



SAN JOSE

COMMUNITY FOREST MANAGEMENT PLAN

Strategic Workplan

Vision: The City of San José Community Forest is a testament to our history and honors our diversity while striving to cultivate the equitable values we hold true towards building a strong and resilient landscape and community forest.

Guiding Principles	Definition
Equity, diversity, and inclusion	City policies and management practices will reflect community values and achieve equitable outcomes by seeking the necessary resources for successful implementation.
Innovation	The City seeks emerging technologies and current research to inform the development of standards and best management practices that lead to a sustainable Community Forest.
Regional Identity	The City will maintain the unique sense of place and neighborhood character that comprises San José as it identifies distinctive community landscapes.
Resilient San José	The City will seek to protect neighborhoods from the adversities of climate change, and to restore and grow canopy cover to maximize the environmental, economic, social and health benefits of the Community Forest.

In order to execute the vision and guiding principles of the Community Forest Master Plan, the following strategies are recommended for implementation. These strategies and objectives intend to bring the City into alignment with the CFMP. Recommendations for ways the City can reach the strategies and objectives are presented at the end of the Strategic Workplan.

Streamline the Governance Structure

Strategy	
1	Consolidate tree responsibilities to one division or create a new division.
Objectives	
1a.	Evaluate respective benefits of consolidation of responsibilities, or expansion of citywide tree staffing to properly manage trees located within the public rights-of-way and at City-owned facilities; and on private property if removal is required. Propose appropriate structure not later than the 2023-2024 budget process.
1b.	Create one central City arborist or urban forester position to oversee and coordinate all community forest programs.
1c.	Consolidate Maintenance of Public Works-Maintained City Facility Trees to a new department.
Strategy	
2	Include trees in the beginning of the design and planning process
Objectives	
2a.	Update the approval process for all development projects to require an arborist report with permit application materials that at a minimum includes: (1) a discussion of the existing conditions of the trees, (2) project impacts to trees, (3) tree candidates for preservation, (4) tree protection methods, and (5) required replacement plantings.
Strategy	
3	Provide an arborist review of all Planning Division tree responsibilities
Objectives	
3a.	Update the process for design review and approval of development projects to require the Building Division to provide City arborist recommendations to the project applicant as part of the initial review of the site plan.
3b.	All private property tree removal applications submitted to the Planning Division are reviewed by either a City arborist or on-call third party consulting arborist, who is also ISA Tree Risk Assessment Qualified.
3c.	All arborist reports submitted with private property development applications must be reviewed and verified by a City arborist as a condition of the protected tree removal permit approval process.

Ensure Community Forest Sustainability

Strategy	Objectives
1. Tree planting activities will promote a sustainable urban forest.	
Strategy	Objectives
2. Increase tree canopy cover across all census tracts and neighborhoods.	
Strategy	Objectives
3. Continually review the City recommended tree species list to ensure trees are adapted to climate change and support local habitat and wildlife.	

- 1a. Develop criteria for selecting tree species to plant on City managed streets, parks, and other public and open spaces that prioritizes trees known to be adapted to changing climate conditions such as extreme heat and drought.
- 1b. The City tree inventory will comprise no more than 10% of one species, 20% of one genus, or 30% of one family.
- 1c. Apply the 10% species, 20% genus, and 30% family standard to smaller geographic segments of the City based on existing defined neighborhood boundaries.
- 1d. Create a dashboard of community forest sustainability indicators and annually update dashboard statistics based on the most recent City tree inventory data.
- 1e. Continue to plant new trees to ensure a continuum of age diversity within the City managed tree inventory.

- 2a. Achieve 20% Citywide canopy cover by 2051.
- 2b. Annually plant 2,000 new trees on both public and private property. Total will not include trees that are required as replacement for a removed tree.
- 2c. Evaluate and adjust the annual tree planting goal every 5 years to ensure the City is progressing towards canopy cover goals.
- 2d. Work with local tree nurseries to ensure tree species and quantities are available to meet City tree planting goals.

- 3a. Tree planting projects in open space, riparian, and native habitat areas will prioritize tree species that contribute to wildlife habitat.
- 3b. Tree planting projects in a City park will prioritize the use of local and regional native tree species.
- 3c. Prioritize planting trees rated by Water Use Classification of Landscape Species (WUCOLS) as very low and low water users.
- 3d. Identify trees that are not expected to adapt to changing climate conditions and replace them with new suitable species.
- 3e. Increase the quantity of small and medium-sized species options in the planting palette to provide more species options in locations that have limited soil volume.

