

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

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**LCCMR ID: 180-F**

**Project Title:**

Expanding and Strengthening Outdoor Classrooms at Minnesota Schools

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**LCCMR 2010 Funding Priority:**

F. Environmental Education

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**Total Project Budget: \$** \$400,040

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

**Other Non-State Funds: \$** \$0

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**Summary:**

Enhance existing outdoor classroom network throughout Minnesota, inject existing environmental education curriculum (including climate change) and teacher training into schools, and establish efficient systems to serve sites in the future.

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**Sponsoring Organization:** DNR

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**Location:**

**Region:** Statewide

**County Name:** Statewide

**City / Township:**

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

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## **PROJECT TITLE: Expanding and Strengthening Outdoor Classrooms at Minnesota Schools**

### **I. PROJECT STATEMENT**

#### **Project Goals**

The DNR's School Forest Program coordinates more than 100 outdoor classrooms throughout Minnesota. (Any school in any part of the state can have a "School Forest." Site must have at least a few trees.) Goals to increase outdoor education and reconnect children and teachers with nature and outdoor recreation are:

- 1) Enhance the use and quality of existing 100 outdoor classrooms (School Forests) & support systems
- 2) Increase the number of self-sustaining outdoor classrooms by 20-25, especially in urban areas
- 3) Integrate existing outdoor and environmental education lessons into school curricula at 125 outdoor classrooms
- 4) Establish climate change monitoring labs at 10 outdoor classrooms (School Forests).

The overall impact of this project will create a more environmentally responsible citizenry through providing positive, replicable outdoor education experiences for teachers and students. This project will directly impact more than 1,500 teachers and 30,000 students.

#### **Why this project needs to be done**

The DNR School Forest Program was created in 1949 by Legislative statute (*Minnesota Statutes*, chapter 89.41) for the establishment and maintenance of outdoor classrooms. In the past eight years, the program has been building capacity for future expansion. At the same time, the program has a rising demand for new outdoor classrooms, especially those in urban areas (Twin Cities, Duluth, etc.), which has not been met. It is vital to enhance outdoor and environmental education in our urban centers, where most citizens live. If properly advanced and maintained at higher levels than before, the School Forest Program will directly address Minnesota's need to raise environmental literacy and demand for outdoor classrooms.

#### **How this project will achieve goals**

Funding will be used to support two regional (north and central Minnesota), temporary staff to strengthen and advance the DNR's outdoor classroom (School Forest) program and establish efficient systems (Web support, local committees, etc.) so that existing school and DNR staff can easily take over and maintain the program.

### **II. DESCRIPTION OF PROJECT RESULTS**

**Result 1:** Efficient support systems that serve all outdoor classrooms (School Forests).

**Budget:** \$93,464 (staff)

**Activities:** 1. Establish efficient online support for all outdoor classrooms.

2. Connect outdoor classrooms with site-specific, local, and state resources to support, increase frequency of outdoor experiences, and ensure sustainability of outdoor classrooms into the future.

#### **Deliverables**

#### **Completion Date**

1. The School Forest Web site serves outdoor classroom sites through:  
providing connections to education and fiscal resources, outdoor lesson  
cache, communication boards, etc.

2012

2. Each School Forest site receives site-specific activities and support.

2012

**Result 2:** Additional 20-25 outdoor classrooms are created, especially in urban and underserved schools.

**Budget:** \$93,464 (staff)

**Activity:** 1. Establish 20-25 new outdoor classrooms (process paperwork; help form site committees, community support, work plans, and five-year goals; help with site preparation and development (trails, clearing, harvesting, planting, etc.)

#### **Deliverable**

#### **Completion Date**

1. 20-25 new School Forests are established, complete with local site  
committees, community support, work plan, five-year goals, and plans for site  
prep, development, and maintenance.

