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

Project Title:	ENRTF ID: 156-D			
Protect Community Forests by Managing Ash for EAB				
Category: D. Aquatic and Terrestrial Invasive Species				
Sub-Category:				
Total Project Budget: \$ <u>5.929.174</u>				
Proposed Project Time Period for the Funding Requested: <u>June 30.</u>	2023 (3 vrs)			
Summary:				
Project will reduce EAB through community developed management (inver management plan, removal, non-neonicotinoid treatment) and improve the -citizens and planting a diversity of trees.	itory, canopy assessment, ir community forest by involving			
Name: Valerie McClannahan				
Sponsoring Organization: <u>MN DNR</u>				
Job Title: Coordinator				
Department: Division of Forestry				
Address: 500 Lafavette Road				
<u>St. Paul</u> <u>MN</u> <u>55155</u>				
Telephone Number: _(651) 259-5283				
Email valerie.mcclannahan@state.mn.us				
Web Address:				
Location:				
Region: Statewide				
County Name: Statewide				

City / Township:

Alternate Text for Visual:

Graphics for EAB, tree planting, and healthy tree. Example of tree survey data. Canopy assessment maps and change rates.

Funding Priorities Multiple Benefits	OutcomesKnowledge Base
Extent of Impact Innovation	_Scientific/Tech Basis Urgency
Capacity ReadinessLeverage	TOTAL%



PROJECT TITLE: Protect Community Forests by Managing Ash for EAB

I. PROJECT STATEMENT

Emerald ash borer (EAB) is spreading at a faster rate within Minnesota each year and it is imperative for communities to know where their canopy cover is located and how it is changing over time. The number of counties with known infestations rose dramatically within the last few years. Delaying the spread of EAB into new areas of the state will benefit the economy, environment, and human health. The citizens of Minnesota deserve the support and education they need to manage and protect their community forests from EAB. ENTRF funds will:

- Provide technical assistance to communities and promote monitoring-based management strategies;
- Provide canopy assessments, statistically sampled tree surveys, and an analysis of community tree benefits for 350-400 communities statewide;
- Administer up to \$4.4 million in grants to support the management of EAB through community forestry activities on public and private land and in urban and rural communities;
- Offer education and outreach to engage citizens in ash management and community forestry activities;

• Quantitatively evaluate the impact of management work on the growth and spread of EAB populations. This project will put vital tools in community's hands so they can best define the way they need to manage EAB and enable them to assist their citizens. Funded activities will include: conducting a tree inventory, removing ash, treating valuable ash with the non-neonicotinoid injectable insecticide *emamectin benzoate*, and planting trees for diverse forests. Communities will work with partners to assess infestations, and provide citizen education and engagement to manage and improve community forest canopy.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1 Title: Develop request for proposals, administer grants, and implement grant projects to support the management of EAB in community forests.

ENRTF BUDGET: \$5,317,881

Description: Communities and citizens need assistance to reduce the impacts of EAB and slow its spread. A request for proposals (RFP) will be issued for a grant program to provide an estimated 200 communities \$4,400,000 in funds, and technical assistance to communities to manage EAB through community forestry activities on public lands. Grant amounts are expected to be \$15,000 to \$100,000 per grant. Eligible applicants are cities, townships, counties, and Tribal Communities. Participating communities will be selected based on demonstrated need for financial and technical assistance, local forestry needs, vulnerable populations (e.g., elderly, low income, etc.), readiness to take on a project of their proposed scope and size, and commitment to sustainable community forestry programming. Project partners include the Minnesota Department of Agriculture (MDA), the University of Minnesota (UMN), Tree Trust (TT), and Conservation Corps of Minnesota and Iowa (Corps). These partners will work closely with applicants to develop work plans that identify program activities, goals, and projected outcomes while additionally providing technical assistance in implementation.

Outcome	Completion Date
1. RFP development, open application period, and review and select proposals	July 2020 – January 2021
2. Develop work plans and grant agreements	February 2021
3. Grant activities are ongoing, annual work plans received and reviewed	May 2021-2023
4. UMN & MDA will conduct tree condition assessments as a baseline measure	August 2020, 2021, 2022
of EAB impacts and to track distribution, density, and population size	
5. MDA will host EAB monitoring and management workshops	Winter 2021 – Spring 2023

Activity 2 Title: Community canopy assessment: mapping and tracking change, diversity, economic, & environmental impacts

