CITY OF SANTA BARBARA

URBAN FOREST MANAGEMENT PLAN

PRESERVING AND PROTECTING
OUR COMMUNITY TREES

ADOPTED BY CITY COUNCIL
APRIL 8, 2014

Acknowledgements

On behalf of the City Parks and Recreation Department, we would like to thank the following people for their contributions to the development of the Urban Forest Management Plan.

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City Boards and Commissions
Parks and Recreation Commission
Planning Commission
Historic Landmarks Commission
Architectural Board of Review
Street Tree Advisory Committee
Single Family Design Review Board
Neighborhood Advisory Committee

Members of the Public
The City wants to thank the engaged citizens and groups who participated in community meetings and surveys and provided valuable input.

California Department of Forestry and Fire
The development of the Urban Forest Management Plan was funded in part from a California Department of Forestry and Fire Protection (CAL FIRE) Urban and Community Forestry Grant.

I. Introduction

Santa Barbara was once a largely treeless landscape of grassland and coastal wetlands with coast live oaks along canyons and hillsides and sycamores and willows lining the creeks.[1] Today, an estimated 320,000 trees grow along city streets, in parks and on private property creating Santa Barbara's urban forest.[2] The urban forest is one of Santa Barbara's most visible and vibrant natural resources providing aesthetic, ecological and economical benefits as well as reflecting horticultural heritage, cultural and community well-being. The urban forest touches the lives of Santa Barbara residents and visitors every day and profoundly influences the city's urban landscape. Trees characterize neighborhoods, beautify parks, enhance commercial corridors, complement buildings, provide environmental benefits and wildlife habitat, and contribute to community health and wellbeing. A recent assessment of Santa Barbara's street tree population estimates they provide over $2 million in annual benefits.[3] If extrapolated out to all trees in the urban forest, benefits could reach upwards of $29 million on an annual basis.

The urban forest is distinguished by its urban setting of paved surfaces, streets, buildings, homes, parks and undeveloped open spaces. Similar to many California coastal communities, Santa Barbara's urban forest is the result of tree planting and landscaping activities carried out by people rather than native growth.[4] Like streets, sidewalks and other urban infrastructure, the urban forest needs regular maintenance and a long-term plan to ensure its health and longevity.

Benefits of Trees

The City recognizes the important environmental, economic and social benefits trees provide, including energy conservation, storm water reduction, carbon dioxide reduction, air quality improvement, social health and aesthetics. The U.S. Forest Service has developed tools to measure these benefits and ecosystem services. Collectively, Santa Barbara's urban forest has the potential to provide the community with $29 million in benefits annually. The following includes some examples of how trees affect our lives and the community around us.

ENVIRONMENT

Trees have many positive environmental effects to our surroundings. Leaves filter air by removing dust, other particulates and gaseous pollutants like carbon dioxide and nitrogen

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[1] Hartfeld, Edward A. (2001). The Santa Barbara City Park Department, Dwight Murphy and John Hartfeld and the Depression Miracle. Santa Barbara Historical Society: Noticias 48 (4) 78-105.

[2] City of Santa Barbara Parks and Recreation Department. (2012). *City of Santa Barbara Tree Canopy Cover Assessment*, Santa Barbara.

[3] City of Santa Barbara Parks and Recreation Department. (2009). *City of Santa Barbara i-Tree Assessment. Santa Barbara, CA.*

[4] Muller, Robert N. and J. Robert Haller. (2005). *Trees of Santa Barbara*. Santa Barbara, CA: Santa Barbara Botanic Garden.

dioxide.[5] They capture rainwater and remove impurities, decrease volume into sewer systems and peak stream flows, plus reduce soil erosion. Urban trees offer habitat to birds, insects, reptiles, mammals and the vast system of microorganisms in the soil.[6] Trees also provide habitat and shade in the creek corridors for fish and amphibian species. Local fruiting trees and orchards reduce the distance food must travel to reach city dwellers. Finally, trees strategically planted along streets reduce noise levels to nearby businesses and homes.

SOCIAL

Researchers continue to uncover ways in which our environment and landscape positively contribute to a community's social health. Trees connect people to nature, provide a link to a community's horticultural heritage, improve public health and provide a sense of community. Thompson Ward and others have been finding these links in everything from quicker recovery times post surgery to less stress in deprived communities.[7,8] Cities with more green space and trees have more active communities and decreased rates of obesity. Patients at hospitals with views of trees have quicker recovery times post surgery. Trees provide opportunities to watch birds and wildlife and offer a place for discovery and exploration, plus naturally create a place of gathering for recreation, family and spiritual purposes. Tree planting activities at schools, along streets and on private property creates neighborhood pride and strengthens the sense of community.

ECONOMIC

Strategically planted trees trim costs by reducing energy consumption, prolonging infrastructure, increasing property values and improving work productivity. [9,10,11] Deciduous trees shade streets, homes and building in the summer and provide sun during the winter, thus reducing energy consumption. Shade from trees has been shown to prolong the life of asphalt, while trees in general reduce the need for expensive storm water management systems. Trees and landscaping have also been shown to improve work productivity. Workers with access to (or views of) trees and green space, are generally more productive, less stressed and happier employees.

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[5] Nowak, David J. (2002). *Effects of Urban Trees on Air Quality*. Syracuse, New York: U.S. Forest Service.

[6] Muller, Robert N. and Carol Boernstein (2010). *Maintaining the Diversity of California's Municipal Forests*. Arboriculture and Urban Forestry 36 (1): 18-27.

[7] Ward, Thompson, C. (2011). *Linking landscape and health: The recurring theme*. Landscape and Urban Planning 99(3-4): 187 195.

[8] Ward Thompson, C., et al. (2012). *More green space is linked to less stress in deprived communities: Evidence from salivary cortisol patterns*. Landscape and Urban Planning 105(3): 221-229.

[9] Dimoudi, Argiro and Marialena Nikolopoulou (2003). *Vegetation in the urban environment: microclimatic analysis and benefits*. Energy and Buildings 35 (69-76).

[10] Dravigne, A., et al. (2008). The *Effect of Live Plants and Window Views of Green Spaces on Employee Perceptions of Job Satisfaction*. HortScience 43(1): 183-187.

[11] Lottrup, L., et al. (2013). *Workplace greenery and perceived level of stress: Benefits of access to a green outdoor environment at the workplace*. Landscape and Urban Planning 110(0): 5-11.

II. Background

The City embarked on the development of its first Urban Forest Management Plan (Plan) recognizing the role of urban trees in providing environmental, economic, social and aesthetic benefits, as well as the challenges faced with managing the urban forest. In certain areas of the city, the urban forest is aging, mature trees conflict with infrastructure, and species diversity is in decline. In addition, resources for the planting and care of trees and community participation in tree management are limited.

The purpose of the Plan is to identify long-term preservation and enhancement objectives and address key management considerations including canopy cover, infrastructure constraints, and environmental, land use, aesthetic, and community considerations. Although nearly 80 percent of the urban forest lies on privately owned land, the Plan's primary focus is on trees located on City property, over which the City of Santa Barbara can exert the most direct influence. Through implementation of this Plan, the City will improve urban tree management, allocate resources, and promote stewardship in a coordinated, cooperative approach with City departments, community partners and citizens.

Plan Development

Development of the Plan included preparation of a baseline tree canopy assessment and policy options analysis; extensive public outreach through community meetings, survey tools, City TV information, web resources, and other public information methods. A Technical Advisory Committee (TAC) was formed with members from the City's Parks and Recreation Commission, Street Tree Advisory Committee, and Planning Commission, as well as representatives from Southern California Edison, Santa Barbara Botanic Garden and Santa Barbara Beautiful to provide technical assistance and input. Over an 18 month period, a total of 32 meetings were held with the TAC, City staff, the Parks and Recreation Commission, Planning Commission, Architectural Board of Review (ABR), Historic Landmarks Commission (HLC), Single Family Design Review Board (SFDB), Street Tree Advisory Committee (STAC), Neighborhood Advisory Committee (NAC), as well as the public, to review current urban forest program management, identify key issues, develop a vision and mission statement as well as broad goals and develop, review and refine objectives and key actions. Additional public input was received through an online survey and distributed comment cards. The project was funded in part by a grant from the California Department of Forestry and Fire.

Santa Barbara's Urban Forest

Unlike cities with naturally occurring forests, Santa Barbara's historic landscape was fairly treeless.[12] Early pictures of the area show it nearly devoid of trees, with the exception of native stands near creek corridors, in canyons and along hillsides.[13] Native trees included

[12] Personal contact with former Mayor Sheila Lodge, 2013- 2014.

[13] Graffy, Neal (2012). *Santa Barbara Then and Now.* Santa Barbara, CA: El Barbareño Publishing.

the coast live oak, species of willows and sycamores. Extensive tree planting beginning in the 1800s and continuing well into the new century transformed the city into a global arboretum.

HISTORY HIGHLIGHTS

The extent and diversity of the City's current urban forest is primarily the result of efforts of early horticulturalists and City management of diverse tree resources for more than a century. Early horticulturalists, including Joseph Sexton, Dr. Francesco Franceschi, Dr. Boyd Doremus, Peter Reidel, and E. O. Orpet, brought plants and trees from all over the world to Santa Barbara. Beginning in the early 1900's, these pioneers transformed Santa Barbara's downtown barren landscape into a diverse canopy, planting trees for food, aesthetics and for the love of horticulture. While some of the earliest recorded plantings are from Spanish Franciscan Padres who introduced the olive trees and California pepper trees, official plantings began in 1908.[14] By 1914, an official street tree list and street designation had been compiled and adopted by the Parks Commission. Many trees throughout the city, such as the Italian Stone Pines along Anapamu, are representatives of this original list. Some important times in Santa Barbara's horticultural history include:

- **1793.** Captain George Vancouver observed almonds, apples, apricots, cherries, lemons, limes, oranges, peaches, pears, and pomegranates near the Mission gardens.
- Spanish settlers introduced the California pepper, chinaberry, as well as palms for the tradition of Palm Sunday.
- **1867.** Joseph Sexton established his first nursery. Ten years later, this grew to become one of the area's most extraordinary sites containing some of the world's rarest shrubs and plants. Sexton is also credited with popularizing the cork oak, dragon tree, Lombardy poplar as well as the invasive pampas grass.
- **1870s.** Ellwood Cooper introduced over 50 species of Eucalyptus, a common tree seen throughout Santa Barbara today.
- **1880–1910.** Kinton Stevens, Francesco Franceschi, Dr. Boyd Doremus, and Peter Reidel made their individual mark on Santa Barbara, forever changing the landscape. Combined, they introduced several thousand plant and tree species and contributed immensely to the city's horticultural heritage
- **1920–1956.** E.O. Orpet, a highly respected horticulturist, made his contributions to Santa Barbara's street and park plantings including Olive trees along Olive Street, Southern magnolias along San Andres, and unique species in Orpet Park.
- **1956–Present.** Many other Santa Barbara residents, horticultural enthusiasts, and arborists added to the flora of Santa Barbara, including: Finlay MacKenzie (Superintendent of Parks from 1938-1962), Bruce Van Dyke (horticulture teacher in Santa Barbara City College's Adult Education classes for over 40 years), and Dan Condon (city arborist from 1980-2002) to name a few. During this time, the City has

[14] Muller, Robert N. and J. Robert Haller. (2005). *Trees of Santa Barbara.* Santa Barbara, CA: Santa Barbara Botanic Garden.

also enhanced tree preservation policies, established a Street Tree Master Plan, and formulated daily operations consistent with industry standards.

The most recent edition of *Trees of Santa Barbara*, by Robert N. Muller and J. Robert Haller, published by the Santa Barbara Botanic Garden in 2005, documents Santa Barbara's long tradition of horticulture and the importance of trees in the region. The book documents over 400 species of trees that can be viewed in public places. Many of these trees are found on City streets, in City parks, and on the grounds of various public facilities.

