

# 2020 ANNUAL URBAN FOREST REPORT

FISCAL YEAR JULY 2019 – JUNE 2020



Photo courtesy SF Environment

SAN FRANCISCO URBAN FORESTRY COUNCIL

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*Submitted to Mayor London N. Breed and the Board of Supervisors by the Department of the Environment, pursuant to San Francisco Environment Code Chapter 12, Section 1209.*

The purpose of the **Urban Forestry Council (UFC)** is to guide the stewardship of San Francisco's trees by promoting a healthy and sustainable urban forest that benefits all San Franciscans. The Council's scope of authority – which is advisory in nature - is the territorial boundaries of the City and County of San Francisco. The Council advises City departments and commissions, the Board of Supervisors, and the Mayor. The Council is charged with developing a comprehensive urban forest plan; educating the public; developing tree-care standards; identifying funding and staffing needs and opportunities for urban forest programs, and securing adequate resources; facilitating coordination of tree-management responsibilities among agencies; and reporting on the state of the urban forest. In fiscal year 2019/2020, the UFC completed an updated strategic plan with six high-level goals, or priorities:

1. Develop Policy Recommendations Related to Management of the Urban Forest with respect to Biodiversity, Tree Species Palette and Availability and Climate Change
2. Expand Focus of the Council to Consider all Trees in San Francisco
3. Steps to Strengthen the Urban Forestry Council
4. Develop Communications Plan
5. Articulate Canopy Goals to inform Policy
6. Attract Additional Funding for Tree Planting and Protection.

In Fall 2019, Council members started to work on the above six strategic goals. The Council identified a lead member for each of these priorities, who facilitated working meetings around a respective goal. The Council made real progress on the key priority of strengthening the Council, through adding more diverse perspectives, including increasing to three the number of women on the Council. In 2020, the Council adapted the 2019 goals and associated actions to form the basis for urban forestry-related draft strategies and actions for the City's forthcoming 2021 Climate Action Plan.

#### **Urban Forestry Council Members (as of October 27, 2020)**

Andrew Sullivan, Landscape Architect, Chair  
Blake Troxel, Presidio Trust  
Chris Fischer, Port of San Francisco  
Damon Spigelman, San Francisco Public Utilities Commission  
Dan Flanagan, Friends of the Urban Forest  
Edgar Xochitl Flores, PODER  
Igor Lacan, UC Cooperative Extension  
Ildiko Polony, Sutro Steward and Wildfires to Wildflowers  
Jillian Keller, Professional Arborist  
Matthew Stephens, San Francisco Recreation and Park Department  
Michael Sullivan, Partner, Orrick, Herrington & Sutcliffe  
Morgan Vaisset-Fauvel, University of California, San Francisco  
Nicholas Crawford, San Francisco Public Works, Vice-Chair  
Oscar Hernandez-Gomez, San Francisco Planning Department  
Pam Nagle, Professional Arborist

#### **Urban Forestry Council Staff**

Peter Brastow, Urban Forestry Council Coordinator, San Francisco Department of Environment  
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## Executive Summary

In its seventeenth year, the 2020 Annual Urban Forest Report provides an analysis of survey data from public, private, and nonprofit agencies that plant and/or maintain the urban forest within the City and County of San Francisco in Fiscal Year 2019-2020 (FY19-20). When possible, the analysis compares FY19-20 data with the previous five years of data, starting in FY14-15. Trends are identified through comparisons across all six years. Likert scale data were collected to identify trends in agency-perceived concerns with urban forestry in San Francisco as well as perceived limitations that affect their work and the urban forest. Agency data from the 2020 survey is provided in Tables 1-3 at the end of the report.

Staffing and funding emerged as the most significant issue reported for this year's Annual Urban Forest Report. Across all categories of this report, including in the *Concerns*, *Limitations* and in the *Major Opportunities and Challenges* section, the information gathered in 2020 indicates that agencies and organizations are highly concerned about their ability to accomplish their tree management responsibilities due to the challenge of staffing and funding levels. Most of the entities who provided information for the report, specifically cited the global pandemic of Covid-19 as playing a major role.

Findings demonstrate that overall urban forestry budgets and tree maintenance activities in San Francisco remained flat from FY18-19 to FY19-20. The overall number of trees planted increased significantly (from 3038 to 3905) compared to FY18-19. In fact, in FY19-20 a positive balance emerged – +326 – between trees planted and trees removed. Tree planting, thus, managed to keep up with tree removals, in contrast with FY18-19 when the negative balance was over 2000 trees. *StreetTreeSF* provides funding for street tree maintenance but does not fund tree planting. Public Works remains concerned about sustaining planting funding long-term. Friends of the Urban Forest continues to seek grant funding for street tree planting.



Photo courtesy SF Environment

# Annual Survey Methods

San Francisco Department of the Environment (SFE) surveyed 21 City departments, other public agencies and universities, non-government organizations and PG&E, which oversee or manage a portion of the urban forest in San Francisco. Survey questions were the same as those used in previous years (see attachments) with just a couple more additions. Agencies were asked to provide information on budgets and staffing, maintenance activities, accomplishments, and concerns in FY19-20. Nineteen agencies provided full or partial responses. For 2020, the Public Library was added to the list of City agencies.

## This data is tracked to:

1. Better understand the resources used to maintain the urban forest across the city.
2. Track agency priorities, needs, and concerns, and monitor how they change over time.
3. Better understand threats to the future well-being of our urban forest.
4. Find ways to increase the contributions that trees provide to our community.
5. Clarify which tree species are planted and why.

## List of Participating Organizations

- California Department of Transportation, District 4 (Caltrans)
- City College of San Francisco (CCSF)
- Friends of the Urban Forest (FUF)
- Laguna Honda Hospital (LHH)
- Port of San Francisco (Port)
- Presidio Trust (Trust)
- Recreation and Park Department (RPD)
- San Francisco Housing Authority (SFHA)
- San Francisco International Airport (SFO)
- San Francisco Municipal Transportation Agency (SFMTA)
- San Francisco Planning Department (Planning)
- San Francisco Public Library (SFPL)
- San Francisco Public Utilities Commission (SFPUC)
- San Francisco Public Works, Bureau of Urban Forestry (SFPW)
- San Francisco State University (SFSU)
- Treasure Island Development Authority (TIDA)
- University of California, San Francisco (UCSF)
- Pacific Gas and Electric (PG&E)
- San Francisco General Hospital (SFGH)

The following organizations and departments did not respond to the 2020 survey to provide data for this year's report:

- Office of Community Investment and Infrastructure (OCII)
- San Francisco Unified School District (SFUSD)

## Primary Findings

The data provided by participating agencies for this report is compared to data provided since FY14-15. While participation is required by Chapter 12, Section 1209 of the San Francisco Environment Code, not all agencies participate in the survey each year. Trends identified in this section only include data from agencies that have reported in each of the last six years, of which there are eleven:

- Friends of the Urban Forest (FUF)
- Port of San Francisco (Port)
- Recreation and Park Department (RPD)
- San Francisco International Airport (SFO)
- San Francisco Municipal Transportation Agency (SFMTA)
- San Francisco Public Utilities Commission (SFPUC)
- San Francisco Public Works, Bureau of Urban Forestry (SFPW)
- San Francisco State University (SFSU)
- San Francisco Unified School District (SFUSD)\*
- Treasure Island Development Authority (TIDA)
- University of California, San Francisco (UCSF)

\*Since SFUSD did not submit data for 2020, an average for the previous five years was calculated for the graphs below. The percentage of SFUSD trees planted and removed compared to totals was only %5 and 1%, respectively.



