



CITY OF CHANHASSEN

Emerald Ash Borer Management Plan

Purpose

The purpose of this management plan is to address and plan for the presence of Emerald Ash Borer (EAB) in Chanhassen. The goal of this plan is to manage the effects of EAB through education, inspection and best management practices. By defining and determining management strategies now, the city strives to be in an informed and prepared community when EAB is confirmed within our borders.

Applicability

This plan is applicable to all public land in Chanhassen and all private properties where EAB may negatively impact public areas or generally threaten the overall health of Chanhassen's urban forest.

Administration

Chanhassen's Environmental Resource Specialist will be responsible for implementing this program with support from the Parks and Recreation and Streets Departments.

EAB Background

EAB was discovered in 2002 in Detroit, Michigan. It is a non-native beetle that causes widespread decline and death of all species of ash trees. The larval stage of EAB feeds on the tissue between the bark and the sapwood, disrupting the transport of nutrients and water in the trees. When larval populations are high, the damage is severe enough to kill the tree. EAB has killed millions of ash trees in the Eastern and Central U.S.

EAB was confirmed in St. Paul in 2009. Since that time it has been found in 11 Minnesota counties, including neighboring counties Hennepin and Scott.

EAB Management Strategies

The city will employ SLAM (Slow Ash Mortality) as an approach to EAB that focuses on slowing ash tree mortality through integrated management strategies. It involves a combination of monitoring for EAB, preemptive removal of ash trees, insecticide treatment, and biological

control. Slowing the spread of EAB and slowing ash tree mortality enables the city to extend management costs over a longer time period.

EAB Management: Tree Inventory

Chanhassen has completed a public tree inventory that includes open grown trees within street right-of ways and manicured park areas. Current inventory data shows that Chanhassen parks have 2,819 trees, 542 of which are ash (20%). A street inventory shows 668 ash were recorded in the public right-of-way. Of the 3,719 street trees, 18% of them were ash. The tree inventory provides data that enables the city to understand the potential financial, aesthetic, and ecological impacts of EAB in Chanhassen.

EAB Management: Inspection, Detection, and Monitoring

The goal of detection is to find infestations as early as possible. Once an infestation center is found, staff will need to determine the duration and outer boundaries of the infestation. Staff involved in detection:

1. **Environmental Resource Specialist (ERS).** This position is point-person for EAB management, including inspection, detection, and monitoring.
2. **City Staff.** City staff will be key players in detecting EAB. Parks and Streets staff have attended general forestry training sessions as well as specific education on EAB. All public works staff has been given an overview of the pest along with signs and symptoms. They have been directed to notify the ERS of any suspicious-looking trees.
3. **Residents.** If Chanhassen residents have a tree with suspected EAB, they are encouraged to review EAB information online and/or call the city. The ERS responds to all calls and does an inspection if EAB can't be ruled out during the phone conversation.
4. **Arrest-the-Pest Hotline.** The state maintains an Arrest-the-Pest hotline. Citizens can call the hotline to report a suspected incidence of EAB.
5. **Minnesota Forest Pest First Detector Network.** The first detector network is the state's early warning system for invasive tree pests. First detectors can help verify the presence of EAB.
6. **Minnesota Tree Care Advisors.** The tree care advisor (TCA) program is a network of trained, community-based volunteers who promote urban and community forestry to all residents of Minnesota. This program is run by the University of Minnesota's Department of Forestry.

EAB Management: Tree Removal

When ash trees die or decline they become hazards near boulevards, buildings, and play areas. Most dead trees and all hazard trees will need to be removed. But strategic removal of trees before they die, whether they are infested or not, will also be a part of the city's EAB management strategy. Strategic removals help spread out removal and replanting costs and may help slow the spread of EAB.

When EAB is confirmed in Chanhassen, ash tree removals will only be done during the insect's dormant period, October 1- May 1. During the active period, May 2- September 30, removals of ash branches, trees or stumps will be avoided.

The city will use four removal strategies:

1. ***Remove trees preemptively based on health.*** The selective removal of public ash trees will be based on health condition. Ash trees that would be considered for removal include:
 - a. Unhealthy trees—inventoried trees that have a condition rating of poor. Trees with a rating of fair will also be removed if they have any additional detrimental quality.
 - b. Trees that are unsafe due to poor health or structure and are located where they are likely to damage people and/or property (hazard trees).
 - c. Trees that are in conflict with utilities.
 - d. Trees that are poorly located and/or require excessive maintenance.

If several trees will be removed preemptively from a park or a neighborhood, the full site impacts should be considered prior to removal.

2. ***Remove trees preemptively in an area.*** Preemptive removal by area may be appropriate in situations such as:
 - a. When a large population of ash trees is near an existing infestation and there are a significant number of trees in poor condition.
 - b. In conjunction with a public works project if the health of ash trees on a street would be negatively impacted by the project and make them more susceptible to EAB.
 - c. In conjunction with adjacent cities or regional strategies to manage EAB.
3. ***Remove trees that are infested.*** When an infested tree is identified, surrounding trees will be surveyed to determine the extent of infestation and the number of trees that will need to be removed. The city will consult with the MDA when infestations are initially identified. Removal of ash trees, branches and stumps will be avoided May 2 – September 30. If removal is necessary due to a hazardous condition then the outer 1” of bark/wood should be chipped on-site and the remaining wood transported to the nearest facility that can quickly process the material. If chipping is not possible, then the wood must be transported and stored in a completely enclosed vehicle until it can be processed quickly.
4. ***Remove trees that die.*** Some trees may not be detected early in the infestation process so they will be removed when they die. On boulevards and in landscaped area of parks, all dead ash trees will be removed. In natural areas, it is not feasible to remove all dead ash trees and deadfall should be addressed on a site-by-site basis. On private sites, owners should remove dead trees that are hazardous to people or structures.

