

**Environment and Natural Resources Trust Fund
2016 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 091-C

Improving Outdoor Classrooms for Education and Recreation

Category: C. Environmental Education

Total Project Budget: \$ 766,563

Proposed Project Time Period for the Funding Requested: 3 years, July 2016 to June 2019

Summary:

This new approach to outdoor classroom management will increase school-based environmental education, create healthy and safe spaces to learn outdoors, and reach 43,000 students and 2,200 teachers statewide.

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Sponsoring Organization: MN DNR

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Location

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Map of current statewide School Forest locations. Photos of students and CCM members from Mounds View, Duluth, St. Paul, and Baudette learning outdoors. Specific activities: tree planting, bird studies, board walk building, wetland exploration, and removing invasive species.

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



Environment and Natural Resources Trust Fund (ENRTF)

2016 Main Proposal

Project Title: *Improving Outdoor Classrooms for Education and Recreation*

PROJECT TITLE: Improving Outdoor Classrooms for Education and Recreation

I. PROJECT STATEMENT

To inspire learning and connect with the natural world, students need outdoor classrooms that are easily accessible and located in healthy, safe environments. Recent School Forest focus groups and evaluations show that teachers don't have the necessary resources to create these accessible and healthy sites as recommended in their site management plans. The Department of Natural Resources (DNR) and Conservation Corps Minnesota (CCM) have the expertise needed to do the heavy lifting on major needs such as building boardwalks, removing invasive species, and creating accessible trails and entrances. This project will:

- Renovate 80 school forests to improve quality and increase frequency of outdoor education.
- Get 43,000 students and 2,200 teachers outdoors through hands-on service learning and environmental activities in physical education, math, science, and social studies.
- Educate and provide 370 school staff (teachers, administration, and maintenance) and 550 community members with knowledge and skills in sustainable outdoor classroom management.
- Establish 10 new school forests on existing school- or community-owned land.

Currently, the School Forest Program supports 130 outdoor classrooms across Minnesota ranging in size from .25 to over 300 acres. These outdoor classrooms serve communities with high cultural and socio-economic diversity in rural and urban locations. Each school forest is unique, with physical features ranging from pine plantations to prairies to small manicured wood lots. DNR foresters create individual site management plans to address the unique land management needs and educational goals of each site. These plans include priority land management projects to create safe and healthy outdoor classrooms.

CCM crews will jumpstart management by completing the most difficult projects identified in site management plans, such as developing new trails, removing hazards (poison ivy, dead tree limbs, etc.), and adding structures (amphitheaters, benches, shelter, etc.) at 80 sites. Volunteers and school staff at each site will be trained to handle future site-specific management needs. In addition, four regionally based Land Management summits will target school grounds workers and lead teachers. These summits will elevate knowledge and skills to better support long-term outdoor classroom maintenance through hands-on sessions in tree care and pruning, trail design, invasive species treatment, tree planting, and land management.

Students' 21st century skills will increase through natural resource service learning experiences and new, standards-based land stewardship activities. A Physical Education (PE) Outdoor Activities Workshop will be held to engage new teachers in outdoor environmental education. This innovative workshop will combine core subjects (math, science, and social studies) with outdoor activities, instruct PE teachers on effective outdoor education methods, and engage PE teachers as School Forest stewards to create safer outdoor classrooms.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Renovate 80 school forests and train long-term site stewards.

Budget: \$394,625

CCM crews will improve 80 school forests through sustainable forest practices including: removing invasive species, treating poison ivy, building educational structures, and developing trails. During these projects CCM will instruct teachers and community members on site-specific management so they can continue work on their own. School staff (maintenance, teachers, and administration) and volunteers will further their knowledge and skills at four regional Land Management summits (northeast, northwest, south, and metro). The summits will provide hands-on skills, detailed information, and resources on land management practices, including invasive species treatment and monitoring, trail maintenance, and tree care (pruning, mulching, etc.).

Outcome	Completion Date
1. Complete management projects at 80 school forests.	June 2019



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2. Train 160 teachers and 240 community members on land management practices.	June 2019
3. Provide four regional Land Management summits to 160 school staff and volunteers.	June 2019
4. Evaluate project outcomes and determine future support and resource needs.	March 2019

Activity 2: Increase education and outdoor recreation experiences at school forest sites **Budget:** \$371,938
 Site improvement projects will engage 8,000 students in hands-on education activities with CCM crews and DNR staff. Standards-based outdoor activities on land management and stewardship will be developed and disseminated to all 140 school forests. Ten new school forests will be established to increase outdoor education experiences to 43,000 students. A Physical Education Outdoor Activities Workshop will increase standards-based, environmental education activities in school forests through gym classes. CCM will also work with schools to organize six volunteer stewardship action events to increase community involvement and use of school forests as outdoor recreation sites. Events will be based on individual sites needs and encourage community involvement in upkeep and promote recreation opportunities such as geocaching, hiking, birding, and skiing.

