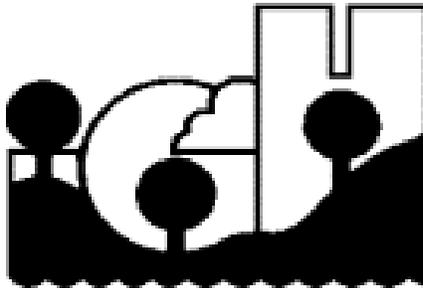
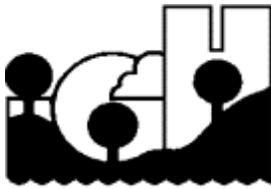


Emerald Ash Borer Management Plan

City of Inver Grove Heights

June 2010





City of Inver Grove Heights Emerald Ash Borer Management Plan

Purpose:

The City will take a proactive approach and spread the physical and fiscal costs associated with the outbreak of Emerald Ash Borer over a 10-year timeframe. The loss of ash trees in Inver Grove Heights will have a devastating effect on home values, quality of life and the environment. Our goal is to buffer that impact in advance by implementing current best arboricultural management activities.

Introduction:

The Emerald Ash Borer (EAB) is a non-native insect that was introduced to North America from Asia. It was discovered in the Detroit, Michigan / Windsor, Ontario area in 2002 and probably arrived in wood packing materials on cargo ships or airplanes. Despite eradication and suppression efforts, EAB has killed over 20 million Ash trees in Michigan, Ohio, Indiana, Illinois, Maryland and Ontario. EAB is a beetle that is smaller than a dime. The adult does very little damage. However, this is not the case with the larvae (immature stage) that feed on the inner bark of Ash trees. This feeding disrupts the tree's ability to transport water and nutrients. Larval feeding takes place over a period of years and eventually kills the infested tree. All species of Ash are susceptible. Because EAB is hard to detect, it can be present for years before an infestation is confirmed. There are currently no known control measures for EAB. This means that it has the potential of killing all of Ash trees throughout the United States and Canada. In Inver Grove Heights there are ash trees which compose the urban tree canopy within the park system, Inver Wood Golf Course, and other public property. There are Ash trees located within the right-of-way (ROW) growing as boulevard trees. There are also a large amount of Ash trees found on public natural areas and private property. It is possible that despite state and federal quarantines of infested regions, EAB may already be established in Inver Grove Heights.

Economic Impact:

Removing and reforesting Ash trees will be a tremendous physical and financial challenge for the City and private property owners. Utilizing a simple formula for removals, stumping and replanting a cost estimate can be determined. For example, consider an average removal cost of \$200, (disposal, stump removal, and restoration) and an average replanting cost of \$200. At these rates, the economic impact of losing 1,113 trees would be about \$329,000.

At this time there are no known federal or state grant programs available to help assist the City in the removal and reforestation activities that will be necessary to combat this infestation.

Inform the Public:

In addition to utilizing TV & newspaper media relations, there are other means whereby the City can disseminate information about EAB. The most accessible are those that the City has direct control over. These include: "*Insights*", our newsletter, our web site, direct mail and cable TV.

The City of Inver Grove Heights must prepare and manage for the arrival of EAB on three fronts:

- Public property (i.e. parks, golf course, City Hall, Fire Stations, Water Treatment Plant etc.)
- Boulevard street trees within the right-of-way
- Private property trees

*City of Inver Grove Heights
Ash Tree Inventory
May 2010*

	Good		Fair		Poor		Total
	Tree Count	Percentage	Tree Count	Percentage	Tree Count	Percentage	
Park (mowed area)	368	41%	33	20%	11	24%	412
Inver Wood Golf Course	39	4%	2	1%	0	-	41
City Facilities	61	7%	17	11%	1	2%	79
Right-of-way (public)	439	48%	109	68%	33	74	581
Private property	-	-	-	-	-	-	Unknown
Total	907		161		45		1,113

The current evidence from Michigan and Ohio show that once EAB becomes established – it takes about five to ten years to infest and kill the majority of the ash trees in a city.

Public Property Trees:

1. The City will not plant any new ash trees on public property.
2. The City shall begin to remove any poor quality trees or trees in fair condition with major defects.
3. The City will continue to cooperate with the Minnesota Department of Agriculture and Minnesota Department of Natural Resources to establish EAB detection trees as needed on city property.
4. Ash trees in wooded areas will be left alone – unless by a bike path or structure and may cause harm if it falls. If it is an early EAB infestation we will be removing infested trees as needed to slow the spread to the community.
5. In mowed areas ash trees will be replaced.

