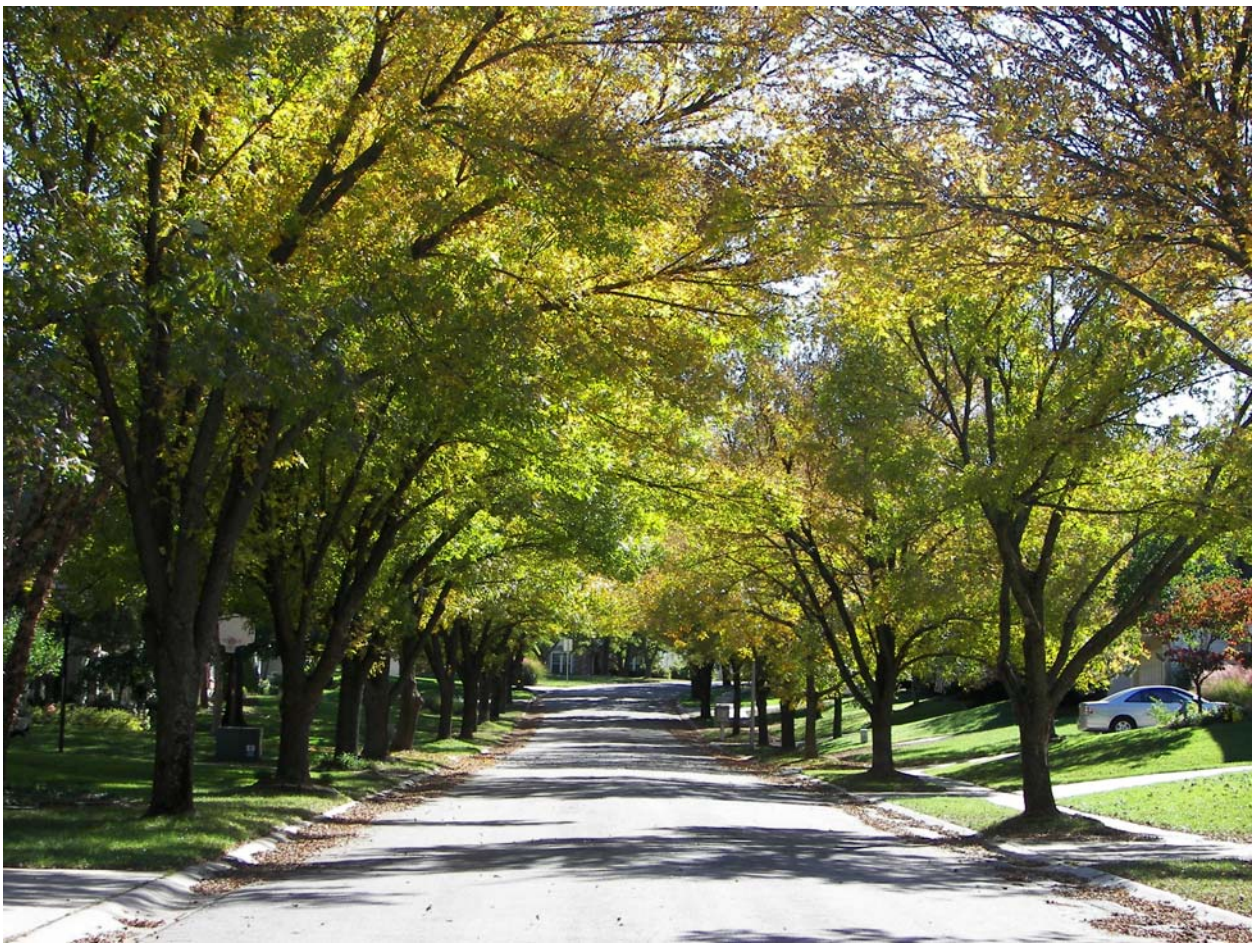
OVERLAND PARK
KANSAS
ABOVE AND BEYOND. BY DESIGN.

Emerald Ash Borer Action Plan
City of Overland Park, Kansas



Purpose

It is the intent of this action plan to guide the City of Overland Park as it prepares for the pending infestation of Emerald Ash Borer (EAB). The city is attempting to mitigate lost tree canopy by considering a proactive approach including removal replacement and in some cases treatment. This approach will allow for efficient and effective communication to address public and private needs as they develop. Loss of the ash tree population in our community will have a dramatic effects on our urban forest for generations to come.

