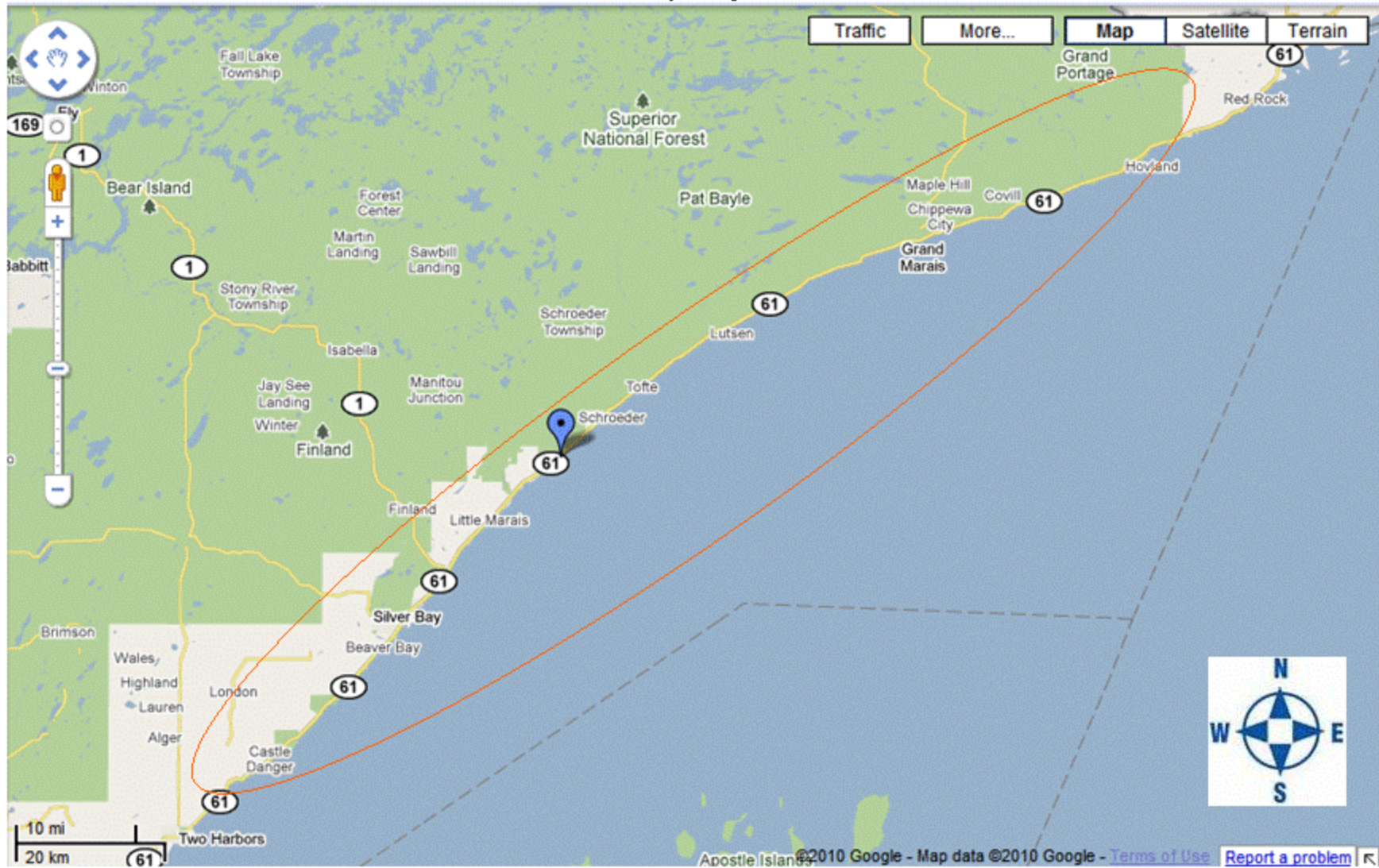
IV. TOTAL TRUST FUND REQUEST BUDGET 2 years

