GUII	DING PRINCIPLE: A CONNECTED COMMUNITY	Goal		
I	By 2028, engage at least 50% of residents through outreach and engage Chico.	ment ettorts	that is representative of all residential types and	demographics within the City of
	Action Items	Cost	Method of Measurement	Who is Responsible
1.α	Develop an urban forest advisory committeeconsisting of City staff, community members, and other invested stakeholders to ensure a broad range of voices have a say in urban forest practices in Chico.	\$	<ul> <li>Expand on current UFMP Working group.</li> <li>Revisit initiating the Tree Committee consisting of three (3) BPPC members, City Staff and Community Stakeholders.</li> <li>Meets quarterly or as-needed.</li> </ul>	PW O&M, and all City departments
1.b	Identify both communities of place and communities of interest to grow the network of partners, to assist in community engagement and outreach activities	\$	<ul> <li>Contact list created of local non-profits, Community groups, Civic groups, churches, HOAs, property management companies, developers, businesses.</li> <li>Initial list of 100 contacts created and kept up to date.</li> </ul>	City with collaboration partners from 1. a
1.c	Create a chicotrees.org webpage for community input on the Tree Division Urban Forestry, display current urban forest data like canopy cover, tree inventory statistics, current legislation and annual trees planted and removed.	\$	<ul> <li>Track web traffic numbers.</li> <li>Green Industry legislation kept current e.g. AB 1881, SB1383 and others.</li> </ul>	City
1.d	Develop a comprehensive education program to enhance community member understanding of tree maintenance practices including planting, establishment care, pruning, costs of deferred maintenance and the importance of continuing to water trees to maintain tree health during drought conditions.	\$\$	<ul> <li>Work with partners identified in 1a, 1b to develop content.</li> <li>Effectiveness of programs assessed by survey of attendees.</li> <li>Frequency of events (target quarterly).</li> <li>Approaches to encourage tree retention on residential private properties are developed. This is a critical action threshold to achieve no net loss of tree canopy (Action 3.L)</li> </ul>	PW O&M, with collaboration partners from 1. a

	In partnership with <u>local non-profits or advocacy groups</u> the Butte Environmental Council-and other partners, hold quarterly community engagement activities such as tree planting and care events, educational workshops, and free tree give aways for private property.	\$	<ul> <li>Delivers programs developed in 1.d</li> <li>Number of participants (attendees and training providers).</li> <li>Number of trees distributed. Target 500 by 2025.</li> <li>Tracked mortality rate of trees over a three-year period.</li> <li>Calculate environmental benefits of free trees from i-tree suite.</li> </ul>
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Local non-profits or advisory
groups BEC and partners from _
1. a
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	Action Items	Cost	Method of Measurement	Who is Responsible
1.f	Collaborate with a local utility company to develop a free residential shade tree giveaway program.	\$	<ul> <li>Emphasis on drought tolerance, climate adaptation, energy savings.</li> <li>Promotion of appropriate species to plant under utilities.</li> <li>Partnership created with water provider to promote turf rebate program for water savings.</li> <li><u>Trees provided by grant funding or utility.</u></li> </ul>	City and participating utilities
1.g	Develop an incentive program that offsets the cost to water a newly planted tree over three years, when residential property owners elect to provide establishment care for a newly planted City-managed tree <u>Grant funding or tree mitigation funds could be used for this incentive</u> program.	\$	<ul> <li>Build on 1.d and collaborators in 1.f.</li> <li>Expand outreach to educate on low cost of young tree establishment compared to other land uses.</li> <li>Explore partnerships with local business to incentivize tree watering activities.</li> </ul>	PW and partnering entities
1.h	Many desirable tree species are not readily available in the nursery trade. Explore the possibility of a city tree nursery in partnership with civic and non-profit groups.	\$	<ul> <li>Possible locations identified.</li> <li>Explore partner sites such as CSU, local nurseries contract grows opportunities. Explore possible school involvement, Master Gardeners and other communities of interest identified in 1. b</li> </ul>	PW O&M, with collaboration partners from 1. a
1.i	Develop outreach efforts that manage resident expectations when non-emergency service requests are submitted.	\$	<ul> <li>Provide website (1.c) and other social media outreach.</li> <li>Develop and communicate protocols for response times based on available staffing resources.</li> </ul>	PW O&M, PIO
1.j	Promote habitat values of city street trees and how they act as wildlife corridors from larger open spaces.	\$	<ul> <li>Collaborate with appropriate partners from 1.b e.g., Audubon Society.</li> <li>Provide website (1.c) and other social media outreach</li> </ul>	PW



