

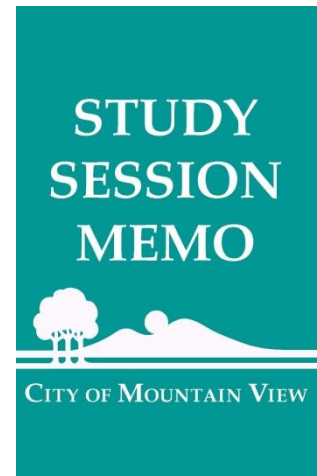
DATE: June 23, 2015

TO: Honorable Mayor and City Council

FROM: Rochelle Kiner, Senior Administrative Analyst
Bruce Hurlburt, Parks and Open Space
Manager
J.P. de la Montaigne, Community Services
Director

VIA: Daniel H. Rich, City Manager

TITLE: **Community Tree Master Plan**



PURPOSE

The purpose of this Study Session is to obtain City Council input on the draft Community Tree Master Plan. The draft Plan was prepared in response to City Council's goal for Fiscal Years 2013-15 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 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 respond to environmental and safety issues that can impact community trees and wildlife habitat.

BACKGROUND

Staff worked with the Community Development Department to develop a Request for Proposals for a Plan that included development-related recommendations and canopy goals. On October 16, 2013, the Parks and Recreation Commission (PRC) approved the list of key elements to be included in the Plan update.

The draft Plan was reviewed and updated by the PRC on October 24, 2014. The draft Plan, along with additional recommendations regarding canopy goals and construction guidelines in development projects, was forwarded to the Environmental Planning Commission (EPC) for consideration and approval on December 3, 2014. The PRC finalized Plan recommendations on January 14, 2015 and also worked with Community Development staff to update development-related Heritage tree posting and notification requirements which were approved by the PRC on February 11, 2015.

DISCUSSION

The Plan is organized into the following categories: what we have, what we want, how do we get there, and how are we doing. This structure provides an easy-to-understand conceptual framework for managing community tree resources (Attachment 1).

The Plan development process involved a comprehensive review and assessment of existing community tree resources, including the composition, value, and environmental benefits of community trees. The process explored the goals set by the City Council, community values, existing regulations, industry standards, and policies and procedures for the protection of community trees, Heritage trees, and habitat. The process involved interviews with Forestry staff and internal and external stakeholders who play a role in the planning, design, care, and advocacy of the community forest. These stakeholders included City staff, Urban Forestry Board members, utility providers, nonprofit groups, and the community. Each of these stakeholders contributed to the development of this Plan.

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.

Regarding item No. 4 listed above, staff worked with the Community Development Department to review and update Heritage tree posting guidelines so they were similar for development and nondevelopment projects. Changes included updates to posting notices to improve visibility, including information on the appeal process, and posting information on Heritage tree removals to the City's website. Those updates were presented and approved by the PRC on February 11, 2015.

Community Input

A community survey was conducted to solicit input on community tree maintenance standards, the Heritage tree program, canopy goals, and educational outreach. The survey was advertised through the City's website, Facebook, Twitter, and Nextdoor, and invitations were sent directly to neighborhood association groups, Friends of the Stevens Creek Trail, and Mountain View Trees. 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, and at the EPC meeting on December 3, 2014. In summary, public comments focused primarily on the following topic areas:

- Better preservation of canopy and trees.
- Greater consistency and enforcement of the Heritage tree removal process between 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.

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 (Attachment 1).

RECOMMENDATION

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

1. Increase Overall Canopy by 5 Percentage Points

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 2. 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, then 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.

Staff estimates this goal would require \$50,000 annually in additional funding for new trees, contract services for tree planting, and hourly support for outreach efforts and to work with homeowners on street tree plantings.

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. Staff anticipates additional hourly support would be needed 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 3 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 50 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 50 percent at 15 years after construction. This goal was recommended by community members and supported by the PRC and the EPC. If approved by Council, development standards would need to be updated.

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 temperatures 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 a tree will grow and mature alongside other infrastructure without conflict.

6. **Sustainability, Health, and Safety of the Community Tree Resource**

The Plan recommends promoting greater diversity in the street tree palette. Species diversity in an urban forest 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 to identify goals and 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**

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 can 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. 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, how to choose the right tree, and highlights 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 and conducting an i-Tree analysis 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 update the Master Street Tree List to 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 50 percent parking lot shade goal. This option requires updates to development standards.
5. Design and construction standards that increase soil volume, planting space, and pervious surface.
6. Sustainability, health, and safety of the community tree resource.
7. Preservation and enrichment of wildlife habitat.
8. Increased outreach and education.
9. Review and measure attainment of plan goals.

FISCAL IMPACT

Staff estimates annual costs to the Community Services Department of \$50,000 for administrative support, contract services, new trees, community outreach, and supplies needed to implement the City's goal of increasing street tree plantings. Staff also estimates \$100,000 annually for a contract arborist to oversee development projects. The contract arborist would be paid for by developers through fees or reimbursements.

NEXT STEPS

Following Council's input, the draft Plan will be updated and presented to the City Council for adoption in fall 2015.

PUBLIC NOTICING

Agenda posting and notification sent to the Parks and Recreation Commission, the Environmental Planning Commission, and interested parties.

RK-BH-JPdIM/7/CAM
240-06-23-15SS-E

Attachments: 1. Draft Community Tree Master Plan
2. Plan to Achieve 5 Percent Canopy Goal
3. Guidelines for Tree Preservation in Construction Zones

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