



CITY OF MOUNTAIN VIEW

MEMORANDUM

Community Services Department

DATE: June 14, 2017

TO: Parks and Recreation Commission

FROM: Bruce Hurlburt, Parks and Open Space Manager
J.P. de la Montaigne, Community Services Director

SUBJECT: Community Tree Master Plan Update

PURPOSE

Provide the Parks and Recreation Commission (PRC) with an update on the objectives of the Community Tree Master Plan.

BACKGROUND

The City's tree canopy is a valuable asset to the Mountain View community. Not only is it aesthetically pleasing, but it also reduces "heat-island" effect, improves air and water quality, reduces home energy use, increases property values, and provides habitat for urban wildlife.

Because of these benefits, the City Council adopted a Council goal to "establish guidelines for tree preservation and planting in development projects with particular emphasis on canopy and habitat preservation" for Fiscal Years 2013-15. Included in the projects to support this goal was an update of the Community Tree Master Plan (Plan). On September 15, 2015, the City Council adopted the updated Plan. The purpose of the Plan is to provide a guide for growing, managing, and enhancing Mountain View's tree canopy over the next 10 to 15 years.

As part of the Fiscal Years 2015-17 Council Goals, staff was directed to provide an update to the PRC on the implementation of the updated 2015 Plan. Today's update does not include actual canopy coverage numbers or percentages. Those will be provided as part of the 2020 update, which is five years after adoption. When updating the Plan, it was determined that measurements of tree canopy coverage would be taken every five years in order to give new trees a chance to grow and start developing their canopy.

UPDATE OF OBJECTIVES

The Plan identifies six broad objectives:

- **Preservation and Enhancement of Tree Canopy**
- **Sustainability, Health, and Safety in the Community Tree Resource**
- **Preservation and Enrichment of Wildlife and Habitat**
- **Increased Outreach and Education**
- **Increased Collaboration with Volunteers and Nonprofit Groups**
- **Review and Measure Attainment of the Community Tree Master Plan**

These objectives are supported by a comprehensive list of strategies and implementation measures to support the success of the Plan. Implementation measures have been divided up into three categories: Completed, In Progress, and Next Steps. Under Next Steps, staff has provided a brief description of how we intend to move forward.

Preservation and Enhancement of Tree Canopy

This objective contains the goals of increasing canopy cover by five percentage points from 17.7 percent to 22.7 percent, adopting new parking lot shade goals, and addressing replacement of trees lost by development. The goal of increasing the existing canopy by five percentage points equates to adding an additional 380 acres of canopy. The Plan includes a strategy to plant enough trees (estimated at 11,000) over the next 10 to 15 years to meet the goal (Attachment 1).

Completed

- Annual tracking of tree planting. Last fiscal year, staff began to collate quarterly data from the Forestry Division (Forestry) on trees that are planted or removed by the City (public trees) or individual residents (private trees) with semiannual data from the Community Development Department (CDD) on trees that are planted or removed through development projects. One and one-half years of data has been collected to date.
- Established an overall long-term strategy for planting development, public, and private trees to achieve the canopy cover goal set forth in the Plan. To achieve the canopy cover goal, 973 net new trees need to be planted each year for 15 years.

Staff determined this requires at least 273 development trees, 500 street trees, and 200 private trees to be planted annually.

- Forestry worked with CDD to adopt guidelines to mitigate the loss of Heritage trees in development projects by requiring developers to replace Heritage trees at a 2:1 ratio. If that ratio cannot be met, the developer pays a Tree Replacement Fee for each replacement tree that cannot be provided.
- CDD requires developers to include plans showing canopy coverage before development, after development, 5 years after completion, and 10 years after completion. At a minimum, staff wants developers to retain the same level of canopy coverage before and after development. Ideally, they will increase coverage whenever possible.
- Established the Tree Mitigation Fund (TMF), which is funded from two different types of fees related to trees: Tree Replacement Fee and Tree Mitigation Fee. The fund is used to plant new trees and for community outreach.
- Created a street tree vacancy database. This will facilitate next steps addressed under the “Increased Outreach and Education” objective.
- Forestry worked with CDD to adopt new parking lot shade goals of 40 percent for new developments.

In Progress

- Promote design and construction standards for developments that increase soil volume for trees. An example currently being implemented is using structural soil in areas with hardscape constraints. Structural soil provides sufficient porous space for roots to grow under hardscape elements, such as sidewalks, without causing long-term damage.