	Action Items	Cost	Method of Measurement	Who is Responsible
1.k	Support and develop use of the city owned urban forest as a resource for increasing community food resilience and access to locally sourced food.	\$	<ul> <li>Seek and apply for funding mechanisms such as grants, donations, and community volunteerism.</li> <li>Develop partnerships with non-profit, businesses and civic groups. Ref to 1.a, 1.b, 1.e.</li> <li>Develop MOU's, permits and protocols for BPPC approval.</li> <li>Develop fruit gleaning and distribution programs of city-owned fruit trees.</li> <li>Develop a free fruit tree program for residents, schools, and other qualifying entities.</li> <li>Short-term goal: distribute 300 fruit trees by 2025. Re-assess program</li> </ul>	Partners from 1.a, Climate Action Corp, BCLFN, <u>Local non-</u> profits or advisory groups BEC
1.1	Incorporate urban forestry messaging into existing City initiatives.	\$	<ul> <li>Notes: Public landscapes and urban forestry impact every aspect of city living. Even when urban greening benefits are secondary to the primary purpose of city- led initiatives, urban forestry messaging should be incorporated into outreach and public engagement activities.</li> <li>Report outreach activities in annual and monthly BPPC staff reports.</li> </ul>	PW O&M, PIO, BPPC
1.m	Develop plans to direct tree planting and maintenance activities to <u>areas neighborhoods</u> with the highest need <u>consulting the</u> <u>Environmental Justice Element and Active Transportation Plans</u> .	\$	• Set priorities utilizing data from sources such as American Forests Tree Equity scores, CalEnviroscreen and data in this UFMP in conjunction with up-to-date inventory data.	PW O&M, Planning, GIS

	Action Items	Cost	Method of Measurement	Who is Responsible
1.n	Develop a demonstration arboretum that highlights trees adapted to projected changes in climate.	\$\$	<ul> <li>Identify candidate sites on either city- owned property, such as World of Trees or in partnership with other entities such as CSU, Butte College, CARD.</li> <li>Explore alternative option for non- geographic locations that could host walking tours (see action 1.0).</li> <li>Select and procure tree specimens. Develop specification plan and install specimens.</li> <li>Develop print, website, and social media content.</li> <li>Develop long-term monitoring and reporting plan to determine success and failure of tree species.</li> </ul>	PW O&M, PIO, UCANR, CSU, CARD, other partners from 1. a
1.0	Explore and integrate the use of smart phone and tablet applications that support GPS for self-guided tours, tree and urban forest information, games and scavenger hunts that facilitate learning.	\$	<ul> <li>Develop interested partners from 1.a, 1.b. Climate Action Corps, educational institu- tions.</li> <li>Also use to promote Heritage Tree Pro- gram (action 5.g) and demonstration arboretum (1.s)</li> </ul>	Climate Action Corps, educa- tional institutions
1.p	Chico attains recognition for promotion of urban forestry standards.	\$	Bidwell Parks and Playground Commission determine which awards staff should prepare to qualify and apply for including Society of Municipal Arborists (SMA) Accreditation. Tree Cities of the World. Tree City Growth Award-Sterling award and Bee City USA.	BPPC, PW O&M, PIO



GUIDING PRINCIPLE: THE COMFORT OF TREES						
		Goal				
2	By 2033 increase canopy cover by 50% across all non-City-managed land	use types.				
	Action Items	Cost	Method of Measurement	Who is Responsible		
2.a	Public outreach during the development of this UFMP indicates that parking lot shade is inadequate. Evaluate the effectiveness of Municipal Code 19.70.60. Identify reasons for success and failure.	\$\$	<ul> <li>Conduct aerial imagery analysis of parking lots that were installed as part of a discretionary approval permit after the date of the parking lot shade ordinance was enacted.</li> <li>Report on successes and failures of parking lot landscape.</li> <li>Follow up with field verification and collect inventory sample data.</li> </ul>	Building Division, GIS, CSU, PW O&M, partners from 1. A		
2.b	Update Municipal Code 19.70.60 parking lot standards for tree planting that provides adequate space and soil volume to support long-term tree growth and health.	\$	<ul> <li>Conduct research to determine successful design strategies to attain 50% parking lot shade.</li> <li>Update Municipal Code 19.70.60 to require engineering and design standards appropriate for the parameters of the development site.</li> </ul>	Building Division, GIS, PW O&M, partners from 1. A		
2.c	Continue to Eenforce Municipal Code 19.70.60, which requires parking lots to be covered with 50% shade by year 15 on all new development. Work with existing property owners that developed parking lots prior to City incorporation to encourage compliance with CMC 19.70.060. General Plan Action OS-6.1.1 (Urban Forest Maintenance) "Working with commercial parking lot owners to improve the shade canopy."	\$\$	<ul> <li>Reach out to selected stakeholders to <u>encourage engage in</u> corrective measures through grant funding</li> <li>Develop long-term maintenance strategies to ensure healthy parking lot tree canopy, for example action 5. P.</li> <li>Consider alternatives to the common 50% at 15-year standard if it is deemed impractical.</li> </ul>	Building Division, GIS, PW O&M, partners from 1. A		
2.d	Develop parking lot tree planting standards workshops in collaboration with Building Development.	\$\$	Build capacity and acceptance of strategies that attain the goal of adequate parking lot shade.	Building Division, GIS, PW O&M, partners from 1. A		

