

**Environment and Natural Resources Trust Fund
2020 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 131-C

MN GreenStep Schools: Statewide Launch in 12 Schools

Category: C. Environmental Education

Sub-Category:

Total Project Budget: \$ 554,313

Proposed Project Time Period for the Funding Requested: June 30, 2023 (3 yrs)

Summary:

MN GreenStep Schools integrates environmental best practices with hands-on environmental education. Funding will launch the program in 12 schools which become regional catalysts, yielding education and environmental outcomes.

Name: Jonee Brigham

Sponsoring Organization: U of MN

Job Title:

Department: MN Design Center

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Web Address:

Location:

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Map showing 2 schools per region, overlayed with locations of existing interest, with images of students in hands-on environmental education, and a list of partners and supporters.

_____ 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)
2020 Main Proposal Template

PROJECT TITLE: MN GreenStep Schools: Statewide Launch in 12 Schools

I. PROJECT STATEMENT

This proposal integrates environmental best practices with hands-on environmental education. Funding will launch the MN GreenStep Schools program in 12 schools which become catalysts in their regions, yielding education and environmental outcomes.

Program: MN GreenStep Schools is a statewide challenge, assistance, and recognition program for schools and districts responding to their desire to improve their operations and outcomes in three areas: reducing environmental impacts and cost, improving health, and providing environmental education. The program is free and voluntary and is based on the concept of the successful MN GreenStep Cities program, which has spread across the state. MN GreenStep Schools program addresses best practices in energy, water, waste, habitat, and healthy buildings, and also integrates these with environmental education through experiential learning opportunities in K-12 schools across the state. The program design framework is complete with an initial set of criteria, tools, and resources in development. MN GreenStep Schools is a program of the University of Minnesota, the MN Pollution Control Agency, and their partners.

Goal: Environmental education through hands-on projects and community events that yield measurable environmental and economic benefits, and exploration of professional and trade STEM careers.

Outcomes: Funding will enable completion of online program elements for all to use, and support an inaugural set of 12 schools that will catalyze momentum in 6 Minnesota regions. Students and their schools will benefit with hands-on experiential learning that makes a difference in human and environmental health outcomes and opens up STEM and other career opportunities to students.

How: To meet the goal and achieve outcomes, there are two activities: 1) Establish the support structure for schools to participate and improve overtime, including website recognition, online connections to resources and opportunities, and simple, online documentation. 2) Launch a statewide MN GreenStep Schools program into 12 school districts, while also providing free access to the program for any interested school in Minnesota.

Need, Opportunities, Response: Schools and Districts are looking for guidance and step-by-step support to provide environmental education that integrates with facilities improvement to protect human and environmental health, and save on operational cost (Phase 1 report www.mngreenstepschools.org). An initial small survey in 2018 yielded 18 schools or districts interested in participating. As the Minnesota energy and environmental landscape is changing those who plan for current and future opportunities stand to benefit. Schools and Districts need peer examples to motivate and inform change. This grant is necessary to support an inaugural set of 12 Minnesota schools to become regional catalysts, demonstrating program success, serving as a resource model for other schools in their region, and laying out long-range plans for advanced achievement.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1 Title: Prepare Program Resources and Recruit Schools for Launch in Year 2.

Description: Implement the full criteria, tools, and resources into the website, working in partnership with local school districts, community members, and program partners. Develop a competitive application process and hire an outreach coordinator to recruit and support schools across the state (both the 12 catalyst schools and additional schools.) Identify assistance providers to accelerate school action.

ENRTF BUDGET: \$101,591

Outcomes	Completion Date
1. Website updated with functionality to support program launch in year 2 including google docs platform for reporting and communicating progress, and initial population of database of resources and supporting resource organizations.	2/2021
2. Outreach coordinator hired	2/15/2021
3. Competitive Application Process developed and issued.	3/30/2021
4. Initial 6 schools selected	6/1/2021



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Activity 2: Launch Statewide Program in 12 School Districts

Description: Support 12 school districts across the state to set up school teams, pass resolutions, and implement best practices to achieve outcomes in environmental education and environmental impact. University of Minnesota will manage the project, supporting 12 catalyst schools (and others interested), engaging resource organizations, and conducting evaluations to inform the program development. Youth Eco Solutions (YES!, formerly Youth Energy Summit), will lead enhanced support, implementation, and outcomes in 12 schools, drawing on their proven, youth-led model and statewide network.