<u>BUDGET ITEM</u>	<u>AMOUNT</u>
Personnel:	
Sugarloaf Naturalist - 80 hours @ \$15/hour. 1 person. July 2011-December 2012. No benefits. 100% towards salary. Will assist forest and educator with classroom sessions, landowner recruitment and mailings.	\$ 1,200
Contracts:	
Professional forester - 1000 hours @ \$20/hour - will work with landowners to design and implement forest stewardship plans. Will write forest stewardship plans. Will supervise MCC work.	\$ 20,000
Instructor - In 2011 will assist with classroom instruction; 2012 and 2013 will instruct landowners and work with participants. It is anticipated this will be an extension educator; 480 hours @ \$50/hour	\$ 24,000
Minnesota Conservation Crews - will assist landowners with tree planting and protection for two planting seasons; 16 days at \$500/day	\$ 8,000
Equipment/Tools/Supplies:	
Printing and reproduction of forest plans and classroom materials	\$ 500
Fence posts, fencing and other planting supplies	\$ 3,000
Travel:	
Forester travel to landowner sites - 5454 miles @ .55/mile - The forester will visit each landowner's property at least two times. A round trip can be up to 250 miles	\$ 3,000
Instructor mileage, lodging and meals to travel to classes and assist landowners. Travel costs are estimated at 5000 miles and lodging costs are estimated at \$100 per night (5 nights).	\$ 3,300
TOTAL ENVIRONMENT & NATURAL RESOURCES TRUST FUND \$ REQUEST	\$ 63,000

V. OTHER FUNDS

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ Being Applied to Project During Project Period: This project overlaps with funding secured from the EPA (see funding history below). The EPA funding is for 2010 to 2011. Half of those funds will be used in 2011	\$ 32,500	<i>Secured</i>
Landowners will purchase the majority of their own planting supplies including seedlings, fencing, fence posts, and weed control mats. It is anticipated each landowner will spend at least \$500 per year for two years (20x500x2)	\$ 20,000	anticipated
Up to 20 Lost Forest participants will pay \$100 to participate in the Woodland Advisors courses. Other persons may participate at \$10 per class.	\$ 2,000	anticipated
In-kind Services During Project Period:	\$ -	
The 15-20 participants will be required to volunteer 100 hours over 24 months. They will spend time helping other landowners with planting and other stewardship activities. A rate of \$20.39 per hour was used from Independentsector.org	\$ 30,585	anticipated
The Sugarloaf Cove site will be used as the classroom for the Woodland Advisor courses. 20 days @ \$50/day	\$ 1,000	secured
Funding History: Funding for 2010-2011 has been received from the Sustain our Great Lakes program from the EPA administered through the National Fish and Wildlife Foundation.	\$ 65,000	Secured

Project map



Project will take place along Minnesota’s North Shore of Lake Superior, in the Lake Superior watershed. Counties to be included are Lake and Cook County. The teardrop icon indicates the location of Sugarloaf Cove—the classroom site.

Project Manager Qualifications:

Sugarloaf's Executive Director, Molly Thompson, will manage the project. Molly has been the Executive Director for the past 3 years and was previously the program manager for Sugarloaf. She has experience managing projects for Sugarloaf, New York Sea Grant, and University of Wisconsin Extension. Molly has a MS degree in Wildlife Science from Auburn University and a B.S. in Zoology/Biology from Michigan State University.

As Executive Director, Molly has authority to apply for funding and manage the project.

Organization Description:

Sugarloaf: The North Shore Stewardship Association will be the organization managing the *Lost Forest* project. Sugarloaf Interpretive Center Association (SICA) was established in 1993 by a group of citizens concerned with a proposed safe harbor or marina at historic Sugarloaf Cove in Schroeder, Minnesota. The cove had been the site of Consolidated Paper's North Shore logging operation from 1942 to 1972. The Association, under the guidance of the late Governor Elmer L. Andersen, developed a positive alternative for the site to preserve the land and strengthen restoration and education efforts on the North Shore.

Sugarloaf has had tremendous success preserving, restoring, and interpreting Sugarloaf Cove. What had been a heavily used industrial site is now a thriving natural preserve, with restored native habitats and over 3000 people per year visiting to enjoy and learn from the setting.

However, the need for preservation, restoration, and interpretation of Lake Superior's North Shore is far broader than Sugarloaf Cove. Approximately 1500 private landowners are the stewards of 80% of the shoreline. Without sufficient outreach and assistance, even the most well intentioned landowner struggles to be part of restoring native habitats.

In 2003, Sugarloaf began expanding its mission and activities to address shore-wide needs. The Lost Forest Initiative engaged private landowners in restoring native conifer forests. We continue this effort through our tree planting workshops and distribution of a restoration guide for the North Shore.

To reflect its larger shore-wide role of education and restoration, in 2005 Sugarloaf changed its name from Sugarloaf Interpretive Center Association to Sugarloaf: The North Shore Stewardship Association. The mission of Sugarloaf is: *To inspire the preservation and restoration of the North Shore's unique environment through education and exemplary stewardship, especially at Sugarloaf Cove.*

Woodland Advisor courses will be offered at Sugarloaf Cove, located near the Cook and Lake County lines, off the heavily travelled Highway 61. Sugarloaf Cove's location is ideal because it is centrally located and is used as a demonstration site of successful North Shore restoration techniques.