Photo Courtesy SF Environment

**Figure 1. Trees & Funding:** Reported tree planting, maintenance and removal activities, and urban forestry budgets since FY14-15 (eleven agencies)

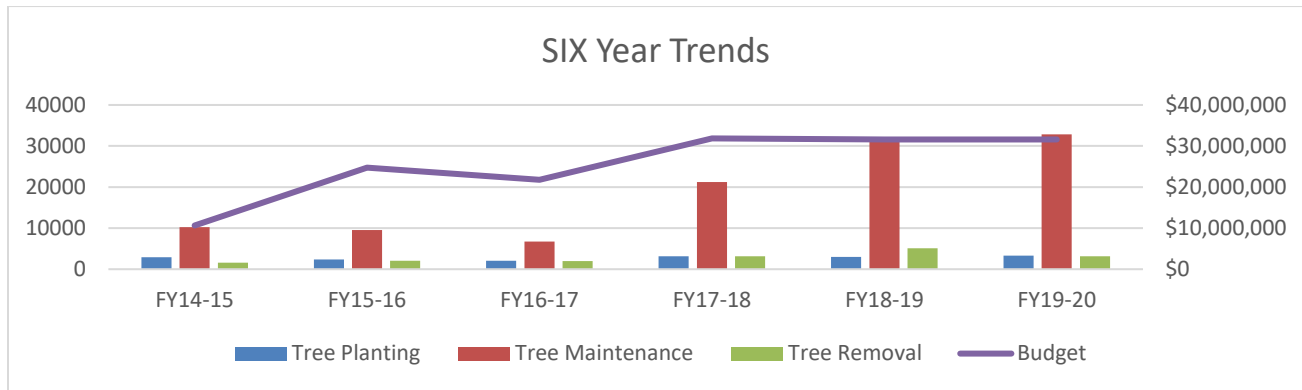


Figure 1 highlights a status quo for budgets from fiscal years 2018 to 2020 and for maintenance from 2019 to 2020, despite various departments reporting budget challenges as a result of Covid-19. Some of those departments may be reporting on challenges related to Fiscal 2020/2021.

**Figure 2: Tree Planting & Removal Trends Since FY14-15**

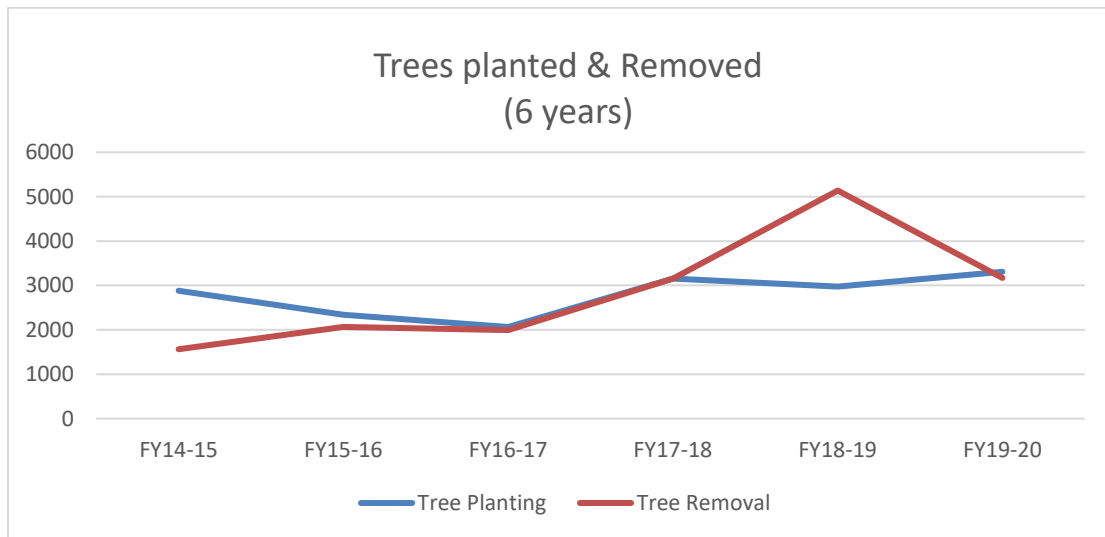


Figure 2 illustrates a slight increase in planting, from FY 18-19 to FY 19-20, due to a significant increase from Public Works. Recreation and Parks and Friends of the Urban Forest actually saw decreases in planting from FY 18-19. Public Works also added 238 trees to the FY 18-19 numbers that they did not report in the 2019 Annual Report. As they report below, Public Works saw a 46% drop in tree removals from FY18-19 to FY 19-20, due to completion of their highest priority removals. "The [continued] high rate of removals is primarily due to lack of maintenance for so many years prior to the new funding stream."



Photo Courtesy SF Environment

## Current Street Tree Estimate

*EveryTreeSF\**, a complete street tree inventory, was conducted between 2013-2017 and identified 124,795 (over 20,000 more than previous estimates) street and median trees throughout San Francisco.

Based on the reported data on street tree planting and removal by San Francisco Public Works and Friends of the Urban Forest, the current total number of street trees as of June 30, 2020 is estimated at 123,017. In fiscal years 17-18 through 19-20, 7,174 new street trees were planted and 8,952 were removed.

The goal of the *San Francisco Urban Forest Plan: Phase 1 Street Trees*, was for planting 50,000 trees by 2035. Tree planting activities will need to continue to increase to surpass the 2017 baseline.