Next Steps

- Develop a technical manual for the protection and preservation of trees during construction and development. We currently have guidelines for CDD and Building Inspection Division staff to follow when working with a developer. A technical manual would provide additional assurance that trees are properly managed during development and construction. Staff is exploring partnering with a nonprofit or consultant to develop Mountain View’s manual, using the City of Palo Alto’s manual as an example.

Sustainability, Health, and Safety in the Community Tree Resource

This objective contains the goals of increasing species diversity, following industry standards for tree care, and initiating a cyclical inspection and pruning program that ensures all community trees are inspected and pruned at regular intervals. These goals promote risk management and the preservation of tree health, longevity, and structure. The pruning and inspection program also ensures equity of service throughout the community.

Completed

- Promote greater diversity in the tree palette. Work on this goal started in late 2010 with the update of the Master Street Tree Plan. This update provided recommended tree species to replace trees with a poor performance record such as liquidambar, Modesto, and raywood ash. Staff is also offering more options in the street tree palette. The various new species for street trees will be formally adopted in the next update of the Master Street Tree Plan.
- A new Master Plant and Tree Palette was adopted for the North Bayshore. The palette for this area emphasizes the use of native trees that perform well in a bay-influenced habitat.

In Progress

- Promote proactive maintenance with a minimum seven-year inspection and pruning cycle for all community trees. Through this year's budget process, staff has requested a Tree Trimmer III position to help advance implementation of this measure. The position will focus on identifying growth rates and optimum pruning cycles for tree species as well as work to improve response times for tree inspections and pruning.
- Forestry will continue to follow the industry standards for tree care and abide by State and Federal regulations. This is an ongoing implementation measure that staff has always followed.

Next Steps

- Update inventory management procedures to improve efficiency and accessibility. The City currently has an asset maintenance management system that is utilized by multiple departments and Forestry. The City is working with the vendor of the

system to upgrade to the most current version. This will improve tracking of work orders, scheduling pruning cycles, and improve ease of data entry.

Preservation and Enrichment of Wildlife Habitat

Approximately 350 species of birds live in or migrate through Mountain View. Preservation of these species and other wildlife is a priority for the community. The City's urban forest provides critical habitat and the Plan ensures that forestry operation will provide adequate consideration to the protection of these species and their habitat.

Completed

- Annual in-house training for staff and tree contractor staff on nesting season in our area to teach how to identify and avoid disturbance of any active nest.
- Trees identified with active nests are pruned after nesting season is completed.

In Progress

- Promote important habitat plant species for cover, foraging, and nesting. Whenever possible, tree planting and landscape projects incorporate tree species that enrich wildlife habitat by providing important cover, nesting, and foraging sources. This goal is heavily promoted in the North Bayshore and Shoreline Areas where species of special interest such as burrowing owl and clapper rail live.

Increased Outreach and Education

Just as a healthy urban forest is vital to the health and well-being of the community, the support, partnership, and engagement of residents is critical to the growth, preservation, and sustainability of the urban forest. The Plan recommends developing programs, activities, and materials that increase community participation and awareness of the maintenance and growth of the urban forest.

Completed

- Enhance the City web page for community trees. Staff has provided facts and links to the City's tree protection regulations, requirements, policies, and forms.
- Staff created an accessible database of pending and active requests for Heritage Tree Removal Permits.

- Staff developed an FAQ section for Heritage and street trees on the City's website.
- Staff increased information on the Master Street Tree List web page and added visuals of each tree along with its approximate size.
- Staff has led an Arbor Day Celebration each March for the past 16 years. The event provides information to residents on trees and their importance. Staff also uses the event to provide free trees for residents to plant. Residents can now sign up for a free tree on the City's website.

In Progress

- Updating links to articles on how to plant, prune, and irrigate trees.
- Adding links to electric and gas utility websites that explain safety and Right Tree, Right Place concepts.
- Continue to provide information about volunteer opportunities with nonprofit groups such as Mountain View Trees. This is an ongoing implementation measure.