Support Diversity, Equity, and Inclusion

Strategy	1. Ensure the diverse demographics of the City are represented by the community stakeholders who participate in guiding the development of the community forest program.
Objectives	<p>1a. Establish and maintain partnerships with community-based organizations that are inclusive of the diverse demographics of the City.</p> <p>1b. Establish a Community Forest Advisory Committee consisting of City staff and external stakeholders to guide the implementation of the Community Forest Management Plan.</p> <p>1c. Develop direct outreach and education programs informing the community on the value of trees, and roles and responsibilities, to under-represented communities; property renters, non-English speaking, and others.</p> <p>1d. Maintain the CFMP webpage and use it as a resource to update community members about new initiatives, educational programs, and outreach events.</p> <p>1e. All CFMP program materials, notices, and permits are made available in the 5 most common non-English speaking languages in the City and adhere to web content accessibility guidelines, and City branding guidelines.</p> <p>1f. Annually update the Transportation and Environment Committee on the status of the community forest and report on the progress of achieving CFMP goals. Invite stakeholders to attend and provide an opportunity for input on setting priorities for the community forest management program.</p> <p>1g. Review and modify, if needed, the agreements with OCF and any other non-profit partners the City may use to ensure that there are clearly defined parameters that align with the goals of the CFMP to expand tree canopy cover and promote equal representation in planning efforts.</p>
Strategy	2. Prioritize increasing canopy cover in disadvantaged communities.
Objectives	<p>2a. Prioritize tree planting activities in census tracts with low CalEnviroScreen scores and tree canopy cover or designated as areas of need by the San José equity atlas.</p> <p>2b. Collaborate with the Office of Racial Equity on prioritizing areas of the City with the highest CalEnviroScreen Scores for new tree plantings.</p> <p>2c. Develop a framework for the City and Our City Forest (OCF) to partner on and/or submit joint grant applications by providing matching resources that align with their expertise and mission statements, and directs resources to low-canopy and underserved communities.</p> <p>2d. Develop a residential shade tree distribution program in partnership with a utility, corporate sponsor, or community benefit stakeholder, to provide free trees to be planted on private property.</p>

Funding the Community Forest

Strategy	<p>1. Develop a plan to annually provide funding to the community forest program so the City can sustainably manage the tree inventory, engage the community, and implement policies and ordinances.</p>				
Objectives	<p>1a. Define funding scenarios for tree maintenance to determine how much funding would be required to properly maintain: 1) existing trees in City right-of-way areas, 2) all street trees and park trees in the City inventory, 3) Trees at all City facilities.</p> <p>1b. In collaboration with PRNS and other City stakeholders, research and identify potential funding mechanisms that would provide the necessary resources for the City to maintain all street and park trees.</p> <p>1c. Develop a multi-year proposal that will result in the maintenance of all City owned trees that meets the standards of the International Society of Arboriculture, American National Standard Institute, and quantify the budgetary impact to the City Council for inclusion in the annual budget.</p> <p>1d. Evaluate the policy benefits and costs of an incentive program for trees that relieves some (or all) of the maintenance responsibility from property owners for both existing and newly planted trees and make a recommendation during the 2022-2023 budget process.</p> <p>1e. Continue to evaluate the deficit in funds that are available to maintain the City's infrastructure in the annual Deferred Maintenance and Infrastructure Report.</p>				
Strategy	<p>2. Fund community forest management activities at a level to meet best management practices as defined by the City.</p>				
Objectives	<p>All newly planted street trees will have a dedicated source to provide watering and establishment care for the first three years after planting, which may include a commitment for residential property owners, contracted maintenance, or irrigation.</p> <p>Dedicate City or other appropriate funding to maintain and water the newly planted trees for projects initiated through community tree planting events within PRNS-managed sites.</p> <p>Incrementally increase funding for the pruning of all street and park trees until the City achieves a pruning cycle that more closely aligns to the industry standard of 5-7 years.</p> <p>Begin to allocate resources to the structural pruning of young trees.</p>				