The Key Recommendations from the Urban Forest Master Plan Phase 1: Street Trees, are:

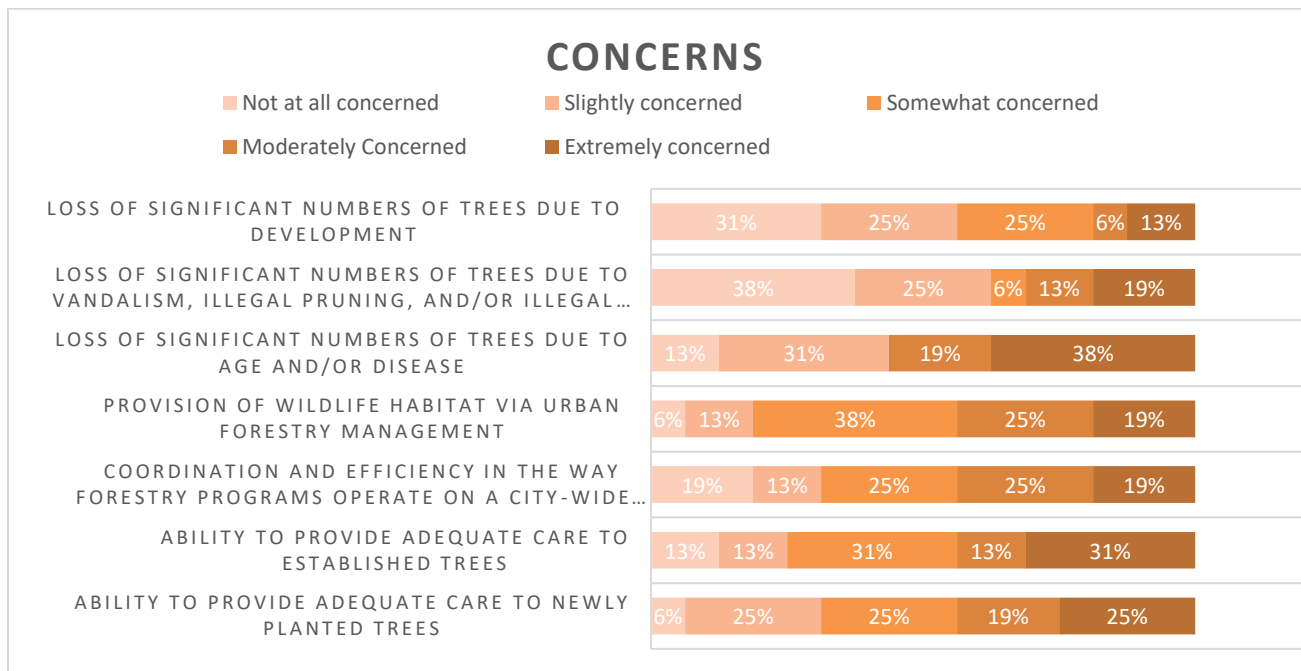
1. Maximize the benefits of street trees;
2. Increase the street tree population with 50,000 new trees by 2035;
3. Establish and fund a citywide street tree maintenance program;
4. Manage street trees throughout their entire life-cycle.

With the implementation of *StreetTreeSF*, the third and fourth recommendations are being met. Meanwhile, the City continues to struggle to meet the second recommendation of increasing the street tree population due to the need to remove dead and diseased trees, though tree removal did decrease significantly from fiscal year 18-19. The Urban Forestry Council is actively working on the first recommendation as part of implementation of their 2019 Strategic Plan.

## Common Concerns & Limitations

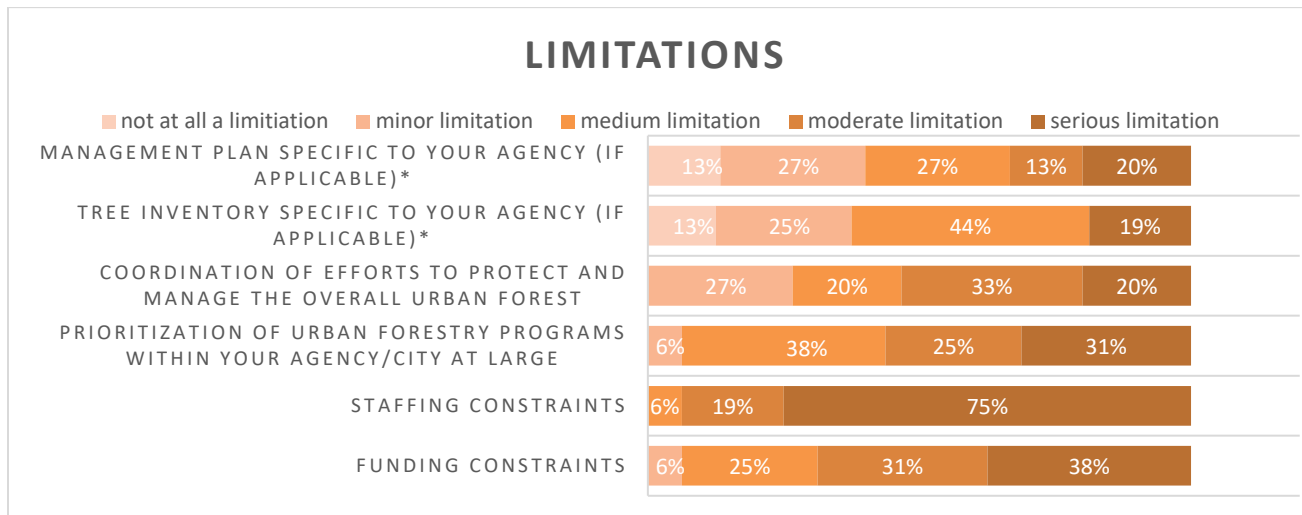
Survey respondents scored common concerns and limitations for their agencies and organizations. Figures 3 and 4 display levels of concern for all responses in 2020.

**Figure 3. Concerns:** Responses to common concerns



Agencies are very concerned about the effects of diseases upon the urban forest. Specific information regarding agency concerns about pests and diseases is highlighted in Table 3 below. Agencies remain concerned about being able to provide adequate care to both established trees and newly planted trees with about 70% of respondents expressing being at least somewhat concerned about both.

Figure 4. Limitations: Responses to common limitations



94% of agencies reported staffing constraints as a serious or moderate limitation in FY19-20. Funding constraints were reported by 94% of respondents to be at least a medium concern. 94% reported at least a medium limitation due to prioritization of urban forestry by the City. These consistent numbers are all significant increases from 2019 and are further reflected in the individual reports detailed in the Opportunities and Challenges section below.

### General Liability Claims

This is the third year that questions about tree-related general liability claims were included in the survey. The goal is to identify other costs City departments and other forest-managing agencies incur in their tree managing activities, and to track how tree care and maintenance may factor into the number and costs of these claims. Only UCSF reported liability claims for fiscal year 19-20, which was one payout for almost \$200,000.

