

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

LCCMR ID: 077-C3+4

Project Title: Shoreland Incentives II: Natural Filters on Private Lands

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

Total Project Budget: \$ \$841,000

Proposed Project Time Period for the Funding Requested: 3 yrs, July 2011 - June 2014

Other Non-State Funds: \$ 0

Summary:

Phase II of the Shoreland Incentives program will 1) pilot incentives programs in agricultural, urban and suburban contexts; 2) develop LGU tools for implementing effective incentives, and 3) deliver trainings.

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Sponsoring Organization: DNR

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Web Address: www.mndnr.gov

Location

Region: Statewide

Ecological Section: Western Superior Uplands (212K), Minnesota and NE Iowa Morainal (222M), North Central Glaciated Plains (251B)

County Name: Statewide

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: SHORELAND INCENTIVES II: NATURAL FILTERS ON PRIVATE LANDS

I. PROJECT STATEMENT

The draft National Lakes Assessment survey found that poor lakeshore habitat (shoreland “filters” or “buffers”) is a driving factor in deteriorating lake health. Shorelines with healthy native vegetation filter excess nutrients and pollutants from runoff, provide habitat for fish and wildlife, and screen onshore development from the water. Recent social science research conducted in Minnesota has found that shoreland owners are generally amenable to restoring vegetative filters on their property, but lack key resources needed to initiate a restoration project.

The ENTRF currently supports the Native Shoreland Buffer Incentives (NSBI) program (M.L. 2008, Chap. 367, Sec. 2, Subd. 4f), which is testing how well two incentive programs work to re-establish native vegetation filters in Itasca and Otter Tail counties. ***The present proposal will build on the positive lessons from the NSBI program and broaden its reach through:***

- 1) ***Testing shoreland incentive programs*** in agricultural, urban and suburban settings;
- 2) ***Developing practical tools*** to help LGUs design and implement effective incentives; and
- 3) ***Delivering training programs*** for the tools developed.

The funding is needed to accelerate DNR activities consistent with proposed revisions to shoreland conservation rules, including providing native shoreland education materials, mitigation measures, and training programs for LGUs.

II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1: Pilot Three Additional LGU Incentives Programs

Budget: \$495,331

The DNR will solicit proposals to test three new pilot incentive programs: one agricultural, one urban, and one suburban. These additional trials are needed to develop context-specific tools for these land-use types (previous trials were in forested and prairie transition areas). As was the case with the original shoreland buffer incentives project, each pilot program will be awarded \$75,000 through a competitive RFP process to investigate a targeted incentive program using KAP (Knowledge-Attitudes-Practices) studies. Grants will be awarded based on the applicant’s description of the proposed incentives; proposed implementation, research, monitoring, and assessment protocols; and any matching monies or in-kind contributions. The DNR will fund trial incentive programs that show the most promise for success, employ a research-driven approach, represent different local circumstances, and come from LGUs that have current shoreline management requirements and enforcement. Evaluation reports will measure changes in KAP and longer-term social and economic efficacy of such incentives programs.

Outcomes	Completion Date
1. Pre- and post-KAP analysis studies are used to evaluate incentives’ impact	April 2014
2. Lessons learned are used to develop LGU tools for wider application	June 2014

Activity 2: Develop LGU Tools to Encourage Natural Shoreland Filters

Budget: \$235,331

Lessons learned from the current and previous pilot incentives programs will be further tested and expanded to build LGU capacities to offer and evaluate targeted incentives programs. Practical tools will be developed for LGUs, lake improvement and watershed districts, and non-

governmental entities. These tools will be designed to maximize the potential for incentive effectiveness, and will include:

- | | |
|--|---|
| 1) Target audience identification strategies | 5) Peer-to-peer networking strategies |
| 2) Social study guidance tools | 6) Citizen-science assessment protocols |
| 3) Community engagement approaches | 7) Shoreland homeowner restoration aids |
| 4) Program impact assessment methods | 8) Variance mitigation approaches |

Outcomes	Completion Date
1. A suite of tools helps LGUs design and implement effective incentives	December 2012
2. Web and print tools and guidance documents are readily accessible and revised to maximize their utility for LGUs	December 2013

Activity 3: Provide Training on Effective Incentive Program Design Budget: \$110,338

Once the incentives program tools in Activity 2 are developed and tested, training workshops will be offered throughout the state to train LGUs how to use the tools to design, implement and evaluate the effectiveness of incentives programs within specific land-use contexts.