2012

**Result 3:** Existing outdoor and environmental education lessons are integrated into school curricula.

**Activities:** 1. Package existing natural resource/environmental lessons for schools' site-specific needs.

2. Correlate lessons to the Minnesota Academic Standards (created by the Minnesota Dept. of Ed).
3. Ensure teachers and administrators are comfortable using the outdoor classroom with students.

<b>Deliverables</b>	<b>Completion Date</b>
1. Each school has a plan to integrate outdoor/environmental lessons into existing curricula.	2011
2. Lessons are correlated to Minnesota Academic Standards.	2012
3. A system of site-specific workshops (30), outdoor classroom conference (1), and outdoor classroom "boot camps" (2) is developed to support teachers' outdoor education training needs. ("Boot camps" are intensive, multi-day, skill-building trainings on how to teach outdoors.) Workshops and conferences will involve appropriate curricula and teaching kits that include tools for teaching outdoors and climate monitoring supplies. Estimated total teachers served directly through workshops, conference, and boot camps: 600.	2011 for development and to begin delivery of workshops, conferences, and "boot camps"

**Budget:** \$155,056 (\$115,000 for materials, sets of curriculum guides, workshops, conference, and "boot camps"; \$40,056 for staff)

**Result 4:** Climate change monitoring labs are established.

**Activity:** Establish climate change monitoring labs at 10 outdoor classrooms (School Forests).

**Budget:** \$58,056 (\$18,000 for learning kits; \$40,056 for staff)

<b>Deliverables</b>	<b>Completion Date</b>
1. Establish and maintain a Web space for reporting and tracking site climate data.	2011
2. With DNR water education staff, pilot climate change activities (which may include studies of temperature and CO <sub>2</sub> change, impacts of greenhouse gases, etc.).	2012

### III. PROJECT STRATEGY

#### A. Project Team/Partners

- DNR Division of Forestry education staff will coordinate and establish School Forest sites.
- About 110 school districts (staff and students) will participate in School Forest activities & trainings.
- DNR Natural Resources Education Coordinator will coordinate DNR curricula support.
- PCA, University of Minnesota Extension, and local nature center staff, along with DNR education staff from the divisions of Fish/ Wildlife, Waters/ Ecological Resources, Lands and Minerals, and Parks and Trails—will participate in the delivery of lessons, curricula, and correlations to Minnesota Academic Standards at site-specific workshops, conferences, and "boot camps."
- DNR water education staff will coordinate climate monitoring labs, pilot climate change activities, and identify other appropriate climate change curricula (from the Minnesota PCA, University of Minnesota Extension, NASA, etc.)
- Natural resources staff (county, city, and DNR) will be involved with outdoor classroom forest, prairie, and urban site management needs.

#### B. Timeline

Year 1: Outline and implement project components, including: recruiting sites, developing support networks, developing and delivering teacher trainings, and establishing climate change monitoring labs.  
Year 2: Continue development and delivery of teacher trainings (30), conference (1), and boot camps (2).  
Ensure long-term systems are in place for long-term, replicable use.

#### C. Long-Term Strategy

This project will give two years' intense focus to strengthen an existing program. Temporary staff will establish efficient systems (Web support, local School Forest committees, etc.) so future staff can easily take over and maintain the enhanced program. The DNR will continue to provide a School Forest Coordinator, forestry education, and field staff to run the program and support site needs in the future.