## Reported Major Opportunities and Challenges

Management of San Francisco's urban forest is shared among many agencies and their partners to provide direct care to trees within their respective jurisdictions. The following provides general background about each agency or organization and highlights or quotes specific information they reported in their FY19/20 survey responses.



Photo Courtesy SF Environment

**Friends of the Urban Forest (FUF)** helps individuals and neighborhood groups plant and care for street trees and sidewalk gardens in San Francisco. They host an average of nine interns per year, and they have trained volunteers who lead less experienced volunteers to plant and prune trees. They have teen and young adult workforce development programs that train teens and adults with minimal work experience how to plant and care for trees.

FUF continues to search for new species that tolerate prolonged drought, rising temperatures, pests, and pathogens. They also continue to plant a wide variety of trees to maximize species diversity to create an urban forest that has resilience against known invasive pests such as Invasive Shot Hole Borers (ISHB).

FUF reports that Covid-19 has had a profound impact on their urban forestry program. For 39 years, they have conducted community plantings approximately twice a month with up to 100 volunteers at a time. They had anticipated exceeding their tree goal of previous years but instead they were forced to halt all field work on March 7th. They did not resume tree planting until July 2020 when they re-designed their planting model to adhere to City guidelines and plant safely with staff only, which will likely limit the number of trees they will be able to plant this year. On the positive side, most of the trees planted were in low

canopy neighborhoods. FUF had been planning to begin some new urban forestry programs, for example, they included a back yard tree program – with a focus on native trees - in their 2019 strategic plan. As a result of COVID and the consequent lack of some public funding, they do not know when they will be able to initiate that new program. They are also not able to fill some vacant positions.

FUF reports being proud of their ability to adapt their Green Teens program to the constraints imposed by Covid-19. The teens set a record of pruning 778 trees this past summer. FUF is committed to equitable access and decision-making in urban greening as a key to growing resilient communities and sharing the climate and health benefits of a robust urban forest throughout San Francisco. In the next several years, FUF will be planting the vast majority of their trees in communities that lack trees. They currently focus their planting efforts in those neighborhoods, to ensure that all San Franciscans have access to the benefits of trees.

In these times of uncertainty, long-term funding for all their programs - including tree planting, tree care, sidewalk landscaping and workforce development - is their greatest concern.

The **California Department of Transportation District 4** (CalTrans) manages trees and green spaces on State rights-of-way in the Bay Area and works with the Adopt-A-Highway division to allow neighborhood groups access to land for community gardening and planting trees. Private and public groups also apply for encroachment permits to plant trees. In 2019, CalTrans performed a [climate change analysis](#). They report that there is greater recognition of the importance of trees and landscape management. CalTrans remains concerned about fire management and funding.

**City College of San Francisco** (CCSF) reports that they consider climate change and biodiversity in their tree planting selection, and they also follow the SF Plant Finder and their own sustainability guidelines. Since they are a teaching facility, they must have additional genus' for learning purposes. CCSF reports that the current administration has no budget or consideration for tree care planting or maintenance, and that Covid did cause problems with funding, staffing, programs, and operations. They have no assistance-no people, no funds, and so they "can't do anything." CCSF is concerned about drought conditions affecting tree health. Warming is bringing in more pests and disease pressure, and other tree health concerns. They are also concerned about providing adequate wildlife habitat.

**Laguna Honda Hospital** (LHH), a San Francisco Department of Public Health facility, is a 62-acre campus with approximately 3,000 trees, 80 percent of which are within open space areas. Covid-19 limited contractor work at the Laguna Honda property. Gardening staff (2) are the only ones available for tree work (3417 gardener limitations apply) with a full grounds maintenance schedule for which they are also responsible. LHH selects tree species for drought tolerance and California natives.

The **Office of Community Investment and Infrastructure** (OCII) is the local successor agency to the San Francisco Redevelopment Agency. OCII continues to be affected by funding constraints due to the state-wide dissolution of Redevelopment Agencies that took effect in February 2012. *This information is from the 2019 survey.*

**Pacific Gas and Electric Company** (PG&E) works with property owners to resolve conflicts between trees and power lines. In 2018, PG&E used LIDAR to identify trees that may need maintenance, and only used that data to determine where inspectors needed to go. This was a pilot to see if remote sensing technology could be used to improve the efficiency and accuracy of utility line clearance inspection in an urban environment. PG&E is concerned that residents receive appropriate messaging about which agency is responsible for the maintenance of street trees with limbs that are within ten feet of power lines, as well as coordinating such tree maintenance with San Francisco Public Works. *This information is from the 2018 survey.*

The **Port of San Francisco** (Port) manages the trees along the San Francisco Bay waterfront. The Port selects drought tolerant trees that require minimum water in consideration of current climate and climate change. As the opportunity arises, the Port is mindful of selecting trees that provide habitat, nectar, and fruit for native insects and foragers. Removal and replacement of Canary Island palms has been postponed due to budget constraints. The Port is concerned about being able to staff the gardener crew for taking on new park maintenance responsibilities. In response to Covid, initially, they stopped all non-essential work which included gardening. They then resumed full time gardening, but Covid may impact long term jobs for gardeners.

The **Presidio Trust** (Trust) oversees approximately 70,000 trees (10,000 of which are actively managed) in the Presidio of San Francisco, the 1,491-acre National Historic Landmark District located within the Golden Gate National Recreation Area, which is managed by the National Park Service. The Trust's historic forest species palette is somewhat restricted; however, the program is moving forward with understory plantings in some of the forest stands. Climate change, biodiversity and wildlife habitat are considered when selecting tree species and under-story species where appropriate in certain locations. This helps to improve both local biodiversity and habitat in the new forest stands. Volunteers usually help with the planting and maintenance of young trees, however, this year the volunteer program was halted because of the virus. The Trust is concerned about achieving appropriate staffing levels for the quantity of tree care work, and they have been challenged by the budget reduction due to reduced revenue because of the COVID outbreak.

The **Recreation and Parks Department** (RPD) maintains over 3,400 acres of open space with an estimated 131,000 trees in San Francisco, including large eucalyptus plantations at Mount Davidson, Mount Sutro and Glen Canyon and diverse tree stands across Golden Gate, McLaren and other parks, including the native coast live oak woodlands in Golden Gate Park, Buena Vista Park, and at Lake Merced, which RPD manages under work order with the SFPUC. In their survey, RPD notes that their 3410 Gardener Apprentice Program includes tree planting and tree maintenance. RPD has been highly affected by Covid-19 with many staff being redeployed. In the meantime, they are concerned about mature trees dying out, pine beetle, tortoise beetle, human vandalism, and theft.