Outcomes	Completion Date
1. 20 audience-specific incentive program trainings are delivered	March 2014
2. 60 different LGUs and non-governmental entities are trained statewide	March 2014
3. Program evaluations indicate increased incentive program effectiveness	June 2014

III. PROJECT STRATEGY

A. Project Team/Partners

The ENRTF will be used to support this collaborative project between the Minnesota DNR (administrator and fiscal agent, Erika Rivers, planner), University of Minnesota Water Resources Center (research lead, Karlyn Eckman, senior research associate and a PhD assistantship), and U of M Extension (training lead, Eleanor Burkett, associate professor). Minnesota DNR will disburse funds to the Water Resources Center and U of M Extension and will contribute in-kind resources for indirect costs of DNR project management staff. Content for incentive program tools will be developed with in-kind partnerships between the project partners and other state agencies and non-governmental entities involved in water resource conservation in Minnesota.

B. Timeline Requirements

This will be a three-year project. The pilot incentive programs will take one year to establish with the KAP study methods and two years to implement and evaluate. In addition, the first and second years will focus on developing, testing and refining incentive program tools for LGUs, with training for specific audience groups occurring during the late-second and third years.

C. Long-Term Strategy and Future Funding Needs

This is Phase II of the ENRTF-funded shoreland incentives project begun in 2008. Tools developed during Phase II will be available on the DNR and WRC web sites. Trainings will enable shoreland professionals and agency staff to implement tools into the future. Ongoing maintenance, revision and trainings for the tools will be the joint responsibility of WRC, U of M Extension, and DNR staff. This incentives program fits squarely within DNR’s longer-term strategic direction to address landscape changes from growth and development through private land- and community-conservation assistance, as identified in the DNR *Strategic Conservation Agenda 2009-2013*.

2011-2012 Detailed Project Budget
SHORELAND INCENTIVES II: NATURAL FILTERS ON PRIVATE LANDS