The plan is based on the most recent information released from national and state agencies. This is a living document and will be updated as needed with new information and resources by the City Forester.

Emerald Ash Borer (EAB) History

EAB was first discovered in 2002 in the Detroit Michigan area. It is likely the non-native pest was introduced to the US through the shipment of solid wood packing crates from Asia. This beetle only feeds on our native ash population; *Fraxinus americana* and *Fraxinus pennsylvanica*. Mortality of infected trees appears to be 100%. The female beetle feeds on the leaves of the ash trees then lays her eggs on the bark. As the eggs mature, the larva bore into the trunk of the tree for the winter months. During this time the larva feeds on the vascular tissue of the tree leaving behind gallery's of damaged tissue cutting off passage of resources from the roots to the tree canopy.

Since the first find in 2002, EAB can now be found in 13 states and Canada. Much of the spread within the US can be directly related to the movement of firewood however the beetle can fly at least a 1/2 mile. The beetle was confirmed, 2012, in Wyandotte county. An additional find was confirmed the summer 2013 in northern Johnson county. The emerald ash borer is a very small metallic beetle that would easily fit on the head of a penny. The larva are about 1-1/2 inches long with bell shaped segments. The serpentine galleries left behind by the feeding larva are very distinct making tight S- shaped pattern. Exiting the tree as adults in spring, EAB creates a D-shaped hole 1/8" in size along the trunk of the tree.

Adult


'S' shaped galleries


'D' shaped emergence holes

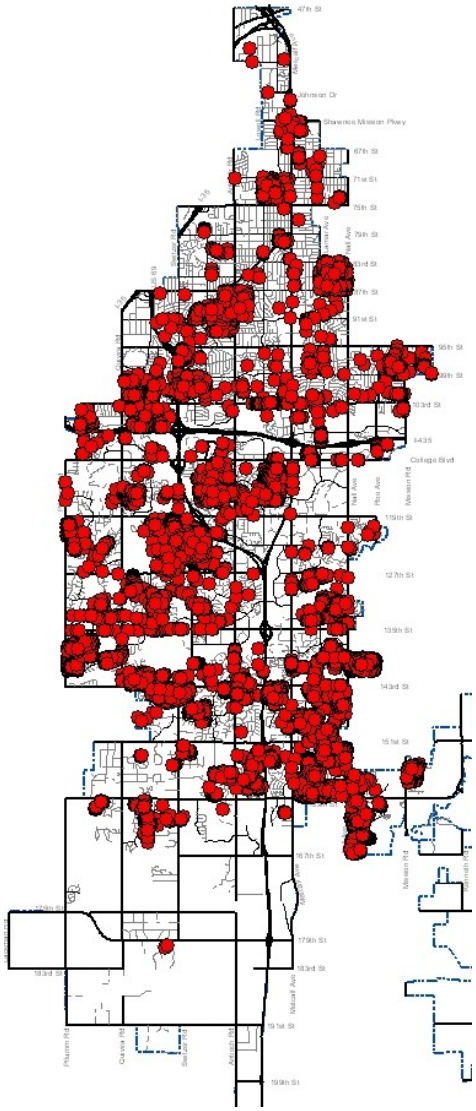
Symptoms of EAB are typically not seen in the canopy of the tree until the fourth or fifth year of infestation making early detection difficult. Signs could include tip and canopy dieback, increased woodpecker activity and sprouting at the base of the tree.

