

# Shoreview Emerald Ash Borer Management Plan

## PURPOSE

By implementing the provisions of this management plan, the City is attempting to mitigate the disruption to its urban forest caused by the infestation of the Emerald Ash Borer (EAB). Taking a proactive approach to the potential infestation enables the City to address both public and private impacts in an efficient and effective manner.

The City will attempt to distribute costs associated with the EAB over a manageable time period, and lessen the economic and social impact that an extensive loss of ash trees would have on the quality of life in our community.

In establishing this management plan, the City considered the following factors:

- EAB was discovered in St. Paul and Falcon Heights in 2009, and Shoreview in summer of 2011.
- Being proactive will allow the City to have greater control over the situation and minimize and better manage the impact and costs of EAB.
- Removal of diseased or declining ash trees will help prevent the more rapid spread and impacts of EAB in the community.
- There are optional chemical treatments available for both public and private ash trees which may assist in controlling the EAB over time.
- Reforesting the City with native tree species will increase the diversity and sustainability of the forest.

## EMERALD ASH BORER BACKGROUND: THE PROBLEM

*Agrilus planipennis*, commonly known as an emerald ash borer (EAB) has a natural range of eastern Russia, northern China, Japan and Korea. In the past decade, the exotic beetle found its way to the United States.

The EAB is a bright green, metallic beetle with an elongated, slender body measuring 1/2 inch long. The adult beetles nibble on ash foliage, but cause little damage to leaves. Trees become infested when adult beetles lay eggs on the bark, which hatch into larvae that bore into the tree. The larvae tunnel in the phloem layer (between bark and wood) and disrupt the movement of water and nutrients, causing eventual death of the tree.

The EAB was first discovered in Michigan in July 2002. It is suspected that the EAB arrived on solid wood packing material shipped from its native Asia. Without any natural predators or controls in North America the insect has spread to 14 states and two Canadian provinces. Millions of ash trees have been killed with some cities reporting complete loss of all ash trees within 5 years of the EAB becoming established. There has been no stopping the devastation to the urban forest, though millions of dollars have been spent on prevention methods. The most current research shows that early sanitation efforts in Minnesota have helped slow the spread of EAB, but new infestation sites are being reported every growing season.

Emerald Ash Borer adults can fly at least half mile from the tree when they emerge. However, new infestations are most often created when people transport infested nursery ash trees, logs or firewood into uninfested areas. Shipments of ash trees and transportation of firewood has been regulated by the state to reduce the spread of EAB. Ramsey County is a designated as quarantine area, and transportation of ash wood outside of the County is prohibited. The Minnesota Department of Agriculture is responsible for quarantine enforcement and penalties.

Signs of EAB include:

- Splitting bark and or small “D” shaped exit holes where beetles emerge.
- Serpentine “S” shaped larval galleries underneath the bark.
- The presence of EAB or larvae.

Symptoms of EAB infestation include:

- General thinning of canopy and increasing dieback of the ash tree.
- Increased woodpecker activity.
- Sprouting of new growth shoots from the base of the tree.

## **APPLICABILITY**

This plan applies throughout the City on all public properties and public right of ways. Elements of the plan will also be applied to ash trees on private properties. The City will follow similar policies that have been used in dealing with the Dutch Elm and Oak Wilt diseases, with variations in removal requirements and timing. Municipal Code Section 209.050 Shade Tree Management details specific EAB sanitation requirements.

## **EDUCATION AND COMMUNITY OUTREACH**

Resident education and ongoing outreach communication are key components of managing the impact of the EAB, especially as more information becomes available. Continued coordinated public information dissemination to residents and the media will be administered through the City’s website, newsletters, and social media. Public meetings will be conducted as necessary. The City will maintain a list of resources for homeowners from relevant agencies; see Appendix A for current community resources.

As EAB activities occurs in isolated neighborhoods, direct communication will be made by the City to advise residents on the current situation of their boulevard or privately owned trees and activity in their neighborhood.

Homeowners may treat their private trees, provided they use a licensed treatment contractor who adheres to the City’s standards to protect surface and ground water.

## **CURRENT EAB SITUATION**

The EAB was discovered within the City in the summer of 2011 in the Shamrock Park area. Analysis of the infestation showed that the EAB had been present for 3-4 years, which is consistent with the insect’s path of destruction. Symptoms are slow to appear and once EAB is actually found, it is estimated that it has already been present for 3-5 years. It is estimated that

more than 10 percent of Shoreview's urban forest is comprised of ash trees based on recent Minnesota Department of Natural Resources survey.<sup>1</sup>

## MITIGATION POLICIES

Although it is impossible to stop the spread of invasive species like the EAB, the City of Shoreview's EAB Management Plan is created to lessen the impact of the EAB on the City's landscape. The City's mitigation of EAB will be similar to its policy and intent of Dutch Elm and Oak Wilt diseases, which attempt to control and prevent the spread of these diseases.