	Action Items	Cost	Method of Measurement
2.e	Develop a comprehensive educational program for commercial, retail, and industrial landowners on how trees add economic value to their business or property, City standards, proper tree maintenance practices, and the importance of continuing to water trees to maintain tree health during drought conditions.	\$	• Expand on action 1. D
2.f	Enforce-Promote tree pruning Best Management Practices (BMPs) on private commercial parking lots that are a requirement of development.	\$	Develop outreach to landscape and tree companies to build capacity.
2.g	Provide resources to <u>local non-profits or advocacy groups</u> Butte Environmental Council-to conduct outreach and engagement efforts to businesses along commercial corridors and retail centers.	\$\$	<ul> <li>Implement programs developed in action 2.e</li> </ul>
2.h	Develop an urban forest <u>focus group coalition</u> comprised of other significant local and regional landowners like Chico Area Recreation and Park District, Chico Unified School District, Chico State University, Mechoopda Tribe, Butte County, utility companies, and others to ensure shared urban forest goals and policies. <u>Findings will be reported</u> to the Bidwell Park & Playground Commission.		<ul> <li>Coalition meets once per year.</li> <li>Report on activities</li> </ul>
2.i	Continue to develop programs with Chico Unified School District regarding plantings, species selection, maintenance, management of landscapes, and Arbor Day events.	\$	<ul> <li>Every K-12 student experiences at least one Arbor Day event, demonstration, or lesson regarding trees and urban forestry before graduation.</li> <li>Attain grant funding either for City or non-profit partner to develop education programs which build in already successf projects.</li> </ul>
2.j	Encourage citizens to remove invasive trees from private property.	\$	<ul> <li>Pursue partnerships with tree care companies to help get the message out.</li> <li>Incentivize with free replacement trees (action 1.e)</li> <li>Initially focus on properties located within ¼ mile of Bidwell Park.</li> </ul>
2.k	Encourage citizens to remove invasive trees from private property. Encourage partner entities to apply for recognition e.g., Tree Campus for K-12 schools and hospitals, Tree line USA for utility tree companies.		<ul> <li>City or partners assist with application process.</li> <li>Achieve at least one signup.</li> </ul>

	Who is Responsible
	PW O&M, PIO, CoC, water utility provider, <u>Local non-profits or</u> <u>advisory groups BEC</u>
е	PW O&M, PIO, CoC, water utility provider, <u>Local non-profits or</u> <u>advisory groups BEC</u>
on 	PW O&M, PIO, CoC, water utility provider, <u>Local non-profits or</u> <u>advisory groups BEC</u>
	Build on partners from action 1.a
nal sful	BEC, CUSD, City <u>, Local non-</u> profits or advisory groups
•	PW O&M, partners from action 1. a
n	
	PW O&M, partners from action 1.a, 2. H.

**URBAN FOREST MASTER PLAN** 

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# GUIDING PRINCIPLE: THE COMFORT OF TREES

		Goal	
3	Increase City-wide canopy cover to 40% by 2062.		
	Action Items	Cost	Method of Measurement
3.a	Achieve a minimum stocking rate of 95% of all identified City-managed planting sites by 2042.	\$\$\$	<ul> <li>Tree inventory is kept up to date.</li> <li>Tree inventory is reassessed every decade.</li> <li>Unviable planting sites are removed from the database.</li> <li>95% of vacant sites equates to approximately 8000 sites planted.</li> <li>Pursue grant funding.</li> </ul>
3.b	Plant <del>at least 500 more street trees than are removed annually<u>, if</u> <u>feasible.</u> by the city.</del>	\$\$	<ul> <li>Pursue replanting of vacant sites.</li> <li>Stump grind removed tree sites and replant as part of a "remove and replace" strategy.</li> <li>Work with development community to install ROW shade trees as part of development.</li> <li>Track metrics and report annually to BPPC.</li> </ul>
3.c	Prioritize tree planting actions towards City-managed vacant sites on commercial corridors and neighborhoods with low canopy cover.	\$\$\$	<ul> <li>Work with partners to identify suitable sites.</li> <li>Pursue concrete removal strategies where locations would otherwise be suitable, but no tree-well exists.</li> <li>Identify adjacent property owners willing to supply irrigation.</li> <li>Pursue strategies to install irrigation infrastructure.</li> <li>Pursue grant funding opportunities for low- income/disadvantaged neighborhoods, commercial corridors especially on walking and bus routes.</li> </ul>
3.d	Continue analysis of empty planting sites in the right-of-way. Refine list to remove those identified as unavailable.	\$	95% inventory accuracy verified by field checks indicating viable tree planting sites.