Assessment of Existing Resources

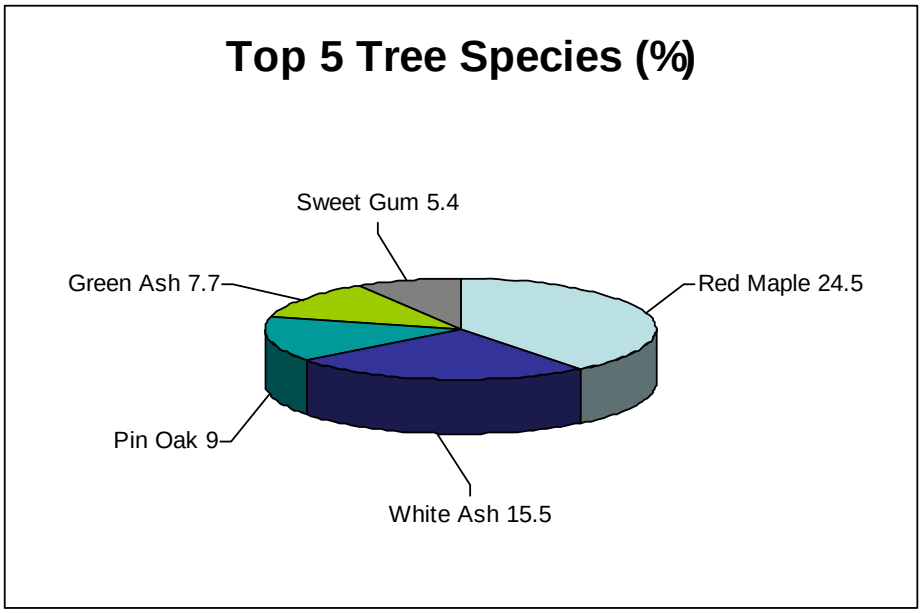
Park Services responds to all tree related issue on public property and assists with removal of trees in rights-of-ways. The Forestry crew is comprised of one Forester, one Senior Park Attendant, 6 Park Attendants and 2-4 seasonal Laborer I's and II's. Associated equipment includes one bucket truck, one grapple truck, two chippers and various sized trucks. The Forestry crew assists homeowners with large dead limb removal, broken limb removal, storm damage and dead tree removal. On average the department is backlogged by at least 50 cases. Current crew and equipment capability will not handle all EAB related tree work even if distributed over a multi-year plan. Use of private contractors will be necessary to ensure that the public right-of-way is safe.

Street Tree Inventory

A street tree inventory was conducted by volunteers of the Legacy of Greenery Committee. The inventory has been completed for all trees lining our public streets. The inventory did not include trees found on private property, parks or other greenway linkages. The inventory recorded location, species, diameter and height but did not take into consideration the overall health of the tree. Red dots in the provided map represent ash trees and their distribution throughout the city.



The inventory revealed that within public right of way there are approximately 11,128 ash trees, white and green combined, making ash 23.2% of our urban forest. This is the second highest population just under red maple, *Acer rubrum*, at 13,488 or 24.5 percent.



White ash trees, *Fraxinus americana*, have a population of 8,723 (15.5% total right of way canopy) over green ash (7.7% total right of way canopy) *Fraxinus penslyvanica*, 2,705 trees. With white ashes low nursery cost and great fall color, many residential and commercial developments over planted the species. The diameter distribution chart below further supports the use of white ash in newer developments with over 50% of our total ash population being young between 3-12 inches in diameter.

Ash Tree Distribution

	Diameter Class (in)				
Species	0-3	3-6	6-12	12-24	>24
White Ash	264	3,235	2,590	2,287	347
Green Ash	30	48	311	1,239	2,405

Plan Recommendations

Greenway Corridors, Facilities and Parks

- New tree plantings no longer consist of any ash species.
- Ash found within natural unmowed space will remain and only be removed if the tree poses a threat to life and property.
- Selected specimen trees, as determined by the City Forester, may be treated by the City and monitored based on individual tree health, condition and location. Treated trees will be removed if they become infested, diseased, or hazardous.

Street Trees; Found within public right-of-way

- Ash trees are no longer allowed in public spaces or in any new development plans reviewed by the City Forester.
- The city will proactively remove all ash trees identified as being in poor health, in decline or flagging with at least 50% canopy dieback, diseased, infested or hazardous due to non-EAB related factors by either city employees or contractors. Property owners will be notified in advance unless the tree posses an immediate threat.
- Removals will be dispersed over neighborhoods to lessen impact on residents, aesthetics, and property values. Requests from adjacent residents will be honored when possible. This includes residents who request removal of trees, as well as those who request that ashes be retained (in expectation that protective treatments will be applied by the resident).
- Property owners, management companies or homes associations are allowed to chemically treat any trees found within the public right-of-way. Prior to chemical application, the City Forester must be contacted to verify the location of the tree and to make note that the tree is under treatment.
- Selected specimen trees, as determined by the City Forester, may be treated by the City and monitored based on individual tree health, condition and location. Treated trees will be removed if they become infested, diseased, or hazardous.

- Utility contractors will be encouraged to remove all ash trees within their easements rather than trim them for utility clearance.

Private Property Trees

- Property owners are urged to monitor the movement of EAB. The decisions to treat, remove, or preserve private trees 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 fail; property value; shade, heating, and cooling values; treatment techniques, efficacy, and costs; proximity of EAB infestation; and intangible values.

