



Staff Report

File #: 22-51

Version: 1

Date: 3/28/2022

Item #: 6.a.

TO: Mayor and City Council

THROUGH: Kristin Retherford, Interim City Manager

FROM: Peter Fernandez, PE, Public Works Director

SUBJECT:

Summary of Public Works Tree Projects in Salem in 2021

Ward(s): All Wards

Councilor(s): All Councilors

Neighborhood(s): All Neighborhoods

Result Area(s): Natural Environment Stewardship; Welcoming and Livable Community

SUMMARY:

The 2021 Summary of Public Works Tree Projects (Attachment 1) provides a snapshot of work related to City-owned trees during the 2021 calendar year. In 2021, the City celebrated 45 years as a Tree City USA and achieved its sixteenth Growth Award, maintaining the Tree City USA "Sterling City" status.

ISSUE:

Receive the 2021 Summary of Public Works Tree Projects.

RECOMMENDATION:

Information only.

FACTS AND FINDINGS:

The report summarizes work done by the Public Works Department to inventory, assess, increase, and enhance Salem's tree canopy through its staff, contractors, and volunteers. Salem's urban tree canopy was exposed to many stressors in 2021. The February ice storm that damaged thousands of trees was followed by a very dry spring and a hot, dry summer. April went down as the driest month on record and the summer months broke previous records for highest average temperatures. In

addition, the COVID-19 pandemic continued to impact volunteer planting events. Despite these challenges, the City continued addressing the goals of the *Community Forestry Strategic Plan*. In 2021, a total of 425 new trees were planted; 5,000 trees were inventoried; 5,132 trees were pruned; and 1,218 trees were removed (over 1,000 owing to ice storm damage). The 2021 Summary of Public Works Tree Projects provides details about these actions, as well as the City's outreach and community engagement activities.

Contracted and City Tree Planting and Maintenance. To increase trees on City-owned property, including street rights-of-way and parks, Public Works continued its contracts with Friends of Trees and Treecology to complement the work done by Urban Forestry staff.

In 2021, Friends of Trees planted 183 large stock trees in parks and street rights-of-way and planted 2,014 small stock trees, shrubs, and smaller native plants in Salem riparian and natural areas. Due to the ongoing pandemic, volunteer participation was severely reduced and Friends of Trees staff, tree stewards, and City staff did most of the planting. Trees were planted in the following parks and neighborhoods: Bill Riegel Park (SEMCA), McKay School Park (NOLA), Hammond School Park (Northgate), Lansing Park and neighborhood (Lansing), Northgate Park and neighborhood (Northgate), and Orchard Heights Park (West Salem).

Treecology planted 92 large stock trees in street rights-of-way along Campbell Drive SE and Salem Parkway.

Public Works' Urban Forestry section staff planted 147 new trees, pruned 5,132 trees, and removed 1,218 severely damaged, dead, or dying trees.

February 2021 Ice Storm. The February 2021 ice storm caused extensive damage to our urban forest. Over 3,000 service requests for trees were received between February 12 and March 30. Due to the large number of tree-related issues, ice storm response became the major focus for the Urban Forestry section for most of the calendar year. Additional contracts with local arboriculture companies were established and ten contractor crews were utilized to help with tree cleanup.

The City spent over \$6.3 million on ice storm-related cleanup and work continued well into the summer. Thousands of trees had to be pruned and over 1,000 trees had to be removed from City property. On the positive side, staff made significant advances in the use of technology to map and prioritize work orders, manage assets, and track time and expenditures.

A Citywide tree canopy impact assessment that utilized high resolution aerial imagery to compare tree canopy before (August 2020) and after the ice storm (May 2021) showed a 17.6 percent reduction in tree canopy in the City between the two time periods. A significant portion of this decrease can be attributed to the ice storm. The results of the impact assessment are available on an interactive dashboard at <https://data.cityofsalem.net/pages/environment>. The 2021 Ice Storm Tree Damage Story Map is available through SalemMaps Online at <https://salem.maps.arcgis.com/home/index.html>.

Street Tree Inventory. In total, over 23,000 trees have been inventoried and over 4,000 new

locations for street trees have been identified. Using new LiDAR imagery, the City of Salem GIS team has identified over 300,000 trees on City-owned property to date. Trees will continue to be surveyed and added to the inventory until the survey is complete.

Tree City USA. As a founding member of Arbor Day Foundation's Tree City USA program, Salem celebrated in 2021 its 45th consecutive year as a Tree City USA. To mark the occasion, the City hosted three online outreach events (a tree poster contest, a "poe-tree" contest, and a tree trivia contest) and ordered six new Tree City USA signs to place at key entrances to Salem. The City of Salem also received its 16th Arbor Day Foundation Growth Award in 2021. In total, the City spent over \$1.3 million in 2021 to plant, maintain, remove, and manage City-owned trees, exceeding the Tree City USA per capita spending requirement.

Education and Outreach. In 2021 and focusing in low-canopy areas, the City conducted a survey to determine barriers to tree planting for private property owners and to identify potential incentives for increasing tree planting on private property. The survey was available in both English and Spanish. Overall, survey respondents were in favor of trees and about half said they would like more trees on their properties. Survey results indicated a general lack of knowledge about the City's tree programs and the City's tree canopy goals. These results will help inform future tree-related outreach, educational campaigns, and planting programs.

Salem Climate Action Plan. City Council called for a climate action plan as part of its 2019 Policy Agenda and October 2020 Council adopted goals for greenhouse gas emission reductions. Given the importance of trees in sequestering and storing carbon dioxide and reducing the urban heat island effect, maintaining and enhancing the City's tree canopy is a vital component of the Salem Climate Action Plan.

BACKGROUND:

For the past four years, the Public Works Department has provided a summary of actions that increase and enhance the urban tree canopy. In 2019, a new citywide canopy goal of 28 percent by 2030 was established. The tree canopy coverage in 2019 was 24 percent. Work outlined in the *Community Forestry Strategic Plan* continues to be implemented and tree planting efforts continue to focus on low canopy areas of Salem. This focused work will enhance tree canopy equity across all portions of the city.

Despite the impacts of the unprecedented global pandemic on our community and extensive damages from the February 2021 ice storm, City staff, contractors, and volunteers have continued to work toward our canopy goal. These actions will serve to sequester carbon, reduce the urban heat island effect, improve air quality, reduce stormwater runoff, and create an overall healthier and more beautiful city.

Robert Chandler, PhD, PE
Assistant Public Works Director

File #: 22-51
Version: 1

Date: 3/28/2022
Item #: 6.a.

Attachment:
2021 Summary of Public Works Tree Projects