	Who is Responsible
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ace"	PW O&M, Planning, Building Division
PPC. sites. here , but ng	PW O&M, Planning, Building Division
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	Action Items	Cost	Method of Measurement	Who is Responsible
3.e	Maintain a 5-year average survival rate of 97% for newly planted trees.	\$\$\$	<ul> <li>Use Actions 1.d and 1.e to build capacity in the community for successful tree care.</li> <li>Practice sustained maintenance practices for street tree establishment.</li> <li>Maintain 5-year rolling average based on field surveys.</li> <li>Report metrics on city website and to BPPC</li> </ul>	PW O&M and partners 1. a
3.f	Select tree species for individual locations that will provide the highest possible canopy cover for the space given the planting area.		Promote "right tree right place" principles.	PW
3.g	Promote the use of non-native cultivar trees with a proven record of successful establishment and growth in highly demanding municipal forest situations.		Utilize arboretum established in action 1.n.	PW
3.h	Develop City of Chico Best Practices Manual with alternative design standards for City infrastructure such as sidewalks, streets, and curb and gutters, that increase the available space and soil volume for trees, and likelihood of tree preservation when infrastructure conflicts occur.	\$	<ul> <li>Supplement planter and pavement design options to reduce conflicts between trees and infrastructure to include suspended pavement, pervious pavement/rubberized pavers, flexible (e.g., rubber) sidewalks.</li> <li>Pursue tree-based strategies to select trees that do not exhibit high potential for infrastructure damage.</li> </ul>	
3.i	Set neighborhood tree canopy goals and measures to increase total canopy tree cover in the city.		Analyze data to determine the required balance of public and private trees needed to achieve the desired canopy goal.	PW, GIS
3.j	Meet or exceed annual baseline Total Yearly Benefits of public tree assets of \$6.6 million as measured by the USDA i-Tree Streets model.		Run i-tree Streets annually on the citywide tree inventory and report values.	PW
3.k	Ensure- <u>Strive for</u> no net loss of canopy cover <u>. on both public and private</u> land.		<ul> <li>Measure at 10-year intervals using LiDAR or other strategies.</li> <li>Canopy should not fall below 36% using same assessment area as analysis in 2021.</li> </ul>	PW



# GUIDING PRINCIPLE: THE COMFORT OF TREES

	Goal								
4	By 2033, the City-managed tree inventory will increase in resiliency and su transitioning to climate appropriate species.	By 2033, the City-managed tree inventory will increase in resiliency and sustainability by achieving targets for species and age diversity, health condition, and transitioning to climate appropriate species.							
	Action Items	Cost	Method of Measurement	Who is Responsible					
4.a	Limit the planting of non-native tree species that represent more than 5% of the city inventory.		<ul> <li>Metrics used as a guide to promote diversity in the species palette.</li> <li>Chinese pistache, red maple, and crape myrtle. <u>A a</u>re examples of trees that should <u>be limited in use.</u></li> </ul>	PW					
4.b	Annually review the City recommended tree species list and update it as appropriate to ensure species are suitable for current and future climate conditions, are low water use, will achieve species diversity standards, and will prioritize well-adapted local and regionally native species.	\$	<ul> <li>Report annually to BPPC with recommended changes.</li> <li>Review list with industry experts and consult scientific and horticulture literature.</li> </ul>	PW, CSU, Master Gardeners, UCANR					
4.C	Ensure that the top six most common trees in the city inventory have a relative performance index score of 1 or better.		Data compiled during inventory reassessments every decade.	PW					
4.d	Conduct an analysis of tree species in the inventory that are marked as poor or critical to further understand if they are suitable for the city recommended tree species list, or if they should be removed.		• Determine cause of failure and determine biotic and abiotic factors.	PW					
4.e	Develop standards for green stormwater infrastructure projects to include trees. Update the tree species selection process for such projects to align with the standards established in the UFMP.		Adopt standards for green stormwater infrastructure projects to include trees.	PW O&M, PW ENG					
4.f	Provide resources and educational materials for private property owners on current and emerging threats to trees, such as drought, pests, and diseases, and steps they can take to improve tree health.	\$	Goal expands on 1.a	PW					
4.g	Develop a 'deferred', 'preferred', 'restricted', 'prohibited' list of trees for use in the right-of-way.	\$	<ul> <li>Promote strategy with Landscape architects. Monitor tree palette composition of landscape plans submitted during the development process.</li> <li>Modify annually and report to BPPC.</li> <li>Promote changes on city website and distribution lists.</li> </ul>	PW, 1a partners					