The **San Francisco Housing Authority** (SFHA) has a maintenance agreement with Public Works to maintain trees around residences on SFHA land. Housing facilities are undergoing redevelopment and being newly managed by third party non-profit and for-profit developers, depending on the site. Demolition will be phased, and a new landscape

project will be designed by the developers. In the meantime, they are not replanting trees. In fact, demolition going on at two of their sites is impacting some trees. SFHA's main concern during COVID is responding to emergencies and providing safe housing to their residents.

The **San Francisco International Airport (SFO)** manages open space, bay shoreline, trees, landscaped areas, and endangered species habitat surrounding the airport facilities. SFO is restricted on new plantings by FAA regulations and potential wildlife habitat concerns. SFO reports that oak moth has started to make an appearance, and they are releasing beneficial insects to manage populations. SFO is very concerned about staffing challenges for being able to accomplish their work. Covid has created some staffing constraints, and a significant amount of new landscape has been added as part of capital improvement programs. As their planted trees mature, they are facing more work clearing roadways and structures. SFO is struggling to manage all the additional work with current staffing levels.

The **San Francisco Municipal Transportation Agency (SFMTA)** remains very concerned about tree and plant health in the ongoing drought conditions. They usually consider what type of rainfall they had for the year when considering tree planting. SFMTA is concerned about staffing, reporting that they need to hire more landscapers for their work load.

The **San Francisco Planning Department (Planning)** has developed policies, studies, and plans to support the long-term health of the city's urban forest. Planning led the production of the Urban Forest Master Plan, Phase I Street Trees, the implementation of which is now under the aegis of Public Works, Bureau of Urban Forestry. In 2020, the Planning Department moved forward on several coordinated efforts and projects which shape and impact urban forestry including the Climate Action Plan 2020 Update which is the City of San Francisco's climate mitigation strategy to reduce greenhouse gas (GHG) emissions and the Sustainable Neighborhood Framework which is a supportive tool kit that provides a comprehensive approach to amplifying environmental performance, quality of life, and community co-benefits in any plan or project. While the Planning Department does not necessarily dictate the tree species for private developments, the Planning Department has a Climate Resilience and Sustainability team whose role is to work with project teams and project sponsors on decisions, strategies, and regulations concerning climate change, biodiversity, wildlife habitat, etc. which, in turn, influences the tree species selection. During the pandemic, the Planning Department is focused on providing support to small businesses impacted by COVID-19 through the Shared Spaces Program, restructuring policies to meet our racial and social equity imperatives, increasing the City's housing supply, including affordable housing stock, and moving forward on strategies to address our climate emergency (ex: wildfires and the resulting poor air quality). The climate resilience and sustainability team, who tackles biodiversity and urban forestry issues more closely on projects, is understaffed and the Department is in a hiring freeze.

The **San Francisco Public Library** is a new addition to the Annual Urban Forest Report. They have a Facilities Manager, Roberto Lombardi, who filled out the survey for the data for the report. They work order much of their landscape and tree management to the Recreation and Park Department. They report being concerned about Ficus trees since they are a “disaster for maintenance” and dangerous. The Library reports that they have been advised by Public Works that red maple would thrive in the harsh conditions at the Main Library, where the sidewalks must be washed down every day due to feces and urine, and because they love water, presumably related to the watering of the lawns in that vicinity.

The **San Francisco Public Utilities Commission** (SFPUC) manages trees and green space around reservoirs. They have partnered with the San Francisco Conservation Corp to develop young adults 18-25 years old, who are taught gardening and hard and soft skills required in the work force. They also have a path to complete their HS diploma. Regarding selecting for climate and biodiversity, the SFPUC reports that they depend upon the SF Plant Finder to make the recommendations on plant species, assuming that those lens' are already incorporated into the tool. SFPUC is concerned about jurisdictional issues and response to agency plans. They report that they need and should have a full service tree crew with a yard to process trees, store equipment & vehicles or have a contract with several private sector companies with blanket purchase orders. They need to have a budget set aside specific to managing trees in the city and in the watershed lands.

**San Francisco Public Works, Bureau of Urban Forestry** (SFPW) provides oversight and care to trees within the City's public rights-of way, including planting and maintaining street trees, issuing street tree planting and removal and sidewalk landscaping permits to residents, and responding to emergency street tree issues. Public Works relies on public service trainee and apprenticeship programs for workforce development and includes workforce development as a requirement for their non-profit planting grant partners. Those partners in turn rely on volunteer support. Public Works considers climate change by identifying and planting species that are robust urban candidates and able to withstand hotter, drier conditions and longer drought durations. They consider biodiversity and wildlife habitat, albeit as a secondary consideration to survivability and suitability as a street tree as the primary lens. In open spaces, native species play a key role in their planting palette.

The pandemic immediately impacted Public Works' programs by suspending contractor work for about a month as new protocols were created, and compliance plans implemented. Internal crews continued to work and were able to refocus on maintenance as service request volume dropped significantly. However, the Tree Maintenance Fund which fuels the StreetTreeSF program was impacted by a Citywide budget deficit, hiring freeze and deferred capital expenditures. Administrative and permit hearings were paused for months while a suitable online format was established. The Bureau contributed broadly to the City's COVID-19 response through staff reassignment as Disaster Service Workers and through contracted work to support numerous public health initiatives.

StreetTreeSF successfully completed all the “Worst First” areas identified at the start of the program which had the greatest need and density. This is reflected in the sharp decrease in tree removal (46% from the previous fiscal year) as the program transitions from the Worst First to bringing the balance of the City's urban forest to a baseline standard of care. The Bureau's tree removal work receives significant public scrutiny through the posting and

hearing process that allows for input on multiple levels. To facilitate this communication, the Bureau created a new Tree Removal Notification page grouped by Supervisor District.

**San Francisco State University (SFSU)** manages an urban forest that provides a network of windbreaks, bird nesting habitat, and sheltered courtyards. SFSU does try to maintain wildlife habitat when they can by leaving places for hawks and owls to nest around campus. New plantings on campus are considered for their drought resistance first before they plant new species. SFSU has been affected by Covid-19; their staff has only been able to work one or two days per week for the last six months. Student labor has been used in the past but stopped due to Covid. Tree pruning staff recently resigned, and so they no longer have a climber on staff to work in the tall trees. They have to contract for large removals or pruning and clean up and can chip only lower canopy branches from ladders. SFSU is highly concerned about how they are going to do tree maintenance going forward. This report is in stark contrast to 2019 when SFSU noted they had a fully staffed tree crew.