Outcome	Completion Date
1. Engage 8,000 students in hands-on service learning experiences.	June 2019
2. Create and disseminate new activities to 43,000 students at 140 school forest sites.	September 2018
3. Establish 10 new school forests.	December 2018
4. Deliver School Forest Physical Education Outdoor Activities Workshop to 50 teachers.	February 2018
5. Involve 300 community members at six volunteer stewardship action events.	June 2019

III. PROJECT STRATEGY

A. Project Team/Partners

- A new DNR School Forest specialist, funded by this project, will coordinate work projects, develop and disseminate new curriculum, deliver environmental education, organize and provide trainings, and establish new sites. Existing DNR School Forest Manager and staff will continue to provide general program operations.
- CCM crews will complete site management projects, lead environmental education activities at sites, instruct community members in management trainings, and organize community events.
- About 140 schools and their School Forest committee volunteers will partake in activities and trainings.
- DNR foresters, statewide, will assist sites with selecting high-priority management activities needed to bring schools up-to-date following their existing site management plans.
- County, city, and DNR natural resource staff and school district maintenance staff will support a variety of school forest management needs.

B. Project Impact and Long-Term Strategy

The DNR School Forest Program has been in existence for over 60 years. A 2010 ENRTF grant expanded the program by establishing new school forests, improving outdoor education quality, and improving program efficiencies. Focus groups conducted during the 2010 ENRTF grant and recent program evaluations show that a lack of site management knowledge and resources are inhibiting outdoor student experiences. This project will complete major site maintenance tasks and equip schools to easily maintain their outdoor classrooms in the future. This will increase the quality and frequency of student experiences outdoors, as many teachers have sited trail safety and access as a major barrier to outdoor education. In the long-term, more environmentally literate citizens will be created through School Forest and CCM experiences. The DNR will continue to provide forestry education staff to support general program needs during the grant process.

C. Timeline Requirements

This project will be carried out over a three-year period.

2016 Detailed Project Budget

Project Title: Improving Outdoor Classrooms for Education and Recreation

IV. TOTAL ENRTF REQUEST BUDGET 3 years

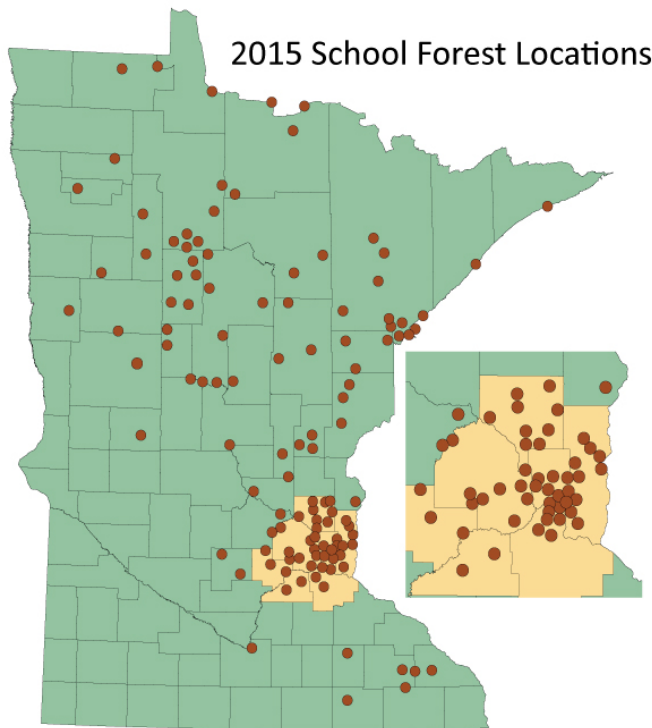
BUDGET ITEM	AMOUNT
Personnel: DNR, Division of Forestry, new School Forest specialist, 1 FTE, three years. Salary (74%); Benefits (26%)	\$ 300,000
Professional/Technical/Service Contracts: <i>Two years of Conservation Corps Minnesota for manager time (\$88,000); corps member stipends and benefits (\$232,950); tools/supplies (\$52,850); fleet (\$48,000); training (\$10,200); and recruitment (\$8,000).</i>	\$ 440,000
Equipment/Tools/Supplies: School Forest Physical Education Outdoor Activities Workshop (materials, supplies, photocopies, and food). 1 workshop for 50 teachers at \$1400	\$ 1,400
Equipment/Tools/Supplies: Four regional Land Managemenet Summits, (materials, supplies, photocopies, speakers, room rental fees, etc.) 4 summits with 40 participants at each x \$1200/summit=\$4800	\$ 4,800
Direct and Necessary Costs*: People support \$4,365; Safety support \$1,029; Financial support \$4,287; Communication support \$1,236; IT support \$8,382; Planning suport \$829; Procurement Support \$235.	\$ 20,363
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 766,563