The diverse horticulture found in Santa Barbara would not be possible without the winning combination of climate and soils that favor a variety of plant species. Southern California enjoys a Mediterranean climate, generally characterized by temperatures and annual precipitation that is moderated by the cool Pacific Ocean.

Five species make up 30 percent of publicly owned trees.

Coast Live Oak
Quercus agrifola. Native to California.

Jacaranda
Jacaranda mimosifolia. Native to subtropical South America.

Mexican Fan Palm
Washingtonia robusta. Native to western Sonora and northwestern Mexico.

Queen Palm
Syagrus romanzoffiana. Native to South America.

King Palm
Archontophoenix alexandrae. Native to Queensland, Australia.

TODAY'S URBAN FOREST

Today's urban forest is a complex mix of native forests, diverse city parks, and a variety of trees planted in landscapes, along streets and on private property. While the urban forest is estimated to contain over 320,000 trees, the City manages only a portion of that. The City's tree inventory database includes over 23,000 street trees, 9,200 park and facility trees, and a number of vacant sites along streets and in parks.[15] As a capital asset, this is valued at $109 million. A large number of trees, perhaps as many as 30,000, not individually counted also exist in open space parks like Rattlesnake Canyon, Parma Park, Skofield Park and along steep hillsides.

The City's tree inventory also contains 456 different varieties of trees, making it one of the most diverse urban forests amongst southern California communities.[16] However, nearly half of those species occur five or less times, suggesting fragility to Santa Barbara's urban

[15] City maintains a database of its trees. A query in 2014 identified 23,603 street trees, 9,295 park trees, 3,938 vacant street sites and 101 vacant park sites. Vacant street tree sites may have been replanted and are awaiting database updates. More information on the condition of these sites is needed to determine if replanting is an option.

[16] Muller, Robert N. and Carol Bornstein (2010). *Maintaining the Diversity of California's Municipal Forests*. Arboriculture and Urban Forestry 36 (1): 18-27.

forest diversity. Maintaining high species diversity can provide increased protection against disease, pest, and environmental changes. Other benefits include nearly year-round color, fragrance and texture due to varied growing seasons, and educational opportunities in the areas of species preservation, ecology, biodiversity, and cultural uses of trees. Some rare species in the City's inventory include the Kentucky Coffee tree native to North America, and the Cadaga tree and Queensland Kauri both native to Queensland, Australia. Commonly planted species include the Coast Live Oak native to California, Jacaranda native to subtropical South America, Mexican Fan Palm from western Sonora and northwestern Mexico, Queen Palm of South America and King Palm native to Queensland, Australia. These five species make up 30 percent of publicly owned trees.

TREE CANOPY OVERVIEW

To capture the breadth of the urban forest, the City completed a tree canopy cover assessment and from that estimated city-wide tree population.[17] Tree canopy is defined as the percent of land area covered by the crown of a tree. Approximately 25 percent of Santa Barbara is covered by tree canopy, yet canopy cover distribution varies greatly across the city.

Tree canopy was divided into the major land use types of residential, parks and open space, commercial/civic, public schools, office areas, and industrial as described in the City's 2011 General Plan. The table below provides information on canopy cover by these land uses, including: number of canopy acres, percent canopy coverage, the percent this represents out of the total city-wide canopy coverage, and the estimated tree population. Perhaps not surprising, tree canopy is higher in residential areas and parks and open spaces, and lower in commercial, office and more industrial areas. Residential areas make up approximately 80.6 percent of total canopy cover citywide. Within these residential areas, approximately 28 percent of the area has canopy cover. Parks and open space represent approximately 11 percent of total canopy cover citywide with 23 percent canopy cover throughout the parks and open space areas. The remaining 8 percent of total canopy cover citywide is represented by office zones, industrial zones, commercial zones, civic zones, and public school zones. The city-wide canopy map on the following page illustrates the distribution of tree canopy cover.

[17] City of Santa Barbara Parks and Recreation Department. (2012). *City of Santa Barbara Tree Canopy Cover Assessment*, Santa Barbara, CA

Location (2011 General Plan)	Canopy Area (Acres)	Percent Canopy by Location	Percent Canopy of entire city	Estimated Tree Population
Neighborhood Parks	2,787	25.4%	100%	322,290
Residential Areas	2,094	27.8%	80.6%	259,719
Parks and Open Spaces**	322	23.3%	11.6%	36,727
Commercial/Civic	140	20.4%	4.9%	16,077
Public Schools	55	18.7%	2.0%	6,299
Office Areas	20	11.4%	0.7%	2,320
Industrial	10	6.9%	0.4%	1,148

** The area excludes unincorporated areas, the Santa Barbara Airport, and the area of the 101 Freeway that intersects within the City limits.*

*** Parks and Open Space areas in the 2011 General Plan do not include the Montecito Country Club, Sheffield Open Space/Reservoir, Laurel Canyon Reservoir, and the Santa Barbara Municipal Golf Course.*

City of Santa Barbara 2012 Tree Canopy Cover

0 0.25 0.5 0.75 1 Miles

N
W E
S

Prepared by the City of Santa Barbara
Parks and Recreation Department
December 2012

Legend

Canopy Cover

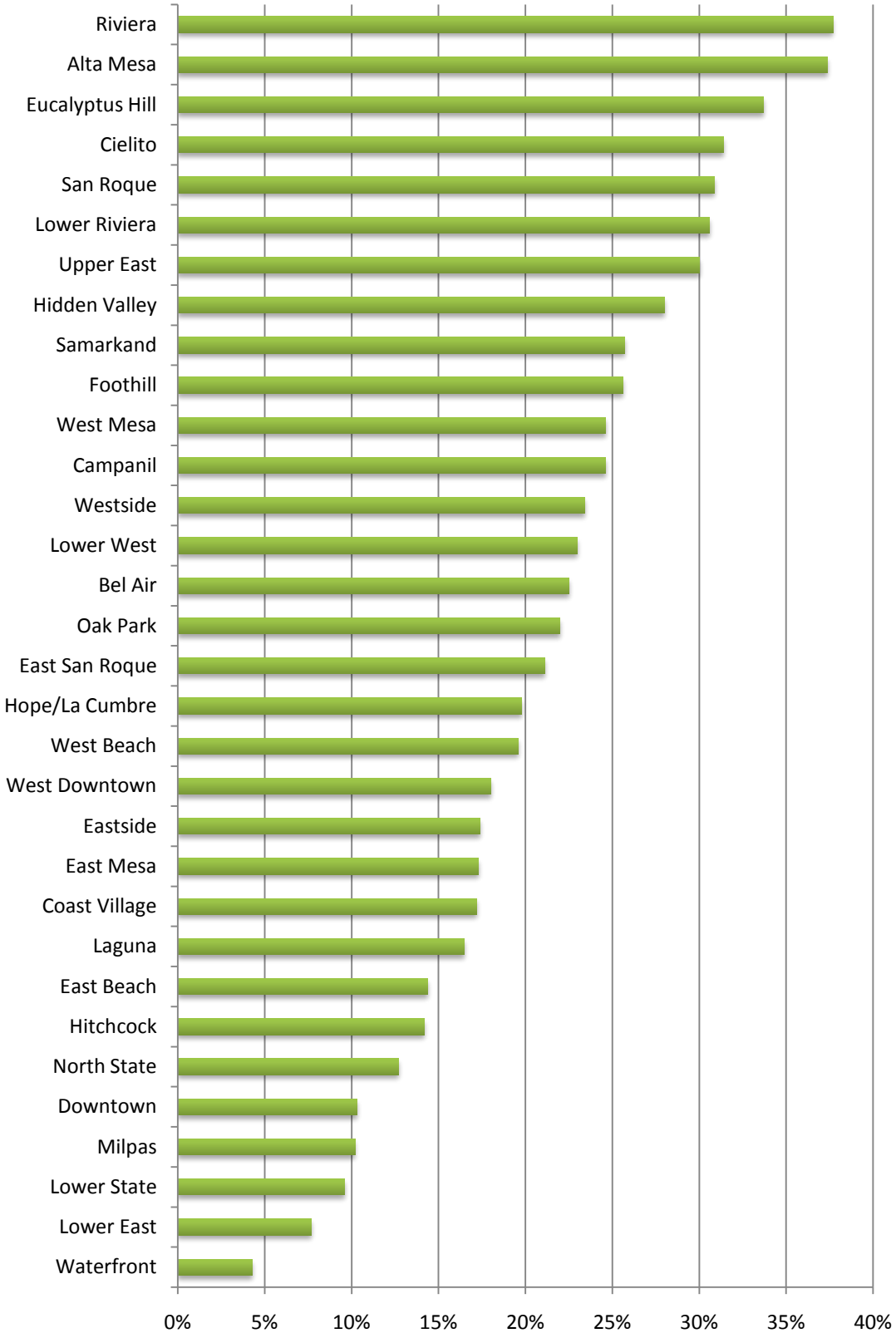
NEIGHBORHOOD CANOPY COVER

Tree canopy distribution varies from neighborhood to neighborhood and park to park. The variation in tree distribution may be attributed to a number of factors. Lot sizes, location and historic planting patterns may have emphasized certain neighborhoods over others. Highly developed areas containing buildings, schools, and major arterial streets negatively influence canopy coverage while the hundreds of trees found in parks and open spaces can positively influence neighborhood canopy estimates. The table below has divided canopy cover information by neighborhood. The City's General Plan describes 32 neighborhoods throughout Santa Barbara. Several neighborhoods, like Alta Mesa, Riviera and Eucalyptus Hill, have high canopy coverage in the 30 percentile, while Downtown, Lower East and Waterfront areas have low coverage in the 10 percentile and below. The graph and canopy map on the following pages also illustrate the distribution of tree canopy cover by neighborhood.

