



Memorandum

Date: February 8, 2023
To: Tree Commission
Charlie Murphy, Urban Forestry Manager
From: Adrienne Heinig, Assistant to the Director
Tina McKeand & Rachael Sitz, Davey Resource Group
Subject: Item 4A – Urban Forest Management Plan: Draft Orientation

Recommendations

Informational Item.

1. Receive introductory orientation on the draft Urban Forest Management Plan (UFMP) website for the City of Davis from representatives of Davey Resource Group; and
2. Consider recommended changes to the UFMP Vision based on feedback from staff; and
3. Note any questions (other than clarifying or functional webpage questions) during introduction & subsequent review for submittal to staff for more detailed discussion on February 16.

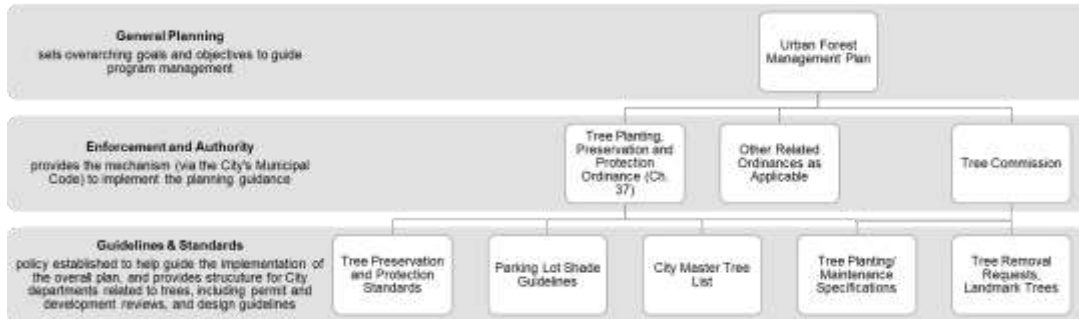
Background

The City of Davis received a CAL-FIRE Grant utilizing Proposition 68 funds to develop an Urban Forest Management Plan (UFMP) and to plant 1,000 new trees within the city limits. Tree Davis, the co-applicant with the City on the grant, took the lead in planting the 1,000 trees. The planting effort is complete as of the drafting of this report. The UFMP is required to be submitted to CAL FIRE by March 25, 2023, with Council approval and adoption.

The UFMP will replace the current City's Community Forest Management Plan adopted in 2002. The UFMP will be a 40-year plan that will guide the management of Davis' urban forest program. The UFMP will look at key areas of the urban forest and develop recommendations for managing, budgeting, service level matrices, and process improvements that will help improve and optimize the overall management of the City's urban forest.

The online UFMP is located here: <https://www.cityofdavis.org/city-hall/urban-forestry/city-of-davis-urban-forest-management-plan>

The Role of the Urban Forest Management Plan



Note: items included in Guidelines & Standards are examples and not a comprehensive list.

While the UFMP will be the guiding force of the Urban Forestry division by setting overarching goals and objectives, it is not intended to be the end-all, be-all document in urban forestry management. As with any City Department, operations and activities are guided by a combination of planning and policy documents, as well as supported by the City's Municipal Code. The City's Municipal Code chapter on trees (Chapter 37) will require updates (and independent of the UFMP, efforts to update Chapter 37 have been underway for a few years), and policy guidance will also require updates. The UFMP is not intended to get into the details around inter-departmental processes or detailed best management practices (BMPs). The draft action steps within the UFMP Implementation Plan point to the necessity of updating City planning & policy documents and the creation of technical manuals based on the objectives set forth in the UFMP.

Engagement

Throughout this process, weekly meetings with the consultant and City staff have involved the discussion of data, operations, processes, best management practices, standards and guidelines. Tree Davis has also been a regular and active participant in UFMP discussions.

A summary of the Tree Commission discussions of draft sections of the plan is included in the table below. City Commission liaisons from eight Commissions have also been participating: Bicycling, Transportation and Street Safety Commission (BTSSC), Finance and Budget Commission (FBC), Historical Resources Management Commission (HRMC), Natural Resources Commission (NRC), Open Space and Habitat Commission (OSHC), Planning Commission (PC), Utilities Commission (UC), and Social Services Commission (SSC). Additional efforts included collaborator interviews (which had the City's consultant sit down with the individuals and representatives of groups in the community with vested interest and/or knowledge of Davis' urban forest), and engagement with the public through a variety of channels. The outreach events associated with the UFMP are summarized in the [Community and Collaborator Engagement](#) section of the [Benchmarks](#) webpages.

