

**Environment and Natural Resources Trust Fund  
2010 Request for Proposals (RFP)**

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**LCCMR ID: 022-A3**

**Project Title:**

Lakescaping: Buffer Zones and Technology Transfer

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**LCCMR 2010 Funding Priority:**

A. Water Resources

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**Total Project Budget: \$** \$497,000

**Proposed Project Time Period for the Funding Requested:** 2 years, 2010 - 2012

**Other Non-State Funds: \$** \$258,000

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**Summary:**

"Lakescaping" promotes improved stewardship of lakeshore property by creating 16 demonstration buffer zones using native plants, partnering with SWCDs, evaluation of lakescaping techniques, and four workshops for landowners and LUGs.

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**Location:**

**Region:** Statewide

**County Name:** Becker, Cass, Crow Wing, Douglas, Martin, Meeker, Morrison, Otter Tail, Pope, Sherburne, Stearns, Todd

**City / Township:**

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_____ Knowledge Base	_____ Broad App.	_____ Innovation
_____ Leverage	_____ Outcomes	
_____ Partnerships	_____ Urgency	_____ TOTAL

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**PROJECT TITLE: LAKESCAPING: Buffer Zones and Technology Transfer.**

**PROJECT STATEMENT:** Natural lake shoreline is one of the most endangered natural habitats in Minnesota. Shorelines featuring native plant species on the shore and in the water play a major role in protecting water quality and in providing essential fish and wildlife habitat. Shorelands are naturally full of a rich diversity of life: plants, animals, and microorganisms, including humans. Preserving and restoring naturally functioning shorelands is a key step in good lakeshore stewardship.

This proposal involves working with private citizens and LGU's who have completed shoreline stewardship assessments for their properties and to implement those stewardship plans. We will select 16 sites with stewardship assessments on shorelands and provide 3:1 cost-share dollars to plan and install 16 lakescaping buffer zones that have been identified for restoration on lakeshore stewardship plans. We will also do an evaluation of lakescaping and bioengineering techniques on existing projects that have previously been carried out as a part of LCCMR Habitat Corridors Partnership lakescaping projects so that DNR staff, private landscapers, and landowners can plan and implement their projects more effectively. We will conduct four workshops to train people how to initiate their own lakescaping projects and to teach local units of government how to begin their own lakescaping initiatives. The final portion of this initiative will be the "technology transfer" phase of providing ongoing technical advice to private citizens and county government officials, and lake associations with state of the art information on lakescaping techniques and on how to use native plant sources within the study area.

This work will be accomplished with one 100% unclassified specialist position assigned within the DNR Section of Fisheries, two 10% technicians from the Nongame Wildlife Program staff, and six interns (50% match) that will be hired through cooperating counties, watershed districts, and project partners like the Initiative Foundation. The Nongame Wildlife Program and Section of Fisheries staff will provide project guidance and supervision.

**I. DESCRIPTION OF PROJECT RESULTS**

**Result 1:** Design and oversee sixteen lakescaping projects **Budget: \$ 275,000.**

Sixteen lakescaping buffer zone demonstration sites will be selected, planned, and installed on lakeshores that demonstrate potential for restoration, including sensitive shoreline lakes. The restorations will demonstrate a variety of innovative treatments that can be used for lakeshore restoration to enhance and protect the quality of privately-owned shoreline zones. Work by one specialist, two Nongame Wildlife Program technicians (10%), and three interns. We will also conduct four workshops to train people how to initiate their own lakescaping projects and teach local government units how to initiate their own lakescaping initiatives. Work by three interns.

**Deliverables**

1. Install eight demonstration sites
2. Install eight demonstration sites

**Completion Date**

June 30, 2011  
June 30, 2012

**Result 2.** Check the eight lakescaping demonstration sites installed in FY '11 to provide

site maintenance and sponsor two field days for the public to visit demonstration sites. Work by one-half intern equivalent. **Budget:** \$47,000.

<b>Deliverable</b>	<b>Completion Date</b>
1. Recheck eight demonstration sites and enhance as needed.	June 30, 2012
2. Sponsor and carry out two field days for visits to demo sites.	June 30, 2012

**Result 3.** Collect local origin native plant seeds for propagation and installation in future lakescaping demonstration sites. Conduct one workshop on native plant propagation and installation for landscapers. Work by one-half intern equivalent. **Budget:** \$50,000.

<b>Deliverable.</b>	<b>Completion Date</b>
1. Collect native plant seed from at least 80 native species.	November 1, 2011
2. Carry out one workshop on plant propagation for landscapers.	June 30, 2012

**Result 4.** Evaluate and rate bioengineering and lakescaping techniques. Prepare results to share with DNR staff, cooperating LUGs, and lakeshore owners. Work by two intern equivalents. **Budget** \$125,000.