ENRTF BUDGET: \$611,293



Environment and Natural Resources Trust Fund (ENRTF) 2020 Main Proposal Template

Description: Working in partnership with the UMN, this project will provide canopy assessments, statistically sampled tree surveys, and an analysis of community tree benefits for 350-400 communities statewide. Building off the methods developed in the ENTRF FY14 funded project, *Update Statewide Land Cover Use Map*, the UMN will produce high resolution maps showing the extent, structure, and types of community forests for the years of 2010, 2015, and 2020. These maps will provide vital tree canopy information to communities throughout the state who don't otherwise have these resources. MNDNR Resource Assessment will perform statistically sampled tree surveys to aid in the production of the maps produced by the UMN, providing basic information communities need to make ash management decisions. Canopy data will be analyzed through the U.S. Forest Service iTree software to quantify the environmental and economic benefits of the community's forest, such as gallons of stormwater mitigated and energy savings. A user-friendly web mapping tool will be developed and several webinars and in-person workshops throughout the state will be offered to deliver and discuss results, data interpretation, and assist communities in developing tailored management plans and/or ordinances to protect and increase canopy.

Outcome	Completion Date
1. Maps will be developed and assessed to look at changes in forest canopy	Summer 2020; Spring 2021
2. Statistically sampled tree surveys in approximately 350-400 communities	Fall 2020
3. Development of web mapping and data dissemination tool	Winter 2021
4. Quantify value of environmental and economic benefits of community forests	May 2021-2023
statewide and grant projects: energy conservation, air quality, CO2 and	
stormwater mitigation	
5. Outreach and workshops about the web tool, environmental benefits, and	Spring 2021-Summer 2021
vulnerability to invasive species such as emerald ash borer	

III. PROJECT PARTNERS AND COLLABORATORS:

Name	Title	Affiliation	Role
Gary Michael,	Supervisor,	MNDNR Forestry	Provide grant administration, staff supervision, ,
Jennifer Corcoran,	Consultant, &		compliance checks, reporting, communications,
& Unclassified Staff	Unclassified		and web tool development
Mark Abrahamson	Division	MDA	Provide technical assistance to communities to
	Director		idenifity management needs and provide
			monitoring and management workshops
Gary Johnson,	Extension &	UMN Forestry,	Train volunteers in EAB and ash management,
Brian Aukema, Joe	Associate	Entomology,	conduct community forestry activities, data
Knight	Professors	Remote Sensing Lab	collection, mapping and canopy analysis
Karen Zumach	Director of	Tree Trust	Event planning, coordination, and citizen
	Forestry		engagement in community tree planting
Nick Cox	Program	Conservation Corps	On-the-ground community assitance for tree
	Manager	of MN & Iowa	planting and maintenance

IV. LONG-TERM IMPLEMENTATION AND FUNDING:

It is estimated there are 2.65 million ash trees in populated areas of the state, making EAB potentially one of the most destructive forest pests ever to reach Minnesota. Slowing the spread of EAB and educating communities using the latest technology and most current information about their community forests will provide tremendous long-term economic and environmental benefits to the state and its citizens. The methods used in this project are repeatable and the web mapping tool is intended to remain a resource available to communities in perpetuity to help address EAB now and future invasive exotic pests.