	Action Items		Method of Measurement	Who is Responsible
4.h	Conduct an analysis of the Northern California black walnut (Juglans hindsii) species, to identify strategies that preserve trees in the short-term. and replace failing trees over the long-term.		<ul> <li>Identify large stature walnuts that are candidates for pruning.</li> <li>Trees exhibiting &gt;50% dead canopy are removal candidates.</li> </ul>	PW
4.i	Develop a long-term plan to replace failing trees based on analysis of the Northern California black walnut (Juglans hindsii).	\$\$	Monitor population and size classes.	PW
4.j	Continue to expand the Tree Inventory and include designated trails in Bidwell Park and other open spaces.	\$\$	<ul> <li>Continue program started on Petersen and South Park Drive to tag and assess trees &gt;12" DBH on designated trails in lower and middle park.</li> </ul>	PW



**URBAN FOREST MASTER PLAN** 



## **GUIDING PRINCIPLE: START WITH TREES**

		Goal		
5	By 2028, City planning processes, ordinances, and policies will be aligned	I with the sto	andards of the UFMP.	
	Action Items	Cost	Method of Measurement	Who is Responsible
5.a	Ensure that Urban Forest policies and procedures are incorporated into other City standards and management plans.		Highlight examples of included messaging in staff reports to BPPC.	All City
5.b	Periodically <u>Rr</u> eview and update the Municipal Code Section 16.66: Tree Preservation Regulations. to ensure that defined protected tree regulations apply to all private property trees regardless of qualifications, entitlements, or lot size.		Review to determine suitable exemptions.	PW, Planning
5.c	Update the City Tree Preservation Regulations to apply to <u>public</u> capital improvement projects, so trees removed through a project will require replacement.		Monitor CIP projects in the same way as private property development projects.	PW, Planning
5.d	Develop, Update and revise standards and guidelines to better protect and preserve trees during construction.	\$	<ul> <li>Determine which types of trees should be monitored for long-term survival after development.</li> <li>Report to BPPC findings with assessment of effectiveness of tree preservation guidelines.</li> <li>Review guidance under CMC 19.68.</li> </ul>	PW, Planning
5.e	Update the standards for new residential developments to <u>encourage require</u> a tree planting plan that will lead to 40% canopy cover for the development project.	\$	<ul> <li>Develop exemptions based on physical site characteristics.</li> <li>Cross reference goal 7. d.</li> </ul>	PW, Planning, Building Division
<del>5.f</del>	Update the General Plan to adopt the canopy cover and urban forestry goals of the UFMP.		Updated General Plan.	PW, Planning
<del>5.g</del>	Update the General Plan to reference species selection, planting- guidelines, and other best management practices identified in the UFMP.		Updated General Plan.	<del>PW, Planning</del>
<del>5.h</del>	Ensure the permit review process for landscape plans aligns with goals of the UFMP and are approved in consultation with the City's urban- forester or a City-qualified certified arborist prior to issuance of permits.		Review staffing plans to ensure timely- reviews of landscape plans by a qualified arborist.	PW, Planning, Building Division



	Action Items	Cost	Method of Measurement
5.i	Update the City Design Guidelines Manual to include tree planting guidance and landscape design standards <u></u> that include minimum tree planting requirements by land use type.	\$\$	<ul> <li>Guidance will include placement of tree during the landscape plan review proces to avoid impeding sight distance views or intersections.</li> <li>Landscape Design Standards to enhance water conservation and improve soil health issues.</li> <li>Develop guidelines for innovative ways to add trees to development projects in situations with limited planting space.</li> <li>Identify desirable trees for preservation at the beginning of the design process so engineering solutions can be developed for their protection.</li> <li>Review sidewalk design and ROW tree planting criteria to mitigate sidewalk displacement by tree roots.</li> </ul>
<del>5.j</del>	Establish and implement a performance bond process for development projects to ensure trees are successful 5 years after planting.		Monitor long-term survival of trees.
5.k	Adopt a policy requiring trees in streetscape improvement projects.		<ul> <li>Extend the "Complete Streets "concept to specifically include suitable shade trees, particularly along pedestrian and bike paths.</li> </ul>
<del>5.</del>	Explore the development of a private tree ordinance to protect trees on private property not associated with development.	\$	<ul> <li>Continue public outreach to build off- feedback received during development- of this UFMP.</li> <li>Conduct analysis of private tree- ordinances in California.</li> <li>Develop language suitable for Chico- including qualifying criteria (example- by species, size, location on property), protection against improper pruning practices such as tree-topping, mitigation measures, exemptions.</li> <li>Report findings to BPPC.</li> </ul>

