

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

Project Title:**ENRTF ID: 150-CH**

UMD Land Lab Sustainable Food System Project

Category: H. Proposals seeking \$200,000 or less in funding**Sub-Category:** C. Environmental Education**Total Project Budget:** \$ 199,860**Proposed Project Time Period for the Funding Requested:** June 30, 2022 (2 yrs)**Summary:**

The UMD Land Lab is a mold-breaking interdisciplinary outreach center that provides active-learning environmental and food systems education for school groups and community members.

Name: Adam Pine**Sponsoring Organization:** U of MN - Duluth**Job Title:** Dr.**Department:** College of Liberal Arts**Address:** 324 Cina Hall, 1123 University Drive

Duluth MN 55812

Telephone Number: (218) 726-8474**Email:** apine@d.umn.edu**Web Address:** <https://cla.d.umn.edu/geography-and-philosophy/faculty-staff/adam-pine>**Location:****Region:** Northeast**County Name:** Carlton, Lake, St. Louis**City / Township:** Duluth, Hermantown, Proctor**Alternate Text for Visual:**

At the center is the UMD Land Lab: a 15 acre sustainable farm. Around this are four separate Goals that the Land Lab facilitates: Education, Sustainability, Community and Food Systems.

_____ 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:

UMD Land Lab Sustainable Food System Project

I. PROJECT STATEMENT

This program will support the UMD Land Lab: a mold-breaking interdisciplinary outreach center that is both an active transitional organic farm and a provider of active-learning environmental and food system programming for school groups, university students and community members from across the state of Minnesota. The UMD Land Lab grows thousands of pounds of produce that is served on the UMD campus and hundreds of college students, elementary school students and community members spend time on the Land lab through classes and internships learning about sustainability, growing organic agriculture, preparing healthy food, and how food production impacts the environment. The goal of the UMD Land Lab is to educate students and community members about the principles of sustainable agriculture and offer active-learning programming about ecosystem preservation, food systems, and how to maintain the ecological health of the environment of Northeast Minnesota.

We achieve this goal through providing internships for student farmers across the region, hosting school groups and engaging community organizations in our established curriculum in environmental education. This project needs to be done because we are the only research and outreach center in Northeast Minnesota that engages students and community members in active-learning based on the unique ecology of Northeast Minnesota. The Land Lab is a space where students and community members engage in active learning based on the unique ecology of Northeast Minnesota. We have ongoing relationships with diverse community organizations that serve marginalized population such as the Intertribal Agriculture Council and CHUM, a Duluth-based provider of transitional housing, homeless services, and food shelves. We also partner with groups such as the Duluth Community Gardening Association, Northeast Beekeepers Association and Extension Education to ensure that we leverage community support in our programming. In a region with high rates of economic inequality and homelessness that is facing climate change, the UMD Land Lab uses the resources of community organizations and the University of Minnesota Duluth to teach participants how we can we ensure that our food system is resilient enough to meet the needs of all community residents.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1 Title: Support for Farming Activities at the UMD Land Lab

Description:

Maintenance of the Land Lab's capacity to exist as a living classroom where students and community members learn about sustainable agriculture and ecosystem maintenance. The Land Lab consists of ten acres of actively managed transitional organic agricultural fields and a five acre apple orchard. There is also a hoop house to extend the short NE Minnesota growing season, a root cellar, a new wind turbine and a weather station. Sale of produce to UMD Dining Services covers the costs of seeds, fertilizer, and general farm maintenance. The full-time farm manager, program associate, and student farmer positions serve as the platform upon which these other activities flourish.

ENRTF BUDGET: \$ 199,860

Outcome	Completion Date
UMD Land Lab will continue to function as a demonstration farm during the 2020, 2021 and 2022 growing seasons. Activities include starting seedlings in greenhouse, tilling fields, applying mulch / ground cover, weeding / crop maintenance and harvesting in the fall.	June 2022
Continue to host Healthy Northland Farm to School , ISD 709 (Duluth Public School	June 2022



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partnership) Farm Field Trip wherein all Duluth 7 th graders visit the farm to engage in active-learning activities about sustainability, ecology, and agriculture.	
Continue to host Farm Fest Community Engagement Festival . Annual day-long university/community collaboration open to all where visitors engage in interactive activities around the issues of sustainability, agriculture and food justice.	June 2022
Continue to provide Student Farmer Internships for 12 student farmers	June 2022
Continue to provide active-learning activities in collaboration with community partners the Intertribal Agriculture Council, UMN Extension, CHUM, Northeast Beekeepers Association, Sustainable Farming Association, UMD Faculty.	June 2022

III. PROJECT PARTNERS AND COLLABORATORS:

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IV. LONG-TERM IMPLEMENTATION AND FUNDING:

This 2-year proposal is designed to provide sufficient time to maintain farm operations as we develop further funding options. The project proposers are developing stronger relationships with existing partners and conducting research into the efficacy of Land Lab activities in order to develop additional revenue streams. Future funding may be sought from governmental agencies such as the United States Department of Agriculture (USDA), the National Institutes of Health (NIH), or private foundations such as the Ford Foundation, Duluth-Superior Community Foundation, or Essentia Health Foundation.