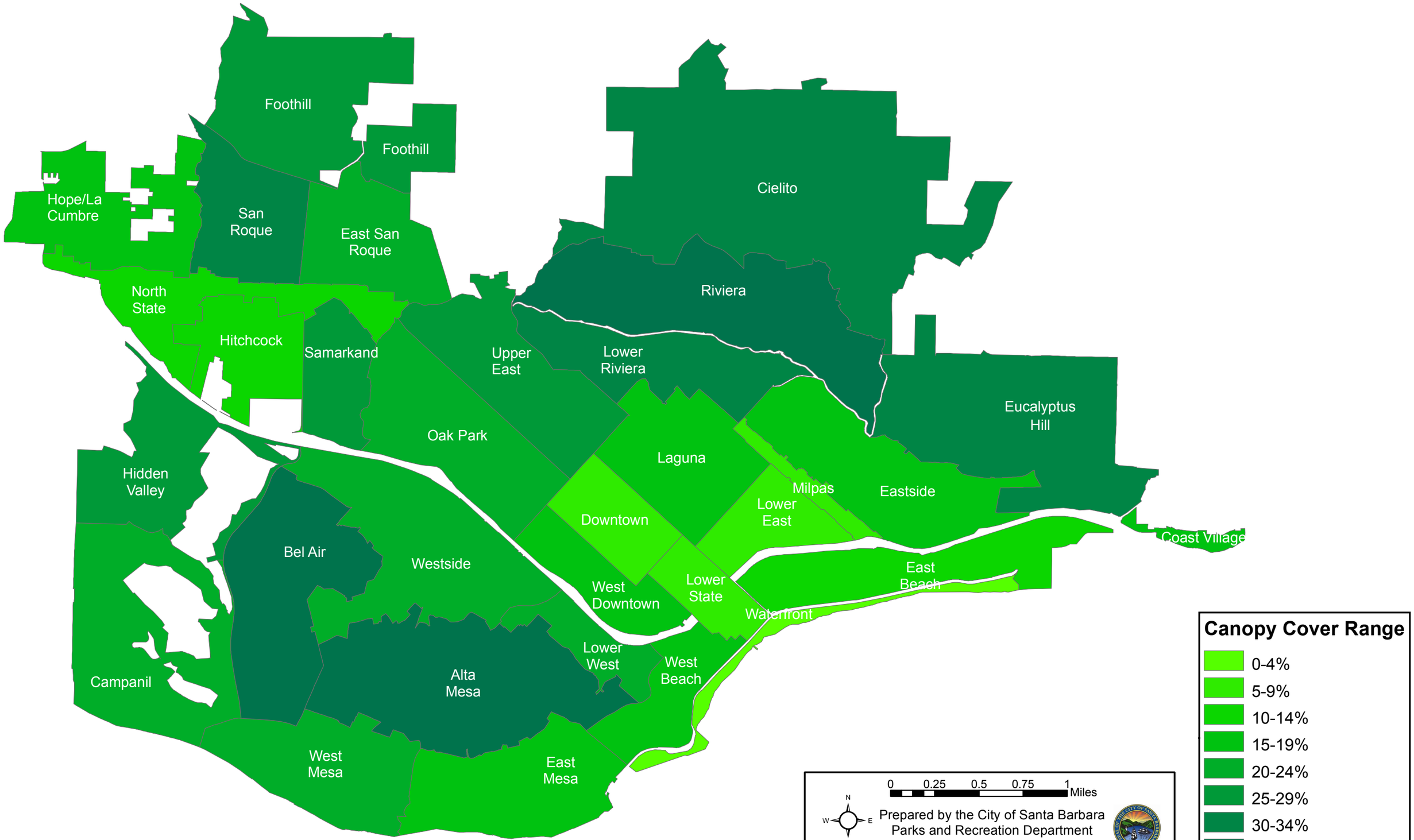
Neighborhood*	Total Area (Acres)	Canopy Area (Acres)	% Area of Canopy Cover
Alta Mesa	634	237	37.40%
Bel Air	480	108	23%
Campanil	488	119	24.60%
Cielito	1,294	407	31.40%
Coast Village	36	6	17.20%
Downtown	172	18	10.30%
East Beach	321	46	14.40%
East Mesa	376	65	17.30%
East San Roque	284	60	21.10%
Eastside	429	75	17.40%
Eucalyptus Hill	672	225	33.70%
Foothill	573	146	25.60%
Hidden Valley	336	94	28.00%
Hitchcock	218	31	14.20%
Hope/La Cumbre	339	67	19.80%
Laguna	324	53	16.50%
Lower East	162	13	7.70%
Lower Riviera	306	94	30.60%
Lower State	122	12	9.60%
Lower West	127	29	23.00%
Milpas	56	6	10.20%
North State	273	35	12.70%
Oak Park	416	91	22.00%
Riviera	607	229	37.70%
Samarkand	177	45	25.70%
San Roque	273	84	30.90%
Upper East	377	112	30.00%
Waterfront	88	4	4.30%
West Beach	183	36	19.60%
West Downtown	178	32	18.00%
West Mesa	350	86	24.60%
Westside	529	124	23.40%
TOTAL	**11,200**	**2,789**	

** Includes all General Plan designated neighborhoods. Tree canopy that fell into the 101 Freeway and unincorporated areas were not included in these results.*

Tree Canopy by Neighborhood



City of Santa Barbara Tree Canopy Cover by Neighborhood - 2012



PARK CANOPY COVER

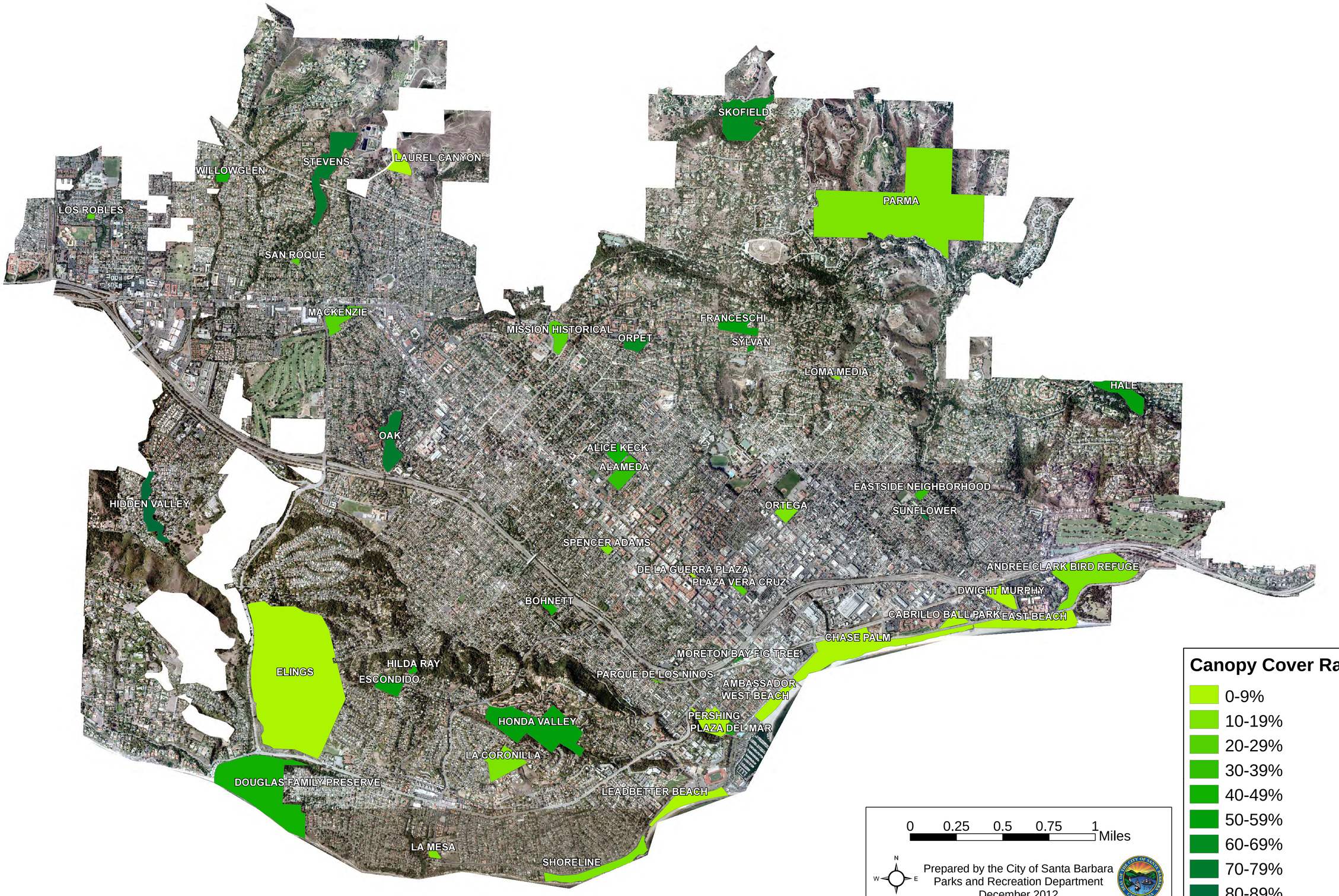
Several factors influence tree canopy within parks, most notably how the park is used and its geographic location. As shown in the following tables and figures, parks used as sports facilities and those along the beachfront have very little canopy (as low as 1.5%). These include Dwight Murphy and Cabrillo Ball Field as well as East Beach, West Beach and Leadbetter Beach Parks. Parks with high tree canopy coverage (as high as 82 percent) are a combination of open space, neighborhood and community parks such as Hidden Valley, Stevens, Sunflower, Oak and Skofield. Both the graph and map on the following pages highlight canopy cover distribution amongst city parks and open spaces.

Location	Total Area (Acres)	Canopy Area (Acres)	% Area of Canopy Cover
All Parks	1,383	322	23.3%
Neighborhood Parks	61	31	50.8%
Community Parks	123	42	34.1%
Passive Parks	72	18	25.1%
Public Open Space*	498	110	22.1%
Open Space Parks	551	114	20.8%
Sports Facilities	35	5	13.8%
Beach Parks	43	2	3.9%

** Includes areas designated as Parks and Open Space in the 2011 General Plan and does not include the Montecito Country Club, Santa Barbara Zoo, Sheffield Reservoir, Laurel Canyon Reservoir, and the Santa Barbara Municipal Golf Course.*

Tree Canopy by Park

City of Santa Barbara 2012 Park Tree Canopy Cover



III. Urban Forest Management

City management of the urban forest involves a number of City departments including Parks and Recreation, Public Works, Community Development and Fire. Planting and maintenance of City trees is primarily the responsibility of the Parks and Recreation Department. Other departments such as Fire, Community Development, and Public Works are involved as part of public safety, public capital improvement projects and land use planning and development. Public review and policymaking related to tree planting, maintenance, and preservation is provided by the Street Tree Advisory Committee, Parks and Recreation Commission, Single Family Design Board, Historic Landmarks Commission, Architectural Board of Review, Planning Commission, and the City Council.

City Departments

PARKS AND RECREATION DEPARTMENT

The mission of the Parks and Recreation Department's Forestry Program is to plant and maintain City public street, park, and facility trees for the benefit of residents, and to ensure a safe and healthy community forest. The Forestry Program currently has eight staff directly involved in the care and maintenance of the City's urban forest, including the Urban Forest Superintendent (City Arborist), Street Tree Supervisor, and six field staff. The Urban Forest Superintendent develops, implements, and supervises tree planting, pruning, removal, and pest management; enforces City tree ordinances; and, coordinates urban forestry related activities with other divisions, departments, and outside agencies or groups. The Street Tree Supervisor oversees field staff, inspects trees, and schedules the day-to-day operations including contracted maintenance services. Field staff are responsible for City tree maintenance including trimming, planting, watering, and respond to emergency tree situations. The field staff includes a Small Tree Care Specialist who is responsible for planting and maintaining young street trees.

Street trees are the primary focus of the Forestry Program and its annual tree maintenance schedule. There are over 23,000 street trees and a number of vacancies waiting replanting.[18] Maintenance of trees and landscaping within the street right-of-way (ROW) is funded by the Utility Users Tax revenue. The Forestry Program also maintains over 9,200 public trees located within 68 parks and landscaped areas of public facilities, as well as all trees within open space parks. In the last five years, the City has pruned an average of 5,796 street trees, 1,375 park/facility trees, and planted 239 new street trees annually. City staff perform block pruning, provide citizen response based and emergency pruning, as well as care for larger park and street trees. Tree contractors are assigned blocks of street pruning or park specific tree pruning. Maintenance of park and public facility trees is funded by the General Fund.

[18] March, 2014 queries to the Forestry Program database identify 4,039 street and park vacant sites. These sites require inspection to confirm their suitability for replanting. In some cases these sites may have been replanted and are awaiting database updates to reflect the change.

The Forestry Program administers the tree removal permit application and review process in accordance with Santa Barbara Municipal Code Chapter 15.20 and Chapter 15.24. The review of each tree removal application includes site visits and discussion with the Street Tree Advisory Committee, and presentation to the Parks and Recreation Commission.

Outreach and education is primarily conducted through public meetings with the Parks and Recreation Commission and the tree removal permitting process and tree planting projects. Recent outreach efforts include a comprehensive update of the Forestry Program web page, publication of a community guide for tree planting, and workshops for tree professionals. The Forestry page on the City's website provides information to the public regarding city-owned and regulated trees and the public benefits of a healthy urban forest. These efforts are supported by community street tree planting projects and annual Arbor Day celebrations and planting projects. As of 2014, the City also enjoys 33 years of designation as a Tree City USA.

COMMUNITY DEVELOPMENT DEPARTMENT

The Community Development Department (CDD) oversees city-wide community planning and land development. Urban forest policy is found in the City's General Plan, Climate Action Plan and various City ordinances. Implementation of City tree policies occurs through project design review and land development approvals, and falls under the purview of the: Historic Landmarks Commission, Architectural Board of Review, Single Family Design Board, and the Planning Commission. Trees are integrated into the land development process through landscape plans. CDD issues permits authorizing landscaping alterations, which may include planting and/or removing trees. Trees planted as part of approved landscape plans are subject to establishment and maintenance requirements. CDD has enforcement authority for unapproved alterations to approved landscape plans. In addition, staff can administratively approve limited tree removals as allowed in the adopted Design Board Guidelines. Under certain circumstances, the Urban Forest Superintendent may review tree removal and planting proposals as part of land development.