IV. TOTAL TRUST FUND REQUEST BUDGET for three years

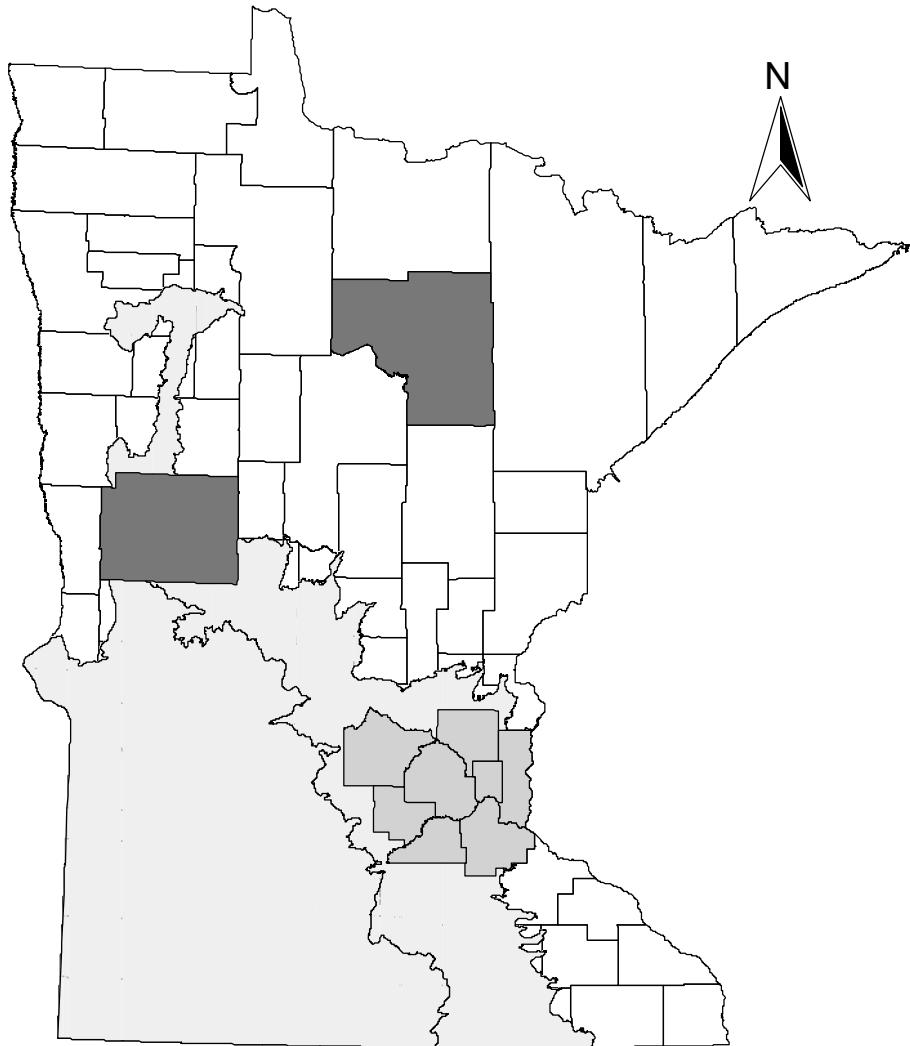
BUDGET ITEM <i>(See list of Eligible & Non-Eligible Costs, p. 13)</i>	AMOUNT
Personnel: During Phase I of this project, other DNR funds covered a project manager position. Those funds are no longer available. Therefore the request is for the Trust Fund to support a DNR project manager (planner principal). 1.0 FTE equivalent for three years @ \$80,000 per year (70% salary; 30% FICA/MSRS & Insurance).	\$ 240,000
Personnel: U of M-WRC senior research associate, Karlyn Eckman, 0.3 FTE for three years to lead research, supervise research assistant, and provide content for toolboxes and trainings. (This is a grant-funded position at WRC.)	\$ 80,000
Personnel: Research assistant (PhD) 0.5 FTE for three years to conduct KAP analysis studies and help develop LGU tools.	\$ 165,000
Personnel: U of M Extension shoreland educator @ 0.25 FTE for three years to help develop toolbox content and lead training development and delivery. (Note: This is not a State of Minnesota position.)	\$ 54,000
Contracts: Graphic design and web site development will be selected by state bidding process.	\$ 50,000
Grants to Local Government Units: Three competitive grants of \$75,000 each to LGUs to implement a pilot incentives program, paid on reimbursement-for-deliverables basis.	\$ 225,000
Printing and Materials for Toolbox Elements: Worksheets, workbooks, datasheets and training materials.	\$ 5,000
Travel: For all three project staff to travel to/from in-state trial incentives sites and trainings at estimated IRS rate (1/3 for each project staffer): 30,500 miles @ \$0.50; 45 meal-days @ \$31/day; and 45 overnight lodgings @ \$75/night throughout project life.	\$ 20,000
Additional Budget Items: Costs associated toolbox trainings, such as facility rental where no-cost option is unavailable.	\$ 2,000
TOTAL ENVIRONMENT & NATURAL RESOURCES TRUST FUND \$ REQUEST	\$ 841,000