Efficient and Effective Tree Management

Strategy	1. Maintain current information on the community forest to ensure management decisions are based on the best available data.
Objectives	1a. Complete a City tree inventory that at a minimum includes the information needed to analyze tree species diversity, health condition, age distribution, and inform management practices. 1b. Maintain the City tree inventory in perpetuity, with each tree in the inventory assessed on a regular cycle. 1c. Centralize tree inventory data using existing management software so community forest program dashboard goals and operational outcomes can be made available on a public online platform. 1d. Regularly conduct an urban tree canopy cover analysis using LiDAR or other high-resolution spatial imagery. 1e. Inspect trees for signs of decline, insect infestation, or pathogen infection. Collect samples from suspect trees and submit to a diagnostic laboratory or the Agriculture Commissioner's Office of Santa Clara County. Develop an appropriate long-term maintenance plan, or strategy to remove and replace failing species, to maintain canopy cover. Each tree to be evaluated every 5-7 years.
Strategy	2. Ensure all City tree management activities and design standards reflect the most current understanding of community forest sustainability.
Objectives	2a. Regularly review and update City tree management practices to reflect the current industry standards as defined by the International Society of Arboriculture, American National Standards Institute, and current research. 2b. Develop and adopt alternative design standards for sidewalk installation and repair that minimizes conflicts between trees, sidewalks, and other infrastructure by considering and providing sufficient growing space for trees. 2c. Develop and adopt design standards for street trees that provide access to stormwater runoff. 2d. Green Stormwater Infrastructure projects will include the planting of one or more shade tree(s) that will contribute to stormwater reduction and avoided runoff.
Strategy	3. Community members and private property owners will understand their role in growing and maintaining the community forest.
Objectives	3a. Educate community members on their responsibility to maintain trees adjacent their property. 3b. Continue to work with OCF to engage and educate residents on how to properly water and maintain newly planted trees, and explore the possibilities to expand the City and OCF partnership. 3c. Educate private property owners on proper tree pruning practices.

Standardize and Improve Planning and Development

Strategy	Objectives
1. Protect and preserve mature trees	<p>Objectives</p> <ul style="list-style-type: none"> 1a. All private property tree removal applications submitted to the Planning Division will provide written justification that no alternatives exist to tree removal. 1b. Remove the ‘unsuitable tree’ definition from the private property tree removal application. 1c. Update the notification process of all tree removal applications for development projects so City Council Offices and community stakeholders have the opportunity to provide comments on tree removals impacting their community.
	<ul style="list-style-type: none"> 1d. Review the fee structure associated with private property tree removal applications and determine if it is feasible to institute incentives that would result in reduced fees for applicants. 1e. Update the permit fees and illegal tree removal fee structure for private property tree removals so the fine to illegally remove a tree is greater than the permit fee to legally remove a tree.
2. City planning and development will contribute to increasing tree canopy cover.	<p>Objectives</p> <ul style="list-style-type: none"> 2a. All development projects will provide site plans that result in 100% canopy cover over adjacent sidewalks within a 15-year timeframe. 2b. Update the tree replacement policy for single-family and duplex lots to state that the property must maintain or achieve 35% canopy cover over a 15-year timeframe. 2c. Update the PRNS tree replacement policy to allow for replacement trees to be planted in adjacent park locations when the current park cannot accommodate all replacement trees.

Recommendations

The following recommendations are:

DIVERSITY, INCLUSION, AND COMMUNITY ENGAGEMENT

Section	Recommendation	Discussion
Canopy Cover Can Illuminate Equity Issues	Collaborate with the Office of Racial Equality on prioritizing areas of the City with the highest CalEnviroScreen Scores for new tree plantings	The large discrepancy in canopy cover is an area that the departments in charge of tree management can collaborate with the Office of Racial Equity on strategizing the best path forward
Online Survey	Increase public outreach and education about trees to renters in San José.	90.4% of survey respondents were homeowners and 88% lived in a single-family home, in comparison to City data that shows 43.9% of housing units are renter occupied. Understanding the priorities of renters is an important step to ensure the CFMP is inclusive of all stakeholder perspectives.
Online Survey – City Managed vs. Private Property Managed Street Trees	Further study the funding mechanisms most appropriate to support community forest management, and the degree to which residents or the City would generate the funding.	Respondents showed varying opinions for how street tree management should be funded. Additional public engagement and education efforts should be undertaken to investigate where public support lies.
Online Survey – Private Property Tree Management	Increase public education about tree benefits.	Respondents identified several costly maintenance actions they needed to take in recent years. The City will need to develop strategies to educate residents on the value of trees to overcome the perception of trees as costly and causing damage, so tree canopy can be preserved and expanded on private property.