FIRE DEPARTMENT

The Fire Department is responsible for implementation of the City's Wildland Fire Plan. The purpose of the plan is to manage vegetation, including trees, in the City's high fire hazard areas for public safety and wildland fire management. With policy guidance from the Wildland Fire Plan, the Fire Department institutes defensible space requirements for property owners, provides roadside vegetation clearance within the foothill areas for fire truck access, leads exotic/pest plant removal projects, and provides water-wise and fire-wise plant and tree landscaping options. The Fire Department has the authority to require tree maintenance and/or removal within high fire hazard areas to achieve fire safety objectives. The Fire and Parks and Recreation Departments work together to evaluate and address trees and vegetation on City streets and City parks to meet the City's vegetation management fire safety requirements.

PUBLIC WORKS DEPARTMENT

The Public Works Department Streets Section is responsible for the maintenance of the City's streets and sidewalks, including the street sweeping program. The Engineering Division and Transportation Planning Section oversee street right-of way improvement projects. As a result, the Public Works Department's involvement in urban forest management is primarily focused on street trees and the relationship of trees and maintenance of public infrastructure. Of particular interest is maintenance of tree canopy for intersection, traffic signal and streetlight visibility, as well as sidewalk travel and street parking. Tree type and placement and potential for conflict with maintenance of underground infrastructure such as water and sewer lines are also important. Under the Streets Section, trees are trimmed to allow for street sweeping vehicle clearance and ensure parking sign visibility. Street and sidewalk improvement projects at times impact the root zone of trees. The Street Section works with the Urban Forest Superintendent to assess trees that may be impacted from these activities. As part of Plan implementation, Public Works and the Parks and Recreation Departments will be developing parkway construction standards and updates to the Street Tree Master Plan.

Public Review and Policy Decision Making

STREET TREE ADVISORY COMMITTEE

The Street Tree Advisory Committee provides advice to the Parks and Recreation Commission and Department staff regarding tree-related issues including, planting and removing City trees, removal requests for street trees and trees located in residential front setbacks, and changes to the Street Tree Master Plan. The Committee is composed of five voting members who have interest and technical knowledge of trees and tree care issues.

PARKS AND RECREATION COMMISSION

The Parks and Recreation Commission acts on all street tree and most residential setback tree removal applications, as well as changes to the Street Tree Master Plan. When appropriate, the Commission may seek the advice of the Historic Landmarks Commission on Specimen or Historic trees as well as Street Trees within the El Pueblo Viejo and Brinkerhoff Landmark Districts. The Parks and Recreation Commission can recommend trees to City Council for Specimen or Historic designation.

HISTORIC LANDMARKS COMMISSION

The Historic Landmarks Commission provides design review for new development and redevelopment projects within El Pueblo Viejo and Brinkerhoff Landmark Districts. HLC also reviews alterations to historic or potentially historic properties throughout the city as well as other Historic Districts (e.g. Riviera Campus). The HLC's purview includes species selection, placement, and preservation of trees on properties within HLC's jurisdiction. HLC reviews and acts on setback tree removal applications within El Pueblo Viejo and Brinkerhoff Landmark Districts and parking lots. The HLC can recommend trees to City Council for Historic designation and reviews all historic and specimen trees subject to removal.

ARCHITECTURAL BOARD OF REVIEW

The Architectural Board of Review provides design review for new development and redevelopment projects that involve multi-family residential, non-residential and mixed-use development outside of Historic Landmarks Commission jurisdiction. Part of design review involves the placement and preservation of trees as part of landscape plans and the development of commercial parking lots. ABR reviews and acts on parking lot tree removal applications.

SINGLE FAMILY DESIGN BOARD

The Single Family Design Board provides design review for some development proposals in single family residential zones that are not reviewed by Historic Landmarks Commission. Part of design review involves the preservation, placement and maintenance of trees as part of landscape plans.

STAFF HEARING OFFICER

The Staff Hearing Officer reviews and acts on certain development applications including small subdivisions, modifications, performance standard permits, and coastal development permits. The Staff Hearing Officer may consider details related to trees and vegetation associated with development proposals.

PLANNING COMMISSION

The Planning Commission makes recommendations to the City Council on changes to the City's Zoning Ordinance, Coastal Plan, General Plan and other plans that provide guidance in the physical development of the City, and reviews and approves land subdivisions and land development plans. The Planning Commission may consider details related to trees and vegetation associated with land development proposals.

CITY COUNCIL

The City Council sets City policy through the Municipal Code, general plan policies, and by Council resolution. All tree-related decisions by the Parks and Recreation Commission and design review decisions by ABR, HLC, SFDB, and design review decisions by the Planning Commission are appealable to City Council.

IV. Policy Context for Urban Forest Management

Management of the City's urban forest is guided by a number of City regulations in the Santa Barbara Municipal Code, policies in the General Plan, Local Coastal Plan (LCP), Wildland Fire Plan, Climate Action Plan, and various design review board guidelines, building design guidelines, and other resources.

Street Tree Master Plan

Chapter 15.20, Santa Barbara's Tree Planting and Maintenance Ordinance, requires a comprehensive plan for planting and maintaining trees along streets and in public areas, and establishes general elements to be included in the plan. The Street Tree Master Plan (STMP) was adopted by City Council in 1977.

The Street Tree Designation section of the plan is used on a regular basis to both assess tree planting options and maintain the City's street tree diversity. The list matches tree species to street blocks, or segments. Street blocks are generally grouped into segments based on tree populations and street characteristics. Some segments span several blocks, while others are only a block long. To date, the Street Tree Designation list has 124 species of trees designated to 969 street segments. There are 134 street segments without tree designations. In some cases, a street or a section of a street may not have a designated species until the public right-of-way receives improvements, such as sidewalks.

Street tree designations are updated for a variety of reasons, including when the designated tree species is no longer available commercially, or when specific species present pest or health problems, cause infrastructure conflicts, and are no longer compatible with size of parkways, among other considerations. Street tree designation changes are reviewed and approved by the Parks and Recreation Commission during a publicly noticed meeting.

Santa Barbara Municipal Code

CHAPTER 15.20, TREE PLANTING AND MAINTENANCE

First adopted by the City Council in 1963, Chapter 15.20 addresses City-owned trees in parks and parkways (street trees) and other developed City parcels. Key aspects of Chapter 15.20 include the application of the American National Standards Institute (ANSI) standards for pruning trees, requirements for conformance to the Master Street Tree Plan in the placement and types of trees, the Parks and Recreation Director's authority and responsibilities related to trees, permitting requirements, and the process for review of requests for significant pruning and removal of City-owned trees. The most recent amendments were adopted by the City Council in December 2009.

CHAPTER 15.24, PRESERVATION OF TREES

Adopted by the City Council in 1969, Chapter 15.24 regulates tree removal and the degree of pruning allowed for any privately-owned trees located in the regulated front setback of a residential or commercial property, regulated parking lots, trees identified on an approved landscape plan, and/or Historic and Specimen trees located anywhere on a private lot. Chapter 15.24 establishes considerations and findings for removal, the processes for review and appeal, and designates the proper review body for various privately-owned, City-regulated trees. Chapter 15.24 also cross-references all other City regulations related to trees and landscaping. The most recent updates were adopted by the City Council in December 2009. Although the ordinance regulates the removal and degree of pruning of trees, it does not regulate the planting of trees in any way.

RESOLUTION 09-096

The City Council adopted Resolution 09-096, on December 8, 2009 to establish a municipal code violation fine schedule specific to certain violations in Chapters 15.20, 15.24, including tree pruning and removal without a permit, and Chapter 22.11, maintenance to approved landscape plans. It authorizes the City Arborist or Community Development Director to issue corrective measures if deemed appropriate.

Action without or in violation of permit	Trunk diameter from 4" to 12"	Trunk diameter over 12" and up to 24"	Trunk diameter over 24"
Significant Alteration	Up to $500	Up to $1,000	Up to $1,000
Removal	Up to $1,000	Up to $3,000	Up to $5,000

The Resolution 09-096 also clarifies and establishes regulations related to tree size, location, and maintenance, applies the ANSI A-300 Standards and Best Management Practices to city-owned trees and to record in the city data base when city-owned trees are pruned by more than one quarter, defines and updates the roles and responsibilities of various boards and commissions in the regulation of public and private trees, establishes explicit protections for trees on commercial and multiple-family properties with approved plans, and clarifies enforcement mechanisms for the maintenance of approved landscape plans.

HISTORIC AND SPECIMEN TREES

Chapters 15.20 and 15.24 provide for the designation of historic and specimen trees by the City Council. Both Chapters protect the removal of these and define specimen and historic trees.[19]

Chapter 22.22.040 provides the criteria for designating landmarks and structures of merit which includes natural features, like trees. The Historic Landmarks Commission can use any or all of the following criteria and considerations in its findings:

A. Its character, interest or value as a significant part of the heritage of the City, the State or the Nation;
B. Its location as a site of a significant historic event;
C. Its identification with a person or persons who significantly contributed to the culture and development of the City, the State or the Nation;
D. Its exemplification of a particular architectural style or way of life important to the City, the State or the Nation;
E. Its exemplification of the best remaining architectural type in a neighborhood;
F. Its identification as the creation, design or work of a person or persons whose effort has significantly influenced the heritage of the City, the State or the Nation;
G. Its embodiment of elements demonstrating outstanding attention to architectural design, detail, materials or craftsmanship;
H. Its relationship to any other landmark if its preservation is essential to the integrity of that landmark;
I. Its unique location or singular physical characteristic representing an established and familiar visual feature of a neighborhood;
J. Its potential of yielding significant information of archaeological interest;
K. Its integrity as a natural environment that strongly contributes to the well-being of the people of the City, the State or the Nation. (Ord. 5333, 2004; Ord. 4848, 1994; Ord. 3900 §1, 1977.)

[19] Specimen Tree - Any tree which has been found by the Board of Park Commissioners to be of high value because of its type and/or age and which has been designated by resolution of the City Council as a "specimen tree".

Historic Tree - A tree which has been found by the Board of Park Commissioners, the Historic Landmarks Commission, or the City Council, to be a tree of notable historic interest and designated by resolution of the City Council as an "historic tree".

CITY DESIGNATED SPECIMEN TREES

Type	Location	Year Designated
American Elm *Ulmus americana*	1210 Carpinteria St.	1989
Two Australian Fan Palms *Livistona australis*	131 E. Anapamu St.	1989
Indian Laurel Fig *Ficus microcarpa var. nitida*	100 E. Constance Ave.	1977

CITY DESIGNATED HISTORIC TREES

Type	Location	Year Designated
Moreton Bay Fig Tree *Ficus macrophylla*	Chapala St. at Montecito St.	1970
Moreton Bay Fig Tree *Ficus macrophylla*	320 West Pueblo St.	2011
City Hall Pepper *Schinus molle*	De La Guerra Plaza entrance to City Hall	2000
Cota Sycamores *Platanus racemosa*	near Mission SB-at Los Olivos St. & APS	Pending[20]
Doremus Stone Pines *Pinus pinea*	300-800 Blocks E. Anapamu St	1997
"Fernald Eucalyptus" *Eucalyptus citriodora*	400 Blk. Santa Barbara St.	1997
Franceschi Flame Tree *Brachychiton acerifolium x populneum*	11-15 W. Gutierrez St. – City Parking Lot 12	2002
"Tree of Light" *Araucaria heterophylla*	100 W. Carrillo St.	1977
Five Lemon Scented Eucalyptus *Corymbia citriodora*	40 E Anapamu St. (Main Library)	2012

CHAPTER 22.10 VEGETATION REMOVAL

Chapter 22.10 is a general vegetation and tree protective measure that regulates the amount of vegetation removed from areas of the city within the Hillside Design District in order to prevent damage, reservoir siltation, denuding, flood hazards, soil loss, and other dangers created by or increased by improper clearing activities; and to establish the administrative procedure for issuance of permits for vegetation removal. The code provides protection to trees on portions of private property that are not subject to the regulations of Municipal Code Chapters 15.20 and 15.24.