Any school may participate in the program, but the 12 regional catalyst schools will receive enhanced training and seed funds, and will commit to providing feedback to the program, sharing their story, and being a resource for future school participants. In each school, students will be empowered to become community leaders and innovators in environmental protection, clean energy, and waste reduction. School teams are led by at least one educator and one facilities or administrative staff, who are supported by MN GreenStep Schools program staff and partner resource organizations specific to their projects. The 12 regional schools will be selected through a competitive application process based on need, equity, opportunity for impact, readiness, and commitment. Students, school district staff, teachers, parents and community members will work together to learn about the built and natural infrastructure of their school and landscapes as they develop skills to save energy and water, reduce waste, and protect natural habitat by leveraging existing environmental education curriculum and connecting to resources through the program. The 12 schools will create a long-range vision for clean-energy, restorative environmental impacts and financial sustainability.

ENRTF BUDGET: \$452,722

Outcome <i>(Based on, 6 schools in year 2, and 6 <u>added</u> schools in year 3)</i>	Completion Date
1. 200 + students directly involved in hands-on environmental education and stewardship	<i>For each outcome: First half: 6/30/2022 Second half: 6/30/2023</i>
2. 100+ school staff will be involved in implementing and sharing best practices	
3. 24 + school resource organizations will engage and support schools in the program	
4. An estimated 6,000 (500 per school) other students and community members will learn about the school improvement story and outcomes	
5. Education and Actions taken for 5-10% reduced energy, water, waste, or stormwater runoff, and student-led long-range clean energy and environment visions developed.	
6. 12 schools will obtain Step 1-2 recognition level in the MN GreenStep Schools program	

III. PROJECT PARTNERS AND COLLABORATORS:

Project partners include leadership by University of Minnesota's Minnesota Design Center and Institute on the Environment, with MN Pollution Control Agency, MN Environmental Quality Board, and Prairie Woods Environmental Learning Center/YES!. Collaborators include MN Department of Education (incl. Green Ribbon Schools,) MN Department of Health, school districts, community members, and businesses.

IV. LONG-TERM IMPLEMENTATION AND FUNDING:

Based on the growth that MN GreenStep Cities has realized, we anticipate that after the grant period, 20 new school/district participants will join per year, and existing participants will increase their achievements and outcomes over time. Outside of this grant, the University of Minnesota and program partners are leading a continuation plan for long-term program governance and financial sustainability.

Attachment A: Project Budget Spreadsheet
 Environment and Natural Resources Trust Fund
 M.L. 2020 Budget Spreadsheet

Legal Citation:

Project Manager: Jonee Bringham

Project Title: MN GreenStep Schools: Statewide Program Launch with 12 Catalyst School Districts

Organization: University of Minnesota (Minnesota Design Center)