Tree Commission items and presentation, reports where applicable and meeting video are summarized and linked below.

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Date	Meeting Video	Documents/Presentations
May 19	Draft Public Engagement Plan (Item 6B - starts approx. 2:34:16)	<ol style="list-style-type: none"> 1. Urban Forest Management Plan – Public Engagement Plan Draft 2. Draft Public Engagement Plan
June 16	Framework of Tree Planning Efforts (Item 6B - starts approx. 1:47:30)	<ol style="list-style-type: none"> 1. Framework of Tree Planning Efforts
July 21	City Tree Resource Analysis (Item 6B - starts approx. 25:12)	<ol style="list-style-type: none"> 1. Urban Forest Management Plan: Resource/Land Use Analysis 2. City Tree Resource Analysis 3. Terms to Know 4. Urban Forest Summary 5. PowerPoint Presentation from Davey Resource Group: Davis Tree Resource Analysis
August 18	Opportunities & Challenges Learned So Far (Item 6B - starts approx. 1:13:00)	<ol style="list-style-type: none"> 1. PowerPoint Presentation from Davey Resource Group: Scope & Progress/Challenges & Opportunities
September 15	Review & Consider 2002 Community Forest Management Plan Goals & Vision (Item 6B - starts approx. 1:53:20:00)	<ol style="list-style-type: none"> 1. Urban Forest Management Plan: Review & Consider 2002 Community Forest Management Plan Goals & Vision 2. Excerpt from the 2002 Community Forest Management Plan
October 20	Review & Consider 2002 Community Forest Management Plan Goals & Vision, Cont'd (Item 6B - starts approx. 35:15:00)	
November 17	Review & Consider 2002 Community Forest Management Plan Goals & Vision, Cont'd (Item 6B - starts approx. 1:37:00:00)	
December 15	Review & Consider 2002 Community Forest Management Plan Goals & Vision, Cont'd and Urban Forest Management Plan: Pre-Draft Update (Items 7A and 7B, Item 7A - starts approx. 14:36:00, Item 7B - starts approx. 2:11:48)	








Outline of the Urban Forest Management Plan

The UFMP is presented on the City of Davis website for easy access to information, including the full implementation plan, benchmarks, resources, urban forestry operations and funding, as well as a summary of the current state of the urban forest.

Each section is summarized briefly below with links:

Goals for the Urban Forest

The UFMP presents seven goals for the urban forest:

-  Promote tree preservation and protection
-  Continue to maintain a safe and resilient urban forest
-  Set a baseline of no net loss in tree canopy cover
-  Optimize urban forestry programming
-  Engage the community to further stewardship for the urban forest
-  Adopt the Urban Forest Management Plan and align with other guiding documents
-  Grow a climate resilient urban forest

Each goal is supported by measurable objectives and specific actions intended to guide Davis' urban forest programming, providing the foundation for annual work plans and budget forecasts. This is intended to be a dynamic tool that can and should be adjusted in response to accomplishments, new information, changes in community expectations, and available resources.

Throughout the Benchmarks and Urban Forestry Operations sections, comments and feedback from collaborators is included within applicable sections, along with a notation (via the graphics for each goal) of which goals address the collaborator remarks.

An example is provided below - from the Urban Forestry Operations section:



Collaborator Findings:

Collaborators emphasized the importance of an up-to-date tree inventory and expressed an interest in tracking vacant sites. There is desire to expand the inventory to include more information about the site conditions (e.g., irrigation, plant layout). There was particular emphasis on the importance of collecting inventory data on trees in downtown that are along important pedestrian bike corridors, along public transportation routes, and near schools to gain a better understanding of how to improve the use of public transportation through the enhancement of the urban forest. Collaborators expressed concern that there is some confusion as to what constitutes a City tree and how to consider private tree plants in the assessment.

 Optimize urban forestry programming

 Promote tree preservation and protection

Urban Forest Story Map

Key information about the urban forest is presented and summarized in the [Urban Forest Story Map](#). This executive summary provides a visual and interactive platform for exploring the current land cover and the distribution of tree canopy in Davis.

In December of 2022, the Commission received a presentation from Davey Resource Group representatives with a walk-through of the functionality of the Story Map webpage. This [presentation](#) is posted on the City's webpage, with the tour starting at the timestamp of 2:33:00 (two hours and thirty-three minutes into the meeting).