V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ To Be Applied To Project During Project Period:	NA	NA
Other State \$ To Be Applied To Project During Project Period: DNR general budget: staff time: DNR School Forest manager & forestry education specialist .10 FTE/year X 3 years = \$30,000; travel in-state costs: fleet, lodging, and expediture = \$6000; Printing, communication, and mailing costs for education materials and resources= \$6,000; Mileage and sub-stipend reimbursement for participants to attend workshop and summits = \$20,000, room rental fees and speaker costs for summits and workshops \$2,000	\$ 64,000	<i>Pending</i>
In-kind Services To Be Applied To Project During Project Period: School Districts local on-site support from schools, parents, businesses and community organizations Assistanace with management steps, training, and education time (varies by school district and community), estimated \$25/hr. 80 sites, 3100 hours x \$25/hr = \$77,500	\$ 77,500	<i>Pending</i>
Funding History: 2010, Project 180-F, Expanding Outdoor Classrooms at Minnesota Schools provided funding to establish and enhance outdoor classrooms through improved educational resources (teacher workshops, curriculum, and website development) and increased capacity to serve schools (additional staff to meet demand).	\$ 300,000	<i>Completed</i>
Remaining \$ From Current ENRTF Appropriation:	NA	NA

Improving Outdoor Classrooms for Education and Recreation

Photos below include: Edgewood School Forest, Mounds View; Lakewood School Forest, Duluth; Como Woodlands School Forest, Saint Paul; Lake of the Woods School Forest, Baudette.



Project Manager Qualifications & Organization Description

Amy Kay Kerber

Forestry Outreach and Legislative Affairs Supervisor

MN DNR Forestry

Amy Kay has worked with Division of Forestry outreach and education programs for 15 years. She has extensive experience working with schools to develop outdoor classrooms, developing curriculum, managing projects, and delivering educator trainings. Additionally, Amy Kay has worked with landowners and forest management plans and is uniquely positioned to supervise this project. For 12 years, Amy Kay coordinated the Minnesota School Forest Program. She has successfully managed many grants, including a \$300,000 ENRTF grant (2010) and many US Forest Service grants over \$100,000.

In her current position, Amy Kay supervises outreach and legislative activities for the Division of Forestry. She works closely with the School Forest Program and oversees the work of the education projects and budgets.

MN DNR

The Minnesota Department of Natural Resources works to integrate and sustain the interdependent values of a healthy environment, a sustainable economy, and livable communities. DNR's integrated resource management strategy shares stewardship responsibility with citizens and partners to manage for multiple interests. DNR protects the state's natural heritage by conserving the diversity of natural lands, waters, and fish and wildlife that provide the foundation for Minnesota's recreational and natural resource-based economy (M.S. 84, M.S. 97A). DNR manages natural lands such as forests, wetlands, and native prairies; maintains healthy populations of fish and wildlife; and protects rare plant and animal communities throughout the state. DNR manages the state's water resources, sustaining healthy waterways and ground water resources. DNR provides access to enrich public outdoor recreational opportunities, such as hunting, fishing, wildlife-watching, camping, skiing, hiking, biking, motorized recreation, and conservation education through a state outdoor recreation system that includes parks, trails, wildlife management areas, scientific and natural areas, water trails, and other facilities (M.S. 86A). DNR supports natural resource-based economies, managing state forest lands for multiple forest values (M.S. 89), ensuring the maximum long-term economic return from school trust lands (M.S. 127A), and providing other economic opportunities in a manner consistent with sound natural resource conservation and management principles. The mission of the Minnesota Department of Natural Resources 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.