The **San Francisco Unified School District (SFUSD)** provides care and maintenance for approximately 3,000 trees on 430 acres of school district property. Lack of funding to replace removed trees continues to be an ongoing concern. SFUSD reports that they consider climate when selecting tree species, but not so much climate change, so far. There was a study in 2010 that demonstrated a 33% decrease in fog during the 20<sup>th</sup> century, but the long-term outlook for fog remains uncertain for San Francisco. Genetic diversity of any species planted in the city is going to be important for adaptation to a changing climate. In fiscal year 2018/2109, SFUSD reports that they have been able to plant some trees and water them, with the help of San Francisco Public Works. The school district remains concerned about the lack of funding for replacement trees and a lack of interest in reforestation. The school district might consider looking at State and Federal grants, including from CalFire. *This information is from the 2019 survey.*

The **Treasure Island Development Authority (TIDA)** oversees the care of all trees on Treasure Island and most trees on Yerba Buena Island (excepting the U.S. Coast Guard property). Tree species for planting on Yerba Buena Island (YBI) are selected consistent with the YBI Habitat Management Plan, which considers trees in the context of the larger natural environment and native plant communities of Yerba Buena Island. COVID-19 has not impacted TIDA's ability to manage trees on the islands. TIDA is concerned about the impact of humans on the native trees of Yerba Buena Island, where a June 20, 2020 human-caused fire in the native oak woodlands damaged several mature coast live oaks and adjacent coastal scrub habitat. TIDA is in the process of studying the presence of phytophthora in soil on YBI.

The **University of California, San Francisco (UCSF)** owns and manages a 61-acre open space area just south of the Parnassus Heights campus called the Mount Sutro Open Space Reserve. UCSF is committed to maintaining the Reserve as a safe and accessible resource that San Francisco residents and visitors can enjoy. The global pandemic has resulted in UCSF not being able to hire temporary staff to implement the management plan. They need additional in-house landscape staff. UCSF is concerned about the ongoing climate change and the availability of water to plant trees and maintain them. Despite the challenges, UCSF did plant many different tree species in the last year, listed in the table below.



University of California, San Francisco (UCSF) – Tree Species Planted in 2019/2020	
<i>Bay Area Natives</i>	<i>Australian Natives</i>
<i>Acer macrophyllum</i> – big leaf maple	<i>Corymbia aparrerinja</i> – ghost gum
<i>Acer negundo</i> – box elder*	<i>Corymbia citriodora</i> – lemon gum
<i>Aesculus californica</i> – California buckeye*	<i>Eucalyptus camaldulensis</i> – river red gum
<i>Arbutus menziesii</i> – Pacific madrone*	<i>Eucalyptus citrix</i>
<i>Prunus ilicifolia</i> – holly leaf cherry*	<i>Eucalyptus globulus</i> – blue gum
<i>Quercus agrifolia</i> – coast live oak*	<i>Eucalyptus grandis</i> – rose gum
<i>Quercus kelloggii</i> – black oak	<i>Eucalyptus gunnii</i> – cider gum
<i>Quercus parvula</i> var. <i>shrevei</i> – Shreve's oak	<i>Eucalyptus leucoxylon</i> – yellow gum
<i>Salix lasiolepis</i> – arroyo willow*	<i>Eucalyptus rudis</i> – flooded gum
	<i>Eucalyptus sideroxylon</i> – red ironbark
	<i>Eucalyptus wandoo</i> – wandoo

\*San Francisco native

**San Francisco General Hospital (SFGH)** is a San Francisco Department of Public Health facility that serves as the city's only trauma hospital and serves over 100,000 patients a year. SFGH does select trees for climate and biodiversity, and they are trying to increase diversity with which trees will survive in the long run, as well as trying to plant more trees in general. As a result of the pandemic all funds were immediately directed towards Covid-19 related healthcare. Volunteer programs were cancelled. But SFGH staff continues to care for the grounds full-time. With City budget shortfalls, SFGH worries about being able to keep up with pruning and care of the older significant trees. The fires and smoke have made both tree and staff health a major concern.

**San Francisco Environment (SFE)** continues to support the Urban Forestry Council. Building on the 2019 Urban Forestry Council Strategic Plan, SFE developed draft strategies and actions for the upcoming 2021 San Francisco Climate Action Plan (CAP). The UFC iterated on the draft strategies and actions over the course of several meetings of both the Full Council and the Planning and Funding Committee. SFE plans to take the entire CAP out to the public at large in December of 2020.

# Annual Survey Response Data

The following entities responded to the survey with information provided in Tables 1, 2 and 3.

<u>Agency</u>	<u>Abbreviation</u>	<u>Agency</u>	<u>Abbr.</u>
California Department of Transportation	Caltrans	San Francisco Municipal Transport. Agency	SFMTA
City College of San Francisco	CCSF	San Francisco Public Library	SFPL
Friends of the Urban Forest	FUF	San Francisco Public Utilities Commission	SFPUC
Laguna Honda Hospital (Department of Public Health)	LHH	San Francisco Public Works	SFPW
Port of San Francisco	PORT	San Francisco Recreation & Parks Department	RPD
Presidio Trust	Trust	San Francisco State University	SFSU
San Francisco Housing Authority	SFHA	Treasure Island Development Authority	TIDA
San Francisco International Airport	SFO	University of California at San Francisco	UCSF
San Francisco General Hospital	SFGH		

**Table 1. Staffing & Budgets**

<b>Agency</b>	<b>Urban forestry-related staff positions</b>	<b>FTE equivalent staff performing forestry work</b>	<b>Total department budget</b>	<b>Urban forestry-related budget</b>
Caltrans	25	15	-	-
CCSF	4	0	300,000,000	0
FUF	21	14	3,468,355	1,720,550
LHH	2	0.05	-	10,000
Port	2	1.5	100,349,000	177,350
Trust	10	8	-	-
RPD	29	29	219,570,100	5,980,157
SFHA	0	0	19,934,747	0
SFO	12	1.5	-	20,000
SFGH	2	0.25		2,000
SFMTA	3	0	-	-
SFPL	0	0	155,000,000	25,000
SFPUC	0	0	-	0
SFPW	52.24	41.24	386,726,519	22,438,000
SFSU	4	1	600,000	200,000
TIDA	0.5	0	13,000,000	200,000
UCSF	2	2	1,994,107	808,858
<b>TOTALS</b>	<b>168.74</b>	<b>113.54</b>	<b>\$1,200,642,828</b>	<b>\$31,581,915</b>

Table 2. Tree Activities

Agency	Planted	Maintained	Removed	Work performed FOR others (P-planted, M-maintained, R-removed)	Work performed BY others (P-planted, M-maintained, R-removed)
Caltrans	12	200	15		
CCSF	0	300	3		Davey Tree Service: R-3
FUF	1,021	2,676	0	SFPW: P-1021, M-2676	
LHH	15	25	0		
Port	1	478	1		
Trust	650	0	400		
RPD	128	378	159		
SFHA	0	50	10		JTS: M-50, R-10
SFO	40	500	5		
SFGH	18	100	12		
SFMTA	6	30	6		Devaney Engineer: P-3000, R-6
SFPL		125	25		RPD: M-125 SFPW: P-25
SFPUC	0	5	4		
SFPW	1,931	18,347	2,355	MTA: R-1; Police: R-1	Contractors: R-1,540; Permitted Private: R-224, P-444; Streetscape Projects: P-642; Climate Action Now!: P-358*
SFSU	15	200	10		
TIDA	0	25	10		JTS Tree Care: P-0, M-25, R-10
UCSF	312	10,000	580		
<b>TOTALS</b>	<b>2,825</b>	<b>33,439</b>	<b>3,371</b>		

\*Climate Action Now! planted 238 of the 358 in FY 18/19, as per discussion above.