State of the Urban Forest

The [State of the Urban Forest](#) provides a summary of the current condition of the urban forest and programming, including progress towards UFMP goals and highlighted accomplishments. This also includes the narrative of the history of the Urban Forest. It is anticipated that the annual update to this page will coincide with annual updates to the Tree Commission on the progress of the UFMP.

Implementation Plan

The [Implementation Plan](#) presents the UFMP goals, objectives, and actions in full detail, including an estimated cost range and priority.

Within the Implementation Plan are progress bars to indicate how far along the City has gone to complete the objectives within each goal. An example is provided below from the Plan (showing progress on the bar to demonstrate what it will look like):

The screenshot shows a progress bar for the objective "Set emphasis on planting the right tree, in the right place, for the right reasons". The progress bar is partially filled with green, indicating progress. Below the bar, there is a list of actions to be taken, including "Update and maintain the Master Tree List".

Continue to maintain a safe and resilient urban forest

Set emphasis on planting the right tree, in the right place, for the right reasons

Resource Need: \$ | Current Priority: High | Timeframe: 1-2 Years, Ongoing

Progress

Update and maintain the Master Tree List

- Include species characteristics (e.g., drought tolerance, utility-friendly, stature, etc.)
- Identify and integrate climate-ready species into the palette
- Identify species that are tolerant of poor soil conditions
- Consider drought tolerant species that require less water and/or species that can handle reclaimed water
- Add species that are performing well and remove species that are not
 - Provide educational materials on planting problematic tree species (e.g. palms, etc.) or trees that are failing in climate change
- Continue research partnerships with outside organizations to continue evaluating species resiliency and response to climate change and equity
- Continue to work with regional groups to identify climate ready species and encourage their availability
 - Explore contract growing with local nurseries to source diverse landscape material

A note about priorities: It is expected that the priority levels for objectives will be updated regularly to reflect available resources, emerging opportunities, and

consideration for the timeline of the objective. For example, a long range objective to monitor canopy cover would be a low priority now, and would be adjusted to medium and high closer to the timeline for completion of the canopy cover assessment.

Benchmarks

Background on the UFMP development process and the information that was explored is presented in [Benchmarks](#), including:

- [Tree Canopy and Land Cover](#): presented to the Commission in July 2022, high-resolution aerial imagery from 2020 and infrared technology were used to remotely map tree canopy and land cover over Davis city limits to provide a clear picture of the extent and distribution of the community tree canopy. (Includes public and private trees).
- [City Tree Resource](#): presented to the Commission in July 2022, the section includes a detailed and quantified analysis of the current structure, function, benefits, and value of the City's tree resource. (Includes only City trees based off of the 2018 inventory).
- [Sustainability Indicators](#): using a tool based on the Characteristics of Urban Forest Sustainability as defined in the Journal of Arboriculture article "A Model of Urban Forest Sustainability" an assessment was conducted of the City's current (i.e. 2022) urban forestry practices and suggest areas where the City could improve. Currently, the City's program operates at a medium level. These categories are anticipated to be updated as the City adjusts or augments programs.
- [Community & Collaborator Engagement](#): details around public meetings and engagement, feedback, and collaborators are included.

Currently, the discussion in Benchmarks relates to data gathered in 2018 (the tree inventory), 2020 (the canopy analysis) and operational data from the City from Fiscal Year (FY) 2021 and 2022. It is anticipated that at regular intervals (likely 5-10 years based on the action items) these sections will be revisited with new data points and revised as necessary. The historical information will be retained for reference.

Urban Forestry Operations and Funding

Urban forestry operations resources and program funding levels are key to ensuring that there are adequate resources to provide proactive maintenance for City trees and to promote sustainability, resilience, and safety in the urban forest. This section includes the current levels of staffing and funding for the program, current responsibilities and where there are opportunities for augmentation. This section also includes identified shortfalls in staffing levels, and budget projections. Lastly, this section includes subpages on tree species selection, desirable characteristics for trees (plus a discussion of climate-ready trees and best practices in tree care).

Resources

The Resources section includes links and information related to several topics, grouped by type, including:

- Priority Planting: this includes a link to the TreeKeeper Canopy tool, a GIS-based tree canopy and land cover assessment mapped the location and extent of existing tree canopy in Davis, with tools to explore the City’s urban forestry data and better understand canopy trends as they relate to different land cover and socioeconomic factors.
- Policy & Regulations: this includes narratives of how the management of the City’s urban forest is influenced by and subject to regulations, policies and guidance. Plans referenced or reviewed in the development of the UFMP are included, along with links to the federal and state agencies that guide urban forestry regulations.
- Technical Guidance: this includes Best Management Practices, ANSI standards, and the Example Workplan (for a period of 7 years) based on the maintenance needs of all City trees.