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

Legal Citation:

Project Manager: Adam Pine

Project Title: UMD Land Lab Sustainable Agriculture Project

Organization: University of Minnesota Duluth

Project Budget: 199,860

Project Length and Completion Date: 2 year, June 30 2022

Today's Date: 4/12/2019



ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET		Budget	Amount Spent	Balance
BUDGET ITEM				
Personnel (Wages and Benefits)		\$ 199,860	\$ -	\$ 199,860
Adam Pine, Principal Investigator, 1% FTE, no salary requested				
Kevin Moris, Farm Manager, \$97,050 (77% salary and 23% fringe) 100% FTE in both years. Manage student workers, coordinate farm operations, plant and harvest vegetables, coordinate purchase of farm supplies.				
To be named, Program Associate, \$42,810 (77% salary and 23% fringe) 50% FTE in year 1; 46% FTE in year 2. Direct educational activities with UMD and community stateholders, coordinate farm Fest, conduct seminars and workshops with farm visitors, maintain relationships with local and statewide stakeholders.				
Student Farmers: 6 students total; total cost \$60,000 (100% salary). 5 students are 25% FTE in both years; 1 student is 19.25% FTE in both years. Student farmers engage in farming operations throughout the summer and learn about the practice of sustainable agriculture and ecological preservation.				
Professional/Technical/Service Contracts				
		\$ -	\$ -	\$ -
Equipment/Tools/Supplies				
		\$ -	\$ -	\$ -
Capital Expenditures Over \$5,000				
		\$ -	\$ -	\$ -
Fee Title Acquisition				
		\$ -	\$ -	\$ -
Easement Acquisition				
		\$ -	\$ -	\$ -
Professional Services for Acquisition				
		\$ -	\$ -	\$ -
Printing				
		\$ -	\$ -	\$ -
Travel expenses in Minnesota				
		\$ -	\$ -	\$ -
Other				
		\$ -	\$ -	\$ -
COLUMN TOTAL		\$ 199,860	\$ -	\$ 199,860
SOURCE AND USE OF OTHER FUNDS CONTRIBUTED TO THE PROJECT	Status (secured or pending)	Budget	Spent	Balance
Non-State:		\$ -	\$ -	\$ -
State:		\$ -	\$ -	\$ -
In kind: University of Minnesota unrecovered indirect costs at 33% MTDC	secured	\$ 65,954	\$ -	\$ 65,954
Other ENRTF APPROPRIATIONS AWARDED IN THE LAST SIX YEARS	Amount legally obligated but not yet spent	Budget	Spent	Balance
		\$ -	\$ -	\$ -



Education.

PARTNERSHIP WITH LOCAL SCHOOLS



Community.

PARTNERSHIP WITH GREATER DULUTH
COMMUNITY



UMD LAND LAB Sustainable Education Center



Sustainability.

COMMITMENT TO
ENVIRONMENTALLY FRIENDLY
PRACTICES



Food.

COMMITMENT TO GROWING
FRESH AND HEALTHY FOOD



F. Project Manager Qualifications and Organization Description

The Land Lab is housed within the College of Liberal Arts and the Department of Geography and Philosophy at the University of Minnesota Duluth. With just under 12,000 students, UMD is a comprehensive regional university with a focus on undergraduate education. Faculty in the Program in Geography has expertise in sustainable agriculture, water hydrology, soil health, food systems and sustainability studies. With 150 majors, the department is one of the largest departments in the college of liberal arts and well situated to support the Land lab's mission of environmental education. The department offers two **a Bachelor of Science in GIS** and a **Bachelor of Arts in Environment, Sustainability & Geography (ESG)**. The mission of the ESG Program is to prepare students to create sustainable communities for present and future generations. The program provides students with the tools to understand the physical and social systems of the earth to become informed change makers locally and globally. All students intern in the community in order to better prepare themselves to be effective sustainable development practitioners.

Dr. Adam Pine, Program Director

Associate Professor Adam Pine is the head of the Department of Geography and Philosophy and has published widely on food security, food deserts, and the process of sustainable development. His article "Including the voices of communities in food insecurity research: An empowerment-based agenda for food scholarship" was used by the USDA-National Institute on Food and Agriculture Review panel adjudicating the Food Insecurity Incentive program which dispersed tens of millions of dollars aimed at addressing food insecurity. His work on food deserts in West Duluth helped support the development of Fair Food Access Lincoln Park, a community-based organization focused on creating a more reliable food environment for the residents of Duluth.

Emily Onello, Project Adviser

Emily Onello, MD, joined the faculty at the University of Minnesota Medical School, Duluth Campus in 2012. She directs and teaches several medical student courses, serves as a faculty advisor to medical students, and helps to develop and evaluate curriculum. She focuses on the rural preceptorship experience for students. Current research interests include rural physician workforce challenges, vaccination attitudes and environmental health.

Kevin Morris, Farm manager

Kevin has been the farm manager at the UMD land lab since 2014. He holds a B.S. in Biology from the University of Minnesota Duluth and directs all field operations onsite, and manages the student farmers.