# Memo

March 28, 2018

TO: Community Forestry Advisory Board

FR: Lynn Johnson, Parks and Recreation Director

RE: Special Meeting on April 5

The purpose of this memo is to provide some additional information in advance of the special meeting of the Community Forestry Advisory Board on April 5.

#### Proposed Emerald Ash Borer Response and Recovery Plan

The public hearing regarding the proposed plan was closed after public testimony during the March 13 meeting. Members of the public may attend the meeting and listen to the Board's discussion and action. However, no additional public testimony or comment will be taken. The Board's action will be a recommendation to the City Council. The City Council will conduct a public hearing prior to considering adoption of the proposed plan by resolution. So there will be an additional opportunity for public comment at that time.

Options of the Board include recommending adoption of the plan as proposed, recommendation of adoption of the plan with modifications, or a recommendation against adoption of the plan.

## Staff are proposing two modifications to the plan below:

#### Insert on Page 3 as the last paragraph under Phased Ash Tree Removal

The chemical(s) to be used in trunk injection treatment of ash trees have not been determined. At the time that initiation of treatment is planned the Nebraska Forest Service and Nebraska Extension will be consulted to seek guidance regarding selection of the chemical(s) to be used. Selection criteria will include minimizing risks to beneficial insects and pollinators, and minimizing risks to people and pets. Neonicotinoid insecticides will not be used in treatment of ash trees.

## Insert on Page 4 as the last paragraph under Private Property

Soil drench is a method of applying systemic insecticide mixed in water to the soil around the base of a tree. This method has inherent risks to beneficial insects and pollinators, people and pets coming into contact with the treated soil, and possible contamination of groundwater. The City should engage in public education activities discouraging the use of soil drench application of chemicals to trees on private property.

You may have been contacted by Jeff Palmer with Arborjet. Andy Campbell and I received email messages with an attachment. Please see the attached information provided by Mr. Palmer. Mr. Palmer is suggesting long term treatment of ash trees in consideration of the benefits that public trees provide to our community. While there is certainly merit in recognizing the value of public trees, we must take into consideration the fiscal realities of a constrained City budget. A long term treatment strategy delays the inevitable removal of ash trees resulting in increased costs due to inflation and growth of the trees. Extending the treatment period also results in added costs with increased investment in prolonging the life of each public tree. Staff continue to recommend the phased removal and replacement of public ash trees with a limited period of treatment for some trees.

If you have been contacted directly by Mr. Palmer or others about the proposed plan, please plan to the share that you were contacted and by whom at the beginning of discussion of a recommendation regarding adoption of the plan.

## Statement regarding Callery Pear

The Board voted to table discussion of the proposed statement for review and action at the special meeting. Eric North acting as Chair may take public comment on the statement during the special meeting, if there are people present wishing to speak. Those wishing to speak should provide their name at the beginning of their testimony. Each person's testimony should be limited to five minutes.

## Attachment: Information sent by Jeff Palmer of Arborjet by email on March 26, 2018

# Emerald Ash Borer Implications for Lincoln and Lancaster County

Emerald Ash Borer (EAB) is an invasive, Ash tree-killing insect which will infest and destroy all ash trees in the area. Approximately 1 in 8 (12%) of Lincoln and Lancaster Counties' urban trees are Ash.

The average ash provides benefits of approximately \$150 per tree annually (reduced energy, storm water management, enhanced property value, etc). In addition, the city-owned ash represents an asset value of approximately \$2 million annually.

While EAB has not been discovered in Lincoln a well-established infestation is in nearby Greenwood and it is quite likely that the insect has entered Lincoln undetected

Once discovered, EAB will destroy all ash trees within an approximately 8-10 year period.

EAB will cost tax payers and communities money to manage. There are measures which may be taken to minimize cost while maintaining existing asset value.

## **Lincoln Ash by the Numbers:**

- The city owns and manages 14,150 ash along the street right of way and parks.
- On average, there are 3-4 times as many ash on private property. Total ash in Lincoln >60,000.
- The state estimates an average removal and replace cost of \$1000.00 per tree.
- Replacement trees will take decades to achieve a similar benefit and asset value to existing canopy.
- Canopy asset reduction of \$2 million annually if trees are allowed to succumb to EAB and will not be recouped until replacement trees reach similar size (20-30 years).
- Treatment is extremely effective and trees may be maintained by treating every third year
- The city of Milwaukee treats 28000 trees for the last 10 years and has not lost one to EAB.
- All-inclusive In house treatment cost is as little as \$20 per tree annually.
- Effective rates are very low and sealed injection sites of treatments minimize off target effects providing for an environmentally responsible method of maintaining the environmental benefits the trees provide.

An integrated Management Approach utilizing all of the tools available and recommended by the Society of Municipal Arborists http://www.urban-forestry.com/assets/documents/eab/eab-toolkit.pdf

would involve assessing the condition, size and location of the ash and implementing a multi-pronged approach including community education, monitoring removal of poor condition trees and treatment.

Please review what an integrated management approach might look like from a budget standpoint over the next decade in Lincoln/Lancaster County on the following page.

Example of an integrated management approach based on the estimated number of ash on public property in Lincoln Nebraska.

Sample 10 year plan comparison							
	Integrated Approach					Cut as They Die Approach	
Year	R and I	R Cost	Treat	Cost	R and F	R Cost	Treat
2018	100	100k	3867	232k	100	100k	0
2019	200	200k	3867	232k	400	400k	0
2020	300	300k	3867	232k	800	800k	0
2021	300	300k	3867	232k	1200	1.2 mil	0
2022	350	350k	3867	232k	2500	2.5 mil	0
2023	350	350k	3867	232k	3200	3.2 mil	0
2024	350	350k	3867	232k	3200	3.2 mil	0
2025	300	300k	3867	232k	1600	1.6 mil	0
2026	200	200k	3867	232k	600	600k	0
2027	100	100k	3867	232k	400	400k	0
Total	2400	2.4 mil	11600	2.32 mil	14150	\$14.15	million
Total: \$4.85 million for integrated plan							

Lincoln will have reduced Ash stock by 17% which are poorer quality trees. The best trees will be retained which will preserve \$1.7 million in asset value and save the city more than \$9 million over a decade.

The \$1000 remove and replace cost results in an estimated spend of \$14 million over the decade. New trees provide a fraction of the asset value and more than \$20 million in cumulative canopy value will be lost.

By treating the healthy ash which are still providing asset value to the community and slowly diversifying the poor condition trees to different species the city will accomplish their urban forest goals and save more than \$9 million in the process. Furthermore, the city annual budget may be more "flat lined" and avoid the spike which will inevitably occur when EAB causes the most damage in years 4-7 when thousands of hazard trees will need to be removed.