Table 3. Species Selection & Diversity

Agency	Most Common Species Planted	Struggling Species & Pests	Experimental Species
Caltrans		<i>Eucalyptus</i> spp.	
CCSF	Pine and cypress	Eucalyptus, Monterey cypress, Monterey pine – canker, beetle, green apple moths	New Acacia and Eucalyptus
FUF	<i>Tristania laurina</i> <i>Olea europaea</i> (combining all fruitless varieties) <i>Magnolia grandiflora</i> (combining all varieties)	Cut back drastically on planting <i>Arbutus</i> 'Marina' due to the canker and no longer recommending them. <i>Pittisporum undulatum</i> are not establishing very well (and it's on the Cal-IPC watch list). Many have thin foliage and a lot of weeping gummosis. Stopped planting <i>Zelkova serrata</i> due to structural concerns and <i>Pyrus</i> species due to fire blight.	<i>Chitalpa tashkentensis</i> coast banksia ( <i>Banksia integrifolia</i> ) gold medallion tree ( <i>Cassia leptophylla</i> )
LHH	southern magnolia ( <i>Magnolia grandiflora</i> ) Ceanothus 'Ray Hartman'		
Port	<i>Pittosporum undulatum</i>	myoporum ( <i>Myoporum laetum</i> ) Canary Island palm ( <i>Phoenix canariensis</i> )	
Trust	Monterey cypress ( <i>Hesperocyparis macrocarpa</i> )	Monterey Pine, Pine Pitch Canker ( <i>Fusarium circinatum</i> ), Seiridium Canker (on cypress trees)	Santa Cruz cypress ( <i>Hesperocyparis abramsiana</i> ) Gowen cypress ( <i>Hesperocyparis goveniana</i> )
RPD	Monterey pine ( <i>Pinus radiata</i> ) Monterey cypress ( <i>Hesperocyparis macrocarpa</i> ) <i>Eucalyptus</i> spp.	Bark beetle, <a href="#">tortoise beetle</a>	
SFHA			
SFO	coast live oak ( <i>Quercus agrifolia</i> ) California buckeye ( <i>Aesculus californica</i> ) Norfolk Island Hibiscus ( <i>Lagunaria patersonii</i> )	Oak moths started to show up. No more planting redwoods due to water conservation.	

Agency	Most Common Species Planted	Struggling Species & Pests	Experimental Species
SFGH	<i>Pinus thunbergii</i> 'Thunderhead' various cedars and pines <i>Cercis</i> sp.	Monterey pines, bark beetle	Wollemi pine ( <i>Wollemia nobilis</i> ) Himalayan white pine ( <i>Pinus wallichiana</i> ) Palo verde ( <i>Parkinsonia</i> sp.)
SFMTA		myoporum ( <i>Myoporum laetum</i> )	
SFPL		Ficus sp. (maintenance challenges)	Red maple
SFPUC		Monterey pines, bark beetle, thrip	
SFPW	Water gum ( <i>Tristanopsis laurina</i> ) European olive ( <i>Olea europaea</i> ) Southern magnolia ( <i>Magnolia grandiflora</i> )	On the Approved Street Tree List, we downgraded <i>Ginkgo biloba</i> and <i>Ulmus parvifolia</i> (Chinese Elm) from appropriate in all locations to having some limitations. Removed entirely from the list <i>Zelkova serrata</i> due to structural flaws and <i>Koelreuteria paniculata</i> due to uneven performance. The recent decline of mature Ficus trees citywide was identified as <i>Phomopsis</i> spp, a canker. It targets already stressed trees which appears to be compounding years of drought stress.	Continued planting more Island Oaks ( <i>Quercus tomentella</i> ) like last year and planted Cork Oaks ( <i>Quercus suber</i> ) as available.
SFSU	Monterey cypress ( <i>Hesperocyparis macrocarpa</i> )	"We don't plant Eucalyptus or Black Acacia trees. Eucalyptus due to their size, Psyllid issues, breakout potential, interference with underground utilities. Black acacia due to its tendency to spread and its brittleness."	Island oak ( <i>Quercus tomentella</i> )
TIDA	None planted		
UCSF	Eucalyptus	No longer planting <i>Arbutus 'marina'</i> ; Anthracnose	<i>Eucalyptus citrix</i> , wandoo, <i>dalrympleana</i>

# Attachment 1: 2019/2020 Annual Survey Questions

Sent to the following agencies and entities that physically manage trees. In addition to the questions listed below from the 2018/2019 survey, agencies were asked about Covid-19 impacts and for further information about diseases.

- Caltrans
- City College of San Francisco (CCSF)
- Friends of the Urban Forest (FUF)
- Laguna Honda Hospital (LHH)
- Office of Community Investment and Infrastructure (OCII)
- Pacific Gas and Electric (PG&E)
- Port of San Francisco (Port)
- Presidio Trust (Trust)
- Recreation and Park Department (RPD)
- San Francisco General Hospital (SFGH)
- San Francisco Housing Authority (SFHA)
- San Francisco International Airport (SFO)
- San Francisco Municipal Transportation Agency (SFMTA)
- San Francisco Public Library (SFPL)
- San Francisco Public Utilities Commission (SFPUC)
- San Francisco Public Works, Bureau of Urban Forestry (SFPW)
- San Francisco State University (SFSU)
- San Francisco Unified School District (SFUSD)
- Treasure Island Development Authority (TIDA)
- University of California, San Francisco (UCSF)



Photo Courtesy SF Environment



# SF Environment

## Annual Urban Forest Report Survey (2018–2019)

Pursuant to Chapter 12, Section 1209 of the Environment Code, the Department of the Environment is surveying your organization's forestry program work during the last fiscal year. Thank you for your participation in this process.

