



CITY OF GLENDALE, CALIFORNIA REPORT TO THE CITY COUNCIL

AGENDA ITEM

Report: State of the Community Forest

1. Motion providing direction to staff

COUNCIL ACTION

Item Type: Action Item

Approved for September 21, 2021 **calendar**

EXECUTIVE SUMMARY

Following the May 18, 2021 City Council meeting, in which the Public Works Department presented on the State of the Community Forest, staff prepared this follow-up report on topics raised for further discussion by Council. Staff is seeking City Council direction on the issues described in this report.

COUNCIL PRIORITIES

Sustainability: A thriving community forest saves energy, reduces greenhouse gases, and provides numerous benefits to local ecosystems.

RECOMMENDATION

That City Council provide direction as requested on the items covered in this report.

BACKGROUND

On May 18, 2021, Public Works Department staff provided a presentation to the City Council on the State of the Community Forest. The City Council provided feedback on various community forest issues to focus on.

ANALYSIS

1. Existing City Canopy Coverage

A canopy goal of 25% is recommended for cities of Glendale's climate by forestry research groups such as American Forests. For comparison, cities in forest ecosystems often adopt a 40% canopy goal. Public Works staff recommends achieving a 25% canopy coverage citywide goal, to encourage an equal distribution of new trees.

Staff analysis indicates Glendale currently has a 20% canopy coverage citywide. Further analysis at the census tract level reveals disparities in consistency of coverage, as many areas, such as the Verdugo Woodlands and Chevy Chase Canyon, are well above 25% coverage, while a number of other areas concentrated in south and west Glendale are considerably below 20% coverage. Staff recommends focusing tree planting in these areas - census tracts near or below 25% coverage, to most effectively progress towards a citywide goal of raising the average. A sample map and table of census tract canopy coverage is attached as Exhibit 1, with areas below 25% coverage highlighted.

Staff recommends that planting trees in response to resident requests and replacing removed trees, discussed later in this report, should remain the top priority citywide, but concentrated tree planting efforts beyond this maintenance-level planting program should be focused in these deficient areas.

2. Tree Planting – How Species Are Selected

Staff considers a number of factors when choosing tree species such as improving tree diversity, achieving appropriate density and maximizing canopy. Species selection is based on the Designated Street Tree List, which is codified in Section 12.40.050 of the Municipal Code. This List identifies the species designated for each City street.

Appropriate trees for the list are chosen based on: species hardiness, growspace, overhead and signage clearance, character of the neighborhood, pest and disease resistance, drought tolerance, durability and wind resistance, canopy and subsurface growth habits, irrigation and soil preference, general aesthetics and shading potential, preference to existing, traditional, or native plant palettes, and nursery availability. City of Glendale has been forward-thinking in terms of drought tolerance selection, and our transition to climate-appropriate trees is well under way.

3. Tree Planting –How to ensure trees are beneficial and climate-suitable?

Many studies at the state level have focused on what climatic conditions to expect in the coming decades, which trees may be best suited for changing conditions, and which species should be phased out. Generally, the current consensus is precipitation will become more erratic and monsoonal, and future temperatures will be comparable to the Inland Empire. ‘Climate-ready’ trees must be selected for these conditions.

4. Tree Planting – How near can trees be planted to one another?

Staff assesses for adequate spacing overhead, underground, and radially to allow for the healthy, unimpeded growth of the tree to its mature size. Distances between trees can vary based on the tree’s mature size. It is important for the health and structure of a street tree for it to be a certain distance from others so it can grow to its natural canopy spread, and not compete for resources with neighboring trees. Competing canopies can be less vigorous and also lead to severe pest infestations.

5. Tree Planting –Prioritize sites near freeways and bus stops

Council requested prioritizing tree plantings in locations near freeways and near bus

stops to provide needed shade and ecosystem services. Staff plans to focus its Measure S-funded tree plantings in these areas. A survey of inventoried vacant tree sites reveals 615 vacant locations within ¼ mile of the 5, 134, and 2 freeways. The concentrations of vacant sites coincide with the lowest-canopied sections of the City, so targeting these locations will also support the goal to increase canopy coverage.

There are 467 Beeline and Metro bus stop locations. Many have existing City trees nearby, but staff will need to visit each stop and assess for existing trees, vacant tree wells, potential planting sites after concrete removal, or if no trees are possible due to site limitations. Staff will rely on the upcoming shade structure recommendations to inform this survey.