Exceptions to the permitting process are described in Section 22.10.040 and include: harvesting fruit-bearing crops, the removal of vegetation approved by fire prevention agencies, utility companies, or by public agencies on publicly owned property or rights-of-

[20] Cota Street Sycamores has been on the list of designated historic trees for many years and exists on historic property, however a resolution documenting its designation is under investigation.

way, when the average slope of the removal site and access to the removal site is less than twenty percent (20%), and contains limits to the quantity of removed native and non-native vegetation over one year and five year time periods.

CHAPTER 22.11 MAINTENANCE OF APPROVED LANDSCAPE PLAN

Chapter 22.11 deems it unlawful for an owner of a lot subject to the provisions of this Chapter to not maintain the trees, plants, irrigation system, and other improvements in accordance with the approved landscape plan and the provisions of this Chapter. In addition, it is unlawful for any person to alter or to authorize or allow the alteration of an approved landscape plan for a lot subject to the provisions of this Chapter without the permit required pursuant to Section 22.11.050. Permits are required for any alteration to the design, character, and plant coverage at maturity, or other improvements specified on an approved landscape plan.

The regulations in this Chapter pertain to any lot developed with a multiple-family residential, commercial, or industrial use; or any lot developed solely with a single-family residence or a duplex residential unit, where the conditions of approval for the development on the lot require the installation and maintenance of trees or landscaping in accordance with an approved landscape plan.

CHAPTER 22.22 HISTORIC STRUCTURES

Section 814 of the Santa Barbara City Charter creates and establishes a Historic Landmarks Commission for the City to promote the general public welfare of the City and to protect and preserve the natural and historical charm and beauty of the City and its aesthetic appeal and beauty. The purpose of Chapter 22.22 is to recognize, preserve, enhance, and perpetuate the use of structures, natural features such as trees, sites and areas within the City of Santa Barbara having historic, architectural, archaeological, cultural or aesthetic significance. As mentioned above, this Chapter also includes criteria for considering trees as historic . Trees identified as historic are subject to the regulations per municipal code chapters 15.20 and 15.24, which include significant pruning and removal.

CHAPTER 22.68 ARCHITECTURAL BOARD OF REVIEW

Section 814 of the Santa Barbara City Charter creates and establishes an Architectural Board of Review for the City to promote the general public welfare of the City and to protect and preserve the natural and historical charm and beauty of the City and its aesthetic appeal and beauty. The board is composed of seven members that review project design as it relates architecturally and city-wide.

Chapter 22.68, as it pertains to the urban forest, provides protection to trees on private properties that are not developed with or proposed to be developed with a single family residence, located in historic districts, or have historic or cultural value. The ABR considers landscaping as part of project compatibility and reviews any substantial alteration or deviation from the design, character, plant coverage at maturity, or other improvements specified on an approved landscape plan for any lot within the City of Santa Barbara that is developed with a multiple residential unit, a mixed use development, or a building that is occupied by a nonresidential use, whether or not the alteration or deviation to the landscape plan is proposed in connection with an alteration to a building or structure on

the lot that is subject to design review by the Architectural Board of Review. Whether a proposed alteration or deviation is substantial is determined in accordance with the Architectural Board of Review Guidelines.

CHAPTER 22.69 SINGLE FAMILY DESIGN BOARD

The goal of the Single Family Design Board is to ensure that single family residential unit projects are compatible with the surrounding neighborhood in size and design. The Single Family Design Board is also charged with the task of protecting public visual resources and promoting the ecological sustainability of the City's built environment through the design review process. This Chapter, as it relates to the urban forest, places general protection on trees located on private property by use of landscape plans during development or redevelopment (see Findings 22.69.050 (A.2, C.2, D.2, and D.3).

CHAPTER 22.76 VIEW DISPUTE RESOLUTION PROCESS

Chapter 22.76 provides a conflict resolution process for homeowners and their neighbors to undertake in the event that a privately owned tree is blocking a view or access to sunlight. City-owned trees are not subject to the provisions in the chapter. The process includes initial discussion amongst the affected parties, mediation, arbitration, restoration and liability.

It is important to note that while the City provides a process for resolution, the City is not part of the process, other than to provide residents with lists of mediators, arbitrators and certified arborists, or to document that a claim has been made pursuant to this chapter. A Complainant can notify the Community Development Department of any request for mediation or arbitration pursuant to the provisions of this Chapter and can provide the City with the claim documentation materials including: evidence of prior view, evidence regarding unreasonable tree blockage, desired action, evidence of attempted resolution, and evidence of ownership. As noted above, notification and documentation is for the purposes of City record-keeping regarding the use of this Chapter only and does not obligate the City to assist or advise a property owner or participate in the dispute resolution process in any way.

CHAPTER 22.80 LANDSCAPE DESIGN STANDARDS FOR WATER CONSERVATION

Although not specifically related to trees, these standards include requirements for new development that includes new landscaping or alterations to existing landscaping and is subject to the review by the Historic Landmarks Commission, Architectural Board of Review or Single Family Design Board. The standards require the use of water-wise plants, limit the amount of turf and plants not considered water-wise and include requirements for mulch and installation of water-efficient irrigation.

TITLE 28 THE ZONING ORDINANCE

The Zoning Ordinance establishes classifications and districts or zones and regulates the use of property within the city, defines terms used in the ordinance, includes a zoning map, provides for the adjustment, enforcement, and amendment thereof, and prescribes penalties for its violation. The City of Santa Barbara is divided into zone classifications that establish, regulate, restrict and segregate the uses of land, buildings and structures;

regulate and restrict the height and bulk of buildings; regulate the area of setbacks, open yards, courts and other open spaces about buildings; and regulate the density of dwelling units.

	Zone Classification	SBMC	Front Setback
Residential	A-1, One Family	28.15	35’
	A-2, One Family	28.15	30’
	E-1, One Family	28.15	30’
	E-2, One Family	28.15	25’
	E-3, One Family	28.15	20’
	R-1, One Family	28.15	15’-20’
	R-2, Two Family	28.18	15’-20’
	R-3 & R-4, Multi-Family	28.21	10’-15’
	SD-1, Special District	28.45	25’-40’
	SD-2, Special District	28.45	10’-20’
Commercial	R-O, Restricted Office	28.48	10’- 20’
	C-O, Medical Office	28.51	10’- 20’
	C-P, Restricted Commercial	28.54	10’
	C-L, Limited Commercial	28.57	10’
	C-1, Limited Commercial	28.63	10’
	C-2, Commercial	28.66	0’- 20’
	C-M, Commercial Manufacturing	28.69	0’- 20’
	OC, Ocean-Oriented Commercial	28.71	0’
	M-1, Light Manufacturing	28.72	0’
	OM-1 Ocean-Oriented Lt. Manuf.	28.73	0’
	HRC-1, Hotel and Related Commerce	28.22	10’-20’
	HRC-2, Hotel and Related Commerce	28.22	10’-20’

While the Zoning Ordinance defines regulated setback on both private and public property, Ch. 15.24 regulates trees planted within the defined setback areas according to the specific land use zones. Front setback distances range in residential zones from 10 feet to 40 feet. Areas zoned commercial or office have regulated front setbacks in the ranges of 0 feet to 20 feet.

CHAPTER 28.90 AUTOMOBILE PARKING REQUIREMENTS

Chapter 28.90 provides the minimum requirements and standards for the provision of off-street parking for all buildings, structures and uses in the City of Santa Barbara in an effort to encourage the development of more attractive parking lots in commercial, industrial, and multiple-family use areas, to provide for attractive and durable screening between such parking lots and adjoining areas, and to lessen the effect of commercial and industrial uses upon adjoining residential uses.

This chapter enhances the urban forest by requiring landscape plans and standards are for all parking areas, parking lots, automobile service stations and automobile service

stations/mini-markets except for one- or two-family dwellings. Section 28.90.050 focuses on requirements for landscaping and lighting.

CHAPTER 28.11 PROTECTION AND ENHANCEMENT OF SOLAR ACCESS

Chapter 28.11 was developed to establish height limitations in the residential zones to protect solar access particularly during development or redevelopment. This ordinance, as it relates to the urban forest, does not establish height limitations on trees or consider tree shading. The intent is to accommodate for natural light.

Santa Barbara General Plan

The City's General Plan provides broad policy direction for the urban forest. Proposed land use, growth management, and biological resources policies and implementation actions included in the 2011 General Plan update, *Plan Santa Barbara*, address ongoing protection and enhancement of the City's urban forest.

LAND USE ELEMENT

The Land-Use Element of the General Plan contains goals and possible implementation actions that seek to enhance community and neighborhood character and are described below. In general, these goals recognize trees as an important visual element and seek to preserve them during development or redevelopment, as well as include them during long-range neighborhood planning development for reduced carbon footprint.

OPEN SPACE, PARKS AND RECREATION ELEMENT

The Open Space, Parks and Recreation Element seeks to enhance the character of Santa Barbara through conservation and by providing significant open and natural landforms throughout the City. Implementation of goals defined in the original document (1972) included preservation of creek channels and hillsides in their natural state, reforestation in mountains where possible, protection of mature trees on private property and adoption of an effective tree preservation ordinance.

ENVIRONMENTAL RESOURCES ELEMENT

The Environmental Resources Element includes policies related to: climate change, energy conservation, air quality, biological resources, hydrology, water quality and flooding, aesthetics and visual resources.

Specific goals that preserve and enhance the urban forest are found under Biological Resource Policies include ER11 and ER12.1. ER 11 addresses the protection of native and Mediterranean drought-tolerant species in urban areas and in landscaping for their benefits as energy and water savers and providers of habitat and shade. ER 12.1 addresses protection, maintenance and expansion of the City's remaining diverse native plant and wildlife habitats, including ocean, wetland, coastal, creek, foothill, and urban-adapted habitats.

Local Coastal Plan

The Local Coastal Plan is the Land Use Plan and Map for the City's Coastal Zone. The City's LCP implements the provisions of the California Coastal Act by indicating the type, location, and intensity of land uses; and providing resource protection and development policies and implementation actions. Policy 9.11 and 9.12 require minimizing vegetation and tree removal along Highway 101. Policy 9.11 requires replacement of removed vegetation where removal is unavoidable. Policy 9.12 provides conditions to the Coastal Development Permit as part of the approval process that relate to trees and landscaping along Highway 101 and provides its own definition of "specimen tree" related to this policy. The LCP notes, "For the purposes of this standard, a specimen tree is defined as any tree with a diameter of at least six inches measured four feet above the ground with a minimum height of six feet. For trees such as willows which do not have a single trunk, the diameter of all upright woody stems should be combined for the measurement of the diameter." Conditions include tree replacement ratios and tree size, use of drought-tolerant species that provide screen, and installation of irrigation.

Climate Action Plan

The Santa Barbara Climate Action Plan addresses climate change issues for the City of Santa Barbara community through the year 2030, in accordance with directives of the Santa Barbara General Plan and the California Global Warming Solutions Act (AB 32).

The purpose of the plan is to*:* (1) reduce the rate of carbon emissions generated within the Santa Barbara community; and (2) plan for adaptation of Santa Barbara to climate changes. The Plan includes policies for reducing carbon emissions and adapting to climate change the areas of energy efficiency and green building, renewable energy, travel and land use, vegetation, waste reduction, and water conservation. Several strategies relate to trees and vegetation in the urban forest, including:

CARBON REDUCTION

39. Tree planting – Increase carbon sequestration through the planting of additional trees, with a goal of 1,000 new trees by 2030.
40. Street trees – Issues to be addressed include canopy cover, land uses, infrastructure constraints, environmental resources, and aesthetics.
41. Tree & landscaping protection – Protect native & other urban trees and landscaped places and promote use of native or Mediterranean, drought-tolerant species in landscaping to save energy and water, incorporate habitat, and provide shade.
42. Urban heat island effect – Establish standards to decrease impermeable surfaces; incentives for green roofs and cool roofs
43. Regional open space preservation – Coordinate with County, school district, other cities on regional open space protection.

