Environment and Natural Resources Trust Fund

2022 Request for Proposal

General Information

Proposal ID: 2022-019

Proposal Title: Protect Community Forests by Managing Ash for EAB

Project Manager Information

Name: Valerie McClannahan

Organization: MN DNR - Forestry Division

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Project Basic Information

Project Summary: Project will reduce EAB through community developed management (inventory, canopy assessment, management plan, removal, non-neonicotinoid treatment) and improve their community forest by involving citizens and planting a diversity of trees.

Funds Requested: $5,930,000

Proposed Project Completion: June 30 2025

LCCMR Funding Category: Aquatic and Terrestrial Invasive Species (D)

Project Location

What is the best scale for describing where your work will take place?
> Statewide

What is the best scale to describe the area impacted by your work?
> Statewide

When will the work impact occur?
> During the Project and In the Future

Narrative

Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.

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.

What is your proposed solution to the problem or opportunity discussed above? i.e. What are you seeking funding to do? You will be asked to expand on this in Activities and Milestones.

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.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

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.

Activities and Milestones

Activity 1: Community canopy assessment: mapping and tracking change, diversity, economic, & environmental impacts

Activity Budget: $612,119

Activity 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.

Activity Milestones:

Description	Completion Date
Maps will be developed and assessed to look at changes in forest canopy	May 31 2023
Statistically sampled tree surveys in approximately 350-400 communities	November 30 2024
Development of web mapping and data dissemination tool	December 31 2024
Quantify value of environmental and economic benefits of community forests statewide and grant projects	May 31 2025
Outreach and workshops about the web tool, environmental benefits, and vulnerability to invasive species	June 30 2025

Activity 2: Develop request for proposals, administer grants, and implement grant projects to support the management of EAB in community forests.

Activity Budget: $5,317,881

Activity 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 150 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 $10,000 to $150,000 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.

Activity Milestones:

Description	Completion Date
RFP development, open application period, and review and select proposals	January 31 2023
Develop work plans and grant agreements	March 31 2023
UMN & MDA will conduct tree condition assessments as a baseline measure of EAB impacts and to track distribution, density, and population size	August 31 2024
Grant activities are ongoing, annual work plans received and reviewed	May 31 2025
MDA will host EAB monitoring and management workshops	June 30 2025

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Mark Abrahamson	Minnesota Department of Agriculture	Provide technical assistance to communities to identity management needs, provide monitoring and management workshops.Assess tree condition and infestations, and host EAB monitoring and management.	Yes
Eric North	University of Minnesota - Department of Forest Resources	Community forestry outreach, and citizen engagement and training for activities such as emerald ash borer detection, and tree planting.	Yes
Brian Aukema	University of Minnesota - Department of Entomology	Emerald ash borer data collection and analysis of rates of infestation.	Yes
Joe Knight	University of Minnesota - Remote Sensing Lab	Mapping and canopy analysis.	Yes
Karen Zumach	Tree Trust	Event planning, coordination, and citizen engagement in community tree planting.	Yes
Jennifer Corcoran	Minnesota Department of Natural Resources - Resource Assessment	Conduct field work for statistically sampled tree surveys and create user friendly format for public data accessibility.	Yes
Nick Cox	Conservation Corps of Minnesota & Iowa	Operationalizing community work plan activities and on-the-ground community assistance for tree planting and maintenance.	Yes

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this be funded?
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.

Project Manager and Organization Qualifications

Project Manager Name: Valerie McClannahan

Job Title: Urban and Community Forestry Coordinator

Provide description of the project manager's qualifications to manage the proposed project.
Project Manager, Valerie McClannahan, has served urban and community forests for over ten years between work at the Department of Natural Resources and University of Minnesota. This includes a significant amount of work with

communities managing terrestrial invasive species, managing community grant programs, assessing tree resources, and engaging citizens. Valerie also has several years of experience in urban and community forestry program management, directing project staff, contracting for professional services, coordinating project partners, preparing and submitting work plans, updates and final reports. Valerie successfully completed M.L. 2015 Improving Community Forests through Citizen Engagement as project manager granting funds to communities and increasing canopy statewide.

Valerie received her Bachelors of Science in Horticulture from the University of Minnesota in 2011 and minored in Urban Forestry. In 2016, Valerie obtained a Master's of Education from the University of Minnesota with an emphasis on urban and community forestry.