Project Budget: \$554,313

3 years, completion June 30, 2023

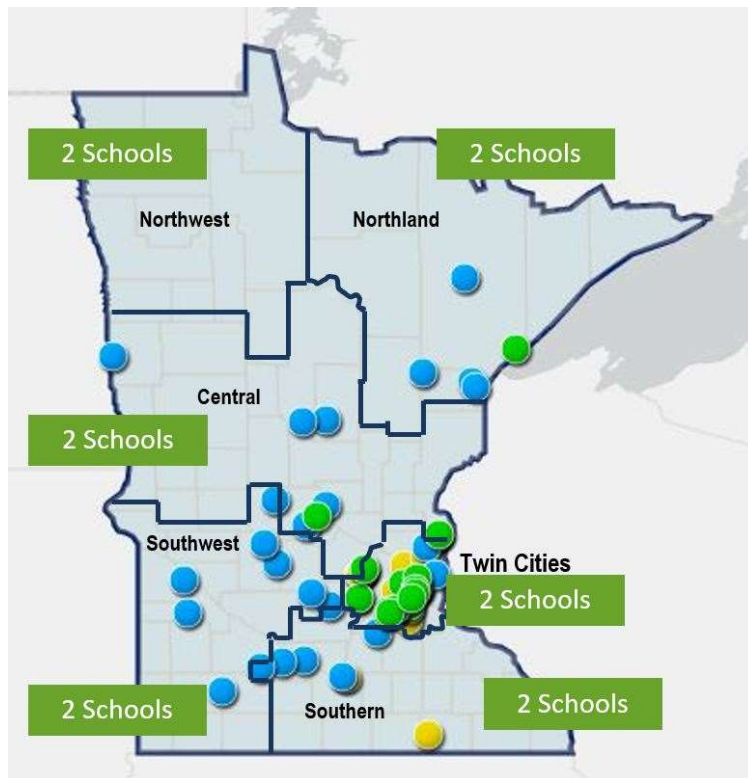
Today's Date: 4/5/2019



ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET		Budget	Amount Spent	Balance
BUDGET ITEM				
Personnel (Wages and Benefits)		\$ 381,313	\$ -	\$ 381,313
Project Manager/Program Designer, Jonee Bringham, \$241,435 (74%salary 26%benefits), 75%FTE each year for 3 of 3years				
Design Futures Planner, Department Director, Tom Fisher, \$4,095 (74%salary 26%benefits) 0.5%FTE for 3 Yrs				
Higher Ed Sustainability Liaison, Beth-Mercer-Taylor, \$6624 (74%salary 26%benefits), 2%FTE each year for 3 of 3years				
Pilot Outreach Coordinator/Trainer To be hired, \$129,159 (74%salary 26%benefits), 17% FTE year 1, 75%FTE year 2-3				
Professional/Technical/Service Contracts				
Prairie Woods Environmental Learning Center (PWELC) for Youth Eco Solutions (YES!, formerly Youth Energy Summit): Assist with planning, lead launch of 6 GSS schools in year 2; support existing 6 schools and launch 6 new schools in year 3. \$5,500 year 1; \$52,500 year 2; and \$89,000 year 3 for a total of \$147,000 for 3 years. (Includes travel for 3 years).		\$ 147,000	\$ -	\$ 147,000
Equipment/Tools/Supplies				
		\$ -	\$ -	\$ -
Capital Expenditures Over \$5,000				
		\$ -	\$ -	\$ -
Fee Title Acquisition				
		\$ -	\$ -	\$ -
Easement Acquisition				
		\$ -	\$ -	\$ -
Professional Services for Acquisition				
		\$ -	\$ -	\$ -
Printing				
		\$ -	\$ -	\$ -
Travel expenses in Minnesota				
\$8,000 over three years (\$1,000 year 1, \$3,000 year 2, \$4, 000 year 3) This is for only in-state travel essential to completing project activities.		\$ 8,000	\$ -	\$ 8,000
Other				
School District expenses; necessary for students and coaches to attend GSS and project related workshops and events; Example: \$500 per team x 6 teams first year and \$500 x 12 teams second year, totalling \$9,000. Project seed funds: funds to assist with projects expenses. Example: \$500 x 6 teams the first year and \$500 x 12 teams the second year, totalling \$9,000. Only LCCMR project expenses will be allowed.		\$ 18,000	\$ -	\$ 18,000
COLUMN TOTAL		\$ 554,313	\$ -	\$ 554,313
SOURCE AND USE OF OTHER FUNDS CONTRIBUTED TO THE PROJECT	Status (secured or pending)	Budget	Spent	Balance
Non-State:	NA	\$ -	\$ -	\$ -
State:	NA	\$ -	\$ -	\$ -
In kind: (Technical support and planning from state agencies, advisors)	Pending	Pending	\$ -	Pending
Other ENRTF APPROPRIATIONS AWARDED IN THE LAST SIX YEARS	Amount legally obligated but not yet spent	Budget	Spent	Balance
		\$ -	\$ -	\$ -

Visual: MN GreenStep Schools: Statewide Launch in 12 Schools

A challenge, assistance, and recognition program
for Action-Education in Energy, Water, Waste, Site, Health, Careers



Open to all schools Statewide
Each Region will have 2 Catalyst Schools
Drawing from (and expanding) an existing network

Existing Green School Interest and Activity

- YES! Schools (26+)
 - Green Ribbon Applicants (17+)
 - Green Ribbon Awardees (19+)
- And more schools use green programs from...
USGBC/LEED, state, county, municipal,
non-profit, and independent projects
>> Initial small survey: 18 interested in participation



