



ST. CHARLES
SINCE 1834

AGENDA ITEM EXECUTIVE SUMMARY

Title: Presentation of Emerald Ash Borer Program Update

Presenter: Chris Adesso

Please check appropriate box:

<input checked="" type="checkbox"/>	Government Operations	X	Government Services 11.25.13
<input type="checkbox"/>	Planning & Development		City Council
<input type="checkbox"/>	Public Hearing		

Estimated Cost:	N/A	Budgeted:	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
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If NO, please explain how item will be funded:

No Funds Requested

Executive Summary:

Staff would like to facilitate a discussion about the current status of the Emerald Ash Borer (EAB) Program. We would like to present a brief overview and status of the program to remove the diseased Ash trees and a “snap shot” of where the publicly owned Ash tree population is today.

Also, a preliminary analysis of the current bond funds supporting this program has been completed and the findings are indicating that after the last of the removal and replacements are completed next fall, we will have achieved very near a zero balance in the bond.

Looking forward to spring 2014 and the associated tree planting season. The Public Services Division would like to introduce the concept of a “Diversified Urban Forest” and share some concepts on why a diverse urban forest is a key strategy in protecting our urban forest from a similar disaster to EAB.

Attachments: *(please list)*

The Role of Diversity in Reforestation by Graf Natural Resources Management and GIS.

Recommendation / Suggested Action *(briefly explain):*

For information only, staff requests the Committee to provide feedback, guidance or recommendations.

For office use only:

Agenda Item Number: 4.f



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The Role of Diversity in Reforestation

It may be said that a municipal forester's legacy is best measured by the trees planted – that is, the forest that he or she leaves to the future. Only when those trees mature we can evaluate the person's work. As in any planning process, planting goals should be based on current conditions and the ability to implement change and move toward a desired end. Today's current conditions reflect a heavy loss in canopy, mostly due to the Emerald Ash Borer (EAB). In 2006 when the EAB was discovered in Illinois, the Illinois Department of Agriculture estimated that Ash trees made up approximately 20% of our deciduous shade cover. Some urban communities have reported Ash inventories over 30% of their overall population. With a more diverse planting plan, this natural disaster could have had far less of an impact on our urban forest. During our planning process, the concept of diversity is one defense mechanism that we can have in place to help ensure that a future pest and pathogen cannot cause a problem of this magnitude again.

The diversity of tree species in the urban forest is quickly becoming a topic of interest. Having had to combat the EAB, Dutch Elm Disease, Gypsy Moth, and the like over the years, it has been realized that we cannot rely on only a few species of trees with which to fill our parkways. In addition to the pest and pathogen battles, we are now facing the realities of species like Silver and Norway Maples, which are hardy and fast-growing, but structurally unsound as they mature. An abundance of these trees on parkways has led to property damage, messy sidewalks, and expensive removals. It has also become apparent that a more diverse tree population is needed, and that some favorite species of yesteryear should be deemphasized in favor of species which are native to the Midwest, and thus more likely to flourish and be vigorous in our soils, temperatures, and moisture regimes.

The following strategies may be followed in the planning of future tree plantings on the parkways and public spaces in Illinois for the sake of reaching goals regarding diversity and aesthetics:

- No single genus should account for any more than 10% of a community's existing tree population. This ensures that in the event of the introduction of a new pest or pathogen, that there will be minimal impact on the tree population as a whole. In addition, it is recommended that new plantings should not exceed 5% of the total population per species. Selective removal of unhealthy existing trees can be utilized to get closer to this number.

- The average species rating across the whole tree population should be no less than 60, according to the Illinois Arborist Association species ratings (see illinoisarborist.org for further information).
- The average coefficient of conservatism (C value) of all trees on public lands shall be no less than 5. These C values should be taken from Swink and Wilhelm *Plants of the Chicago Region*.
- Trees with a tendency towards having weak structural wood such as Cottonwoods, Silver Maples, Poplars, and Willows should not be planted on parkways to reduce the potential for damage to property or health.
- Trees with a tendency towards producing messy, foul smelling, or insect attracting fruits such as unimproved Locusts, Mulberry, female Ginkgo, or common Apple should not be planted on parkways due to sanitary concerns.
- Invasive tree species such as Buckthorn, Tree of Heaven, or unapproved European tree species should not be planted on parkways for ecological reasons.