A priority removal list will be developed and revised regularly. In targeting trees for removal, the following will also be considered:

1. Proximity of ash tree removals to current infestation centers and their anticipated spread.
2. The number of trees in poor condition that are located near each other.

3. Spreading out removal costs over several years.

EAB Management: Insecticide Treatment

Insecticides treatments are effective against EAB by killing dispersing adults as well as eggs and larvae. High-value ash trees can be preserved with consistent treatments over time. If public trees are treated, the only method of application will be trunk injections. No neonicotinoids will be approved for use on public trees.

The city shall encourage property owners to carefully evaluate environmental impacts before using pesticides to treat EAB on private property. Owners that decide to use EAB pesticides are urged to use trunk injection rather than soil drenching, which will help reduce pesticide drift, reduce impacts to groundwater and surface water and protect non-target species.

Once the city is heavily infested, it will face an intense 3 - 6 year removal interval in order to limit liability related to dead and dying ash. The city has elected to treat a portion of the ash inventory in order to defer removal and thereby limit an otherwise crippling budget impact. In some situations, treatment for the remaining service life of the tree will cost no more than the cost of up-front removals. By employing this method, the budget impact is spread over 25 - 40 years and removals occur as trees age out in the normal course of events. It is recommended that resident property owners be allowed the option to pay for treatment of the city-owned ash trees or private ash trees at a reduced market rate negotiated by the city contract.

The costs of treatment for park trees will be borne solely by the city. The decision of which trees to treat will also be solely at the discretion of the city. In the case of boulevard trees, treatments will be recommended to the neighboring property owner. This approach allows for the retention of mature trees in neighborhoods and staggers the workload of the streets department as well as the budget for removal work.

EAB Management: Biological Control

The city will coordinate with the MDA for release of these biocontrol agents in Chanhasen, if applicable.

EAB Management: Wood Disposal and Utilization

The city will continue to look for ways to dispose of or utilize ash wood. Information continues to be published on potential markets for urban wood utilization. Possible uses for ash wood include fuel (biomass energy chips), mulch, pulpwood, and saw logs. The city will identify local options for disposal and wood utilization. In addition, the city will seek partnerships with nearby cities for disposal and utilization.

EAB Management: Replanting

Whenever possible and appropriate, it is recommended that at least one tree be planted for every tree removed or lost to EAB. Increased diversity is a key element in the replanting program. The city will be following the 10-20-30 rule: plant no more than 10% of any species, 20% of any genus, and 30% of any family. Chanhasen's Tree Coupon program provides a subsidy for

residents to plant trees on private land. It is recommended that the city continue funding this program.

EAB Management: Education and Outreach

Education and outreach are essential components of the EAB Management Plan. The city shall develop an EAB education and outreach program that:

1. Educates residents so they understand the threats of EAB, know what to look for, know what to do when they find EAB or a declining ash tree, understand replanting and care of trees, and can make informed decisions for ash trees on their property.
2. Educates parks and public works staff so they can recognize signs and symptoms of EAB infestation.
3. Uses diverse forums for education including: public programs, website, articles in city publications, handouts, public service announcements, etc.
4. Provides advance notification to a neighborhood or homeowner that ash tree management will occur in their area.
5. Provides educational and other support to residents that wish to form neighborhood groups to detect and manage EAB in their neighborhood.
6. Develops partnership with groups such as Tree Care Advisors.

EAB Management: Ordinance and Policy

City code will be reviewed and revised to account for EAB. The following sections of code in particular may need revision:

1. **Section 13-29. Declaration of policy.** The section identifies Dutch elm disease and oak wilt as being targets for the shade tree disease program. It would be recommended to add Emerald ash borer as a targeted pest for control.
2. **Section 13-30. Nuisances declared.** This section covers the city's declaration of nuisance trees as being those with Dutch elm disease and oak wilt. It lists the conditions in which a tree is declared a nuisance. This ordinance should be revised to include any ash tree with emerald ash borer.
3. **Sec. 13-33. Article IV. Tree disease inspection program.** It allows the city to control and eliminate Dutch elm disease fungus and elm bark beetles, oak wilt and "other epidemic diseases of shade trees." It states that the city may enter properties to inspect for epidemic tree diseases. Property owners are required to abate trees that are declared a nuisance. This ordinance should be revised to include emerald ash borer as a tree pest. In addition, guidelines should be developed to identify appropriate abatement actions. For example, in the early stages of EAB infestation in Chanhassen, the city may need to require that homeowners remove infested ash to help slow the spread. But, once EAB is widespread in the city, it may become impractical to require removal of all infested trees.

4. **Section 13-35. Procedures for removal.** Proper timing of the removal of ash trees is important in order to limit the spread of the beetle. Unless an infested ash poses an imminent safety threat, infested ash should only be removed during the winter. Additionally, if chipped, the wood needs to be a specific dimension in order to inhibit harboring any live beetles.

EAB Management: Licensing/permitting

As part of EAB management, the city will establish requirements for tree contractors licensed in the city and determine what licensing or permitting is necessary. At a minimum, permits will be required for any chemical treatment of ash trees in the street right-of-way.