**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**

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| **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 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* |

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| **Activity 2 Title:** *Community canopy assessment: mapping and tracking change, diversity, economic, & environmental impacts* | **ENRTF BUDGET: $611,293** |
| **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.  |  |

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| **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 statewide and grant projects: energy conservation, air quality, CO2 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 2021* |

**III. PROJECT PARTNERS AND COLLABORATORS:**

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| Name | Title | Affiliation | Role |
| Gary Michael, Jennifer Corcoran, & Unclassified Staff  | Supervisor, Consultant, & Unclassified  | MNDNR Forestry | Provide grant administration, staff supervision, , compliance checks, reporting, communications, and web tool development  |
| Mark Abrahamson | Division Director | MDA | Provide technical assistance to communities to idenifity 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 |
| Nick Cox | Program Manager | Conservation Corps of MN & Iowa | On-the-ground community assitance for tree 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.