	Who is Responsible
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to	PW O&M, PW ENG, Planning, Building Division
F	<del>PW, Planning</del>
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	Action Items	Cost	Method of Measurement	Who is Responsible
5.m	Update and promote the Heritage Tree Ordinance and celebrate historically significant trees.		<ul> <li>Conduct an analysis of similar programs.</li> <li>Create a survey to determine reasons for low take-up.</li> <li>Modify regulations to increase participation from private property owners.</li> </ul>	PW
5.n	Update Title 14 to improve its functionality.	\$	<ul> <li>Update Street Tree Law ordinance to allow for enhanced penalties and enforcement of illegal public tree removals.</li> <li>Update language.</li> </ul>	PW
5.0	Develop programs to remove and replace invasive trees on public property.	\$\$	<ul> <li>Program compliments action 2.j on private property.</li> <li>Initially focus on properties located within 1/4 mile of Bidwell Park.</li> </ul>	PW
5.p	Develop a procedure for final approval and acceptance of projects once complete, including the requirement that as-builts are received and scanned in a timely manner.	\$	<ul> <li>Landscape inspection procedures for final Certificate of Occupancy issuance clarified.</li> <li>Training provided to Planning staff for landscape inspections of private landscape elements.</li> </ul>	PW, Planning, Building Division
<del>5.q</del>	Explore the necessity of a city Solar ordinance.	\$	Monitor number of solar/tree conflicts to determine the necessity.	<del>PW, Planning</del>
5.r	Coordinate with stormwater managers to recognize the important contribution and value of trees and tree canopy in stormwater and flood requirements for 85 percentile storm control management plans and strategies.	\$	<ul> <li>Ref 5.i I</li> <li>Encourage and promote the benefits of stormwater planting pits, swales, channels, and other designs intended to capture and retain stormwater for use by urban trees.</li> </ul>	PW O&M PW ENG
<del>5.s</del>	Coordinate with floodplain managers and GIS staff to analyze and model strategies to supplement stormwater and flood control.	\$	Green Stormwater Infrastructure (GSI)     strategies considered.	PW O&M, PW ENG, GIS
5.†	Promote trees and canopy as an efficient and cost-effective part of the solution to managing stormwater.	\$	• <del>Ref 5 l.</del>	PW O&M, PW ENG
<del>5.u</del>	Encourage and promote the benefits of stormwater planting pits, swales, channels, and other designs intended to capture and retain stormwater for use by urban trees.	<del>\$\$</del>	Install at least one demonstration site with incorporated stormwater capture designs, such as Silva Cells.	PW-O&M, PW-ENG

	Action Items	Cost	Method of Measurement	Who is Responsible
5.v	Supplement design standards to support the construction of suspended sidewalks, curb drains, stormwater tree pits, and other designs that promote the temporary storage and infiltration of stormwater; especially in areas with a high percentage of impervious surface and where planter space is limited (e.g., commercial, and downtown areas).	\$\$	Design Standards updated	PW O&M, PW ENG
5.w	Encourage development designs that support the State MS4 General Permit requirements that include provisions for matching the predevelopment hydrograph for 85 percentile storm events with the post-development hydrograph, thereby reducing stormwater and channeling valuable water to support trees and other landscaping.	\$	Design Standards updated	PW O&M, PW ENG
* \$ Low (0-\$2.	5,000), \$\$ Medium (\$25,000 -\$50,000),  \$\$\$ High (\$50,000 - \$100,000), \$\$\$ <mark>\$</mark> Very High (>\$100	,000)		



