



CITY OF SANTA BARBARA
PARKS AND RECREATION COMMISSION REPORT

AGENDA DATE: October 26, 2022

TO: Parks and Recreation Commission

FROM: Parks Division, Parks and Recreation Department

SUBJECT: Urban Forestry Program – Work Plan Goals and Objectives for Fiscal Year 2023

RECOMMENDATION:

That the Commission receive a presentation on the Urban Forestry Program's Work Plan Goals and Objectives for Fiscal Year 2023.

BACKGROUND:

Santa Barbara is fortunate to have an unrivaled urban forest. Starting in the early 1900s, prominent horticulturists began developing what has become a large, diverse, and unique tree canopy. Staff estimate that the City's urban forest is currently comprised of more than 320,000 trees. City-owned trees along public streets, in parks, and other public places make up approximately 20 percent of the urban forest. The remaining 80 percent of the forest is located on private and other public property. There are more than 450 species of trees on City property, making Santa Barbara's urban forest one of the most diverse in the country.

Urban Forest Management Plan

In order to preserve, protect, and enhance the urban forest, the Parks and Recreation Department (Department) developed an Urban Forest Management Plan (Plan) adopted by City Council in April 2014. The Plan serves as a long-term guide for the preservation and enhancement of trees in Santa Barbara. The Plan was developed by the Parks and Recreation Department in collaboration with a technical advisory committee and staff in the Community Development, Public Works, and Fire Departments, and through extensive public input.

There are four primary goals for the plan:

- 1) Elevate the importance of the urban forest
- 2) Continue Santa Barbara's horticultural legacy
- 3) Promote a vibrant and healthy community

4) Foster awareness and appreciation of trees

Fifteen plan objectives are organized under three areas: Tree Resource Management, City Organization and Policy, and Community Involvement. Each objective has a series of actions. Tree Resource Management objectives and implementation actions focus on the planning, planting, and maintenance of trees as well as maximizing the economic, environmental, and aesthetic benefits of the urban forest. City Organization and Policy objectives and implementation actions address enhancing the City's investment in the health and management of the urban forest through funding, inter-departmental coordination, and City policy and planning initiatives. Community Involvement objectives and implementation actions focus on enhancing and expanding community participation and investment in the urban forest through partnerships and education and volunteer programs.

DISCUSSION

This year, the Urban Forestry team in the Parks Division is working to advance several Plan objectives. In addition to routine maintenance goals, which consist of pruning, tree and stump removal, providing tree inspections, and planting, the Urban Forestry Program has set additional work plan goals to begin to address specific program objectives.

For Fiscal Year 2023, Staff have focused on four key objectives and specific action items within each objective, outlined below.

Urban Forestry Management Plan – Work Plan Objectives

Objective 2: Enhance Street Parkway Growing Conditions Where Feasible

Objective 2 identifies the challenges that urban trees, specifically street trees, encounter, including: limited soil volume; heavy levels of soil compaction; being surrounded or at least partially surrounded by impermeable hardscapes; and both oxygen and nutrient deficient soils.

This fiscal year, staff will focus on Action Item #2, *to identify existing parkways to enlarge to accommodate greater canopy and or larger canopy trees*. Additionally, staff will focus on Action Item #3, *to promote streetscape redevelopment to maximize parkway-planting area*.

Staff began focusing on these items in earnest several years ago as staff have worked cross-departmentally to create better growing environments for street trees. Recent examples of our efforts are visible on West Carrillo Street. Public Works recently initiated a project to improve the paving, lighting, and pedestrian safety elements on West Carrillo Street between the 101 freeway and San Andres Street. Forestry staff worked with Public Works to improve the tree wells in this area as part of this project. Modifications were

made to ten existing tree wells, using saw cutting to make them larger, and seven new tree wells were cut out of existing sidewalks.

Both the modified and new tree wells increased in size from a traditional tree well cutout. The length increased significantly and the width of the wells was gently arced to provide additional space. The increase in size of the tree wells helps to provide greater natural growing conditions, allowing for oxygen diffusion and water penetration, both of which contribute greatly to larger healthier trees.

Once the site modifications were completed, Urban Forestry was able to install new trees. These updated existing sites, new tree sites, and new trees will add significant canopy to this section of West Carrillo Street, all while gradually reducing impermeable surfaces.

In addition to these efforts, staff routinely work alongside of Public Works during comprehensive sidewalk and road repair projects to remove unnecessary hardscape from around trees and out of the parkways. During the 2021 calendar year, crews removed a total of 5,832.5 square feet of hardscape from the public right of way.

An upcoming Public Works project this fiscal year includes tree well modification and new tree well creation along both East and West Haley Street from Castillo to Milpas Street. As part of this project, staff will create 22 new tree wells and 18 existing tree wells will be made larger by saw cutting. While no other projects are currently in the queue for the remainder of the fiscal year, staff will continue working directly with Public Works to look for additional opportunities to continue to implement Action Items #2 and #3.