In an effort to mitigate EAB, the City will take the following actions:

1. **Removal of EAB infested trees:** The City will update its diseased tree ordinance to require the removal of both public and private ash trees infested by the EAB to prevent the spread of the disease. Rules or requirements used for determining infestation will be per the Department of Agriculture or Department of Natural Resources guidelines. This ordinance will allow the City to enter private property for inspection, order the removal of diseased trees, and abate the nuisance upon non-compliance of property owners.
2. **Preemptive removal of declining ash trees:** The City will begin some preemptive removal of declining ash trees on public property, even when EAB has not yet been identified. These ash trees could be located within City parks or in boulevard areas. The reasons for this ash reduction include:
  - a. Removing declining trees before they are infested with EAB;
  - b. Allowing for reforestation with other species of trees; and
  - c. Spreading the cost of tree removal over a longer period of time.

These tree removals will generally be completed by City crews or contractors in late fall and winter months as time and work schedules permit. The most critical period for movement of confirmed EAB ash trees is June and July. This is the period when adult beetles emerge from trees, begin feeding on foliage, and move to more trees to lay their eggs. During this time it is best to leave these trees standing and not chance the spread of EAB by transporting beetle-infested wood to other areas.

3. **Chemical treatment option:** There are currently two methods of tree treatments being offered in the marketplace; drenching the soil with chemicals and injecting the chemical into the tree. The City strongly discourages the use of soil drench insecticides applied by the homeowner due to potential to pollute water and negatively impact wildlife.

The City maintains guidelines for treatment of ash trees to help control the onset of EAB and considers trunk injections a management tool to utilize on significant trees

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<sup>1</sup> Minnesota Department of Natural Resources 2010 Community Tree Survey. Survey of front yard and street trees in residential and commercial sampling areas. Ash trees represented 10.5% of the top ten tree genera for the City of Shoreview.

within public parks and along higher profile public right of ways, higher volume roads, and Municipal State Aid collector streets. Due to the high cost of reoccurring treatments and the long-term effects of chemical treatments on ash trees, water resources, and the environment, the City shall identify the best candidates for treatment.

The City will permit residents to use chemical treatments on either private ash trees or public ash trees in boulevard areas, given the following:

- a. Private contractors are to use **only** the approved trunk injection method.
  - b. The injection treatment application must be done by City licensed tree contractor that is bonded, insured, and state licensed to apply commercial tree chemicals.
  - c. The boulevard tree treatments need to be reported annually to the Environmental Officer for tracking.
4. **Reforestation:** In an effort to encourage reforestation of private properties, the City will reinstitute its annual tree sale program in 2013 that allows residents to purchase trees at wholesale prices. The program will offer a variety of tree species that are appropriate for this region, and the City will promote diversity in all public and private plantings.

The City will promote Ramsey County's Friends of the Parks annual tree sale, and identify resources for reforestation on public property as appropriate.

5. **Wood utilization:** The City will publicize the Minnesota Department of Agriculture's regulations for handling ash wood removal. Ramsey County is currently under a quarantine which prohibits the transportation of wood outside of the County. From September 15<sup>th</sup> to April 30<sup>th</sup> EAB-infested trees can be removed and transported only within the quarantine area, so long as they are promptly chipped to the required dimensions, less than 1"x1"x1".

Any storm damaged ash trees during the active growth spring and summer period must be chipped within the area before transportation to kill the EAB larvae. The City will identify marshalling yards for this work as necessary.

Non-infested EAB trees can be removed from September 15<sup>th</sup> to April 30<sup>th</sup> using the normal process of transporting un-chipped wood to the Ramsey County Yard Waste Site.

6. **Monitoring and Tracking:** The City will track the spread of EAB in Shoreview and surrounding communities in conjunction with the Department of Agriculture or Department of Natural Resources. The City will also monitor trees that have been treated as reported by private contractors. The City will conduct a tree inventory to identify replacement and reforestation needs in the future.

**SUMMARY**

EAB will have a significant impact on Shoreview's landscape. The City's plan is designed to inform the public of new infestations, treatment options, removal requirements, and to provide a comprehensive proactive approach to addressing the EAB infestation.

## ***Appendix A: Resources***

The following is a list of resources for residents to review to learn about Emerald Ash Borer symptoms, firewood requirements, and insecticide options. The City will update this list as more information becomes available.

[City of Shoreview Licensed Tree Contractors](#)

[Pest Alert-Emerald Ash Borer \(PDF\)](#)

[Do I Have EAB? \(PDF: 245 KB / 1 page\)](#)

[Ash Tree Identification \(PDF: 7.95 MB / 2 pages\)](#)

[Signs and Symptoms of EAB \(PDF\)](#)

[Map of EAB in USA \(PDF\)](#)

[Minnesota Department of Agriculture EAB Quarantine](#)

[Firewood Restrictions & Safe Handling Guidelines](#)

[Homeowner Guide to Insecticide Selection, Use and Environmental Protection](#)

[Ash Tree Waste Disposal Sites within Hennepin-Ramsey-Houston County](#)

Much of this information is available on the MN Department of Agriculture website:  
<http://www.mda.state.mn.us/plants/pestmanagement/eab/eabmanual.aspx>