Organization: MN DNR - Forestry Division

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.

The Urban and Community Forestry Program within the Division of Forestry's mission is to increase environmental services by creating and maintaining healthy urban and community forests. Community forests are unique ecosystems that provide vital environmental services such as mitigating stormwater and cleaning the air.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	$ Amount
Personnel								
Urban and Community Forest Project Specialist		Grant administration, contract management, education, and outreach campaign.			33%	3	X	$300,000
Cooperative Forest Management Foresters		Foresters statewide will complete grant compliance checks.			33%	0.99	X	$100,000
							Sub Total	**$400,000**
Contracts and Services								
Grants to Cities, Townships, Counties, and Tribal Communities	Professional or Technical Service Contract	Grants to Cities, Townships, Counties, and Tribal Communities (Request for Proposals, $4.4 million) for management of ash for EAB. Estimate providing grants to 200 communities throughout the state of Minnesota.				0		$4,400,000
Resource Assessment - Department of Natural Resources	Sub award	Conduct field work for statistically sampled tree surveys and create user friendly format for public data accessibility.				0		$275,785
Remote Sensing Lab - University of Minnesota, Department of Forest Resources	Sub award	Mapping and canopy analysis.				0		$242,000
Urban Forestry Lab - University	Sub award	Community forestry outreach, and citizen engagement and training for activities such as emerald ash borer detection, and tree planting.				0		$140,000

of Minnesota, Department of Forest Resources								
University of Minnesota, Department of Entomology	Sub award	Emerald ash borer data collection and analysis of rates of infestation.				0		$160,000
Tree Trust	Sub award	Community engagement tree planting education and volunteer events.				0		$65,000
Conservation Corps of Minnesota & Iowa	Sub award	Operationalizing community work plan activities and on the ground community assistance for tree planting and maintenance.				0		$45,000
Minnesota Department of Agriculture	Sub award	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.				3		$165,000
							Sub Total	**$5,492,785**
Equipment, Tools, and Supplies								
							Sub Total	-
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								

	Miles/ Meals/ Lodging	Vehicle and lodging for 25 work days.	DNR Travel for education and outreach.					$3,000
							Sub Total	$3,000
Travel Outside Minnesota								
-							Sub Total	-
Printing and Publication								
	Printing	5,000 emerald ash borer education	Printing costs for emerald ash borer education and outreach.					$5,000
							Sub Total	$5,000
Other Expenses								
		Direct and Necessary	HR Support (~$6,640), Safety Support (~$1,028), Financial Support (~$5,099), Communication Support (~$1,311), IT Support (~$14,128), and Planning Support (~$1,008) necessary to accomplish funded programs/projects.					$29,215
							Sub Total	$29,215
							Grand Total	$5,930,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Personnel - Urban and Community Forest Project Specialist		Grant administration, contract management, education, and outreach campaign.	**Classified :** Explanation of Use of Classified Staff: Any classified staff position paid for by ENRTF will either: 1) be backfilled from funds received from Federal grants and contract work OR 2) the work done by this position will be delayed, eliminated, or completed by the start of the project. The activities of all or portions of the classified staff is directly related to this work program.
Personnel - Cooperative Forest Management Foresters		Foresters statewide will complete grant compliance checks.	**Classified :** The .33 FTE will be utilized to conduct compliance checks across the entire State of Minnesota and we have chosen to utilize our professional forester staff to complete this work. These are classified staff. Due to the extensive geographical area needed to be covered by this work, we felt utilizing several current staff rather than hiring unclassified staff would create efficiencies that reduce overall costs to the project. We estimate needing 1 FTE annually for this work if we were to utilize an unclassified staff person.

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
-			**State Sub Total**	-
Non-State				
-			**Non State Sub Total**	-
			Funds Total	-

Attachments

Required Attachments
Visual Component
File: [46c9b4b4-602.pdf](#)

Alternate Text for Visual Component
Graphics for EAB, tree planting, and healthy tree....

Administrative Use

Does your project include restoration or acquisition of land rights?

No

Does your project have potential for royalties, copyrights, patents, or sale of products and assets?

No

Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?

N/A

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?

N/A

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

No

Protecting Community Forests by Managing Ash for EAB

DEPARTMENT OF NATURAL RESOURCES

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 ENRTF 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