Objective 3: Optimize Tree Canopy

Objective three recognizes that larger trees produce significantly more environmental benefits than smaller trees. The primary focus of this objective is to make informed planning decisions to maximize the available planting location to grow the largest tree possible, all while trying to minimize infrastructure conflicts.

As part of work plan efforts this fiscal year, staff will focus on Action Item #1 *to identify planting locations along City streets, in City Parks, and on other public property that can support greater canopy and/or large canopy tree species.*

Staff will develop a comprehensive planting program with a specific focus on increasing shade around playgrounds, the Mackenzie Dog Park, and key spectator areas adjacent to sports fields. As the weather continues to become hotter and drier, the need for shade has increased. Many park agencies have begun adding shade sails to playgrounds to create shade. While shade sails can be a great option for some locations, there is a growing understanding that canopy trees often have a number of advantages. Canopy trees are longer lasting, better able to withstand storm and wind events, and provide increased air quality and cooling.

Staff are currently evaluating all play structures within the Parks network, looking for opportunities to plant large canopy shade trees in key areas around play structures, as well as off-leash dog areas. This survey will also extend to areas near sports fields where spectators gather to watch events. Preliminarily, staff have identified 12 playgrounds and spectator areas to continue to evaluate for opportunities for tree planting. Based on initial analysis, staff plan on each site receiving at least one new tree, with the possibility for multiple trees. Staff will be responsible for planting and maintenance of the new trees and anticipate completion by the end of spring 2023.

Objective 4: Optimize Age and Enhance Species Diversity

Objective four defines the need for both age distribution and species diversity to ensure a healthy urban forest. Varied age throughout the tree population safeguards against significant losses of canopy cover over time. The same is true of having a diverse array of tree species. Maintaining desirable levels of species diversity prevents catastrophic loss of trees due to a combination of pests and/or diseases.

Staff will focus efforts this year on Action Item #1 *to maintain existing species diversity and investigate methods for increasing desirable species that are rare.*

Staff will analyze existing species designations to both filter out undesirable tree species and look for opportunities to continue to build upon the City's rich horticultural history by increasing species diversity. An example would be the use of London Plane Tree (*Platanus x hispanica*). Currently, London Plane trees occur 8 times in the designation listing, where the native California sycamore (*Platanus racemosa*) only occurs one time. London Plane Tree readily hybridizes with the native California Sycamore and slowly, over time, native seed stock diminishes as the hybridization between the two species occurs. By recognizing this problem, staff will prioritize review and create modifications to these designations to try to reduce the impacts to our native California Sycamore tree populations. Staff will also be gradually reducing the frequency of palm tree designations. Research has shown that palms do not produce environmental benefits at the same level of shade trees, nor do they help to combat heat island effect. This creates further opportunities for us to introduce more diversity.

Another example of increasing the use of desirable species is the recent designation of Heartleaf Robinsonella (*Robinsonella cordata*) for the 00-500 blocks of W. Los Olivos Street. Heartleaf robinsonella is a tree that has shown to have merit as a potential street tree and records indicate that there is only one known tree in the entire City. A local nursery has been successful in propagating this species, and as part of designation modification for West Los Olivos Street, it was included as a co-designation. Its use as a street tree will be entirely new and will add to the diversity of the urban forest.

This fiscal year, staff have already brought six designation changes before the Commission. Each of these designation modifications have helped to increase the biodiversity of street tree selections and help to improve the street tree population's

resiliency against both abiotic and biotic factors. Staff will continue updating existing designations, focusing on furthering implementation of Action Item #1.

Objective 9: Enhance City Investment in the Health and Management of the Urban Forest
Objective 9 recognizes that resources available for public tree management have not kept pace with the actual costs to maintain City trees. As the urban forest continues to grow and mature, costs to maintain also increase. Correspondingly, increasing costs to manage the urban forest not only limit the City's ability to increase service, but also to expand or develop additional programs and initiatives. The ability to either expand or create new components and initiatives within the Urban Forestry Program allow managers to improve safety and longevity of the tree resource while maximizing the benefits obtained from a healthy urban forest.

This year staff will focus specifically on Action Item #1, which sets a goal *to increase annual maintenance funding for the management and care of City trees*. A key step in leveraging additional funding to support enhanced management of the urban forest is to understand desired levels of maintenance. Staff will determine costs for optimum citywide pruning intervals, costs for maintaining species requiring higher levels of maintenance, costs for tree removals and stump grinding, and costs for planting and establishment. Understanding the costs associated with optimum maintenance will provide staff with the needed information to articulate true costs for tree maintenance annually.

CONCLUSION

Santa Barbara's urban forest is a unique, high-value City asset. As the climate becomes increasingly hotter and drier, trees struggle to adapt without human help. Implementing policies and actions outlined in the Plan are important steps to preserve and enhance the City's Urban Forest.

PREPARED BY: Nathan Slack, Urban Forest Superintendent

APPROVED BY: Jill E. Zachary, Parks and Recreation Director