SAN JOSÉ GOVERNANCE STRUCTURE

Section	Recommendation	Discussion
Department of Transportation	Consolidate tree responsibilities to one division or create a new division	<p>Tree responsibilities are dispersed across multiple City departments which contributes to inefficiencies in management. One possibility to streamline tree management is to create a new division or department that encompasses all tree management activities within the City. If all tree-related management activities, permitting, enforcement, and planning decisions were coalesced into one department, it would be clear where to go for answers to tree-related questions, and it would ensure qualified staff are always reviewing tree issues for the City. While tree responsibilities have fallen under the purview of DOT, their funding allocation does not reflect their management needs.</p>
Planning Division	Include trees in the beginning of the design and planning process	<p>In development (public, commercial, and private and both new and remodel/redesign) projects managed by both Planning and PRNS, or Public Works, trees are often not included in the initial design and planning phase, when critical decisions are made that impact the City's ability to plant and preserve trees. In the case of Planning development projects, the City plan check and internal review processes should be updated to include an initial review of projects by either a City arborist or a contracted third-party consulting arborist. For PRNS development projects, a PRNS representative and certified arborist should review site plans. The initial review of all projects should determine if site plans consider how construction will impact the existing on-site tree and what available measures can be taken to ensure the long-term preservation/survival of trees before recommending removal. Consideration should also be given to whether the design or location of the project can be modified to accommodate the retention of existing mature trees. It should also include a review of the planting specifications to ensure site-appropriate tree species are selected, and that each newly planted tree has sufficient soil volume and grow space to reach a full canopy size at maturity.</p>
Planning Division	Provide an arborist review of all Planning Division tree responsibilities	<p>Currently, the Planning Division does not have a staff arborist dedicated to the review of private property tree-related issues. This position is needed to implement policies and tree management decisions that support the City's goals of a healthy and safe urban forest. Another option that would reduce the City's financial commitment is to have a City-approved, independent third-party on-call arborist in lieu of an additional full-time employee. This model is often used by municipalities as it provides an unbiased expert opinion on tree issues and demonstrates to residents the extra step in due diligence the City is willing to take when deciding issues concerning their private property.</p>

SAN JOSÉ GOVERNANCE STRUCTURE (continued)

Section	Recommendation	Discussion
Public Works Maintenance Division	Consolidate Maintenance of Public Works-Maintained City Facility Trees to a new department	<p>The Public Works Maintenance Division does not have the staff capacity or training/experience to manage the approximately 500 trees on City-owned properties. The management of these trees should be consolidated within the department or division that will be responsible for management of the community forest program.</p>
Parks Recreation and Neighborhood Services	Update the PRNS Tree Replacement Policy	<p>The current PRNS policy is to replace every removed tree with three new trees in the same park. This policy has been successful in maintaining high canopy cover levels in some parks, but it has also led to parks receiving new trees that have already filled all available planting locations. Instead of requiring trees to be replanted back in the same park in all cases, replacement trees should be allocated first to the park in which they were removed to fill vacant planting locations. If all vacant planting locations are filled, the balance of trees should be planted in a park within the same neighborhood, council district, or adjacent disadvantaged community that has the space to accommodate more trees.</p>
Parks Recreation and Neighborhood Services	Provide funding for establishment care as a condition to plant trees on PRNS sites	<p>PRNS is not able to adequately water newly planted trees due to a lack of funding for contract watering or the availability of in-house maintenance crews, but values the efforts from community planting events held in parks that are supported by nonprofit organizations, corporate groups, and City-elected officials. As such, groups interested in a community tree planting event in a City park should provide funds to PRNS that support the watering and establishment care of the newly planted trees for a period of up to 3 years. Groups unable to provide maintenance funds should be encouraged to hold community events that provide maintenance and care for newly planted trees in lieu of planting new trees, which would contribute to the health of park trees and are achievable without placing an additional burden on PRNS maintenance staff.</p>