Next Steps

- Provide links to trainings by local nonprofits such as Mountain View Trees and Canopy. These include hands-on workshops that teach the basics of tree care, pruning, and irrigation practices.
- Through the annual Forestry capital improvement project (CIP), staff was able to secure funding for either a part-time worker or a contractor to perform outreach for street trees as well as other marketing efforts. With the completion of the street tree vacancy database, this person will be able to perform targeted outreach to residents to gauge interest in planting street trees.

Increased Collaboration with Volunteers and Nonprofit Groups

Local nonprofits such as Mountain View Trees, Friends of Stevens Creek Trail, and Canopy in Palo Alto help staff engage residents, promote goals of the Plan, rally volunteers, and provide a wealth of information on the importance of trees and habitat in our community. It has been staff's pleasure to collaborate with Mountain View Trees since its inception in 2006.

Completed

- Work with Mountain View Trees to provide three community planting events on public property every year.
- Provide trees and locations for Mountain View Trees to conduct pruning workshops that teach about tree structure and pruning techniques to help a tree grow.

In Progress

- Staff is working with Mountain View Trees, Friends of Stevens Creek Trail, and Canopy to plant 87 fifteen-gallon trees along Stevens Creek Trail on June 17, 2017.

Next Steps

- Continue to partner with Mountain View Trees and Canopy to provide pruning and planting events, increase outreach to volunteers and other organizations, and leverage materials to educate the public about the benefits of trees.

Review and Measure Attainment of the Plan

The Plan was developed to provide guidelines to improve our urban forest. It is important to review the Plan to ensure that objectives and strategies are incorporated in Forestry's ongoing work and planning. We must also periodically measure progress to see how we are doing.

Completed

- Staff developed a matrix with CDD for tracking the number of development trees, public trees, and private trees that are planted and removed (Attachment 2).

In Progress

- Staff is using information from the matrix to assist with our annual in-house review on meeting Plan goals.

Next Steps

- Complete a canopy analysis in 2020 to measure the change in canopy.

- Prepare a State of the Community Forest Report every five years (2020) to update the community on the state of the forest, canopy goals, and quantify the increase value and benefits of the City's urban forest.
- Review and update the Master Street Tree Plan (2020) to maintain a broad selection of tree species that perform well in our community.

Challenges

The community faces some challenges in implementing the Plan. There is a finite amount of land and limitations on available planting space for trees. On top of this, achieving the net new goals for tree planting is increasingly difficult due to trees that have been impacted by the severe drought of the past five years. Lastly, there is mature canopy being lost through ongoing commercial and residential development that will take a long time to replace with new young trees.

FISCAL IMPACT

At this time, there are no additional financial impacts being requested. To date, Forestry has received \$31,000 through the CIP process to hire a part-time employee or contractor to perform outreach for street trees and other educational and marketing efforts. An additional \$19,000 was provided through the CIP process to cover the cost of materials, supplies, and trees affiliated with these efforts.

Staff also worked with the Finance and Administrative Services Department and CDD to develop the Tree Mitigation Fund, which currently has \$41,200 from Tree Mitigation fees. This fee, along with the Tree Replacement Fee (beginning July 1, 2017), will provide the revenue source to the fund. The expenditures from the fund will be for Arbor Day, street trees, and other tree-planting activities.

Lastly, Forestry requested a Tree Trimmer III (\$139,800) through the current budget process. The City Manager and City Council are recommending to include the position next year. The Tree Trimmer III will focus on improving response times for tree inspections and pruning by working closely with contractors to address residents' concerns involving trees.

CONCLUSION

With six broad objectives that each have measureable goals and implementation measures, the Plan provides a comprehensive template to focus and guide Mountain View's efforts to improve the City's canopy. This update provides the PRC with the

status of implementation measures after adopting the updated Plan approximately 18 months ago. Actual canopy measurements will be collected in 2020 as part of the State of the Community Forest Report.

Staff is making good progress on the objectives set forth in the Plan. With funding sources now established and mutual understanding of goals with CDD, staff anticipates being able to make even more progress on the objectives despite the challenges that come with living in a built-out City.

The results of the Plan will be measurable through increased benefits and value in the community tree resource and the preservation and eventual increase in canopy cover over time. Attainment of the objectives and strategies will support better tree health, greater longevity, and hopefully a reduction in tree failures so that the City can enjoy all the benefits of the urban forest.

BH-JPdIM/BR/3/CSD

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Attachments: 1. Plan to Achieve 5 Percent Canopy Goal
2. Community Tree Master Plan Tree Tracker