



# Environment and Natural Resources Trust Fund (ENRTF)

## M.L. 2020 ENRTF Work Plan (Main Document)

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**Today's Date:** August 22, 2019

**Date of Next Status Update Report:** April 1, 2021

**Date of Work Plan Approval:**

**Project Completion Date:** June 30, 2023

**Does this submission include an amendment request?** No

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**PROJECT TITLE:** Protect Community Forests by Managing Ash for EAB

**Project Manager:** Valerie McClannahan

**Organization:** Department of Natural Resources

**College, Department, or Division:** Division of Forestry

**Mailing Address:** 500 Lafayette Road

**City, State, Zip Code:** St. Paul, MN 55155

**Project Manager Direct Telephone Number:** 651-259-5283

**Email Address:** valerie.mcclannahan@state.mn.us

**Web Address:**

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**Location:** Statewide

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**Total Project Budget:** \$3,500,000

**Amount Spent:** \$0

**Balance:** \$3,500,000

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**Legal Citation:** M.L. 2020, Chp. xx, Sec. xx, Subd. xx

**Appropriation Language:**

## 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.

ENRTF 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 260-300 communities statewide;
- Administer up to \$2.4 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 tree inventory, removing ash trees, treating valuable ash trees 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. OVERALL PROJECT STATUS UPDATES:

**First Update April 1, 2021**

**Second Update October 1, 2021**

**Third Update April 1, 2022**

**Fourth Update October 1, 2022**

**Fifth Update April 1, 2023**

## Final Report between project end (June 30) and August 15, 2023

### III. 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.*

**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 100 communities \$2,400,000 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.

**ACTIVITY 1 ENRTF BUDGET:** \$3,121,060

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 of EAB impacts and to track distribution, density, and population size	August 2020, 2021, 2022
5. MDA will host EAB monitoring and management workshops	Winter 2021 – Spring 2023

**First Update April 1, 2021**

**Second Update October 1, 2021**

**Third Update April 1, 2022**

**Fourth Update October 1, 2022**

**Fifth Update April 1, 2023**

**Final Report between project end (June 30) and August 15, 2023**

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

**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 260-300 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 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 2 ENRTF BUDGET: \$378,940**

<b>Outcome</b>	<b>Completion Date</b>
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 260-300 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 statewide and grant projects: energy conservation, air quality, carbon dioxide and stormwater mitigation	May 2021-2023
5. Outreach and workshops about the web tool, environmental benefits, and vulnerability to invasive species such as emerald ash borer	Spring 2021- Summer 2023

**First Update April 1, 2021**

**Second Update October 1, 2021**

**Third Update April 1, 2022**

**Fourth Update October 1, 2022**

**Fifth Update April 1, 2023**

**Final Report between project end (June 30) and August 15, 2023**

#### **IV. DISSEMINATION:**

**Description:** All reports will be integrated into a final project report. This final report will document the impact of the program and feature outputs (number of trees planted, number of municipal inventories completed, etc.). The final report will be shared with the LCCMR as well as the League of Minnesota Cities, Association of Minnesota Counties, and Minnesota's urban forestry professional community through the Minnesota Shade Tree Advisory Committee.

It is expected that the project manager will have ongoing opportunities (examples: presenting at a conference, representing the project at meetings of state and/or city government) before, during and after the ENRTF funding period to share information about the project with city officials, forestry professionals and others who are interested in urban and community forestry.

To effectively disseminate results of this project, the MNDNR partnerships with other agencies and local government units will be leveraged for maximum return on investment. The final datasets will be delivered via the web portal that Resource Assessment will develop as well as by means of integrating its use into platforms supported by other programs.

This project will also be featured on the DNR website with the required acknowledgment of ENRTF funding as an important community assistance program.

The Minnesota Environment and Natural Resources Trust Fund (ENRTF) will be acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the [ENRTF Acknowledgement Guidelines](#).

**First Update April 1, 2021**

**Second Update October 1, 2021**

**Third Update April 1, 2022**

**Fourth Update October 1, 2022**

**Fifth Update April 1, 2023**

**Final Report between project end (June 30) and August 15, 2023**

## **V. ADDITIONAL BUDGET INFORMATION:**

### **A. Personnel and Capital Expenditures**

#### **Explanation of Capital Expenditures Greater Than \$5,000:**

**Explanation of Use of Classified Staff:** Classified staff salary will be paid out of Department of Natural Resources, Division of Forestry, Cooperative Forest Management funding following the finalization of this projects funding.

