

# PROTECT

## STRATEGY 2.1

### *Stabilize the urban forest by achieving a net zero loss of trees.*

Aside from growing the urban forest through new planting, one of the biggest steps the City can take is to protect and stabilize our existing urban forestry assets. The urban forest has an estimated 4% annual mortality rate. This means thousands of trees die or are removed each year. Many are lost to age, disease, vandalism and illegal removal without permits. New tree planting in San Francisco has not historically kept pace with these losses resulting in a shrinking urban forest canopy. Efforts should be made to replace lost trees and expand tree planting whenever possible.

**2.1.1 Replace all dead or removed trees on streets on a 1:1 basis.** To stabilize existing tree resources, the City should plant replacement trees whenever trees are removed. If trees cannot be replaced in the same location, plantings should take place in available planting sites elsewhere on other streets.

**2.1.2 Improve enforcement of existing codes for tree protection including: Public Works Code (Article 16: Urban Forestry Ordinance) and Planning Code (Sec. 138.1 & 428).** See Appendix for list of additional tree codes and policies. The City should continue to enforce and look for ways to improve existing regulations governing tree maintenance, care and planting. The City should regularly track the enforcement of these codes and the agencies responsible for implementing them.

## STRATEGY 2.2

### *Reduce impacts of development on the urban forest.*

**2.2.1 Improve care and maintenance of street trees through a comprehensive management program.** (See MANAGE chapter).

Regular ongoing maintenance of the City's trees is one of the most important ways to protect and ensure their long-term health.

**2.2.2 Encourage developers to incorporate existing trees into building and site designs.** While street trees and significant trees (within 10' of the public right-of-way) are afforded certain protections, many trees on vacant or redevelopment sites are removed to allow for new development. Consideration should be given during review of building plans to the existing trees on the site, especially "significant" trees (20 ft or more in height, 15 ft or greater canopy width, and/or 12 inches or greater in trunk diameter). If trees are removed efforts should be made to harvest or re-use the wood if possible.

**2.2.3 Explore regulatory devices to increase protection of trees during permitting process for garages, curb cuts and driveways.** Installation of parking facilities on public and private development often requires the removal of street trees. These include trees of significant size that provide valuable public benefits and a mature canopy. In such cases, where a tree would be impacted, design alternatives such as off-set driveways or denial of a permit may be appropriate where existing trees would be removed or new trees cannot be planted.

**2.2.4 Require contractors to carry Tree Protection Bonds during construction projects.** Construction activities frequently result in accidental damage or loss of trees - including street trees. Development projects with the potential to disturb existing trees should be required to carry Tree Protection Bonds as insurance. Such bonds would allow recourse in the event that significant damage to trees occurs during the development process through fines, tree replacement or other measures.

**2.2.5 Improve process for approving Tree Protection Plans for construction projects.** Currently Tree Protection Plans are collected by the Planning Department. Review of these plans should take place with appropriate urban forestry staff. The inspection and enforcement of plans should be carried out. These plans include important provisions to protect trees such as protective barriers, construction exclusion zones, and the restriction of material and equipment storage within tree drip zones.

**2.2.6 Fully integrate DPW into the Building Permit and Project Tracking System (PPTS).** DPW should be fully integrated into the development review and building permit process. The inclusion of DPW into the Permit and Project Tracking System (PPTS) used by the Planning Department and Department of Building Inspection (DBI) will facilitate the effective review of planting issues (e.g. appropriate siting, interference from pre-existing infrastructure, pedestrian and vehicular safety) by staff at an early stage in the development review process. The current process requires more staff time than is necessary, causes undue delay to development projects, and has com-

plicated enforcement of the street tree requirements. DPW's integration in PPTS will allow for more robust implementation of tree requirements and monitoring of in-lieu fees required when street trees cannot be planted.

#### STRATEGY 2.3

### ***Develop strategies to combat diseases and pests.***

**2.3.1** **Involve DPW early in the planning and design of projects affecting trees in the public right-of-way.** Streetscape, transportation and utility projects can have large impacts on existing street trees. To ensure an adequate level of protection and to determine what new trees and plantings may be appropriate, DPW should be an active participant in the planning and design of infrastructure changes related to the public right-of-way.

**2.3.2** **Plant a variety of species to create a more resilient urban forest.** By growing and maintaining a species diverse urban forest, the City's trees will be more resistant to widespread infestation or fatality. Since pathogens and diseases typically affect a specific species, no single species or group of species should dominate the urban forest or a neighborhood. To support a more diverse urban forest, new species should be tested to determine their suitability for San Francisco.

**2.3.3** **Monitor the urban forest for signs of emerging pests or disease.** The Urban Forestry Council's annual State of the Urban Forest Report should identify trends and mitigations for significant pests or diseases that may affect the urban forest.

**2.3.4** **Require annual disease and pest training for City's urban forestry staff.** City urban forestry staff should undergo training on how to identify and report disease, pests and early indicators of harm when working on trees.

#### STRATEGY 2.4

### ***Promote proper care and maintenance of street trees.***

**2.4.1** **Increase enforcement of the Urban Forestry Ordinance.** The City's Urban Forestry Ordinance outlines the requirements for tree care in the City. DPW should increase its ability to enforce these rules to ensure property owners and contractors properly care for street trees and significant trees. Additional staff resources would allow for more robust implementation of the ordinance and protection of the urban forest.

**2.4.2** **Help facilitate audits of tree care by City agencies.** Reviews of tree care provided by City agencies and their contractors should be conducted to identify improvements and opportunities. Reviews could be conducted by an outside source or by a peer city's urban forestry staff. Funding should be secured to conduct this type of review.

**2.4.3** **Educate the public on various aspects of tree care.** Educational opportunities through classes, publications, videos and on-line materials should be made available to the public regarding proper tree pruning techniques, standards and the identification of pests and disease. The City's Adopted Pruning Standards and tree selection guides should be made easily accessible.