**Project Budget: School Forests: Expanding Minnesota's Outdoor Classrooms**

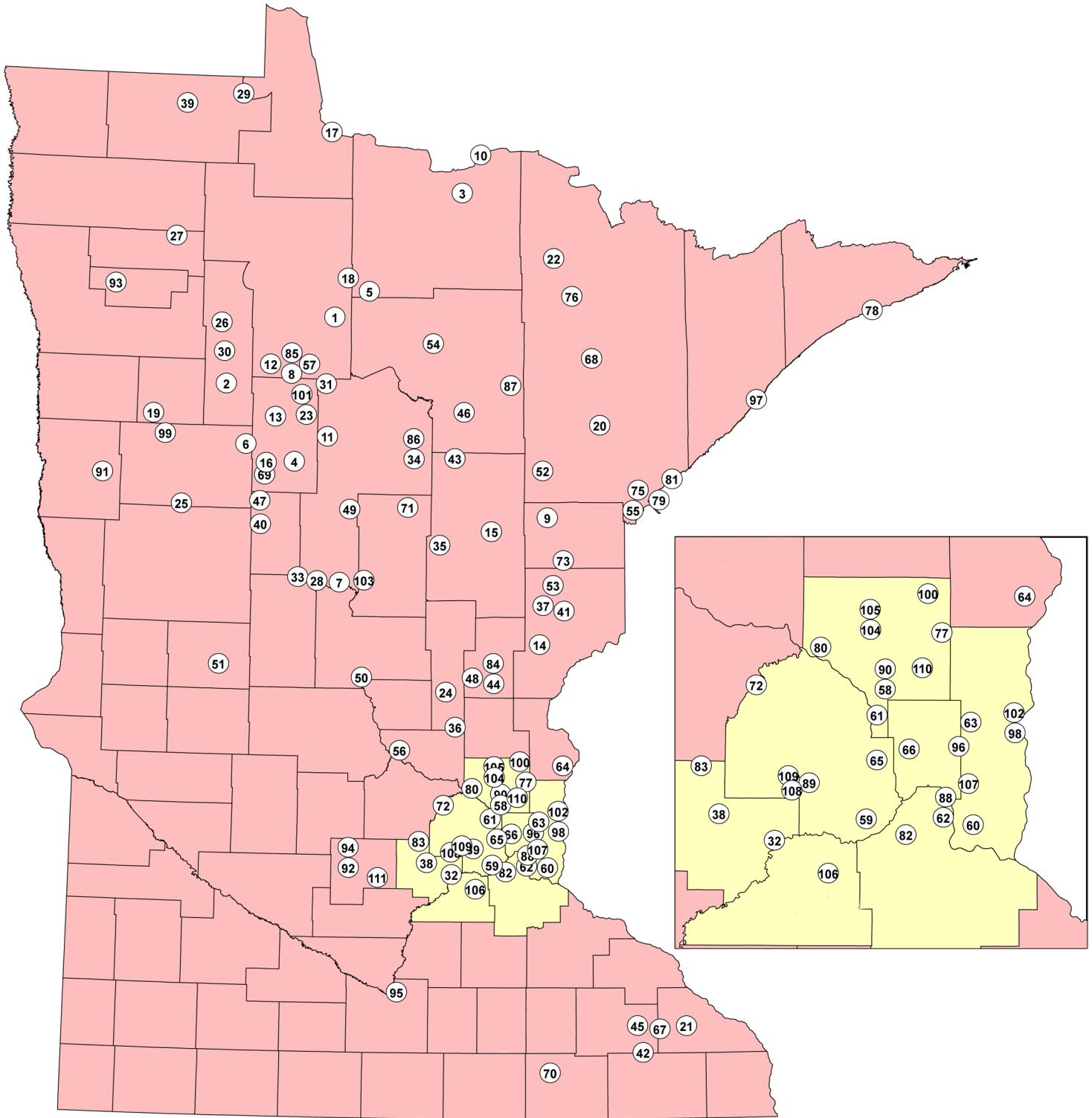
**IV. TOTAL PROJECT REQUEST BUDGET (2 years)**

