

DURHAM



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**Date:** May 7, 2015

**To:** Thomas J. Bonfield, City Manager

**Through:** Keith Chadwell, Deputy City Manager  
Steven L. Medlin, AICP, Planning Director

**From:** Kathleen R. Snyder, Planner

**Subject:** Durham Environmental Affairs Board Recommendations for Sustaining a Healthy Urban Forest in Durham

**Summary.** At the request of a Council member, the Durham City-County Environmental Affairs Board (EAB) has evaluated the future health of Durham's urban forest. As a result of this evaluation, the EAB has prepared the attached report and presentation for the City Council work session on May 7, 2015. In the report, the EAB recommends that the Durham City Council allocate resources to facilitate the planting of at least 1,680 trees per year, the removal of the 750 aging trees per year, and the proper maintenance of all trees on public property in Durham.

**Recommendation.** The Planning staff recommends that City Council receive the presentation from the EAB.

**Background.** Durham's urban forest is at a critical juncture due to a large wave of tree-planting that occurred in the 1930s. These trees, mostly Willow Oaks, will reach the end of their lifespan over the next two decades. Willow Oaks are large, averaging 100 feet tall, 40 inch trunk diameter and providing 200-250 square feet of canopy coverage per mature Willow Oak. Due to their size, Willow Oak removal is costly and results in a significant reduction of canopy coverage. The City of Durham must take action to prevent the loss of trees planted in the 1930s from leading to a significant reduction in the number of trees located on public property.

Because of this tree situation in Durham, the EAB has worked to estimate the number of trees expected to be lost over the next 20 years. In addition, the EAB has approximated the number of trees that the City of Durham will likely plant each future year, based on trees planted per year in the past. Finally, the Board has calculated the difference between the above numbers and estimate the number of additional trees the City of Durham must plant to maintain the current level of canopy coverage.

**Issues.** The EAB has determined that in order for the City of Durham to maintain the approximate canopy coverage from trees on public property, 1680 trees must be planted and 750 trees must be safely removed each year for the next 20 years. Current tree replacement operations support the planting of only 500 trees and the removal of only 300 potentially hazardous dead/dying trees per year. Without additional resources, the City faces the

reduction in the quality of life, economic, ecological, and human health benefits for its current and future citizens.

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**Attachments:**

**Attachment 1**, EAB Recommendations for Sustaining a Healthy Urban Forest Cover Letter

**Attachment 2**, EAB Recommendations for Sustaining a Healthy Urban Forest Report

**Attachment 3**, EAB Recommendations for Sustaining a Healthy Urban Forest Presentation