

**Environment and Natural Resources Trust Fund
2017 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 086-C

Sustainability Immersion Institute for Diverse Pre-University Students

Category: C. Environmental Education

Total Project Budget: \$ 323,000

Proposed Project Time Period for the Funding Requested: 3 years, July 2017 - June 2020

Summary:

This intensive sustainability summer program engages culturally diverse high school and community college students, teachers, and undergraduate mentors to develop youth-relevant communication of sustainability issues and inspire future career choices.

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Sponsoring Organization: U of MN

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Location

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Visual of Map of Minnesota with list of topics to be covered in Twin Cities, Duluth, Morris.

_____ 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) 2017 Main Proposal

Project Title: *Sustainability Immersion Institute*

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I. PROJECT STATEMENT

To foster a culturally diverse workforce trained in sustainability and focused on solutions, Minnesota’s sustainability K-12 and college educators need to include more voices and articulate their concerns in a contextually relevant way. Current academic sustainability programs draw students from various disciplines, but do not reflect the diversity of Minnesota’s changing demographics. Research shows diverse teams create more effective and innovative solutions. Historically, sustainability has been associated with STEM education; however, it is increasingly vital to communication, business, agriculture, health, planning and economics. A culturally diverse sustainability community will better reflect Minnesota’s changing demographics, and increase effectiveness, creativity, and innovation in business, industry, government, and community efforts statewide.

GOALS:

- Expose culturally diverse students to sustainability-focused opportunities that fit their interests.
- Invest in prospective students in a meaningful way using an intensive, cohort-based mentoring strategy.
- Engage K-12 teachers, faculty, and the community in expanding the network of sustainability leaders.
- Use plain language communication to describe sustainability concepts in contextually relevant styles.

The Sustainability Immersion Institute will prepare diverse students for college-level sustainability education through two years of mentored summer immersion programs. The Institute will touch more than 500 people, by building a “community of practice” for Minnesota K-12 teachers, college-age student mentors, faculty, and community partners; they will share their learning in presentations to industry, business, and the public . Hosted by University and partner institutions, workshops during the school year will introduce 80 participants annually to sustainability concepts and career-building opportunities. Each year, 24 participants will experience an immersive two-week overnight summer program. Participants will engage in experiential activities in Duluth, Morris and the Twin Cities to deepen their interest in sustainability topics, build relationships with “near-peer” mentors and instructors, and develop communication projects. Participants and mentors will express sustainability in their own words, answering the question: “*How would you tell the story of sustainability?*” These communication-focused projects will help state agencies reach new audiences using plain language communication that is relevant to the next generation of leaders. A professional filmmaker will assist students in making videos and document all student projects for sharing with Minnesota agencies and with the public.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Establish the Sustainability Immersion Institute

Budget: \$118,000

Bring together diverse high school students, college students, K-12 educators and local experts in developing the Sustainability Immersion Institute, reaching more than 500 people.

Outcome	Completion Date
<i>1. Provide immersive experiential learning to 48 diverse Minnesota high school students on topics, careers, and concepts surrounding sustainability and college options, connecting with 5 partner high schools and at least 3 community colleges</i>	<i>June 2019</i>
<i>2. Recruit and train 16 undergraduate mentors from the UMN MLK program</i>	<i>June 2019</i>
<i>3. Ten K-12 teachers receive continuing education credits and training on sustainability</i>	<i>June 2019</i>
<i>4. Four workshops during the academic year, reaching 40 people each</i>	<i>April 2019</i>
<i>5. Two Minnesota Educator Academy (MEA) workshops, reaching 30 teachers each</i>	<i>October 2018</i>

Activity 2: Summer Institute

Budget: \$172,000



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A two-week intensive program includes trips to Duluth and Morris, visiting innovative, on-the-ground projects run by campuses, local community groups, NGOs, agencies and businesses. The program covers themes of food, agriculture, water, energy, justice, sustainable business, and communication.

Outcome	Completion Date
<i>1. Duluth Sustainability Tour, to be conducted in June 2018 and 2019</i>	<i>June 2019</i>
<i>2. Morris Sustainability Tour, to be conducted in June 2018 and 2019</i>	<i>June 2019</i>
<i>3. Twin Cities Urban Sustainability Tour, to be conducted in June 2018 and 2019</i>	<i>June 2019</i>

Activity 3: Student-developed Communication Projects

Budget: \$42,000

Student-designed projects portray state-wide topics of sustainability in Minnesota, through forms like short videos, photos, annotated maps, posters, business plans or science fair exhibits. These are presented to experts and the broader community as a tool for bridging audiences and worldviews.