ADAPTATION TO CLIMATE CHANGE EFFECTS – BIO RESOURCES

97. Wildlife, coastal and native plant habitat protection
98. Open space connectivity and trails

99. Creek setbacks, protection, restoration

Wildland Fire Plan

Santa Barbara's Wildland Fire Plan was created to protect lives, property, and natural resources threatened by wildland fire. The Plan organizes the City's existing high fire hazard area into four zones and applies appropriate vegetation management distances to each zone, known as defensible space requirements.

Defensible space requirements are established for properties in high fire areas and include brush clearance, the use of fire resistant landscaping, plant spacing and maintenance. In some cases, this limits the number and type of trees placed on private property. Use of these guidelines is intended to impede the progress of fire, reduce its intensity and provide a safe buffer to protect homes and buildings. The plan includes a list of plants and trees that have desirable qualities for fire resistant landscaping as well as those that do not.

The Wildland Fire Plan also identifies areas within the high fire hazard area that are outside the Fire Department Defensible Space Requirements, but that have existing hazards and risks that increase the potential for loss of wildlife habitat, property loss and safe fire protection. These units are identified as Vegetation Management Units. Vegetation management is proposed within each of these units. The Fire Department works with private property owners and neighborhoods to implement vegetation management plans and provides a list of fire-wise tree and plants and encourages tree pruning.

Design Guidelines

Several design guidelines and plans are listed due to their relevance to trees in the urban forest, particularly during re-development or new development. The City's design review boards including Single Family Design Board Architectural Board of Review and Historic Landmarks Commission have design guidelines for development and redevelopment. Other guidelines consist of voluntary actions like those in the Passive Solar Building Design Guidelines.

SINGLE FAMILY DESIGN BOARD GUIDELINES ARCHITECTURAL BOARD OF REVIEW GUIDELINES AND HISTORIC LANDMARKS COMMISSION GUIDELINES

Guidelines for Single Family Design Board, Historic Landmarks Commission and Architectural Board of Review contain many of the same goals and policies for protection and enhancement of trees and landscaping on private property. Many of the projects subject to the review by one of these Boards are required to have a landscape plan. The guidelines are intended to clarify the goals and policies of the respective boards for the public and those who enter apply for a permit.

SOLAR ENERGY SYSTEM DESIGN GUIDELINES

These voluntary guidelines provide guidance to property owners, architects, contractors and others who may be interested in using solar energy in their buildings. The guidelines include general principles as well as specific techniques for designing solar energy systems that can take advantage of solar energy.

As they pertain to trees in the urban forest, the guidelines encourage choosing plant and tree types and locations that will not grow to shade areas on the property or on neighboring properties where solar energy systems are installed. While these guidelines consider the type and placement of trees, they do not address trees planted prior to or after the installation of solar energy systems or trees on adjacent property owners that may grow to shade the solar systems.

PASSIVE SOLAR BUILDING DESIGN GUIDELINES AND RECOGNITION PROGRAM

The Passive Solar Building Design Guidelines are voluntary actions that can provide energy savings and create a more comfortable environment. The Guidelines promote Passive Cooling Techniques that minimize direct sun exposure and heat absorption. For example, trees can be strategically placed to shade homes and provide cooling in the summer, sun in the winter and to decrease wind.

LANDSCAPE PLAN GUIDELINES

When landscape plans are required for a project subject to the review of the Architectural Board of Review, Historic Landmarks Commission or Single Family Design Board , they must be submitted prior to the Project Design Approval hearing. When developing these plans, the following considerations should be made: number of tree removals, invasive plants being used, right plant-right place, water conservation, permeability, sustainability and any specific guidelines particular to the project. A Landscape Design Guidelines Consistency worksheet is available to help the public develop their plan with the City's policies in mind.

STORM WATER MANAGEMENT PROGRAM

The State's Minimum Design Standards for storm water management and water quality protection are addressed in the City's Storm Water Management Program (SWMP). The SWMP addresses a number of required design standards, one of which is natural area conservation grading limitations. The SWMP design standards seek to minimize grading and clearing of native vegetation, preserve existing trees and vegetation, promote the use of native and drought-tolerant vegetation, incorporate landscaping in parking lot design, and preserve riparian areas and wetlands.

PEDESTRIAN MASTER PLAN

Santa Barbara is already a world-renowned city for its livable and walkable Downtown. Pedestrian activity translates directly into health, economic, environmental, and cultural community benefits. The objective of the Pedestrian Master Plan is to address obstacles to increased walking, such as deficient facilities, concerns about safety, attractiveness and appeal, and a lack of connectivity. The Pedestrian Master Plan sets forth specific strategies for improvements The Plan identifies the desirability and psychological comforts of trees, accommodates for street trees, and provides design guidance for minimum clearances below street trees.

URBAN DESIGN GUIDELINES

Several sections of this document incorporate the use of vegetation and canopy trees to enhance landscaping near and around pedestrian facilities and amenities, courtyards,

plazas, and placitas. Use of trees is generally required to provide shade, weather protection and greenery in the urban environment.

UPPER STATE STREET DESIGN GUIDELINES

These guidelines require trees to be used in streetscape plantings and to frame views rather than block them. They recommend protecting skyline and canopy trees bordering State Street, as well as integrate parking lot lighting with trees.

HARBOR MASTER PLAN DESIGN GUIDELINES

The Harbor Master Plan suggests the use of large canopy trees in parking areas and shade trees for pedestrian areas.

OTHER GUIDELINES

Other areas of the city with designated guidelines for development, including trees, include the Haley Milpas Design Guidelines, Highway 101 Coastal Parkway Design Guidelines, State Street Landscaping Design Guidelines, Waterfront Aesthetic Criteria for New Development, Lower Riviera Special Design District Guidelines, and El Pueblo Viejo (EPV) Design Guidelines.

V. Santa Barbara Urban Forest Key Issues

The identification of key issues for the long-term management of Santa Barbara's urban forest provides the foundation for the urban forest objectives and implementation actions. The key issues presented below were developed with input from community members, City design/development review boards and commissions, the Street Tree Advisory Committee and Parks and Recreation Commission, the Urban Forest Technical Advisory Committee, and City staff in the Parks and Recreation, Community Development, Public Works and Fire departments. The issues are organized under three main topics: tree resource management, City policy and organization, and community involvement.

Tree Resource Management

As the City has developed with paved streets, sidewalks, and other public infrastructure, street parkway planting spaces have decreased and tree root systems are increasingly impacted by compaction and construction disturbance. There are management challenges when trees grow into high voltage power lines, root systems disrupt paved surfaces, and grow too close to underground infrastructure. Tree planting spaces can also be inappropriate for the size of the tree. Public resources to plant and maintain trees have not kept pace with tree maintenance needs to ensure a healthy urban forest. The public's opinion of trees is diverse and can create conflict due to tree size, leaf drop, views, shade and/or solar access. The Wildland Fire Plan and high voltage line street clearance requirements can result in radical pruning with aesthetic and tree value impacts. In addition, traffic visibility considerations can affect the potential to plant and maintain trees in areas with higher traffic volumes.

Existing resources allocated for tree planting and maintenance are unlikely to be sufficient to adequately care for existing trees and/or expand urban forest resources over the long-term. Currently, annual street tree pruning operations are primarily focused on grid pruning. Fewer resources are available for specialized pruning, and systematic removal and replacement of poorly performing trees, or trees at the end of their life. The loss of tree resources and the lack of planning for new trees also affects the health and longevity of City park tree population.

Specific Tree Resource Management Issues identified during Plan development include:

1. Low diversity/overuse of similar species in existing population
2. Need to develop a proactive approach to systematic removal and timely replacement of poorly performing or placed trees and trees at the end of their life
3. Need for organized interdepartmental plan to manage tree and infrastructure maintenance, improve parkways, address tree canopy clearances and assess roadway visibility and other public safety issues

4. Tree planting and landscaping challenges arise when buildings are constructed at property line and/or building heights limit tree sizes and/or ability to plant trees
    - Redevelopment/Urban infill changes streetscapes and tree options
5. A large number of vacant tree sites exists in parks and along streets that are potentially suitable for planting
6. Maintenance focuses on grid pruning and citizen response pruning
    - Need for proactive pruning/maintenance
7. Conflict between trees/solar access/views likely to increase
8. Need for proactive verse reactive pest management
9. Unknown consequences of climate change on tree population health, longevity and maintenance requirements
10. Value of trees not frequently considered, trees not treated as a capital resource
11. Park tree maintenance focused on safety
    - A significant number of unique park tree species occur only once with no plan to offset this loss
    - Need to take advantage of and seek opportunities to restore/enhance riparian canopy, eliminate invasive species and increase native habitat in open space parks and parks with creeks
12. Trees as bird and wildlife habitat not always considered during species selection and tree replacement and planting
13. Limited maintenance and inappropriate planting and pruning of private trees
    - Loss of tree resources through removals
    - Lack of knowledge of landowner responsibility for maintenance of private infrastructure and regulated trees
14. Public and private infrastructure damage from both publicly and privately owned trees
15. Fire prevention and safety
    - High Fire Hazard Area Defensible Space requirements limit tree planting opportunities and require certain tree maintenance

City Organization and Policy

Santa Barbara's organizational challenges relate to interdepartmental coordination, staff training, and financial resources. In addition to Parks and Recreation, the Public Works, Fire and Community Development Departments are involved in the management of tree resources. Consistent interdepartmental coordination and communication is critical for effective tree resource management. At times poor coordination and lack of staff knowledge of tree protection policies and practices has resulted in delayed project decision-making, loss of trees, lost opportunities for planting new trees, and other issues.

From a policy and planning perspective, the City has a strong foundation for tree protection and enhancement. While some documents, such as the Street Tree Master Plan need to be updated, recent updates to the municipal code and landscape plan guidelines reaffirm Santa Barbara's commitment to preservation of urban forest resources. In addition,

guidance in the General Plan, Local Coastal Plan, and Climate Action Plan, as well as City Council support for urban forest management issues and well-established advisory boards, provide a solid framework to address urban forest issues. At the same time, as Santa Barbara continues to develop and the public urban forest matures, land development, infrastructure improvements, and community safety considerations, such as including solar design, pedestrian access, views, and fire protection, among others, may require new policy guidance.

Specific City Policy Issues include:

1. Street Tree Master Plan outdated, provides limited guidance
2. No overall Park Tree Master Plan
    - Fire prevention and species selection in parks and open spaces
    - Defensible space considerations
3. Landscape design guidelines require the planting and maintenance of some trees on private property, yet enforcement of those plans is limited
4. Tree preservation ordinances do not address native trees, native habitat areas, or wildlife corridors
5. Pedestrian Master Plan does not adequately address need for space to plant trees
6. Design review boards require landscaping within parkways without regard to maintenance needs
7. Risk reduction plans need to reduce wind/falling limb hazards and identify potential high hazard trees or areas
8. Purpose and function of Historic and Specimen designations not well defined
    - Review definition and designation process with consideration of replacement species and location

Specific City Organization Issues include:

1. Limited funding resources to maintain existing street trees
2. Limited funding resources to plant, establish and maintain new street trees
3. Lack of funding and mechanisms for community education/outreach and tree planting programs
4. Limited funds for park and facility tree maintenance and new park tree planting
    - Loss of park species diversity
5. Budget implications for identification and resolution of infrastructure conflicts
6. No comprehensive enforcement program that is proactive, education based
7. Competing priorities among different departments can create conflict and adversely affect trees
8. Inconsistent interdepartmental communication and coordination can result in missed opportunities to plant/maintain and protect trees
9. Lack of staff knowledge on tree preservation and maintenance requirements results in missed opportunities, delayed project decision-making, loss of trees, lost opportunities for planting new trees and other issues.

