

City of Lincoln

Emerald Ash Borer Response and Recovery Plan

Recommended by the Community Forestry Advisory Board on April 5, 2018

Introduction and Purpose

Being the home of the Arbor Day brings heightened emphasis to establishment, maintenance and management of trees in Nebraska. How we handle the Emerald Ash Borer crisis will certainly draw national attention. It is the City of Lincoln's intention to make that attention positive.

It is to that end that we have prepared this Emerald Ash Borer Response and Recovery Plan. Lincoln does not yet have a confirmed infestation of EAB, but we have been proactively managing our public ash tree population and planning for its arrival in and impact on our community. A primary emphasis of the plan is pro-actively working with homeowner associations, neighborhood associations and private individuals to remove public ash trees and replant a diverse mix of trees along streets and on public lands.

Background

Emerald ash borer (EAB), *Agrilus planipennis* Fairmaire, is an exotic beetle that was discovered in southeastern Michigan near Detroit in the summer of 2002. The adult beetles nibble on ash foliage but cause little damage. The larvae (the immature stage) feed on the inner bark of ash trees, disrupting the tree's ability to transport water and nutrients. Emerald ash borer probably arrived in the United States on solid wood packing material carried in cargo ships or airplanes originating in its native Asia. Emerald ash borer is also established in Windsor, Ontario, was found in Ohio in 2003, northern Indiana in 2004, northern Illinois and Maryland in 2006, western Pennsylvania and West Virginia in 2007, Wisconsin, Missouri and Virginia in the summer of 2008, Minnesota, New York, Kentucky in the spring of 2009, Iowa in the spring of 2010, Tennessee in the summer of 2010, Connecticut, Kansas, and Massachusetts in the summer of 2012, New Hampshire in the spring of 2013, North Carolina and Georgia in the summer of 2013, Colorado in the fall of 2013, New Jersey in the spring of 2014, Arkansas in the summer of 2014, Louisiana in the winter of 2015, Texas and Nebraska in the spring of 2016, and Delaware in the summer of 2016, and Oklahoma and Alabama in Fall 2016. Since its discovery, EAB has:

- Killed hundreds of millions of ash trees in North America.
- Caused regulatory agencies and the USDA to enforce quarantines and fines to prevent potentially infested ash trees, logs or hardwood firewood from moving out of areas where EAB occurs.
- Cost municipalities, property owners, nursery operators and forest products industries hundreds of millions of dollars.

Overview of EAB

The most recent states added to the "confirmed infested" list include Oklahoma, Alabama and Delaware increasing the number of infested states to 31.

Public Tree Inventory

The City of Lincoln completed an inventory of all public trees in July 2017. The inventory data will be used in managing Lincoln's public trees, identifying areas for additional plantings, managing species diversification and locating the ash trees.

Of almost 112,400 planted public trees (81,785 along streets and 30,575 in parks and golf courses), nearly 14,150 are ash (11,700 along streets and 1,600 in parks and golf courses). This is about 12% of the public trees in Lincoln, and does not include trees on private property. The Nebraska Forest Service estimates that there could be three to four ash trees on private property per one public ash tree in Lincoln, or perhaps another 40,000 to 50,000 ash trees on private property.

Communication/ Community Engagement

Keeping the community-at-large informed of the management of EAB is key. To this end, we plan on hosting workshops to help homeowners identify ash trees and emerald ash borer, posting regular information on the City website, articles and news releases, using social media and providing training to industry professionals. We feel that by training private property owners it will give us additional "boots on the ground" for scouting out the pest and spreading the word about this devastating pest.

We will make the information available to the public regarding response to EAB through the Parks and Recreation Department website and include such features as: an interactive map of neighborhoods where EAB has been found, neighborhoods that are participating in the City remove and replant program, and ash trees that have been chemically treated and/or "adopted" for treatment.