OUR CITY FOREST		Section	Recommendation	Discussion
OCF and City Partnership	The City and OCF should further define OCF's role in supporting the goals of the City's community forest program		OCF has a mission to improve the community forest of San José by educating and engaging the community. OCF should work with the City to define their shared goals and determine how current OCF programs will help meet those goals. Funding can then be dedicated to those programs to ensure OCF can use City funds to support its core values and mission.	
Grants	OCF and the City should explore joint grant applications		Both the City and OCF independently apply for, and receive, state and federal grant funds to expand community forest programs. While the grant funding is sufficient to support the objectives of the individual project, more substantial funding can be received through a joint OCF and City grant application. A joint application could be designed so each entity provides a core service function to the project and matching contribution of a resource they already have available. This avenue would ensure the project does not require either OCF or the City to provide a service of which it does not have experience and could greatly expand funding for tree planting and establishment care in disadvantaged communities of San José.	

STREET TREE MANAGEMENT

PRIVATE PROPERTY TREE MANAGEMENT

Section - Subsection	Recommendation	Discussion
Private Property Tree Removal - Unsuitable Tree	Eliminate the unsuitable tree definition	The definition for an unsuitable tree is broad, not scientifically accurate, and allows for the unnecessary removal of many trees that are not actually unsuitable. The City would benefit from entirely getting rid of the unsuitable tree allowance to permit tree removal, so all tree removals are evaluated by a criterion based on arboriculture standards and not an arbitrary definition.
Private Property Tree Removal - Permit Process and Fees	Require due diligence from a certified arborist that no alternative exists to tree removal	If the City continues to allow tree removal when a tree is 5 feet from a residence, secondary unit, garage, or the centerline of a below-grade utility pipe or line, the City should also require a report from a certified arborist that the tree is in conflict with the adjacent structure or utility. The certified arborist report could determine if the tree in question is causing or has substantial evidence to indicate that it will cause a conflict in the future. The applicant and certified arborist should also explore mitigation options to resolve the conflict without removing the tree. Options could include root pruning, crown reduction, tree cables or bracing, and adjustments to the existing infrastructure.
Private Property Tree Removal - Permit Process and Fees	Provide an incentive for applications that are submitted with an arborist report	Multiple steps will need to be taken to improve the permit application process for ordinance-size and unsuitable private tree removals beginning with the information provided by the applicant. One option would be to give applicants a reduced permit fee when they provide a report prepared by a certified arborist who is also ISA Tree Risk Assessment Qualified. This incentive would encourage private property owners to have an expert review their tree concern before submitting removal applications to the City. It has the potential to reduce the number of applications submitted to the City, as arborists would be able to fully explain the options for tree preservation and whether the residents concern warrants tree removal. It would also provide the City with better information to assess applications, which should reduce application processing time and associate staff review costs.
Private Property Tree Removal - Permit Fees and Fees	Review and align permit fees	The current permit fee for live tree removal is excessive and not supported by the level of review needed to process permits. It is also higher than the fine for illegal tree removals, and consequently does not encourage residents to file for a permit to remove a protected tree. For the City to have an effective ordinance to protect trees on private property, the permit fee must align with realistic costs of the City and not be a burden on applicants.

PRIVATE PROPERTY TREE MANAGEMENT (continued)