<b>Deliverable</b>	<b>Completion Date</b>
1. Provide for "technology transfer" of information on the best lakescaping techniques to DNR staff, project partners, LUGs, and lakeshore homeowners.	June 30, 2012
2. Sponsor and carry out four public workshops on best techniques.	June 30, 2012

## II. PROJECT STRATEGY AND TIMELINE

**A. Project Partners.** Department of Natural Resources' Section of Fisheries (Linda Erickson Eastwood), Nongame Wildlife Program (Carrol Henderson), Cass County Environmental Services Department (John Sumption), Thirty Lakes Watershed District (Martha Peisch), Sauk River Watershed District (Lynn Nelson), Martin County SWCD (Kathy Smith), Heron Lake Watershed District (Melanie Luinenburg), Otter Tail SWCD (Steve Henry), Pelican River Watershed District (Monica Almeida) and the Initiative Foundation (Don Hickman).

**Project Impact:** Provide direct habitat benefits to 16 sites identified as important for protection and enhancement of selected lakes which include at least 1000 linear feet of shoreline. Some lakes will involve sensitive shoreline lakes where there is a need and opportunity to protect or restore water quality. Creation of these buffer zones, technique evaluation, and workshops will build the local capacity for meeting the increasing demand for protecting and restoring shorelines. Sites will include a variety of locations to show several innovative restoration techniques.

**B. Timelines.** From July 1, 2010 to June 30, 2012.

**C. Long-Term Strategy:** It is the goal of this project to select and install buffer zones on a total of 60 sites on selected lakes over the next four biennia and carry out both workshops and field trips to extend this effort. By increasing the local capacity to initiate restoration projects by project partners and LUGs, this will address the increasing demand for technical assistance and advice related to appropriate shoreline management.

## Project Budget

### IV. TOTAL PROJECT REQUEST BUDGET 2 years

BUDGET ITEM	AMOUNT
Contracts:	\$ -
One fisheries specialist @ \$62,500/yr for two years =	\$125,000
Two Nongame Wildlife Program technicians @ \$6,500/yr x 2 years =	26,000
Six project interns at up to 50% match with participating counties at \$20,000/intern x 6 x 2 years =	240,000
<b>Equipment/Tools/Supplies:</b> Plant materials for lakescaping sites	\$ 25,000
Bioengineering materials for lakescaping sites	25,000
<b>Instate travel, fleet, and expenses for specialist and interns:</b> \$7,000/nongame technician/year x 2 years = \$14,000; \$3,500/intern/year x 6 interns x 2 years =	\$56,000
<b>TOTAL PROJECT BUDGET REQUEST TO LCCMR</b>	<b>\$ 497,000</b>

### V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	Status
<b>Other Non-State \$ Being Applied to Project During Project Period:</b> A \$100,000 match will be provided by the Initiative Foundation.	\$ 100,000	<i>Secured</i>
<b>Other Non-State \$:</b> Each homeowner will provide \$500 matching cash for their buffer zone plantings x 16 = \$8,000.	\$8,000	<i>Pending</i>
<b>Other Non-State \$:</b> County and watershed partners will provide 50% cash match to cover intern positions for six interns, @ \$25,000 per intern= \$150,000.	\$150,000	<i>Pending</i>
<b>Other State \$ Being Applied to Project During Project Period:</b>	\$ -	
<b>Nongame Wildlife Program regional wildlife specialist coordination and expenses</b>	\$ 4,000	
<b>Nongame Wildlife Program supplies and expenses for workshops</b>	\$ 4,000	
<b>Nongame Wildlife Program expenditures: Program supervisor coordination</b>	\$10,000	
<b>In-kind Services During Project Period:</b> In-kind work by participating landowners.	\$8,000	
<b>Funding History:</b> LCCMR has provided funding for Lakescaping demonstration sites in five previous biennia: FY 00-01: \$140,000; FY 02-03: \$325,000; FY 04-05: \$223,100; FY 06-07: \$205,000; FY 08: \$100,000; FY 09: \$ 75,000.	\$1,068,100	

## **Carrol L. Henderson, bio**

Carrol Henderson has been supervisor of the Minnesota Department of Natural Resources= Nongame Wildlife Program since 1977. He has a B.S. in zoology from Iowa State University (1968), and a Master of Forest Resources degree in ecology from the University of Georgia (1970).

Henderson is author of the DNR book "Landscaping for Wildlife" and is co-author of "Lakescaping for Wildlife and Water Quality". He was a major contributor to the production of the CD-Rom entitled "Restore Your Shore." He was the original project manager for creation of Lakescaping for Wildlife and Water Quality buffer zone demonstration sites through a grant from the LCMR in 2000 and has managed that project and subsequent LCCMR grants as part of the Habitat Corridors Partnership that have resulted in the selection, planning, and installation of 55 shoreland buffer zone demonstration sites during the past 8 years. He has planned, organized, and carried out lakescaping workshops as part of those grants for lakeshore homeowners, lake associations, nursery managers, realtors, and officials from local units of government.