Response and Recovery Plan

In conjunction with the USDA-APHIS and the Nebraska Forest Service Best Management Practices recommendations, our R&R Plan includes:

- A 3-phase process for selective and pre-emptive removal of ash trees that are declining, damaged, diseased or poorly located (i.e. under power lines, threatening public accesses, etc.)
- Chemically treat a declining quantity of ash each year to allow the managed removal of trees
- Remove 1,050 ash trees per year
- Plant 1,050 replacement trees per year utilizing diverse tree species.

Phased Ash Tree Removal

The criteria for removal in Phase 1 is the diameter at breast height (DBH) is < 14".

The criteria for removal in Phase 2 is: 14-18"

The criteria for removal in Phase 3 is >18" DBH, and not responding positively to chemical treatments.

Ash trees on public property that have a trunk diameter of 18-inches or less will be removed by Community Forestry staff. There are nearly 10, 300 smaller diameter ash trees on public property (i.e., trees with a trunk diameter of 18 inches, or less). At this time, it is anticipated that public ash trees with a trunk diameter greater than 18 inches will be removed by contracted private tree service companies. There are about 3,900 larger diameter public ash trees (i.e., trees with a trunk diameter greater than 18 inches).

Smaller trees will be removed first moving to larger trees through the removal and replanting cycle. We are implementing a phased two-year plan to purchase equipment and to hire and train staff for removal of smaller caliper trees, beginning in Fiscal Year 2016-17. The plan is to remove about 1,050 public ash trees and replant new trees annually when the equipment and staff are in place. As noted above, Community Forestry staff will be responsible for larger scale ash tree removal efforts involving entire streets and neighborhoods. We will continue to respond to requests from residents to remove larger public ash trees on an individual basis using contracted private tree service companies. It is anticipated that it will take about ten years (years 1 through 10 of the plan) for removal of smaller caliper public ash trees, and about five years to remove larger ash trees (years 11 through 15 of the plan).

The pruning cycle for public trees has gradually increased over the past decade; due in part, to the growth of the community, while staff numbers have remained constant. We plan to address reducing the pruning cycle for public trees in tandem with the EAB response and recovery plan. Staff involved in ash tree removal will be shifted to tree trimming when the annual quota for ash trees has been achieved.

The City will coordinate and oversee short-term treatment of public ash trees to prolong the life of some trees during the removal period to avoid the potential of large numbers of standing dead ash trees that could be a public safety hazard. It is planned that treatment of public ash trees will be accomplished by private contractors. Public ash trees to be treated on an interim basis during the removal period should meet the same requirements listed below for the Adopt-an-Ash Program.

Projected Cost and Spending Plan

The projected overall cost for the Lincoln EAB response and recovery effort over a 15 year period is \$22.8 million. It is estimated that between \$950,000 to \$3.7 million will be needed each budget biennium when EAB response and recovery efforts are fully in motion. Biennial costs will increase during the period that ash trees are being chemically treated to temporarily prolong their life to avoid the public safety impacts of a large number of standing dead ash trees.

It is anticipated that a multi-prong approach will be used to fund the Lincoln EAB response and recovery effort including general tax revenues, grants and private donations.

Adopt-an-Ash Program

We recognize that some citizens like to have options and be involved in determining the future of public trees near their homes. In that spirit, we are providing an option for those who would like to “adopt” an ash tree in the right-of-way and/or in pre-selected park areas and fund ongoing chemical treatment for that tree(s).

Property owners may contact the Parks & Recreation Department for a no-cost Permit to Chemically Treat a public ash tree. The Forestry Operations Supervisor or appropriately trained staff will inspect the tree proposed for adoption. If tree meets the following criteria, a permit would be issued:

- ✓ The diameter at breast height (DBH) must be >14”.
- ✓ No overhead wires may be present.

- ✓ The tree must be well-maintained and in good condition. Any wound to the tree must not exceed 20% of the circumference of the tree, a proper mulch ring must be in place, good branch structure and a healthy canopy visible.

A list of properly licensed pesticide applicators will accompany the permit when it is mailed to the property owner.