- The City will enforce the relevant sections of City Ordinance Chapter 7.16 should it receive complaints about hazardous private trees. Staff is always vigilant for private trees that threaten the public or the street right of way, and this will not change. Private trees that are a threat to private property will be inspected only as complaints are received. It is encouraged that private owners remove ash trees on their property. Order of removal to private property owners will not occur unless the ash trees are infected and/or hazardous.

7.16.120 City Forester, Appointment, Authority.

B. Private property. The Neighborhood Services Division shall have the authority to enforce all ordinances, laws and regulations concerning the planting and maintenance of trees, hedges, shrubs, plants, woody vegetation or other vegetation located on private property. Where such trees, hedges, shrubs, plants, woody vegetation or other vegetation may endanger other public or private trees, hedges, shrubs, plants, woody vegetation or other vegetation, or endanger the public safety or hinder the use of public property, the Neighborhood Services Division, on the recommendation of the City Forester may, subject to the procedures set forth in Section 7.16.190, order the maintenance of such materials by the property owner, or declare such materials to be a nuisance subject to the abatement of nuisance provisions in the municipal code. It is unlawful for the property owner or other person in control of any premises to permit any tree, hedge, shrub, plant, woody vegetation or other vegetation to remain on such premises in violation of a maintenance or nuisance order from the Neighborhood Services Division. The Neighborhood Services Division, the City Forester, or any person performing tree, hedge, shrub, plant, woody vegetation or other vegetation inspections under the authority of the City is hereby authorized and directed to enter on private property where there appears to

be a threat to public or private property or the public safety, for the purpose of inspecting said materials. This entry and inspection may be done without the prior permission of the person in control of the property if the threat is imminent and if such notification is not feasible under the circumstances. If any person prevents such entry and inspection, the City may seek an appropriate court order to make such entry and inspection possible.

- It would be beneficial for residents to establish a relationship with a Certified Arborist now in the event that ash evaluation, treatment, or removal is desired in the future. Contractors should be able to provide proof of liability insurance and worker's compensation coverage. 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 preserving the urban canopy. To find certified arborists; visit one of these two sites.
  www.treesaregood.org
  www.kansasarborists.com

Restoration and Replacement

- The stumps of trees removed by the City within public right-of-way will be ground out by city employees or contractors. Site restoration will include pulverized topsoil and fescue grass seed. Replanting will be managed through the regular spring or fall plantings.

- As budget permits, ash trees, in public spaces, will be replaced with non-host species that enhance the planting site, are appropriate for the planting site and add diversity. Currently the budget is for the replacement of 100 street trees. No plantings will be made that cannot be adequately maintained. All new plantings will conform to the "10-20" tree species diversity rule.

- As generally stated, this rule implies that the urban forest should not be made up more than 10% of the same species (*rubrum*), and 20% of the same genera (*Acer*).

- Specimen ash trees that die in greenway corridors, parks and facilities will be replaced. In wooded areas, natural regeneration will play a significant role in reforesting parkland.

- See "Approved Tree List for Street Right-of-Ways in Overland Park" for a list of replacement trees that have proven themselves hardy in our area. Due to high population of red maple, this species is not recommended at this time.

Public Outreach

Public awareness is vital to slowing the spread of EAB. Education and outreach plays a key role in communicating the effects of EAB on the City's urban forest and increasing public awareness, understanding, and support for the City's EAB Action Plan

Ongoing communication, education, and outreach with employees, public officials, and residents will be the key components of the initial public awareness response. The efforts will continue and be expanded upon as more information becomes available.

- Educate employees, public officials and residents about EAB and the options they have for management.
- Educate and inform all municipal leaders and officials through presentations and written reports to the City Council, Parks Board, Legacy of Greenery Committee and all other interested committees as needed.
- Develop an EAB page on the City website that would provide updates, the EAB Action Plan, "Approved Tree List for Street Right-of-Ways in Overland Park" brochure and other helpful resources.
- Use local media outlets to disseminate information through press releases.
- Inform the community on EAB through the city-wide monthly newsletter (Overland Park Overview), the environmental newsletter (EcoConnect) and social media.
- Informational presentations will be available for home associations, preservation groups, garden clubs or any other interested parties.
- When EAB is found within the City of Overland Park, information will be provided to City personnel, and residents on the exact location of the infestation and plans on how it will be addressed.

Conclusion

We can not prevent Emerald Ash Borer from entering our city limits but we can be prepared to mitigate the affects. This approved Action Plan will aide in quick decision making once infested to help save time and money. Trees in Overland Park are an asset to our community providing environmental, social and economic benefits. As research continues and advances are made, this plan will be revised accordingly.