Community Involvement

Community involvement in the urban forest is primarily focused on street tree maintenance. Residential homeowners often have an expectation that the City will provide prompt response based pruning. This practice, which is increasingly difficult with reduced staff, also reduces tree maintenance efficiency. In addition, many landowners are not familiar with City tree preservation rules and maintenance requirements which can lead to illegal removals and improper pruning practices. This is compounded by limited staff resources that have a greater focus on enforcement rather than proactive community education. Recent updates to community information materials, including City web page information, preparation of a Community Tree Guide, and workshops for tree care professionals, provide some of the tools to increase community knowledge and involvement, yet more is needed.

Specific Community Involvement Issues include:

1. Limited community involvement in street tree selection, planting and maintenance
2. Limited public knowledge of tree preservation policies
3. Public perception of street trees is diverse
4. Lack of knowledge of City preservation rules and landowner responsibility for maintenance of private infrastructure and regulated trees
5. Limited resident participation in street tree maintenance
6. Community involvement primarily focused on street tree maintenance through tree permitting.
7. Need for incentive programs to promote tree planting on private property
8. Residential homeowners often have an expectation that the City will provide prompt response based pruning

VI. Urban Forest Management Plan Vision and Mission

Urban Forest Plan Vision

Santa Barbara's urban forest is healthy and diverse, and contributes to the community's economic, environmental, and aesthetic vitality. It is valued and cared for by the City and its citizens, and reflects our horticultural heritage.

Urban Forest Plan Mission

Preserve, protect and enhance our trees, promote the benefits of trees, and foster a healthy and diverse urban forest.

VII. Urban Forest Plan Goals, Objectives, Implementation Actions

Goals

1. Elevate the importance of the urban forest.
2. Continue Santa Barbara's horticultural legacy.
3. Promote a vibrant and healthy community.
4. Foster awareness and appreciation of trees.

Objectives

The fifteen Objectives and corresponding implementation actions of the Urban Forest Plan are organized under:

1) Tree Resource Management,
2) City Organization and Policy, and
3) Community Involvement.

Each objective includes a discussion to provide context and support the associated actions. Implementation of any action will include policy, program and budget coordination as well as an assessment of long-term funding and data needs, development of tools and programs, and staffing levels. Where necessary, additional considerations are included specific to each objective and/or associated actions.

Tree Resource Management

OBJECTIVE 1: MAINTAIN CITY TREES TO PROMOTE SAFETY, HEALTH AND LONGEVITY.

Healthy trees contribute to Santa Barbara's environmental health and quality of life. Trees maintained on a regular, frequent cycle are healthier, live longer, reduce conflicts with urban infrastructure, and increase safety. The City's current trimming cycle limits the City's ability to adequately maintain all of its street trees. Maintenance plans are year-to-year, and funding levels constrain proactive and systematic removal and replacement of trees that are performing poorly or reaching the end of their life. Further, the City does not have a plan to address trees located under high voltage power lines that are pruned for safety reasons by Southern California Edison that often results in a dramatic loss of tree canopy, reduced aesthetics and tree benefits. Addressing these issues will prolong the life of trees, provide clear direction for tree replacement and increase the aesthetic quality of trees located under or near utilities. In addition, ongoing comprehensive analysis of the urban forest is essential for implementation of resource management tools and cost/benefit analyses.

Implementation Actions

1. Trim/maintain street trees more frequently to promote public safety, neighborhood aesthetics, and tree health.
2. Develop a multi-year plan to address tree maintenance, planting and removal citywide.
3. Develop a young tree training program to reduce the potential for mature trees to conflict with high voltage lines and other utilities and infrastructure.
4. Broaden and formalize partnerships with Southern California Edison (SCE), Caltrans and other utility companies through Memorandum Of Understanding's or other means to implement tree trimming plans and where possible utility undergrounding to minimize conflict/maximize safety while promoting tree canopy, health and longevity.
5. Conduct periodic tree assessments to monitor tree performance.
6. Continue to maintain the City tree inventory database to achieve urban forest objectives and tree management.
7. Continue to work with the Fire Department to develop and implement proactive maintenance plans for street trees located in high fire zones.

OBJECTIVE 2: ENHANCE STREET PARKWAY GROWING CONDITIONS WHERE FEASIBLE.

Many tree problems in urban areas can be traced to physical changes, such as introduced hardscapes, poor soils, small planting spaces and street and sidewalk construction that result in reduced supply of nutrient rich soil, water and oxygen. Consequences can include hardscape/root conflict, poor canopy growth and degraded tree health. The implementation actions seek to enhance the health, longevity and aesthetics of street trees by providing better growing conditions. Baseline data on parkway conditions will provide information on enhancement opportunities.

Implementation Actions

1. Revise City infrastructure construction specifications to maximize tree health and longevity and minimize infrastructure damage.
2. Identify existing parkways that can be enlarged to accommodate greater canopy and/or larger canopy trees.
3. Promote streetscape redevelopment to maximize parkway planting area.
4. Develop formal parkway and tree planting guidelines and specifications to maximize tree health and minimize conflict with public infrastructure.
5. Provide extra protection for newly planted trees such as curb adjustments and protective barriers where necessary and feasible.
6. Where feasible, include irrigation during parkway and sidewalk redevelopment.
7. Work with adjacent land owners and neighborhoods to provide supplemental water and weed management.
8. Develop strategies to manage sensitive parkway trees during drought conditions.
9. Develop parkway construction specifications to improve parkway soil conditions that promote young tree root development and minimize infrastructure damage.

10. Where feasible, utilize the latest construction technology such as permeable pavers, to increase storm water infiltration and provide water to tree roots.

OBJECTIVE 3: OPTIMIZE TREE CANOPY.

As canopy increases, the benefits that trees provide increases, such as shade and energy conservation, wildlife habitat, neighborhood character and beauty, cleaner air and reduced storm water runoff, among others. Optimizing tree canopy includes identifying appropriate planting spaces for large trees, planting groups of trees to achieve contiguous canopy, planting larger trees where possible, and planting new trees and replacing lost trees in areas with lower canopy coverage. Key considerations include staffing costs for tree planting and maintenance, and implementation of outreach programs to involve residents and property owners.

Implementation Actions

1. Identify planting locations along City streets, in City parks and on other public property that can support greater canopy and/or large canopy tree species.
2. Complete a comprehensive inventory of vacant planting sites to determine which ones can support new trees.
3. Identify opportunities to increase available planting space along City streets, in City parks and on other public property.
4. Increase the use of large-canopy trees where practical.
5. Expand the young tree care program to increase plantings and associated care and maintenance.
6. Expand street tree planting and replacement program with priority on neighborhoods with the fewest trees and in areas where residents are willing to provide supplemental early tree care.

OBJECTIVE 4: OPTIMIZE AGE AND ENHANCE SPECIES DIVERSITY.

Age and species structure are important elements of urban forest health. While species diversity reduces the likelihood of tree loss from disease or pests, varied tree age reduces the possibility that all the trees in the forest will begin to die at the same time. A healthy mixture of young, medium, and older trees also provides a more complex habitat for wildlife and can support a greater number of species. Long known for its horticultural heritage, Santa Barbara's tree diversity is at risk. Although the current City tree inventory contains approximately 456 different varieties of trees, half of those occur at a frequency of five or fewer times; ninety-six (96) species occur only once, many of which are no longer available commercially. Determining an appropriate mix of tree age and species diversity that accounts for tree availability, planting locations, maintenance requirements, and other issues is a key consideration.

Implementation Actions

1. Maintain existing species diversity and investigate methods for increasing desirable species that are rare.
2. Assess and develop age and species criteria for City parks and other City property.

3. As part of the Street Tree Master Plan update, define appropriate age and species diversity distribution and locate areas where new or replacement trees should be planted.
    - Determine potential life spans and growth sizes in Santa Barbara for designated trees and potential designated trees
    - Increase planting species that have longer average life spans Formalize the criteria and methodology for change to street tree designations.
4. To the extent feasible, work with local and regional nurseries and other public agencies to grow/propagate unique and desirable tree species not commercially available.

OBJECTIVE 5: MAXIMIZE THE ECONOMIC, ENVIRONMENTAL, AND AESTHETIC BENEFITS OF THE URBAN FOREST.

Trees provide ecological benefits such as reduced energy consumption, improved air quality, increased carbon sequestration, wildlife habitat, reduced storm water runoff and enhanced views. Developing resources to measure and communicate these benefits is critical for City board and commission members during land development review, for home and business owners during re-landscaping and solar panel installation, and for effective decision-making by City managers.

Implementation Actions

1. Select new tree plantings that will maximize energy conservation, increase carbon sequestration, and provide shade.
2. Encourage the use of parking lot and streetscape designs that provide greater amounts of pavement shading.
3. Develop an economic/environmental tree resource calculator/performance checklist to evaluate the tree resource as it relates to other capital resources during land development.
4. Develop long-term street tree plans for major commercial corridors and public areas such as Upper State Street, De La Vina Street, Carrillo Street, Milpas Street, Chapala Street and Cliff Drive. Integrate plans in land development projects and public infrastructure improvements.
5. Require street tree plantings and maintenance as part of permitting for all land development and/or redevelopment, when new trees are planted.
6. Develop tree resource management guidelines that balance tree resource value with solar access and solar energy system design.
7. Work with private landowners to minimize the potential for private trees to conflict with public infrastructure.
8. Develop guidance for tree selection and planting along Highway 101 that would improve air quality for nearby sensitive land uses.

OBJECTIVE 6: PROVIDE URBAN FOREST BENEFITS THAT ENHANCE VISITOR EXPERIENCES IN CITY PARKS AND FACILITIES.

Santa Barbara's parks provide relief to an urban landscape for both people and the environment. City parks offer a diverse experience that includes: sports, bird and wildlife viewing, botanical discoveries, children's play, picnicking, walking and other exercise, place of gathering, and more. Maintaining these areas for safety and their respective designed use is important. The City's Urban Forestry Program maintains over 9,200 trees located within 68 parks and landscaped areas of public facilities, and as many as 30,000 trees in open space parks. Overall, park trees are on an eight to ten-year pruning cycle and lost trees are rarely replaced. More frequent pruning, beyond safety pruning, is needed to prolong park tree life and health. Planned replacements are needed to maintain aesthetic value and heritage as well as enhance native habitats.

Implementation Actions

1. Increase park tree maintenance for prolonged health and longevity.
2. Develop a tree replacement program that enhances aesthetics and promotes recreation.
3. Continue to work with the Fire Department to develop and implement proactive maintenance plans for parks located in high fire zones.
4. Maintain stands of large trees in open spaces and community and developed parks.
5. Increase canopy cover to enhance habitat for wildlife and for public benefit, where appropriate.

OBJECTIVE 7: ENHANCE AND PRESERVE TREES WITHIN NATIVE HABITATS INCLUDING RIPARIAN AREAS, OAK WOODLANDS AND PROTECTED OPEN SPACES.

Native habitats host drought-tolerant trees and vegetation that provide shelter, food and movement for native wildlife. City open space parks and riparian areas provide optimal locations to promote and enhance native trees. Actions within this Objective are consistent with General Plan goals found in Sections 11 and 12 of the Environmental Resources Element which recognize the importance of native trees and habitats found in native oak stands and riparian woodlands.

Implementation Actions

1. Minimize compaction of soil under drip lines of trees by routing trails and pathways around trees.
2. As part of the Park Tree Master Plan, address riparian and oak woodland management to preserve and protect mature trees, native tree saplings and native understory vegetation.
3. Use large native trees in riparian zones and areas that connect to native landscaping and open spaces, where feasible.
4. To the extent feasible, control invasive, non-native vegetation that threatens trees in riparian areas and open space parks.
5. Develop a riparian canopy restoration program in parks with creek habitats.

