



DATE: September 15, 2015

CATEGORY: New Business

DEPT.: Community Services

TITLE: **Community Tree Master Plan**

RECOMMENDATION

Adopt the 2015 Community Tree Master Plan as recommended by the Parks and Recreation Commission and the Environmental Planning Commission (Attachment 1 to the Council report).

BACKGROUND

For Fiscal Years 2013-15, the City Council established a major goal to “establish guidelines for tree preservation and planting in development projects with particular emphasis on canopy and habitat preservation.” Included in the projects to support this goal is the update of the Community Tree Master Plan (Plan).

The Plan was drafted in collaboration with the Environmental Planning Commission (EPC), the Parks and Recreation Commission (PRC), the Public Works and Community Development Departments, key stakeholders, and the community. The draft Plan was approved by the EPC on December 3, 2014 and the PRC on January 14, 2015.

The proposed Plan was presented to the City Council in a Study Session on June 23, 2015 (Attachment 2). Staff also provided additional information regarding the 50 percent canopy shade goal for new parking lots. Based on a modeling exercise of three current projects, staff was unable to configure the parking lots to meet a 50 percent canopy goal without significantly reducing parking spaces and requiring an update of development standards. Staff therefore recommended reducing the parking lot canopy goal from 50 to 40 percent. Council supported this change and the Plan has been updated accordingly. Council also directed staff to look at requiring a street tree on single-story additions and better enforcement to ensure replacement trees are planted.

ANALYSIS

The Plan is intended to be a guiding document that provides recommendations and actions the City can take in the short and long term to improve and enhance the City's urban forest and canopy over the next 15 years, and to respond to environmental and safety issues that can impact community trees and wildlife habitat.

Community Input

A community survey was conducted to solicit input on community tree maintenance standards, the Heritage tree program, canopy goals, and educational outreach. A total of 596 responses were received during the month of July 2014. In addition, a community meeting was held on July 23, 2014.

Public comments were also received at a public hearing of the PRC on October 22, 2014, an EPC meeting on December 3, 2014, and during the City Council Study Session on May 26, 2015. In summary, public comments focused primarily on the following topic areas:

- Preservation of canopy and trees.
- Greater consistency and enforcement of the Heritage tree removal process in development and nondevelopment projects.
- A desire for more diversity of tree species, including drought-tolerant species.
- Providing canopy coverage requirements for parking lots.
- Ideas to incentivize tree planting on private property.
- Higher fines for unpermitted tree removals/damage.
- Inclusion of fruit trees as an approved street tree.
- Recommendation for a 2:1 canopy coverage goal for development projects.
- Add more pervious surfaces in development projects.
- Community outreach and education on how to care for trees during times of drought.

The Community Tree Survey results can be found in the Plan document within the sections “What Do We Want?” on Pages 38 to 40 and detailed in Appendix D.

Advisory Body Input

The Plan was reviewed and updated by the PRC on October 22, 2014 and January 14, 2015, and approved without changes by the EPC on December 3, 2014.

In addition to Plan updates, the PRC recommended the following development-related recommendations that were approved by the EPC at the December meeting.

1. Recommend a tree mitigation goal based on canopy coverage at a 2:1 ratio for development projects.
2. Increase pervious surface areas in new developments and parking lots.
3. Reduce soil compaction and increase soil volume in parking lots.
4. Recommend staff work with the PRC and EPC to explore and clarify perceived inconsistencies between development and nondevelopment Heritage tree removal postings.
5. Explore the viability of applying new parking lot shade goals to existing parking lots if there is a request for a redevelopment permit.

Council Direction

At the June 23, 2015 Study Session, the City Council supported the proposed Plan and provided direction to staff to update the new parking lot canopy goal from 50 percent to 40 percent coverage at 15 to 20 years maturity to be more in-line with current development standards. Council also directed staff to look at updating the City Code to require a street tree on single-story additions. The City Code only requires street tree plantings on second-story additions and on new dwelling units. Section 36.10.25. of the City Code states that, “Street trees shall be planted in front of all structures with second-story additions or construction of a new dwelling unit.” While planting of a street tree is not a requirement for single-story additions, staff does encourage street tree plantings when reviewing remodel requests. Staff will work with the EPC to bring forward a recommendation to Council that includes a threshold for what additional square footage would trigger a street tree requirement in single-story additions.