Right-of-Way Trees:

1. The City will begin a policy of excluding any new ash trees on public right-of-way – with the recommendation that citizens and businesses discontinue the use of ash in new plantings.
2. The City will remove any boulevard ash tree at citizen request. Based on current City Ordinance (7-1-4), a new tree cannot be placed in the right-of-way.
3. The City will permit residents to chemically treat an ash tree in the public ROW under the conditions of hiring a licensed tree service that is bonded and insured, and that is a State of Minnesota Licensed Commercial Pesticide Applicator using state approved trunk injection pesticides only. By using trunk injections hopefully this reduces pesticide exposure to others and the environment overall. (Note: Chemical treatment would not preclude future removal of said ash tree if deemed necessary.)
4. The City will hire a contractor to begin to remove 10% of ash trees each year beginning with poor and fair quality trees. The removal shall include the complete removal of the tree, stump and ground restoration. All costs will be borne by the City of Inver Grove Heights.
5. Trees removed from the ROW will not be replaced.

Trees on Private Property:

1. There are many thousands of ash trees, large and small, on private property in Inver Grove Heights. No reliable inventory exists, and ash densities vary by neighborhood.
2. Property owners are urged to monitor for the EAB.
3. City of Inver Grove Heights Ordinance, Chapter 8 Diseased Trees, will be updated to reflect the Emerald Ash Borer threat. The same parameters concerning Dutch Elm Disease and Oak wilt are appropriate measures to slow the spread of EAB.
4. It would be prudent for residents to establish a relationship with an ISA Certified Arborist now in the event that ash evaluation or removal is desired. When residents call the City with questions they will be encouraged to consult with a ISA Certified Arborist that is insured and bonded. City staff will not inspect trees on private property.
5. The City also encourages residents to replace trees lost with species appropriate for the site, or to plant new trees in advance of EAB infestation and ash removal as a way of tree canopy cover and lessening the large economic and environmental impact of the Emerald Ash Borer.
6. The City will not treat or dispose of any trees found on private property.

Ordinances and Policies:

The City has Ordinances and policies that affect and outline what actions the City can take to manage diseased trees. Ordinance revisions will be recommended to the City Council as appropriate to address the infestation of EAB.

Title 5 Chapter 8

The diseased tree ordinance will be updated as necessary to include EAB.

Title 7 Chapter 1

Under current City Ordinance, trees are not permitted within 5' of the public ROW.

Development Plan Approval Process

Future approvals of development/redevelopment will include a condition stating that no ash trees shall be allowed as a condition of approval.

Structured Removal Plan:

The City will adopt a proactive “Structured Removal Plan” of ash trees, including those in decline, and that meets a set percentage of ash in anticipation of the larger loss of the entire ash population. The intent is to hopefully slow the spread of EAB by reducing host trees, thus, spreading out management costs over several years by avoiding a “spike” in diseased and dangerous trees.

Disposal:

The probable loss of thousands of ash trees creates several challenges for the City in regards to public trees as well as residents and commercial tree services dealing with private property trees.

In the early stages of infestation, care to slow down the spread of EAB is paramount not only for Inver Grove Heights, but to other communities and the state.

The most critical period for movement of confirmed EAB ash trees is the months of May - July. This is the period where adult beetles emerge from trees, begin feeding on foliage, move to even more trees, and lay their eggs. During this period, it is best to leave these trees standing and not chance the possible spread of EAB by transporting beetle infested wood to other areas. After this period, from about August 1st to April 30th each year, EAB trees can be removed and transported so long as they are promptly chipped to the required dimensions, less than 1"x1"x1" in any one dimension, effectively killing any EAB larvae.

The City will explore emergency marshalling yard(s)—suitable for on-site tub grinding--within areas of EAB confirmed trees that need to be removed in response to an emergency, such as clean up of a wind storm during the months when beetles are active. These yard(s) would be used to process all wood in the area, including public, and private from property owners and commercial tree services.

Reforestation:

The future expected loss of ROW, public and open space ash trees will require a massive reforestation effort. The benefits trees provide is broadly understood and includes cleaning our air, cooling our atmosphere, saving energy through shade and wind breaks, and making our city safer and more pleasant. Re-planting lost trees may be the most important part of the management plan because it will keep Inver Grove Heights a livable city for future generations.

One strategy to increase the number of new trees planted is to choose less expensive 1 ½ to 1 ¾ inch, bare root stock. This is becoming common practice in many communities. The loss of ash trees due to EAB will require an infusion of tree planting money.

Links to Websites with EAB Information:

- [Minnesota Department of Agriculture](#)
- [University of Minnesota Department of Forest Resources](#)
- [Emerald Ash Borer Web site](#)

Projected Budget Cost (Public):

*City of Inver Grove Heights
Ash Tree Management
Estimated Costs
May 2010*

	Trees	Removal @ \$200/tree	Replacement @ \$200/tree	Total
Park (mowed area)	412	\$82,400	\$82,400	\$164,800
Inver Wood Golf Course	41	\$8,200	\$8,200	\$16,400
City Facilities	79	\$15,800	\$15,800	\$31,600
Right-of-way (public)	581	\$116,200	NA	\$116,200
Total	1,113	\$222,600	\$106,400	\$329,000