The Arborist Exam I is being updated to include questions regarding Emerald Ash Borer. As long as a licensed Arborist is in good standing with the City of Lincoln, they will not be required to re-take the exam. All new applicants must either show proof of International Society of Arboriculture certification or take and pass the Arborist I exam.

Arborists seeking certification or recertification will also be asked to indicate whether they intend to chemically treat trees in addition to other tree trimming and removal work. If so, the applicant will need to provide proof of a current Nebraska Pesticide Applicator's License.

No physical marker will be placed on adopted ash trees, however they will be documented and tracked in BeeHive Asset Management software.

The permit will be valid for two years. Upon expiration, the property owner will need to request a new permit if they wish to continue treatment of the tree and physical inspection of the tree will be made again. If the property owner does not renew the Adopt-an-Ash permit, the tree will be scheduled into the phased removal sequence for removal.

The Lincoln Municipal Code (LMC) 12.20.040 *currently reads*, "Any person desiring to plant, remove, or destroy any street tree in or upon any street, parkway, sidewalk space or other public way within the City shall first make a written application to the Director to do so."

We will request that the City Council approve the following amendment so it reads as follows, "Any person desiring to plant, remove, **chemically treat**, or destroy any street tree in or upon any street, parkway, sidewalk space or other public way within the City shall first make a written application to the Director to do so."

Volunteer Tree Pruning

The Parks and Recreation Department will be establishing a citizen pruner training program. The purpose of this program is to teach residents the principles and practices of tree trimming using hand tools. An emphasis of the program will be to encourage individuals, neighborhood groups and community organizations to prune young street trees to establish a proper branching structure and branching height of the sidewalk and street for long term viability of trees a planted in public spaces.

Private Property

Due to the unpredictable and dangerous nature of ash trees infected with EAB, there is great concern for failing ash trees on private property becoming a threat to public safety. We will be exploring avenues to assist low income property owners with financial assistance for the removal of these trees including grant opportunities and partnerships with community organizations.

Licensing of Private Companies

Because the scope of this crisis is so vast, sadly the opportunity for extortion and price-gouging is very real. In an effort to prevent, or at least minimize this danger, we plan to publish the names and contact information of licensed tree service companies with demonstrated knowledge of EAB on the City website.

Companies must meet the following criteria to qualify for this listing:

- ✓ proof of annual additional and ongoing training in the treatment of EAB approved by Community Forestry staff,
- ✓ current pesticide applicator's license, and
- ✓ proof of insurance for arboricultural and pesticide application work.

Ash Wood Utilization

The City of Lincoln will continue to explore new areas for ash wood utilization by participating in statewide discussions on the topic. We will continue to seek out public and private partnerships. We are exploring a partnership with Lincoln Public Schools and the Nebraska Forest Service where high school wood shop students would learn about milling logs for lumber, and use ash wood in wood shop classes. There are also discussions regarding a partnership with the Department of Correctional Services as a partner for utilization of ash wood. We will continue to provide wood chips to Community Organizations and in the following parks for the public to use; Oak Lake, Tierra Homes, Parking Lot 4 at Holmes Lake, Fleming & 33rd and Mahoney Golf Course. We will deliver mill-able logs in accordance with APHIS and NE Department of Agriculture quarantines within a 20 mile radius of Lincoln, NE. All wood will be processed using best management practices, and in a manner to restrict the movement of EAB.

Quarterly Reports

Routine quarterly reports will be made to the Community Forestry Advisory Board during regular meetings, and a written status report will be presented to the Board, the Mayor and the City Council. Reports will include, but not be limited to, the following:

- ✓ Number of ash trees removed during the reporting period,
- ✓ Number of trees replanted during the reporting period,
- ✓ Number of public ash trees treated through the Adopt-an-Ash program,
- ✓ Number of public ash trees treated under City contract(s), and
- ✓ Number of hazardous ash trees identified on private property by Community Forestry Staff.

Plan Amendment

This plan may be amended as recommended by the Community Forestry Advisory Board, and as approved by the City Council.