**URBAN FOREST MASTER PLAN** 



		Goal		
6	By 2028, the City will have tree management practices and policies that I		ainable management of the urban forest.	
	Action Items	Cost	Method of Measurement	Who is Responsible
6.a	Achieve a 5-to-7-year pruning cycle of all City-managed trees.		All City-managed trees pruned or inspected every 5-to-7-years.	PW O&M
6.b	Annually conduct a level 1 survey on City-managed trees.	\$	<ul> <li>Target 10,000 trees per year.</li> <li>Staff possessing TRAQ credential windshield survey to identify clear defects.</li> </ul>	PW O&M
6.C	Complete first formative pruning of trees within 5 years after planting.	\$	• As part of 6.a young tree care will ensure reduced future maintenance.	PW O&M
6.d	Provide all newly planted trees a minimum of 3 years of establishment care and watering.	\$\$\$	<ul> <li>Goal 7.g provides one FT Maintenance Worker to focus on young tree care.</li> <li>Goal 3.e provides proxy for success.</li> </ul>	PW O&M
6.e	Identify veteran trees in Bidwell Park and develop additional protection, preservation, and maintenance standards appropriate for their age and condition.	\$\$\$	<ul> <li>Veteran tree definition criteria established.</li> <li>Identified trees assessed at ISA Level 2 and added to TreeKeeper database.</li> <li>Determine equipment and training needs for inhouse Level 3 ISA assessments; Cost Benefit Analysis conducted to compare costs of service provided by consultant.</li> <li>Cross reference with action point 6. S.</li> </ul>	PW O&M
6.f	Develop a program to auction high value wood removals to the highest bidder.	\$	Report dollar value of proceeds to BPPC.	PW O&M
6.g	Update standard details to align with the standards discussed in this UFMP (Technical Assessment Section 5.3).	\$	Updated standard details.	PW O&M, PW ENG
6.h	Implement the street tree planting plan included in this UFMP.	\$\$\$	Report annually to BPPC numbers, location and types of trees planted.	PW O&M

	Action Items	Cost	Method of Measurement Who is Responsible
6.i	Ensure all identified dead trees in the city managed tree inventory are removed annually.	\$\$\$	Report removal numbers to BPPC     PW O&M
6.j	Address emergencies and urgent tree work within one week of notification.	\$	Report from service request database PW O&M     response time.
6.k	Promote the elevation of limbs and foliage for traffic safety and line of site clearance at intersections as a high priority.	\$	Report on number of trees pruned PW O&M     annually for sightline issues.
6.l	Program Downtown elevations, sightlines and building clearance at least every other year as needed.	\$	Report numbers of trees pruned.     PW O&M
6.m	Program volunteer tree removal from alleyways on a mid-term cycle.	\$	When schedule allows, remove volunteer trees that are an encroachment issue.
6.n	Revise tree pruning and productivity standards for Public Works and contractors.		Report number of trees pruned per year     PW O&M
6.0	Develop city and contractor workflows and equipment needs to ensure the inventory is updated as trees are removed, planted, or pruned.	\$	Provide training, tools and software to allow in-house and contractor staff to update work orders in the field.
6.p	Develop and promote the concept of "whole tree life cycle" to include salvaged wood and use of wood products.	\$	Develop outreach materials for print, website, and social media     PW O&M, PIO
6.q	Research local wood workers, tree care companies, and resource recovery operations that may be able to use wood waste generated by the city.	\$	Develop "highest and best use" strategy. PW O&M
6.r	Create partnerships with companies identified in 6.q and individuals who can use City-generated wood waste.	\$	<ul> <li>Report of board feet milled.</li> <li>Highlight end use of wood products.</li> </ul>
6.s	Work with Risk Management to create a tree risk management strategy that identifies objectives and action thresholds for tree risk management, coordinates risk management objectives with a tree inspection program, prioritizes risk mitigation measures and coordinates with work plans, identifies risk assessment priorities, protocols, policies, and final authority for removals, and adds urban forest risk management policies to the City Hazard Mitigation Plan.	\$	Define policies and procedures for tree removal, both during development and in the city ROW.



	Action Items	Cost	Method of Measurement	Who is Responsible
6.t	Develop a Policies and Procedures manual that outlines group operations, best management practices and official policies and procedures that guide day-to-day urban forestry operations.	\$	Technical manual for staff created	PW O&M
6.U	Coordinate management strategies for trees in utility rights-of-way including electric, natural gas, water, and other utilities. <u>Confirm safety</u> is top priority, but also focus on health and wellbeing of the tree.		<ul> <li>Uphold best management practices to ensure long-term health of the urban forest. Renew and update permit processes and fees.</li> <li>Uphold that the least amount of work required to meet objectives is done.</li> </ul>	PW O&M, PW ENG
6.v	Develop a policy and identify responsibility for quality control, quality assurance, and auditing of tree care operations that are performed by contracted staff to ensure compliance with contract specifications.		Report on number of call-backs.	PW O&M
6.w	Identify department staff with an interest in tree care. Develop and implement a training program on basic tree care skills, including small branch removal, young tree training, and risk identification. Mentor individuals who demonstrate an aptitude and interest for arboriculture and provide opportunities for advancement and certification pay.	\$	<ul> <li>Develop a process that incentivizes City staff to obtain Tree Risk Assessment Qualification (TRAQ) through the International Society of Arboriculture (ISA). (Assists goal 6.b)</li> <li>Report on certifications attained by Public Works staff.</li> </ul>	PW O&M
6.x	Use GIS analytics to evaluate service request/work orders to identify areas of high maintenance concentration and to identify patterns related to disease, pests, or other specific maintenance issues. This data will help inform where pro-active tree management should focus.		Report findings to BPPC	PW O&M