Council also requested staff look for opportunities to better ensure that permitted tree removals or trees that are removed by the City are replaced in a timely manner. Staff will work with the Community Development Department and the Parks Division to track tree removal permits and ensure that all permitted tree removals and City removed trees are replaced within six months.

Plan Recommendations

The following are some key Plan recommendations to maintain and enhance the City's community trees:

1. Increase Overall Canopy by 11,000 New Trees

The Plan recommends a 5 percent increase to canopy coverage, increasing the City's overall canopy from 17.7 percent to 22.5 percent. It is estimated that a 5 percent increase to canopy would equate to approximately 11,000 new trees. A plan to meet the goal of planting 11,000 new trees within a 15-year period is included as Attachment 3. Staff proposes to plant approximately 973 trees annually which includes approximately 500 street trees, 273 new development trees, and 200 private trees each year. Once the City has reached optimal street tree stocking levels, new trees would need to come from development and private plantings. Young trees take time to mature, so staff anticipates it would take approximately 15 to 20 years for trees to reach full maturity and canopy coverage.

2. Increase the Stocking Level of Community Tree Resource

The Plan recommends increasing the City's street tree stocking level from 82 percent to 91 percent over the next 15 years. This would equate to approximately 3,000 new street trees and increase the City's street tree inventory from approximately 26,000 to 29,000. Many of the vacant street tree sites are due to conflicts with City utilities or because homeowners choose not to have a tree. The City will utilize hourly staff to work with homeowners on outreach efforts and education about the benefits of trees.

3. Develop a Technical Manual for Protection of Trees

Protection of existing mature trees during construction is important to sustain both the health and the value of existing trees and canopy. The Plan recommends construction guidelines for the preservation and protection of existing trees preconstruction, during construction, and postconstruction. The Plan also

provides guidelines on mitigating tree and infrastructure conflicts for paving, foundations, sidewalks, and curbs.

The Plan also recommends promoting design and construction standards that increase soil volume and planting space. Trees must have enough soil volume and space to support healthy root growth and structure so trees can reach full maturity and canopy potential. A full description of recommended guidelines is included in the draft Plan and also included as Attachment 4 for ease of reference.

Staff recommends a contract arborist be hired on development projects to ensure adherence to the City's tree protection plan and that adequate protection is provided to avoid damage to the tree(s) and/or critical root zone area during and immediately following construction.

4 Adopt a 40 Percent Parking Lot Shade Goal

Shaded parking lots can contribute greatly to reducing the overall heat island effect from asphalt surfaces. The Plan recommends a parking lot shade goal of 40 percent as measured at 15 to 20 year maturity. This goal also allows the flexibility for Council to consider solar shade structures as an alternative to required shade trees.

5. Promote Design and Construction Standards that Increase Soil Volume, Planting Space, and Pervious Surface

To reach full maturity and canopy coverage, a tree must have enough soil volume to support healthy root growth and structure. This is particularly important in parking lots and other paved areas where the temperature of surrounding asphalt can inhibit the natural spread of roots beyond planter boundaries. Finding adequate planter space for medium and large trees can be a challenge in Mountain View where space for trees is often limited by hardscape. The Plan recommends developers consider using planter designs that increase soil volume below grade when surface area is restricted by impervious surfaces. In addition to planter design, species selection is critical (e.g., right tree, right place) to ensure that trees will grow and mature alongside other infrastructure without conflict.

6. Sustainability, Health, and Safety of Community Trees

The Plan recommends promoting greater diversity in the street tree palette. Species diversity is an indicator of the overall health and stability of street trees. Greater diversity promotes greater resistance to pests, disease, and environmental

stressors. This goal also includes an annual work plan for annual tree care operations, such as inspections, trim cycles, planting, and removals to maintain a healthy urban forest. This work plan also includes identifying objectives, risk factors, and action thresholds for tree risk management of the urban forest.