V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	Status
Other State \$ Being Applied to Project During Project Period: Shared services for 1.0 FTE DNR project management over three years to include communications, budget, human resources, management resources, and information technologies.	\$ 31,256	Pending
Other State \$ Being Applied to Project During Project Period: Indirect costs for rent and services over the course of three years (\$12/sq. ft @ 144 sq. ft/yr) and annual FTE charges of \$1,500/yr for building/maintenance services.	\$ 9,684	Pending
In-kind Services During Project Period: Partnering agencies and non-governmental entities will contribute in-kind resources (staff time) toward development and review of toolbox elements (100 hrs).	\$ 4,000	Pending
Remaining \$ from Current ENRTF Appropriation: Funds already encumbered for distribution to pilot counties Jan 2010 - June 30, 2011 for pilot incentives programs (funds programmed to be spent before these funds would be available).	\$ 112,765	Funds Encumbered
Remaining \$ from Current ENRTF Appropriation: Funds allotted for WRC contract services in final year; project evaluation and efficacy assessment; and workshop and training services from U of M Extension (funds programmed to be spent before these funds would be available).	\$ 46,603	Funds Allotted
Funding History: Current Trust Fund award for Native Shoreland Buffer Incentives Program: M.L. 2008, Chap. 367, Sec. 2, Subd. 4(f).	\$ 225,000	ENRTF

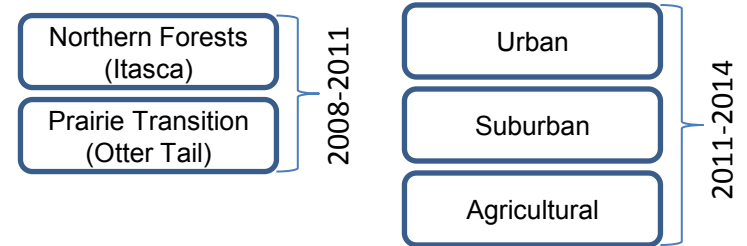
2011-2012 Proposal Exhibit

Shoreland Incentives II: Natural Filters on Private Lands

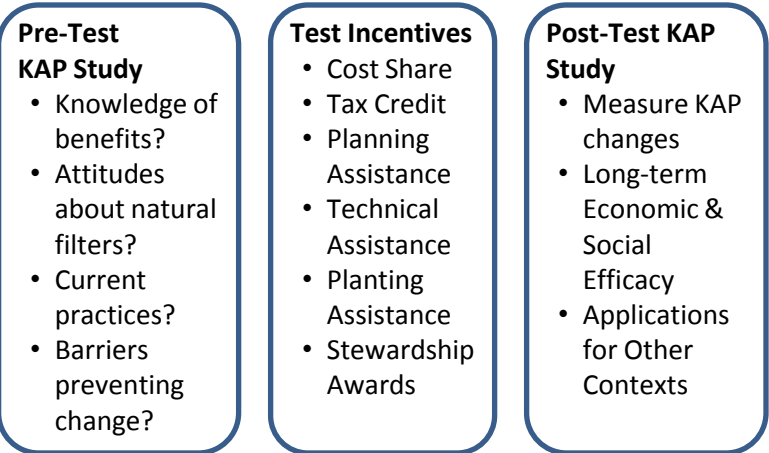


- Current Pilot Incentives, 2008-2011
- Target Urban/Suburban Area, Pilot Incentives 2011-2014
- Target Agric. Area, Pilot Incentives 2011-2014
- Counties in Minnesota

STEP 1: Pilot Incentives Programs in Different Land-Use Contexts



STEP 2: Learn from Applied Research in Pilot Areas (Knowledge-Attitudes-Practices, "KAP Study")



- Pre-Test KAP Study**
- Knowledge of benefits?
 - Attitudes about natural filters?
 - Current practices?
 - Barriers preventing change?