Outcome	Completion Date
<i>1. Two closing student presentations: How would you tell the story? to 100 people each</i>	<i>June 2019</i>
<i>2. Student-developed projects are presented to government agencies, university departments, student groups, NGOs, businesses, and community colleges to assist with their future communication planning, potentially reaching more than 40 audiences.</i>	<i>June 2019</i>
<i>3. Student-developed projects are presented to communities: in schools, libraries, coffee shops, art galleries, community centers, reaching more than 1,000 people.</i>	<i>September 2019</i>

III. PROJECT STRATEGY

A. Project Team/Partners

This project is a collaborative partnership across three University of Minnesota campuses, IonE, the UM-Twin Cities’ MLK Program, President’s Emerging Scholars Program, the Bee Lab, Acara social entrepreneurship program, Minnesota Technical Assistance Program (MNTAP) and the Large Lakes Observatory. Partners from Hennepin County Environmental Student Leaders Action Network, including North Hennepin Community College and Minneapolis Community and Technical College (MCTC), as well as colleagues from Bemidji State University will be included. State agency partners include the Department of Natural Resources (DNR) and the Minnesota Pollution Control Agency. Local community partners will also be integrated in each of tours.

B. Project Impact and Long-Term Strategy

This program will expand conceptions of sustainability to be more inclusive and culturally relevant, and thus responsive to Minnesota's changing demographics and the needs of its residents. By providing culturally diverse students access to college opportunities, networking, skill development, and new career options, the project will assist in diversifying the sustainability community. The extensive partnership model will strengthen connections between university campuses, government agencies, NGOs, businesses, and local organizations and will assist in the sharing of best practices, particularly in communication and outreach to Minnesota youth.

C. Timeline Requirements

June 2017 to September 2019. This time frame allows for the Sustainability Immersion Institute to be developed in 2017, and for the summer component to run in June 2018 and June 2019. Workshops will be offered fall 2017, spring and fall of 2018, and spring of 2019. Three months are allowed at the end of the project for program evaluation and reporting.

2017 Detailed Project Budget

Project Title: Sustainability Immersion Institute for Diverse Pre-University Students

IV. TOTAL ENRTF REQUEST BUDGET 3 years

<u>BUDGET ITEM</u>	<u>AMOUNT</u>
<u>Personnel:</u>	
Project Manager (75% salary, 25% benefits) 15% FTE years 1,2, 5% for year 3	\$31,000
Project Lead, Adjunct professor (75% salary, 25% benefits) 25% FTE for years 1,2, 5% for year 3	\$48,000
4 Morris and Duluth Lead Coordinators, (75% salary, 25% benefits), 4% FTE for year 1 and year 2	\$22,000
4 Undergraduate students workers to organize programs (100% salary)	\$6,000
16 Undergraduate peer mentors, (100% salary) (8 per year x 2 yrs)	\$26,000
10 teacher supervisors for field trips (\$1500 per teacher) 5 teachers x 2 yrs	\$15,000
Summer graduate student assistant (82% salary, 13% benefits) x 2 yrs	\$16,000
6 Faculty summer program lecturers, (75% salary, 25% benefits) x 2 yrs	\$12,000
<u>Professional/Technical/Service Contracts:</u>	
Youth advisor - Ana Davis, North Hennepin Community College Faculty	\$2,000
Wellness and Sustainability Lecturer - Erika Bailey-Johnson, Bemidji State University Faculty	\$3,000
Evaluation of program, formative during and summative after second year	\$5,000
Film maker to assist with student videos and document all student projects	\$4,000
<u>Equipment/Tools/Supplies:</u>	
Student project supplies for posters & communication projects	\$2,000
High school student lunch during immersion residential week in Twin Cities & participants in off-campus sustainability tour	\$5,000
Marketing materials, brochures, posters, outreach to underserved youth	\$1,000
Sustainability Fall & Spring workshops materials	\$1,000
University of MN-Morris & UM-Duluth materials for program activities	\$3,000
<u>Travel:</u>	
Bus rental fees to and within Duluth, Morris & return to Twin Cities	\$13,000
Transportation costs within Twin Cities - Urban Sustainability Tour	\$3,000
Meals during summer institute while participants are in Morris & Duluth	\$24,000
On-campus Housing in UM-Morris & Off-campus in Duluth	\$19,000
<u>Additional Budget Items:</u>	
48 High school student paid summer internships	\$35,000
On-campus UM-Twin Cities high school students' housing, dinner & breakfast	\$15,000
Bee Ambassador Program Costs for participants	\$1,000
Program and off-campus activity costs in Morris and Duluth	\$7,000
Activity costs for Urban Sustainability Tour	\$4,000
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$323,000

V. OTHER FUNDS

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ To Be Applied To Project During Project Period:	N/A	
Other State \$ To Be Applied To Project During Project Period:	N/A	
In-kind Services To Be Applied To Project During Project Period:	\$ 170,000	<i>Secured</i>
<i>Forgone Indirect Costs by University of Minnesota</i>		
Funding History:	N/A	
Remaining \$ From Current ENRTF Appropriation:	N/A	

Sustainability Immersion Institute

for Diverse Pre-University Students

How would you tell the story?



WHAT:

New Summer Institute Program

June 2018/2019; reaching 74 people

2 workshops during the academic year

2018/2019; reaching 120 people

MEA workshops

2018/2019; reaching 60 teachers



WHO:

University of Minnesota Twin Cities, Duluth, and Morris; Bee Squad, Large Lakes Observatory, MLK Program at UMN; community colleges, K12 Partner schools

"How would you tell the story?"