7. Preservation and Enrichment of Wildlife Habitat

The Plan recommends staff and contractors be educated on State and Federal regulations protecting endangered and migratory species and nesting birds and modify, when appropriate, pruning and maintenance operations to support wildlife habitat. Approximately 350 species of birds live in or migrate through Mountain View and the preservation of these species and other wildlife is a priority for the community. Contractors and in-house staff will receive training from the City's Wildlife Preservation Biologist to identify and protect nesting and migratory birds. The Plan also recommends planting tree species that provide critical nesting, foraging, and cover for birds and wildlife.

8. Increased Outreach and Education

The Plan recommends developing programs, activities, and materials that increase community awareness and appreciation for the urban forest. One key factor is to update the City's website to provide additional information to residents on tree care, maintenance, and the Heritage tree program. The website will also provide a recommended list of tree species for Mountain View and how to care for trees during drought conditions. The Plan recommends working with Mountain View Trees, schools, nonprofits, businesses, and neighborhood groups to develop informational workshops and walks designed to educate the public on tree care, choosing the right tree, and the value and benefit of trees in the community.

9. Review and Measure Attainment of Plan Goals

The Plan recommends an internal operational review of Plan goals every year to develop the Forestry Division's annual work plan. Every five years, the Plan recommends preparing a State of the Community Forest Report to update the community on the state of the forest, canopy goals, and to quantify the increased value and benefits of the City's urban forest. The Plan also recommends a canopy analysis and an update of the Master Street Tree List every 10 years to review changes and improvements to the City's canopy and ensure the health and sustainability of the urban forest.

Summary of Recommendations

The following is a summary of key Plan recommendations for Council's consideration and inclusion in the draft Plan:

1. Increase overall canopy by 5 percentage points.
2. Increase the stocking level of street trees.
3. Develop a technical manual for protection of trees.
4. Adopt a 40 percent parking lot shade goal.
5. Design and construction standards that increase soil volume, planting space, and pervious surface.
6. Sustainability, health, and safety of community trees.
7. Preservation and enrichment of wildlife habitat.
8. Increased outreach and education.
9. Review and measure attainment of Plan goals.

FISCAL IMPACT

The City Council approved \$50,000 in ongoing Capital Improvement Program (CIP) funding as part of the Fiscal Year 2015-16 budget. This funding will be used for hourly support, contract services, new trees, community outreach, and supplies needed to implement the City's goal of increasing street tree plantings.

CONCLUSION

For Fiscal Years 2013-15, the City Council adopted a major goal to "establish guidelines for tree preservation and planting in development projects with particular emphasis on canopy and habitat preservation." One of the projects in support of this goal was the update of the Community Tree Master Plan. The proposed Plan provides a guide for managing, enhancing, and growing the urban forest over the next 10 years. The Plan also provides long-range objectives for promoting sustainability, increasing diversity, protecting wildlife habitat, and increasing the City's overall tree canopy by 5 percent. The Plan was presented and approved by the EPC on December 3, 2014, and the PRC on

January 14, 2015. The Commissions' recommendations were presented to the City Council in a Study Session on June 23, 2015. The City Council supported the proposed Plan and provided direction to staff to update the new parking lot canopy goal from 50 percent to 40 percent coverage to be more in line with current development standards. In support of Plan recommendations, the City Council approved \$50,000 in ongoing CIP funding in the Fiscal Year 2015-16 budget to fund outreach efforts, hourly support, the purchase of new trees, and contract services.

NEXT STEPS

In addition to Plan implementation, staff will work with the EPC to develop a recommendation to Council for updating the City Code to require a street tree on single-story additions. Staff will also work with the Community Development Department, the Parks Division, and Code Enforcement to ensure that permitted tree removals have been replaced in a timely manner.

ALTERNATIVES

1. Revise the 2015 Community Tree Master Plan as directed by the City Council.
2. Do not update the City Code to require a street tree on single-story additions.
3. Direct staff to return to the PRC and/or the EPC for additional work as determined by Council.
4. Provide other direction.

PUBLIC NOTICING

Agenda posting and notification sent to the PRC, the EPC, and interested parties.

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- Attachments:
1. Draft Community Tree Master Plan
 2. [City Council Study Session, Community Tree Master Plan, June 23, 2015](#)
 3. Plan to Achieve 5 Percent Canopy Goal
 4. Guidelines for Tree Preservation in Construction Zones

cc: ACDD/PM, ZA, APWD – Solomon, PCE – Au