<b>BUDGET ITEM</b>	<b>AMOUNT</b>
<b>Personnel:</b>	
Salary and benefits for School Forest regional staff (2 unclassified FTEs/2 years); 60% salary/40% benefits and overhead. A mid-range temp/unclassified education staff costs \$66,760/year)	\$ 267,040
<b>Equipment/Tools/Supplies:</b>	\$ -
Sets of curriculum guides (5 sets of 5 guides = \$500)(120 sites) <i>result 3</i>	\$ 60,000
Learning kits: one per site (\$150 each/120 sites), may contain classroom sets of outdoor teaching tools, climate monitoring supplies (as applicable). Contents may vary with site needs. <i>results 3 and 4</i>	\$ 18,000
Materials and supplies (photocopies, speakers, additional books) for 30 on-site workshops (\$20/teacher)(15 teachers)(100 sites) <i>result 3</i>	\$ 30,000
Materials and supplies (advertising, registration services, speakers, photocopies, room rental fees, etc.) for one conference (\$100/teacher)(100 teachers) <i>result 3</i>	\$ 10,000
Materials and supplies (advertising, speakers, photocopies, site fees, classroom sets of equipment) for two environmental education "boot camps" (\$300/teacher)(50 teachers) <i>result 3</i>	\$ 15,000
<b>TOTAL PROJECT BUDGET REQUEST TO LCCMR</b>	<b>\$ 400,040</b>

**V. OTHER FUNDS**

<b>SOURCE OF FUNDS: Minn. Dept. of Natural Resources (DNR)</b>	<b>AMOUNT</b>	<b>Status</b>
<b>In-kind Services During Project Period:</b>		
DNR Web support (.25 FTE/2 years)	\$ 40,625	
DNR Division of Forestry staff (Communication and Education Unit) for overall School Forest coordination and supervision of unclassified staff (.5 FTE/2 years)	\$ 81,250	
DNR Information & Education staff for curriculum coordination - 2 years (.25 FTE/2 years)	\$ 40,625	
DNR Education staff (Divisions of Fish&Wildlife, Eco&Waters, Parks&Trails, Lands&Minerals, Forestry) for curriculum (including climate change) delivery, development, pilot testing, and support (.5 FTE/2 years)	\$ 81,250	
Local DNR natural resources staff support (to manage outdoor classroom sites, write stewardship plans, etc.) (.25 FTE/2 years)	\$ 40,625	
<b>SOURCE OF FUNDS: Local School Districts</b>		
Local on-site support from schools, parents, businesses and community organizations (varies by school district and community, estimated \$45/hour, 100 hours/site, 22 sites)	\$ 99,000	
<b>Remaining \$ from Current Trust Fund Appropriation (if applicable):</b>	none	
<b>Funding History:</b> We have not received any funding specifically for this project in the past.	\$0	

# 115 Minnesota School Forests as of April 30, 2009



**Organization Name:** Minnesota Department of Natural Resources (DNR), Division of Forestry

**Organization Description:** The Minnesota DNR's mission is to work with citizens to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life. The department consists of several divisions based on the state's natural resources:

- Fisheries and Wildlife
- Forestry
- Lands and Minerals
- Parks and Trails
- Waters and Ecological Resources

A key performance area identified by the DNR in the *A Strategic Conservation Agenda 2003-2007: Measuring Progress Toward Mission* is Natural Resources Stewardship Education. The School Forest Program is based on specific outdoor classroom sites at schools throughout Minnesota; it acts as the "umbrella" program through which all other department education programs can be delivered.

#### **Project Manager Qualifications**

Laura Duffey currently operates two education programs for the DNR: the School Forest Program, which coordinates a network of outdoor classrooms around Minnesota; and Project Learning Tree, which consists of a network of trained volunteer workshop facilitators and a suite of environmental education activity guides designed for teachers to improve student learning in all academic subjects.

Both programs rely extensively on partnerships, education and natural resources networks, and individual contacts to connect teachers and schools with resources and materials needed to best serve students and communities at specific sites.

These networks, with which Ms. Duffey is connected, include:

- U.S. Forest Service
- University of Minnesota – Extension
- Minnesota Pollution Control Agency – Office for Environmental Education
- Minnesota Naturalists' Association (a network of Minnesota's nature centers)
- Minnesota Association for Environmental Education
- Minnesota Conservation Corps
- Minnesota Soil and Water Conservation Districts
- Center for Global Environmental Education (Hamline University)
- Minnesota Department of Education
- Education Minnesota

Ms. Duffey has a Master of Science degree in environmental education from the College of Natural Resources, University of Minnesota.