Section - Subsection	Recommendation	Discussion
Private Property Tree Removal - Permit Fees and Fees	Review the illegal removal fine structure	It should be determined if the current fine structure for illegal tree removal is sufficient to deter violation and adequately replace the lost value of the tree. The review of the illegal removal fines should happen concurrently with the permit fees so there is continuity between the fees and fines that encourage participation in the City process to legally remove protected trees.
Private Property Tree Removal - Replacement Tree Requirements	Focus requirements of replacement trees on community forest program goals	The 1:1 tree replacement ratio should be directed towards goals of the community forest program to increase canopy cover, species diversity, and the environmental services of trees. It should also include a requirement for replacement trees to be similar in size at maturity of the removed tree. The City could also provide an approved replacement species list to applicants based on neighborhood-level species diversity goals. The City could further expand its partnership with OCF to provide guidance to homeowners to properly place trees around their property to cool homes and lower energy use.
Tree Protection During Construction	Require site developers to provide detailed tree protection plans in alignment with industry standards	It should be a condition of approval for development projects to provide a tree protection plan for all on-site and street trees that are to be preserved during construction. Tree protection plans should be prepared by a certified arborist hired by the site developer, and the plan should be approved by a City arborist. The protection plan should adhere to City, ISA, and ANSI standards.
Tree Protection During Construction	Conduct a site visit prior to any construction to ensure protection measures are installed	The site developer, project arborist, and City arborist (or contracted arborist) should conduct a site visit to confirm that all protection measures are implemented as described in the protection plan.
Tree Protection During Construction	Require a certified arborist to periodically monitor on-site construction activities when there is potential to impact trees	A certified arborist should be on-site whenever construction encroaches upon the critical root zone of a tree or a tree requires limb or root pruning. Any impacts to a tree should be documented by the project arborist with a report submitted to the Planning Division and City arborist to determine if the site developer is compliant with the protection plan.

SAN JOSÉ COMMUNITY FOREST ASSESSMENT

Section	Recommendation	Discussion
Species Diversity	Based on these factors, it is important for the City to have both Citywide and local species diversity goals, which could form into a three-tiered approach.	<ul style="list-style-type: none"> Tier 1. Citywide Species Diversity Goal: The City should adopt a goal of having no one species comprise more than 10% of the City tree population and no one genus comprise 20%. This goal will help to ensure that the overall inventory is resilient to threats as it is dispersed over the 181 square miles of the City. The established goal can then be used to further inform a more nuanced plan for individual neighborhoods or geographic areas of the City. Tier 2. Implement Goal on Neighborhood Scale: The City should determine smaller geographic segments of the City and apply the species diversity goal to those areas. Boundaries could be formed from existing defined neighborhoods, Council Districts, or other set boundaries within the City. This strategy would help to identify what species dominate a specific area and plan for the introduction of new species to provide an additional layer of species diversity and protection from threats. This approach would also necessitate specific planting palettes for each area that factor in the current neighborhood-level species diversity percentages into what species are planted. Tier 3. Street Level Diversity: The City should incorporate species diversity on a street or street block level. At this scale, species diversity decisions would include determining whether a street is planted with two or three alternating species, and the extent to which monoculture street plantings would be allowed. The planting palette for individual streets would be formed by decisions made in Tier 2 of the planning process. This tier would not include maintaining the Citywide species diversity goal as continuity and aesthetics are important considerations for developing neighborhood character and would be difficult to achieve with 10 or more species planted on a street.
Species Diversity	Revise the City recommended tree species list to:	<ul style="list-style-type: none"> Ensure the total number of species recommended by the City can meet species diversity goals. Prioritize planting trees rated by Water Use Classification of Landscape Species (WUCOLS) as very low and low water users. Identify trees that are not expected to adapt to changing climate conditions and replace them with new suitable species. Increase the quantity of small and medium-sized species trees in the planting palette to provide more species options in locations that have limited soil volume.

Section	Recommendation	Discussion
Age Diversity Protect and preserve mature trees	It will be difficult to increase the total number of mature trees without the enforcement of City ordinances and policies that protect and preserve trees in the public space. This will be especially important with the City's emphasis on increased urban infill development that seeks to maximize lot space for buildings and not allow room for street trees. It may also require adopting new and innovative approaches to managing tree and sidewalk conflicts, which is a common reason for street tree removal. This could occur through the updated design guidelines or other mechanisms that provide guidance for developers to incorporate trees into the built environment.	
Age Diversity Structural pruning program	Large structural issues within a tree's crown begin developing at an early age. Structural issues such as co-dominant stems or conflicts with adjacent infrastructure are typical of mature trees and can often be avoided by selectively pruning branches when trees are still young and forming their structure. By investing in the structural pruning of young trees, the City can actively mitigate against future structural issues in mature trees that typically have a higher associated cost and may require tree removal if the issue cannot be resolved through pruning.	
Age Diversity Continue to plant and establish trees	Although the current age distribution is skewed towards young and immature trees, the City must continue to plant new trees and ensure they successfully establish. A reduction in planting totals may bring the age distribution range into a more sustainable range in the short term, but would create a shortfall of trees across the entire age spectrum as they progress from immature, to young, and eventually mature.	