Stewardship Planting (YES! Team)



Exploring Solar Energy (YES! Team)



Exploring Stormwater (UMN Camp)



STEM/GIS (River's Edge Academy/UMN)



Natural Infrastructure (UMN Camp)

Youth-Led, Place-Based, Hands-On Learning and Stewardship

Team: University of Minnesota | Youth Eco Solutions (YES!) | Minnesota Pollution Control Agency
Minnesota Department of Education | Minnesota Department of Health | Environmental Quality Board

Expressing Support: Minnesota Association of School Administrators | Minnesota School Boards Association
Minnesota Association for Environmental Education | USGBC Minnesota

See More at www.mngreenstepschools.org

PROJECT TITLE: MN GreenStep Schools: Statewide Launch in 12 Schools

PROJECT MANAGER QUALIFICATIONS AND ORGANIZATION DESCRIPTION

Project Manager Qualifications: Jonee Kulman Brigham, AIA, LEED AP O+M, is a Senior Research Fellow at the Minnesota Design Center of the University of Minnesota and an Institute on the Environment Fellow, and leads work in Green Schools and Environmental Education. As Manager and PI she will provide administrative oversight for the project, including managing the budget and personnel, as well as coordinating program development drawing on her experience in program planning, design, and management of sustainability programs and projects at both the University and private sector working across institutions and disciplines. She served as Co-PI and co-editor of the State of Minnesota B3 Sustainable Building Guidelines for 10 years, and was PI of the B3 Post Occupancy Evaluation (POE) development applying it to numerous consulting grants using the POE methodology. As a practicing architect in school renovation projects, she coordinated the needs and inputs of school districts, school staff, community members, and interdisciplinary design teams. As an energy consultant, she managed and conducted analysis for utility-sponsored energy design assistance coordinating the inputs of construction cost estimates, design team ideas, and client priorities to arrive at multiple cost-benefit scenarios. She also develops environmental education integrating the built and natural environment. She is currently PI leading MN GreenStep Schools Phase II development.

Organizational Description:

The Minnesota Design Center (MDC) is part of the College of Design at the University of Minnesota. MDC uses design thinking to addresses systemic issues throughout Minnesota, helping communities and organizations realize opportunities in their built and natural environment to stimulate economic prosperity, encourage social vitality, and enhance human health and well-being.

Task Leaders at the University:

Higher Ed Sustainability Liaison: Beth Mercer-Taylor, JD, is Sustainability Education Coordinator for the Institute on the Environment. As Higher Ed Sustainability Liaison and Co-PI, she will promote project connections between K-12 and higher education as well as be a conduit for sustainability resources and contacts across the University Campuses. Mercer-Taylor administers Sustainability Education programs, the Sustainability Studies Minor, and related courses. Her work involves mentoring students, supporting faculty, and leading campus sustainability initiatives. She oversees or co-leads emerging K-12 sustainability programs at the University, such as Water Journey Camps, MN GreenStep Schools and an internship program. She will coordinate the involvement of the Institute on the Environment, whose approach bridges disciplines and sectors to create a synergistic setting for discovering solutions, educating leaders, and engaging partners.

Design Futures Lead: Tom Fisher, Director, Minnesota Design Center (MDC) will lead 'design thinking for the future' to help shape a program that is innovative and future-ready, anticipating societal and economic shifts. Tom Fisher is a liaison to a network of innovative initiatives across the State of Minnesota and coordinates the work of MDC in its community-engaged projects throughout Minnesota.

Qualifications of Task Leaders Outside the University

Program Launch Catalyst School Delivery Leader: Shelli-Kae S. Foster is the YES! (Youth Eco Solutions) Program Manager and will lead the implementation of the program in 12 school districts. She has partnered with the MN GreenStep Team to plan the program launch based on YES!'s demonstrated and unique leadership in youth-led environmental education that integrates learning with facilities improvement. Foster has an MBA in sustainable business and has led YES! projects including ones funded by ENRTF. Previously, Foster worked as a School District Energy Manager. YES! Is a program of **Prairie Woods Environmental Learning Center.**