# GUIDING PRINCIPLE: SUSTAINABLE RESOURCES

		Goal		
7	By 2033, the city will have the resources to fully support implementation of	f the UFMP.		
	Action Items	Cost	Method of Measurement	Who is Responsible
7.a	Achieve appropriate funding to meet Goal OS-6 of the General Plan, to ensure a healthy and robust urban forest.	\$\$\$\$	Annual increase in funding until desired goal is met.	PW O&M
7.b	Continue to seek external funding sources that support tree planting and establishment care projects like the Community Choice Aggregation (CCA) program, to reduce the energy load on the grid by providing shade trees to residents.	\$\$	Other sources of funding include dispensary tax, Inflation Reduction Act urban forestry funding.	PW O&M
7.c	Conduct an <u>routine</u> analysis of mitigation and in-lieu fees to determine if fees are adequate to replace and care for newly planted trees and adjust fees as appropriate.	\$	Conduct fee study and make     recommendations	PW O&M
<del>7.d</del>	Explore opportunities to leverage future development projects to increase resources for urban forest management.	\$	Cross reference action item 5. e.	PW O&M
7.e	Annually provide a report on the City's return on investment from the funding that is allocated to urban forest management.	\$	Report to BPPC	PW O&M
7.f	Ensure the City has <u>continued</u> funding to create a staff position or on-call contract for a certified arborist to effectively manage and implement planning policies on private property including code enforcement, site plan review, post-installation inspections.	\$	<ul> <li>Public Works report to BPPC on proposed staffing changes.</li> <li>Continue to ensure a City arborist is directly involved in reviewing new development designs, project permits, and removal applications to ensure best arboricultural practices are being instituted.</li> </ul>	PW O&M
7.g	Review 2017 Staffing plan to determine revised needs to attain the goal of General Plan goal OS-6. Include 1 FT position focused on young tree care establishment.	\$\$\$\$	Cross reference action items 6.a, 6.n, 6. J.	PW O&M
<del>7.h</del>	Ensure a City arborist is directly involved in reviewing new development designs, project permits, and removal applications to ensure best arboricultural practices are being instituted.		• <del>Ref 7.f.</del>	PW O&M, Planning
7.i	In partnership with other agencies, bring International Society of Arboriculture training opportunities to Chico that will help support the greater arboriculture industry north of Sacramento.		<ul> <li>Report on number and type of ISA courses hosted in the Chico area.</li> <li>Report on number of candidates assessed</li> </ul>	



7.j	Pursuant with accepted tree removal policy, establish revenue streams	•	Ref 6.f
	from recycled wood.		

	Action Items	Cost	Method of Measurement	Who is Responsible
7.k	Explore corporate sponsorship opportunities for the Heritage Tree Program.		• Goal to identify one tree care company that will offer reduced cost of tree maintenance on private Heritage Trees.	PW O&M
7.I	Assess fleet age, condition, and usage hours to determine when equipment used for urban forest maintenance will need to be replaced; once identified, begin purchasing process at least one year prior to the projected "aging out" date.		Report assessment to PW Fleet manager	PW O&M
7.m	Consider providing the tree crew with a smaller aerial truck for easier maneuvering around the city.		Report assessment to PW Fleet manager ref 7.1	PW O&M
7.n	Rent or contract for specialty equipment that would not be used often for urban forest management and/or by any other department in the city, or, consider sharing specialty equipment with other nearby cities.		• e.g., Stump grinder.	PW O&M
7.0	Develop a policy to budget for or pursue grant funding to re-inventory publicly owned trees every ten years.	\$\$\$	<ul> <li>Pursue grant funding.</li> <li>Pursue outreach initiatives to engage the community and interested groups to learn about condition assessments of community trees</li> </ul>	PW O&M, CalFire
7.p	Optimize funding from newly established assessment districts CMD's (Chico Maintenance Districts). Work with Public Works Engineering to ensure adequate funding is built into assessment schedules for cyclical tree maintenance.		Provide amortization costs associated with whole tree life cycle.	PW O&M
7.q	Develop a Pest Vulnerability Matrix		Liaise with Ag Commissioner and UC     Extension agents to determine current and     future biological threats.	PW, UCANR
7.r	Develop Emerald Ash Borer (EAB) Action Plan.	\$	If EAB arrives in California from Oregon, monitor and report on the 1179 ash trees in the ROW in Chico	PW O&M
7.s	Develop an Integrated Pest Management Program (IPM)	\$	Report on effective ways to reduce the amount of pesticides used on City landscapes.	PW O&M