Please Return By 08/09/2019

1 I – IV

2 V

3 VI – X

### I. Agency Information:

**Name of Agency/Department/Organization: \***

**Your Name \***

First

Last

**Email \***

### II. Work force:

**A. How many urban forestry-related staff positions does your organization have?**

**B. How many full-time equivalent staff positions work only on tree planting, care, and removal?**

III. Budget:

A. What is your organization's total budget?

B. What is your urban forestry-related budget?

C. Does your urban forestry related budget fund anything other than tree care (such as education or lawn and shrub care)?

- No  
 Yes

D. If "yes," please estimate the percentage or amount of funding listed in your urban forestry related budget (above) spent specifically on tree planting and maintenance.

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IV. Health and Diversity of the Urban Forest:

A. What are the three most common species of trees you planted this fiscal year?

B. Are there any species you feel are struggling in San Francisco, or species you have decided no longer to plant? Please explain why.

C. Did you experiment with planting any new or less common species this year? If so, what were they?

D. Are you considering climate change, biodiversity and wildlife habitat when selecting your tree species? Please explain.



V. Tree Care (planting, maintenance, and removals):

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A. How many trees were planted, cared for, and removed within your organization's jurisdiction in FY2018-19?

Do not include tree care performed for other entities by your agency.

**Planted**

**Cared For**

**Removed\***

**\*Please describe reasons for tree removals**

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B. If your organization performed urban forestry related work for another entity during the past year, please provide the requested information below. Leave blank if not applicable.

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**Entity 1 Information**

**Entity 1 Name**

**Entity 1 Planted**

**Entity 1 Cared For**

**Entity 1 Removed**

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**Entity 2 Information**

**Entity 2 Name**

**Entity 2 Planted**

**Entity 2 Cared For**

**Entity 2 Removed**

C. If another entity performed urban forest related work for your organization during the past year, please provide the requested information below. Leave blank if not applicable.

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**Entity 1 information**

**Entity 1 Name**

**Entity 1 Planted**

**Entity 1 Cared For**

**Entity 1 Removed**

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**Entity 2 information**

**Entity 2 Name**

**Entity 2 Planted**

**Entity 2 Cared For**

**Entity 2 Removed**

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**Entity 3 information**

**Entity 3 Name**

**Entity 3 Planted**

## VI. Fiscal Year General Liability Claims

Please answer the questions below if any general liability claims made against your agency due to issues related to trees.

For example, trip and falls on exposed roots or branch failures that damaged persons or personal property.

### A. Total general liability claims related to trees

### B. Total number of paid general liability claims related to trees

### C. Average dollar amount of tree-related claims paid

## VII. Concerns & Limitations

Many organizations have reported similar concerns related to the urban forest and similar limitations when attempting to address these concerns. We are tracking these concerns and limitations over time to identify trends.

### A. Concerns:

	not at all concerned	slightly concerned	somewhat concerned	moderately concerned	extremely concerned
<b>Ability to provide adequate care to newly planted trees</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Ability to provide adequate care to established trees</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Coordination and efficiency in the way forestry programs operate on a city-wide basis</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Provision of wildlife habitat via urban forestry management</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Loss of significant numbers of trees due to age and/or disease</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Loss of significant numbers of trees due to vandalism, illegal pruning, and/or illegal removal</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Loss of significant numbers of trees due to development</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

**B. Limitations:**

	not at all a limitation	minor limitation	medium limitation	moderate limitation	serious limitation
<b>Funding constraints</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Staffing constraints</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Prioritization of urban forestry programs within your agency/the city at large</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Coordination of efforts to protect and manage the overall urban forest</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Tree inventory specific to your agency (if applicable)*</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<b>Management plan specific to your agency (if applicable)*</b>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

**VIII. Significant Changes**

What, if any, significant changes or accomplishments have taken place within your organization's urban forestry programs in the last fiscal year?

**IX. Topics of Concern**

What topics are of greatest concern in your organization this year?

**X. OPTIONAL**

Do you have any recommendations, comments, or suggestions for us to improve the method of data collection, the annual report, or other processes related to the Annual Urban Forest Report?

# Attachment 2: 2020 Alternative Annual Survey Questions

Sent to the San Francisco Planning Department

## Annual Urban Forest Report Alternative Survey

*Fiscal Year 2019-2020*

Pursuant to [Chapter 12, Section 1209 of the Environment Code](#), SF Environment is surveying your organization's forestry program work during the last fiscal year. Thank you for your participation.

### Part I

#### 1. Agency Information:

Name of Agency/Department/Organization:	
Your Name:	
Email:	

#### 2. Work Force & Budget:

A. How many urban forestry related staff positions does your organization have?	
B. What is the budget for your urban forestry related programming in the 2018-2019 fiscal year?	

#### 3. Assistance to San Francisco-based Urban Forestry Programs or Organizations

A. Did you provide <u>TECHNICAL</u> assistance to any urban forestry programs or organizations in San Francisco? If so, please identify the programs and/or organizations and the nature of the assistance.	
B. Did you provide <u>FINANCIAL</u> assistance to any urban forestry programs or organizations in San Francisco? If so, please identify the programs	

<b>and/or organizations and the nature of the assistance.</b>	
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**4. Other San Francisco Projects/Programs**

<b>Did you work on any other projects not discussed in Question III that may affect San Francisco’s urban forest?</b>	
<b>A. If yes, what is the project/program status?</b>	
<b>B. How can we assist or work with you on these projects/programs?</b>	

**Part 2: Additional Questions**

<b>5. What, if any, significant changes or accomplishments have taken place within your organization’s urban forestry programs in the last fiscal year? <i>For example, staffing or budget changes, new major projects or programs, changes to forestry management programs or oversight, or any significant achievements?</i></b>

<b>6. Are you working on regional, statewide, or national issues that we should know about and/or can support locally?</b>

**7. What topics are of greatest concern in your organization this year?** *For example, concerns about drought conditions affecting tree health, including increased pest or disease pressure, other tree health concerns, providing wildlife habitat, jurisdictional issues, COVID-19, or public response to an agency plan.*

**8. OPTIONAL: Do you have any recommendations, comments, or suggestions for us to improve the method of data collection, the annual report, or other processes related to the Annual Urban Forest Report?**

**Thank you for your participation. Please return this form and direct any questions to:**

Peter Brastow

Senior Environmental Specialist

*Nature, Ecosystems and Biodiversity*

San Francisco Department of the Environment

[peter.brastow@sfgov.org](mailto:peter.brastow@sfgov.org)

P: 415-355-3733



Blue Elderberry (*Sambucus nigra* ssp. *caerulea*), which species has a representative Landmark Tree in Bernal Heights.