Today's Date: April 15, 2019 ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET Budget Amount Spent Balance BUDGET ITEM Personnel (Wages and Benefits) Ś 400,000 Ś Ś 400,000 Department of Natural Resources Project Administrator of Unlassified staff in Forestry Division for grant administration, contract management, education, and outreach campaign, \$300,000 (67% salary, 33% fringe) 1 FTE for 3 years. Department of Natural Resources Cooperative Forest Management Foresters statewide for completing grant compliance checks, \$100,000 (67% salary, 33% fringe) 0.33 FTE for 3 years. Professional/Technical/Service Contracts 5,492,000 \$ \$ 5,492,000 Ś Grants to municipalities or other entities (Request for Proposals, \$4.4 million) for management of EAB infestations Department of Natural Resources, Resource Assessment (Single Source, \$275,000) would be contracted to conduct field work for statistically sampled tree surveys and create user friendly format for public data accessibility. Department of Natural Resources, Resource Assessment (Single Source, \$275,000) would be contracted to conduct field work for statistically sampled tree surveys and create user friendly format for public data accessibility. Minnesota Department of Agriculture Scientist (Single Source, \$165,000) - MDA will hire an unclassified Scientist (50% FTE) along with a part-time field assistant equaling 0.5 FTE. These staff will be responsible for assessing tree condition and infestations, and will host EAB monitoring and management workshops throughout the state. University of Minnesota, Department of Forest Resources (Single Source, \$242,000) mapping and canopy analysis. The University of Minnesota, Department of Forest Resources (Single Source, \$140,000) -Community forestry outreach, and citizen engagement and training. The University of Minnesota, Department of Entomology (Single Source, \$160,000) - Data collection and analysis. Tree Trust (Single Source, \$65,000) – Community engagement tree planting education and volunteer events Conservation Corps of Minnesota and Iowa (Single Source, \$45,000) – Operationalizing work plan activities Equipment/Tools/Supplies Ś Ś Ś Capital Expenditures Over \$5,000 \$ \$ \$ Fee Title Acquisition Ś Ś Ś **Easement Acquisition** Ś Ś Ś Professional Services for Acquisition \$ \$ \$ Printing Printing costs for emerald ash borer education and outreach \$ 5,000 \$ \$ 5,000 Travel expenses in Minnesota DNR Travel for education and outreach: Vehicle and lodging for 25 work days. \$ 3,000 \$ \$ 3,000 Other *Direct and Necessary expenses: HR Support (~\$6,115), Safety Support (~\$1,107), Financial Support \$ 29,174 \$ \$ 29,174 (~\$4,881), Communication Support (~\$1,388), IT Support (~\$14,545), and Planning Support (~\$1,138) necessary to accomplish funded programs/projects COLUMN TOTAL 5,929,174 Ś \$ 5,929,174 \$ SOURCE AND USE OF OTHER FUNDS CONTRIBUTED TO THE PROJECT Status (secured Budget Spent Balance or pending) Non-State: Ś Ś Ś \$ State: Ś Ś In kind: \$ \$ \$ Amount legally Other ENRTF APPROPRIATIONS AWARDED IN THE LAST SIX YEARS obligated but Budget Spent Balance not yet spent

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Protecting Community Forests by Managing Ash for EAB



There are approximately 2.65 million ash in our communities. If left unmanaged, infested ash become extremely brittle and a serious hazard in the landscape. If all ash are simply removed it will result in an increase of 1.7 billion gallons of stormwater entering our system annually.

Funding from ENTRF will slow the spread of EAB, prevent hazardous trees from injuring people or property, maintain quality trees and their stormwater management benefits, provide needed tree resource assessments to make basic management decisions, and increase tree diversity to minimize future threats.



Stress

Emerald ash borer is spreading at an exponential rate in Minnesota. Communities don't have the resources to manage it fast enough, reducing canopy cover and environmental services.



Needs

- Tree inventories
- Canopy assessments
- EAB management plans
- Removal of poor quality or infested ash before they become a hazard
- Treatment of high quality ash with non-nicotinoid insecticide
- Tree planting for diversity



Benefits

- Slow the spread
- Increased capacity to make informed practical decision
- Maintain safety
- Clean air
- Clean water
- Cooling shade
- Higher quality of life
 ENRTF ID: 156-D

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05/12/2019

Project Manager Qualifications and Organization Description

Organization Description: The Minnesota Department of Natural Resources (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.

Project Responsibilities: The project manager will be responsible for providing overall program management and technical direction for the project; directing project staff, contracting for professional services and grant contracts in support of the program; coordinating with project partners; preparing and submitting work plans, updates and final reports.

Project Manager: Valerie McClannahan

Education **Bachelor of Science, Horticulture** Emphasis on Sustainable Agriculture, Minor in Urban Forestry **Master of Education** Emphasis on Adult Education

Oualifications Urban and Community Forestry Coordinator

Minnesota Department of Forest Resources, St. Paul, MN

Ensure shade tree and community forest resources are maintained and managed to enhance the physical, social and economic well-being of the state's communities.

Senior Planner – Urban and Community Forestry Program and Grant Manager 03/2016-11/2018 Minnesota Department of Forest Resources, St. Paul, MN

Assist the Statewide Urban and Community Forestry programs within the Division of Forestry in project and grant management.

Volunteer and Program Coordinator

University of Minnesota, St. Paul, MN

Built relationships with municipalities, non-profits, UMN Extension, and Soil and Water Conservation districts and coordinated input to develop unique programs and education courses that enhanced community forests statewide.

Committee Work

Minnesota Society of Arboriculture President, manager of staff and agency liaisons Vice President, manager of Programs and Education

Work collaboratively to advance the practice, science, and technology of tree care through education.

11/2018-Present

Graduated December 2011

Graduated December 2016

University of Minnesota, St. Paul, MN

University of Minnesota, St. Paul, MN

01/2012-03/2016

01/2018-Present 01/2015-12/2017