Communication projects made by the students in the summer workshop will be shared in presentations to industry, business, NGOs, student groups, and the public.



WHERE:

Twin Cities

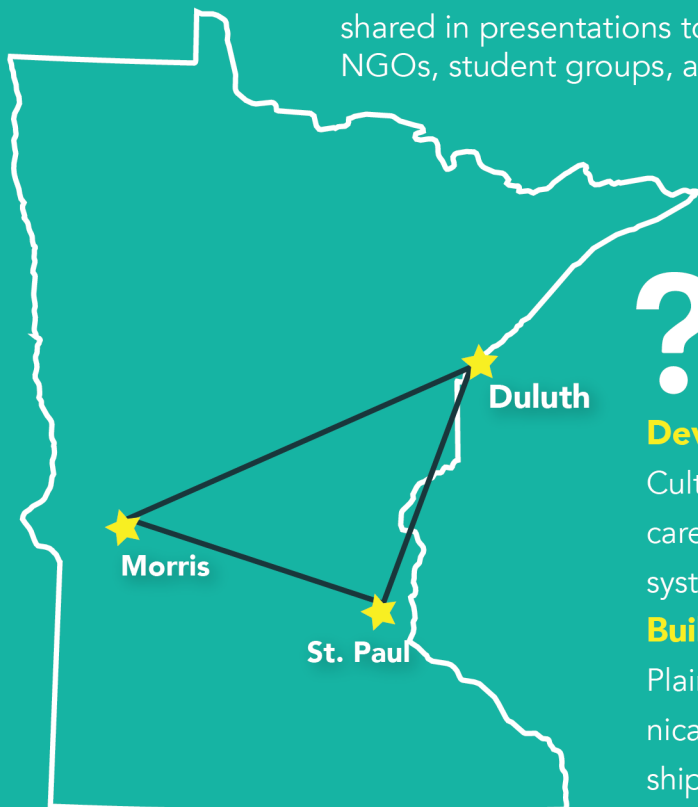
Sustainability and well-being | Career pathways | Justice and equity
Urban agriculture | Twin Cities campus sustainability tour

Duluth

Outdoor environmental education | Ecological literacy
Team building skills | Great Lakes & water resources
University of Minnesota Duluth tour

Morris

Renewable energy options | Native American roots | Small town sustainability
Green Prairie Community | University of Minnesota Morris tour



? WHY:

Develop

Culturally relevant & career-ready skills, systems thinking

Build

Plain language communication skills, relationships

Organize

Toward transformative

PROJECT TITLE: Sustainability Immersion Institute for Diverse Pre-University Students

Qualifications & Organization Description for LCCMR Environmental Education grant

Institute on the Environment (IonE), at University of Minnesota serving all campuses

IonE's mission is to discover solutions to Earth's most pressing environmental problems by conducting transformative research, developing the next generation of global leaders and building world-changing partnerships. Complex environmental challenges can't be solved with business-as-usual thinking. Our approach includes:

- **Discovering Solutions** IonE pursues research-based solutions to global grand challenges. Through our fellows and grants programs, we bring together the brightest minds from across the University and beyond. Established experts team up with emerging leaders in science, technology, business, education, policy and other areas to envision and create enduring positive change.
- **Educating Leaders** IonE is shaping the next generation of environmental leaders. We offer specialized training in communication, media relations, entrepreneurship, systems thinking and more. While our efforts focus on graduate, professional and postdoctoral students, we also serve the larger University community by coordinating the undergraduate sustainability studies minor and emerging graduate sustainability programs.
- **Engaging Partners.** Partnership is at the heart of nearly all of IonE's activities. With some 20 Fortune 500 companies and many other players in the global economy, Minnesota is an ideal setting for creating collaborative change. By linking our work with that of leaders in the business, investment, media and nonprofit sectors, we're building synergies and creating conduits for sharing Minnesota innovation with the world while growing new opportunities at home.

Mary (Oldham) Hannemann, Principal Investigator

Mary (Oldham) Hannemann earned a Bachelor of Science degree in Chemical Engineering and a Public Policy Master's degree with an emphasis in Environmental Sustainability. For two years, she has served as Project Coordinator in Sustainability Education at IonE. She co-facilitated IonE's Undergraduate Leaders program and managed a suite of academic and co-curricular programs for undergraduate students becoming sustainability change agents. Over the past year, Mary organized representatives of 25 different schools and organizations in the statewide host committee for a national sustainability conference, the Association for the Advancement of Sustainability in Higher Education (AASHE), which brought 2300 sustainability professionals and students to Minnesota in October 2015. Mary also manages a grant from Hennepin County which created a cohort of student leaders across five community colleges and universities. Prior to her Humphrey degree and current job, Mary worked in Kenya with hundreds of youth, from children to college students, as an educational program project coordinator for three years.