6. Tree Planting – Connect with GUSD and GCC on opportunities

City Council also requested that staff explore planting partnerships with Glendale Unified School District and the Glendale Community College. Both entities are outside of City of Glendale jurisdiction, but partnerships will be explored. Recently, Northeast Trees, a local nonprofit tree planting organization, partnered with Public Works and GUSD to apply for grants that involved planting hundreds of trees in schoolyards and adjacent City right-of-way, as well as establishment watering. Unfortunately, these grants were not awarded, but staff will continue these efforts.

7. Watering – Recycled Water Usage

Since 2011's City's Purple Works Project, all Public Works' water trucks come standardized with recycled water equipment, meaning trees are watered only with recycled water, and it is likewise required to use recycled water for watering young trees in our tree maintenance contract with West Coast Arborists. City trees are also typically irrigated with recycled water in most of the large median islands across Glendale and 11 City Parks. Recycled water makes up approximately 54% of City-owned irrigation.

8. Watering - Specific funding and approach to water trees

Regular watering is necessary to ensure new trees become drought tolerant. The first two years of watering must be regular, and third year watering can be tapered. After five years, no supplemental water should be needed. Adjusting the watering program to improve tree survival and establishment should include watering bags to speed up and improve water delivery. A watering bag can be filled quickly to 15 gallons, which is the quantity many young trees require.

With the approved Measure S funding, staff intends to plant a total of 800 street trees this fiscal year, and ensure watering is provided for them, by maximizing coordination with existing CIP projects. For future years, Public Works will request funding to cover both tree planting and watering services. Planting 450 additional trees annually would require approximately \$150,000 in additional funding for watering.

9. Watering – Is an ordinance change recommended?

Currently, the Glendale Municipal Code requires the adjacent private property owner to provide the needed watering. Adjacent property owners are also responsible for weed

abatement and general parkway maintenance. Instilling a sense of community stewardship of public right-of-ways is important in garnering neighborhood support for our shared public infrastructure. Additionally, Public Works lacks the resources necessary to provide adequate watering to all young trees for the ideal length of five years. Therefore, it is not recommended to change this ordinance.

10. Funding – Overall cumulative need

As described in the previous report, there are three areas of need in Public Works' current urban forest program. First, we need to plant more trees to mitigate canopy decline. Second, we must have adequate water beyond existing capacity. Third, we need adequate funding for the grid trimming program, to shorten the current 6-year cycle.

Staff estimates 630 trees are removed annually compared to the current rate of 300 annually planted trees. To recover from the canopy deficit, we would need to increase plantings by 450 trees to 750 trees per year. If 750 trees were planted for 10 years, we would be able to mitigate tree canopy losses and grow the canopy coverage. Planting new trees in areas with few existing trees is the most impactful and cost-effective method of increasing canopy coverage, versus a single tree in an area with few trees, both in terms of benefits to the City and to increase canopy coverage overall. At a current rate of \$390 per tree, planting an additional 450 trees would require \$175,500 annually. Table 1 identifies the needed additional funding for planting per year.

Table 1: Anticipated Funding Required for Additional Tree Planting

PW Planting Target	Unit Cost	Annual Funding Required
300 (current)	\$390/tree	\$117,000 (existing)
450 (needed)	\$390/tree	\$175,500 (additional need)
750 (total)	\$390/tree	\$292,500 (total)

To increase planting levels, these additional trees would also require weekly watering, which would require use of a private contractor. The contract rate for watering a tree is \$7.60 per visit. Thus, for an additional 450 trees, it costs \$2,848.50 weekly, or \$148,122 annually.

Finally, to return to the 6-year street tree maintenance cycle, Public Works would require an additional \$437,000 annually. The City's current contract rate for tree trimming is based on unit costs for tree trunk sizes, and paired with the data in the street tree inventory. It will cost \$5,076,000 to prune every City street tree over the 6-year grid cycle, or roughly \$846,000 per year. Table 2 shows the current funding available for tree maintenance, and the needed amount to return the program to a 6-year cycle.

Table 2: Anticipated Funding Required to Achieve 6-Year Pruning Cycle

	Annual Funding	Average unit cost	Average # of trees pruned/year
Current funding	\$409,000	\$135.26/tree	3,024
Needed funding	\$437,000	\$135.26/tree	3,231
Totals	\$846,000		6,255

The total additional annual funding to support an optimal tree maintenance program is \$760,622. With this funding, the City would be capable of ensuring each street tree is maintained on a 6-year cycle, and after 10 years, will have fully recovered from the previous net loss of trees, as well as give water to each newly planted tree for the first year via a contractor, with Public Works staff providing subsequent watering. Table 3 summarizes needed funding.

