City of Lakewood

Emerald Ash Borer Management Plan

Ash Tree Treatment, Removal and Reforestation

August 1, 2013

Background:

Since the discovery of Emerald Ash Borer (EAB) in southeast Michigan in 2002 and the subsequent spread into western Ohio by 2003, several strategies are being implemented to deal with this devastating pest; in which mortality is generally 100% after infestation. By 2013 it had been found in all counties fronting the Lake Erie shoreline and was causing extensive mortality of municipal ash trees throughout Cuyahoga County. As of August, 2013, the City of Lakewood has lost and removed 54 city owned ash trees to EAB and many of the remaining 343 municipal ash trees show signs of infestation, some with dead branches that need frequent pruning to remove public safety hazards from the larger trees.

Objective:

The objective of the plan is to minimize the destructive effects of EAB on the City of Lakewood urban forest. The urban tree canopy is an important asset that requires care, preservation, and maintenance the same as other public property. Retaining and maintaining the existing tree canopy maintains property values and improves the
quality of life within our urban environment.

The two primary objectives of the Emerald Ash Borer Management Plan is preservation of the City of Lakewood urban tree canopy and public safety. With the arrival of EAB into the City of Lakewood, City staff has developed an Emerald Ash Borer Management Plan that will guide the City over the next 10 years. The Plan includes:

- Monitoring and Assessment
- Treatment
- Tree Removals
- Tree Planting (Tree Canopy Replacement)
- Public Education and Communication

Three financial costs have been identified in this process: removal of existing ash trees, treating ash trees to prevent their premature death and replanting with an appropriate replacement tree.

One new tree will be planted for each ash removed regardless of the size of the ash being removed.

The purpose for developing and implementing an EAB treatment plan is to slow the removal and replacement of municipal ash trees to lessen the visual and economic impact of ash replacement while maintaining the safety of the residents

Strategy:

The City of Lakewood is taking a proactive approach to the EAB infestation. The first strategy involves the eventual removal and replacement of all the remaining City of Lakewood ash trees over a 10-year time period. It is our intention to replant all ash tree removal sites within a very narrow timeframe to establish new tree canopy replacement – often within the same week that a removal may take place. The second strategy involves insecticides injected directly into ash tree trunks to prolong the life of certain ash trees during the overall removal process to reduce the many negative environmental and social impacts associated with a wholesale removal of a significant percentage of our overall urban forest.

The City of Lakewood has inventoried its ash tree population. As of July 2013, on City of Lakewood public property, there are 343 ash trees. As EAB infestations spread, the number of ash trees needing removal will increase. To limit this loss, tree trunk insecticide injections are a viable option to prolong the life of the City's larger ash tree population and limit the negative environmental and social impacts associated with a large amount of removals at one time. A handful of Lakewood streets contain large numbers of ash trees in which we desire to treat and remove the trees over a broader time frame rather than a conduct a wholesale removal on those streets with high concentrations of ash trees.

All ash trees at or less than 6-inches Diameter at Breast Height (DBH) will be removed by May 15th, 2014 and replaced with a variety of tree species appropriate to the particular site. Also, any larger ash trees over 6-inches in diameter that are identified as rapidly declining will also be removed to eliminate any potential public safety hazards.

This approach and timeframe will help preserve the ecological services of the larger trees longer, in particular those streets that have larger ash tree populations and it front loads removal and re-planting costs so that new growth and replacement canopy is on trees the city will keep, not on trees that will be replaced.

The current City of Lakewood ash tree inventory consists of 343 trees. Of that amount, 225 ash trees have been identified as being greater than 6" estimated DBH. Those trees will receive EAB treatments and eventually be removed over a 10-year timeframe, the remaining 118 ash trees at or less than 6-inches DBH will not be treated. They will be removed and replaced with other tree species.

The initial EAB treatment year (2013) quantity will be one-half of that greater than 6" estimated DBH ash tree population - being 104 trees (Group I) with a DBH between 10" and 32" with a

total estimated DBH of 1,806 inches and may be adjusted up or down for any following treatment year(s).

The second treatment year (2014) quantity will be one-half of that greater than 6" estimated DBH ash tree population - being 121 trees (Group II) with a DBH between 8" and 10" with a total estimated DBH of 1,030 inches and may be adjusted up or down for any following treatment year(s).

The Ash tree populations designated as Group I will be treated in 2013 and again in 2016. The Ash tree populations designated as Group II will be treated in 2014 and again in 2017. Future EAB treatment cycles beyond the year 2017 will be assessed at that time.

It should be noted that while many larger trees remain alive and viable after treatment, not all branches are protected and frequent pruning to remove dead wood is required. Annual ash tree removals will increase and trees identified for EAB treatment will decrease during the 10-year city EAB Plan, but costly removal bubbles should be avoided as the plan is implemented.

Ash Trees on Private Property:

There are many ash trees on private property in the City of Lakewood. No inventory exists and ash density varies by location. **The decision to treat or remove a private tree rests with the property owner.** Residents should consider many variables when evaluating options, including tree size, location, and condition; access to the tree; potential targets should the tree fall; property value; shade, heating and cooling values; treatment techniques and costs versus replacement costs and private yard tree canopy reestablishment.

When hiring for EAB insecticide control or tree removal it is encouraged to contact a qualified ISA Certified Arborist. Contractors should be able to provide proof of liability insurance and worker's compensation coverage (visit: www.onelakewood.com for a listing of registered contractors). The City also encourages residents to replace trees lost with species appropriate for the site.

Conclusion:

Like other Ohio communities, the City of Lakewood is faced with the need to remove and replace the ash trees within their urban forest. We have initiated this proactive approach and plan to remove and replace the ash tree population before the infestation causes higher rates of mortality. In doing so, we will not suffer devastating impacts to our overall urban tree canopy and avoid negative economic consequences to our urban forestry programs.

Lakewood is deeply rooted in our horticultural history and our community's passion for environmental preservation. The City of Lakewood has been a designated a Tree City USA each year since 1976; the 2nd longest continuous streak in the State of Ohio. To ensure the continuation of this tradition, an Emerald Ash Borer Management Plan has been established to preserve one of our City's greatest assets – our urban forest.