#### **Total Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation:**

Enter Total Estimated Personnel Hours for entire duration of project:	Divide total personnel hours by 2,080 hours in 1 yr = TOTAL FTE: 0.91
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#### **Total Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation:**

Enter Total Estimated Contract Personnel Hours for entire duration of project:	Divide total contract hours by 2,080 hours in 1 yr = TOTAL FTE: 2.73
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## **VI. PROJECT PARTNERS:**

### **A. Partners outside of project manager's organization receiving ENRTF funding**

Name	Title	Affiliation	Role
Jennifer Corcoran	Consultant	MNDNR Forestry	Web tool development
Mark Abrahamson	Division Director	MDA	Provide technical assistance to communities to identify management needs and provide monitoring and management workshops
Gary Johnson, Brian Aukema, Joe Knight	Extension & Associate Professors	UMN Forestry, Entomology, Remote Sensing Lab	Train volunteers in EAB and ash management, conduct community forestry activities, data collection, mapping and canopy analysis
Karen Zumach	Director of Forestry	Tree Trust	Event planning, coordination, and citizen engagement in community tree planting

Name	Title	Affiliation	Role
Nick Cox	Program Manager	Conservation Corps of MN & Iowa	On-the-ground community assistance for tree planting and maintenance

B. Partners outside of project manager's organization NOT receiving ENRTF funding

## **VII. 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.

## **VIII. REPORTING REQUIREMENTS:**

- Project status update reports will be submitted April 1 and October 1 each year of the project
- A final report and associated products will be submitted between June 30 and August 15, 2023

## **IX. SEE ADDITIONAL WORK PLAN COMPONENTS:**

**A. Budget Spreadsheet**

**B. Visual Component or Map**

**C. Parcel List Spreadsheet – N/A**

**D. Acquisition, Easements, and Restoration Requirements – N/A**

**E. Research Addendum – N/A**

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

Legal Citation:

Project Manager: Valerie McClannahan

Project Title: Protect Community Forests by Managing Ash for EAB

Organization: Minnesota Department of Natural Resources

Project Budget: \$3,500,000

Project Length and Completion Date: 3 years; June 30, 2023

Today's Date: April 15, 2019



ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET		Budget	Amount Spent	Balance
<b>BUDGET ITEM</b>				
<b>Personnel (Wages and Benefits)</b>		\$ 253,715	\$ -	\$ 253,715
Department of Natural Resources Project Administrator of Unclassified staff in Forestry Division for grant administration, contract management, education, and outreach campaign, \$182,758 (67% salary, 33% fringe) 0.66 FTE for 3 years.				
Department of Natural Resources Cooperative Forest Management Foresters statewide for completing grant compliance checks, \$70,957 (67% salary, 33% fringe) 0.25 FTE for 3 years.				
<b>Professional/Technical/Service Contracts</b>				
		\$ 3,219,000	\$ -	\$ 3,219,000
Grants to municipalities or other entities (Request for Proposals, \$2.4 million) for management of EAB infestations.				
Department of Natural Resources, Resource Assessment (Single Source, \$206,250) 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, \$123,750) - MDA will hire an unclassified Scientist (0.75 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, \$181,500) mapping and canopy analysis.				
The University of Minnesota, Department of Forest Resources (Single Source, \$105,000) – Community forestry outreach, and citizen engagement and training.				
The University of Minnesota, Department of Entomology (Single Source, \$120,000) – Data collection and analysis.				
Tree Trust (Single Source, \$48,750) – Community engagement tree planting education and volunteer events.				
Conservation Corps of Minnesota and Iowa (Single Source, \$33,750) – Operationalizing work plan activities.				
<b>Equipment/Tools/Supplies</b>				
		\$ -	\$ -	\$ -
<b>Capital Expenditures Over \$5,000</b>				
		\$ -	\$ -	\$ -
<b>Fee Title Acquisition</b>				
		\$ -	\$ -	\$ -
<b>Easement Acquisition</b>				
		\$ -	\$ -	\$ -
<b>Professional Services for Acquisition</b>				
		\$ -	\$ -	\$ -
<b>Printing</b>				
Printing costs for emerald ash borer education and outreach.		\$ 3,750	\$ -	\$ 3,750
<b>Travel expenses in Minnesota</b>				
DNR Travel for education and outreach: Vehicle and lodging for 25 work days.		\$ 3,000	\$ -	\$ 3,000
<b>Other</b>				
*Direct and Necessary expenses: HR Support (~\$4,184), Safety Support (~\$757), Financial Support (~\$3,116), Communication Support (~\$1,388), IT Support (~\$9,952), and Planning Support (~\$1,138) necessary to accomplish funded programs/projects.		\$ 20,535	\$ -	\$ 20,535
<b>COLUMN TOTAL</b>		\$ 3,500,000	\$ -	\$ 3,500,000
<b>SOURCE AND USE OF OTHER FUNDS CONTRIBUTED TO THE PROJECT</b>	<b>Status (secured or pending)</b>	<b>Budget</b>	<b>Spent</b>	<b>Balance</b>
<b>Non-State:</b>		\$ -	\$ -	\$ -
<b>State:</b>		\$ -	\$ -	\$ -
<b>In kind:</b>		\$ -	\$ -	\$ -
<b>Other ENRTF APPROPRIATIONS AWARDED IN THE LAST SIX YEARS</b>	<b>Amount legally obligated but not yet spent</b>	<b>Budget</b>	<b>Spent</b>	<b>Balance</b>
		\$ -	\$ -	\$ -

# 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