Table 3: Recommended Funding Summary

Needed Tree Planting	\$175,500
Needed Tree Watering	\$148,122
Needed Tree Maintenance	\$437,000
Total Annual Additional Funding Recommended	\$760,622

11. Funding – Public sponsorships

Council commented on public sponsorships as a possible way to bolster the tree planting program. Typically, these sponsorships are provided via nonprofit organizations with expertise in tree planting and those that have an existing agreement with a City. A corporation or community group can donate to the nonprofit for tree plantings or maintenance activities in the City.

Currently, the City has no existing partnerships with these organizations, however, we are exploring opportunities to team up with organizations such as TreePeople and North East Trees to identify programs that would help augment City's tree planting efforts.

12. Funding – Research donation tree possibility; describe existing program

The existing tree donation program in the Community Forest Management Plan may be sufficient for City needs, though it has not been publicized in recent years. It would be sensible to add this program to the Public Works website as well as a convenient way to donate. Expanding this program to take the form of corporate sponsorships is also possible.

The current tree donation program is in the form of monetary gifts dedicated to the purchase and planting of a tree at the 24" box size, which is currently \$390. The tree location and species are at the discretion of the City. Donations greater than \$500 must be approved by the Director of Public Works. The most recent tree donation was at this \$500 limit, which went towards a median replanting project at Carr Drive and East Broadway.

13. Funding – Grants; describe past pursuits and new opportunities

Grants are used by the City to bolster tree planting efforts, but are a competitive and unreliable source of funding. Public Works has planted 550 trees with grant funding in the past 10 years and recently was awarded two grants for an additional 55 trees, with another application pending.

14. Ordinance – Explore private tree programs, specify recommended changes and the resulting fiscal, staff, and impact on City Departments

An expanded survey of 20 Los Angeles County cities of similar character to Glendale indicates that half of the communities do not have private tree protections, with ten communities protecting some or all native species, and only six protecting additional, non-native species. A summary table is included in Exhibit 2.

However, City of Glendale already protects a significant quantity of both public and private trees. Every tree within the City right-of-way or an adjacent planting easement is protected, and cannot be pruned or removed unless the work is performed by the City and meets strict City ordinance standards. In some communities with Heritage Tree programs, such as Santa Monica and Los Angeles, specific notable trees are subject to additional protections; however, these designated trees are limited to City-owned trees. This is not the case in Glendale, as our street tree ordinance already protects all City-owned trees. Additionally, the existing Indigenous Tree Ordinance protects some privately owned trees. The intent of the Indigenous Tree Ordinance is to create favorable conditions for the preservation of indigenous trees in the community while respecting individual rights to develop, maintain and enjoy private property to the fullest possible extent consistent with the public interest, health and welfare.

The ordinance as structured currently protects the most common and valuable private native trees within Glendale, which has the added benefit of mainly consisting of large, native keystone species best suited for our environment. In cities where significant non-native tree protections exist, City review of tree removal applications is usually minimal. For example, in cities where many private tree species are protected, if an independent arborist report recommends a tree removal, the arborist report is taken at face value, and the removal is approved by the City. In Glendale, fewer species of protected trees allows for a greater level of application review. Staff is also able to work with the arborist and tree owner to determine if other options exist beyond tree removal.

Staff does not recommend amending the private tree ordinance at this time, either to protect additional species or heritage trees. Most importantly, staff estimates the majority of large existing trees are already protected under the existing Street and Indigenous Tree Ordinances. Increasing the scope of the ordinance to include non-indigenous trees, or smaller indigenous trees, will require significant staff resources across multiple divisions within Public Works and Community Development Departments to implement and enforce any new protections, with diminishing returns in terms of the quality of oversight and enforcement.

Should the City Council wish to expand Glendale's tree ordinance to include additional

trees, staff will analyze potential options and return with findings and associated costs.

STAKEHOLDERS/OUTREACH

The community forest issues described in this report derive from an earlier City Council meeting.

FISCAL IMPACT

There is no fiscal impact associated with this report.

ENVIRONMENTAL REVIEW

This item is considered a ministerial activity and therefore, not subject to CEQA review.

CAMPAIGN DISCLOSURE

This item is exempt from campaign disclosure requirements.

ALTERNATIVES

Alternative 1: The City Council may provide direction as proposed by staff.

Alternative 2: The City Council may not accept these recommendations.

Alternative 3: The City Council may consider any other alternative not proposed by staff.

ADMINISTRATIVE ACTION

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EXHIBITS / ATTACHMENTS

Exhibit 1: Glendale Canopy Coverage by Census Tract

Exhibit 2: Los Angeles County Private Tree Ordinances