Suggested Updates to the Vision

Two updates to the vision statement as drafted by the Tree Commission are included below for consideration. Words suggested to be removed are identified with a strikethrough, and words to add are underlined.

Vision Statement

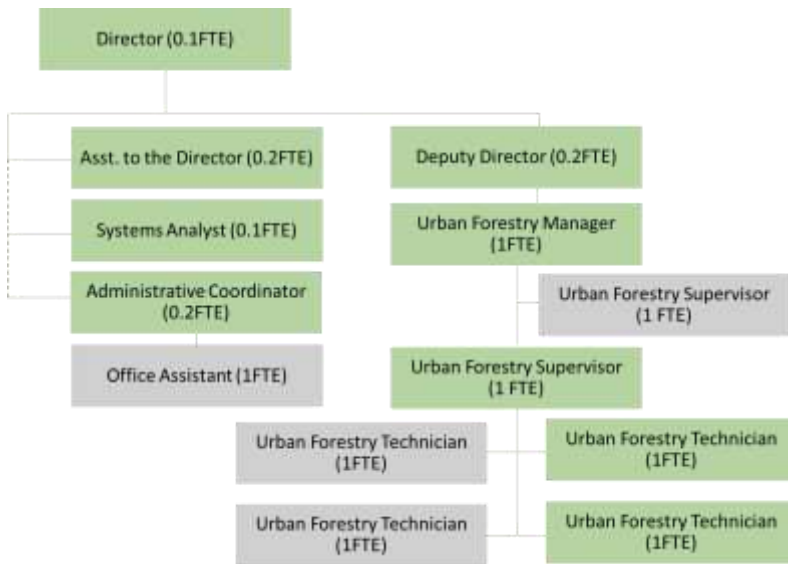
The City of Davis will be a community identified and shaded by a “living umbrella.” Relying on the Urban Forest Management Plan for guidance, the City of Davis will actively encourage participation in tree planting and stewardship, preserve and protect ~~healthy existing~~ trees, promote public safety and tree health, implement cost-effective enhancement and maintenance of the forest, provide education, increase public awareness of the value of our urban forest, and maximize the social, economic, and environmental benefits of the urban forest for current residents and future generations. The City of Davis will use the urban forest as part of its efforts to act on and adapt to climate change.

Recommendations for Urban Forestry Staffing Levels

The Urban Forest Operations section of the UFMP outlines the current staffing levels and associated challenges with the workload of the division. Within the Identified Shortfalls and Budget Projections section, two charts summarize the staff time necessary to complete the work of the division. It is important to note in the charts that the estimated staff time is a combination of urban forestry staff, Public Works Utilities & Operations staff, other City staff, contractors and non-profits. With that note, however, in-house staffing within the Urban Forestry Division falls short of the number necessary to provide the services expected by the community. Before Urban Forestry can conduct the necessary assessments to meet the objectives within the UFMP, division staffing must be at sufficient levels.

To begin to implement the objectives and action steps within the UFMP, City staff, and in discussions with Davey Resource Group, have included the following recommendations for staffing levels within the program. Existing positions are included in green, and recommended new positions are in grey.

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This initial ask for staffing augmentation is what staff estimates as the minimum necessary to move forward with the UFMP. This assumes that for the time being, small tree care and maintenance will be conducted by City staff, and large tree/block pruning and removals will continue to be completed by a contractor. Like the UFMP itself, regular assessments of how the division is performing will be necessary to understand the successes, challenges and what adjustments to staffing may be necessary as resources allow to accomplish the objectives.

Introduction of the Draft UFMP and Webpages

The special meeting of the Tree Commission is intended as an orientation for the webpage and UFMP content. Any questions or comments (other than clarifying or functional webpage questions) are asked to be held until the second discussion of the draft UFMP at the Tree Commission regular meeting on February 16, 2023. At that time, City staff and the consultant will address questions.

Anticipated Next Steps for Plan Review

Anticipated Dates	Steps
February 8, 2023	Introduction of draft UFMP to Tree Commission
February 16, 2023	Discussion of draft UFMP with Tree Commission, including staff recommended next steps after adoption of UFMP
February 2023 (TBD)	Virtual Public Forum on the Draft UFMP
March 21, 2023	Final UFMP review and adoption by City Council
March 25, 2023	Submit UFMP and Prop 68 Grant Report to CAL-FIRE