- Test Incentives**
- Cost Share
 - Tax Credit
 - Planning Assistance
 - Technical Assistance
 - Planting Assistance
 - Stewardship Awards

- Post-Test KAP Study**
- Measure KAP changes
 - Long-term Economic & Social Efficacy
 - Applications for Other Contexts

STEP 3: Develop Tools for Broader Application across Minnesota Land-Use Types

- Target Audience Identification
- KAP Study Guide/Training
- Community Engagement Training
- Impact Assessment Techniques
- Peer-to-Peer Empowerment Strategies
- Citizen Science Protocols
- Variance Mitigation Approaches

PROJECT TEAM QUALIFICATIONS

PROJECT TITLE: SHORELAND INCENTIVES II: NATURAL FILTERS ON PRIVATE LANDS

PROJECT MANAGER: ERIKA R.L. RIVERS, LAKES PLANNER/COMMUNITY LIAISON

MINNESOTA DEPARTMENT OF NATURAL RESOURCES, 1201 E HWY 2, GRAND RAPIDS, MN 55744; (218) 999-7914; ERIKA.RIVERS@STATE.MN.US

DNR Project Manager

Erika Rivers has been with the Minnesota Department of Natural Resources (DNR) since 2004. She currently serves as a Lakes Planner/Community Liaison, which is a community conservation position that works with local units of government and citizen groups to promote best management practices on Minnesota lakes and shorelands. Rivers' professional experience includes facilitating several interdisciplinary teams related to shoreland conservation and management, and more than a decade of professional and academic planning experience, including managing Phase I of the present submission (Native Shoreland Buffer Incentive project). In her current position, Rivers is responsible for 1) promoting progressive and sustainable shoreland best management practices (BMPs); 2) assessing regional and statewide shoreland management needs and recommending approaches to meet those needs; 3) identifying, developing and delivering programs for customers to use in improving lake resources; and 4) functioning as a DNR liaison to other agencies, governments, and organizations on lake-related issues. Rivers earned a Ph.D. in Conservation Biology from the University of Minnesota, with a graduate minor in Ecology, Evolution and Behavior. Her coursework, applied research and experience cover a broad range of ecological sciences and issues; social and biological dimensions of conservation; and conservation communications.

Water Resources Center Research Lead

Karlyn Eckman is a Senior Research Associate with the Water Resources Center at the University of Minnesota. She participates in a regional effort to develop and test a framework of socioeconomic indicators for nonpoint source pollution projects, which is funded by the U.S. Environmental Protection Agency and Minnesota Pollution Control Agency. Eckman is also the principal investigator for the current Native Shoreland Buffer Incentives project. She is a member of the Water Resources Science and Natural Resources Science and Management graduate faculties, and is an adjunct professor in the Department of Forest Resources and Hydrology. Current areas of work and research focus on evaluation research, including the design and testing of a new KAP (Knowledge-Attitudes-Practices) evaluation tool for natural resources projects with smaller target audiences. Eckman also advises on community-based water and forestry programs and research in developing countries, specializing in agroforestry and food production systems in Sub-Saharan Africa, Southeast-Asia and the Caribbean. She has an M.A. from Johns Hopkins University, and an M.S. and Ph.D. in Forestry and Watershed Management from the University of Minnesota.

U of M Extension Training Lead

Eleanor Burkett is an Associate Extension Professor for the University of Minnesota Extension Shoreland Education Program, where she is responsible for program development, implementation and evaluation. Burkett conducts raingarden, shoreland buffer, erosion control, and water quality trainings for shoreland property owners, lake associations, local governments, shoreland management specialists, landscape and nursery professionals, and master naturalists and gardeners. She is also actively engaged in ongoing research in soil erosion control methods and aquatic invasive species. Burkett worked in the landscape and garden industry for nearly a decade prior to joining Extension's Shoreland Education Team. She also worked as a naturalist for the University of Minnesota, Crookston. Burkett has an A.A.S. in Horticulture from the University of Minnesota Crookston, a B.S. in Agriculture Extension from North Dakota State University, and a M.S. in Education from the University of Minnesota Duluth.