OBJECTIVE 8: MAINTAIN AND PROTECT HISTORIC AND CULTURALLY SIGNIFICANT TREES CITY-WIDE.

Historic and specimen trees provide a link to Santa Barbara's culture and history and have been designated for a variety of reasons, including their location amongst other historic/landmark structures, association with a particular person or time, value to an area as a prominent and established visual feature, or unique location, among other considerations. Specimen trees are designated as such by virtue of their age, size, rarity, and condition of species. Refining the definition of these trees and criteria for designation will better guide the designation process, as well as the maintenance and replacement of designated trees.

1. Review and revise, as needed, the definition of and criteria for designation of historic and specimen trees.
2. Clarify guidance for maintenance, longevity and replacement of designated specimen and historic trees.
3. Maintain the history, design, cultural integrity, and functional use of developed parks, as feasible.
4. Protect and enhance trees in historically significant parks such as Alameda Park, Alice Keck Park Memorial Garden, Orpet Park and Franceschi Park through increased tree maintenance and tree planting programs.

City Organization and Policy

OBJECTIVE 9: ENHANCE CITY INVESTMENT IN THE HEALTH AND MANAGEMENT OF THE URBAN FOREST.

Public resources to plant and maintain trees have not kept pace with tree maintenance needs to ensure a healthy urban forest and cannot support expanding programs. Increased funding will be an important first step as the City seeks to increase its level of tree service. Further, dedicated funding is not allocated for community outreach and public education, yet nearly 80 percent of the urban forest lies on private property. Long-term urban forest health will require programs that integrate the community. Establishing funding for programs and resources will drive the development of urban forest education. The City will continue to seek funds from grants and other sources to further Plan Objectives.

Implementation Actions

1. Increase annual maintenance funding for the management and care of City trees.
2. Establish an annual capital improvement program to plant and maintain new trees.
3. Establish funding for community outreach programs and public education resources.
4. Develop public-private partnerships to address tree resource needs.
5. Identify and obtain external sources of funding to support the goals and strategies of the Management Plan.
6. Evaluate the feasibility of a Street Tree/Parkway Management Assessment District to fund street tree maintenance.

OBJECTIVE 10: IMPROVE INTERDEPARTMENTAL COMMUNICATION AND COORDINATION RELATED TO TREE PRESERVATION AND ENHANCEMENT.

Consistent interdepartmental coordination and communication is critical for effective tree resource management. Several City departments are involved in tree care, including the Parks and Recreation, Public Works, Fire, and Community Development. At times, poor coordination and lack of staff knowledge of tree protection policies and practices has resulted in delayed project decision-making, loss of trees, lost opportunities for planting new trees, and other issues. Part of long-term planning will be the ability to synchronize projects with other departments. For example, parkway enhancements can be coordinated with street or sidewalk related projects.

Implementation Actions

1. Establish formal urban forest team comprised of staff from Parks and Recreation, Public Works, and Community Development and Fire to address tree management and coordinate tree review for land development projects.
2. Implement an annual staff and board/commission tree training program to review Tree Preservation and Tree Maintenance Policies, plus objectives and actions outlined in the Urban Forest Management Plan.
3. Collaborate with the Public Works Department to develop criteria to evaluate tree performance, age and species diversity as well as options to remove/replace trees and enhance street tree grow space during construction projects that involve sidewalks, curbs, gutters and other infrastructure.

OBJECTIVE 11: ELEVATE URBAN FOREST OBJECTIVES IN CITY POLICIES AND LAND DEVELOPMENT CONSIDERATIONS.

The City's street tree program is guided by the Street Tree Master Plan, adopted in 1977. Since that time, trees that were once small and in a spacious planting space, are now large and confined with a variety of infrastructure constraints. An updated Street Tree Master Plan will address current urban forest key issues including: revisions to street tree designations, tree diversity objectives, canopy enhancement, infrastructure considerations and tree health and maintenance, among others. In addition, the City does not currently have a plan that addresses long-term management of park trees. As the community develops and the public urban forest continues to mature, trees need to be incorporated into the discussion during beginning stages of review for land development, infrastructure improvements, and for community safety considerations. Updating relevant documents in combination with the development of resource tools will increase urban forest health and optimize canopy, plus decrease missed opportunities.

Implementation Actions

1. Update the Street Tree Master Plan to address long range tree management objectives.
2. Develop a Park Tree Master Plan that includes maintenance objectives, and planting and replacement strategies.

3. Continue to implement and update, as needed, urban forest objectives in the City's General Plan, Climate Action Plan, Local Coastal Plan, Pedestrian Master Plan, and Wildland Fire Plan.
4. Integrate tree resource management objectives in the future update to the Open Space, Parks and Recreation Element of the General Plan.

OBJECTIVE 12: ENSURE THAT TREE PRESERVATION AND LAND DEVELOPMENT ORDINANCES SUPPORT URBAN FOREST MANAGEMENT GOALS.

City policy documents affirm the City's commitment and provide guidance for tree preservation. Additional guidance/clarification for long-term planning specific to historic species is becoming an issue as these trees near the end of their life and are lost due to disease, extreme weather, and other conditions.

Implementation Actions

1. Review and update, if necessary, the City ordinances pertaining to trees and landscapes to ensure that they are consistent with urban forest management plan objectives.
2. Develop Parkway Vegetation Planting and Care Guidelines/Checklist to better articulate and document plantings during land development review.
3. Establish a tree mitigation bank program when impacts to trees cannot be avoided.

OBJECTIVE 13: IMPROVE INTERAGENCY COORDINATION AND PARTNERSHIPS.

Developing strong partnerships with local agencies, businesses and private property owners will increase the success of urban forest objectives and generate additional resources. While the City currently works with several agencies on tree-related issues, these communications have primarily been on a case-by-case basis. The actions below seek to strengthen existing partnerships and develop new partnerships.

Actions

1. Establish and formalize partnerships with Southern California Edison, Caltrans and other utility companies through Memorandum Of Understanding's or other means to implement tree trimming and planting plans that minimize conflict/maximize safety while promoting tree canopy, health and longevity.
2. Develop partnerships with organizations, businesses and the public school system to encourage tree health and plantings on private property.

Community Involvement

OBJECTIVE 14: ENHANCE PUBLIC AWARENESS AND APPRECIATION OF THE URBAN FOREST AS A COMMUNITY RESOURCE.

In order for residents to become actively engaged in enhancing and caring for the urban forest, they must first be made aware of the value and benefits it provides. With an estimated 80 percent of the urban forest on private property, the urban forest's overall health is dependent on community support. Until now, outreach and education has been aligned with specific City projects including tree removals and policy changes, or as part of

tree removal permitting processes. It is anticipated that expanding urban forest education at a programmatic level will increase awareness of tree preservation policies and improve tree care practices city-wide.

Implementation Actions

1. Develop a comprehensive tree education program to provide city residents with information about tree preservation policies, the benefits trees provide, and the importance of tree canopy.
2. Strengthen city-wide approaches for communicating through web, print and media and social media. Continue to provide resources about urban forestry to the public through newsletters, permitting, websites, and other resources.
3. Hold an annual public workshop to educate public on policies, maintenance and care of trees.
4. Develop partnerships with organizations, businesses, private and public schools to encourage tree health and plantings on non-City property.
5. Institute a program to acknowledge and publicize contributions to urban forestry by residents, businesses, institutions, and neighborhood group organizations.
6. Develop a tree education program to foster appreciation and awareness of the contribution of city-owned street trees and park trees to the City's history and cultural heritage.

OBJECTIVE 15: EXPAND PUBLIC PARTICIPATION IN URBAN FOREST PRESERVATION AND ENHANCEMENT.

Santa Barbara's tree planting history is strongly tied to citizen stewardship. Today's tree policies aim to protect trees from unauthorized plantings and removals but can also limit the amount of public involvement. Currently, community involvement is often associated with street tree maintenance issues. City programs are needed to balance the desires of individual residents with the City's responsibility for overall tree care and management. To increase urban forest enhancement on private property, the City will provide tree planting and maintenance technical assistance and work with public schools and other institutions to develop forest stewardship projects.

Implementation Actions

1. Develop Adopt-a-Block or Adopt-a-Tree programs to encourage healthy long-lived street trees.
2. Develop a technical assistance program to support the planting and care of trees on private property.
3. Develop community service opportunities with schools and other institutions for urban forest stewardship projects.
4. Increase community involvement in street tree designations, maintenance, plantings and care.
5. Engage the community to identify opportunities and barriers for tree planting and preservation on public property.

6. Develop volunteer maintenance programs to increase public participation opportunities.

OBJECTIVE 16: EXPAND PUBLIC/PRIVATE PARTNERSHIPS.

Partnerships will bring newfound resources and broader support for urban forest objectives. Strengthening partnerships with civic groups, educational institutions and businesses will expand the message of urban forest health and associated community benefits.

Implementation Actions

1. Develop partnerships with non-profit organizations, businesses, neighborhood associations, private schools and the public school system to encourage tree health and plantings.
2. Seek opportunities to collaborate with universities and colleges and the public school system on urban forestry science and current research.
3. Encourage private landowners to apply a tree resource calculator when selecting trees to increase economic, environmental and aesthetic benefits and enhance property values.

VIII. Urban Forest Management Plan Implementation

Implementation of this 30 year plan will require policy, program and budget coordination, data gathering, development of tools and programs, and establishment of long-term funding mechanisms. Because not all actions can be implemented immediately, a work plan will outline priority actions, identify roles and responsibilities, analyze resource implications and funding needs, and establish realistic timelines for execution and completion. Priority actions identified by the public, boards and commissions and staff address a variety of community needs and desires including tree maintenance, tree planting and community outreach, as well as organizational improvements including project coordination and staff training. Work plans will remain flexible to account for new opportunities and respond to available funding through City Council annual budget approval.

As shown in the following matrix, some implementation actions are already underway and represent key aspects of the City's Urban Forest Management Program, while others expand upon current practices or are altogether new. The matrix also illustrates actions that do not require additional resources, as well as those that have short-term funding needs and others that require long-term program enhancements.

Tree Resource Management

Tree resource management implementation actions will increase tree planting and maintenance, formalize partnerships with utility companies to address tree/infrastructure conflicts, and optimize tree species and age to promote safety, aesthetics and tree health. Additional actions include the development of and/or revisions to tree resource documents to help evaluate and provide guidance for urban forestry decisions for staff, boards and commissions, as well as the public. Key actions include:

- Shorten tree trimming cycles city-wide
- Development of multi-year maintenance plans
- Increase tree planting city-wide by identifying planting locations and areas where larger canopy trees can be planted
- Develop a tree training program for trees located under utility lines
- Formalize partnerships with Southern California Edison, Caltrans and other utility companies to address tree/infrastructure and utility conflicts
- Revise City infrastructure construction specifications and development of formalized parkway tree planting guidelines
- Develop tree resource guidelines that balance tree resource value with solar access and solar energy system design
- Partner with neighborhoods for supplemental street tree maintenance
- Assess parkway irrigation needs and adjustment options during times of drought

- Work with local and regional nurseries and other public agencies to grow/propagate unique and desirable tree species not commercially available
- Develop planting palettes for parking lots and areas along Highway 101
- Protect trees in historically significant parks through increased planting and maintenance
- Revise the definition of and criteria for selection of Historic and Specimen trees
- Promote native canopy in parks where native woodlands and vegetation currently exist or where restoration is needed

City Organization and Policy

To address funding needs the Plan provides the following primary actions:

- Increase annual maintenance funding for the management and care of City trees
- Establish an annual capital improvement program to include planting and maintenance of new trees planted as part of a development/redevelopment projects
- Establish funding for community outreach programs and public education resources

To better coordinate with City boards, commissions and staff, the following actions are prioritized:

- Establish an urban forestry team comprised of several departments to evaluate and address tree management and coordinate land development projects
- Implement staff, board and commission trainings to review Tree Preservation and Tree Maintenance policies as well as UFMP work plan actions

Actions that address policy objectives include:

- Update the Street Tree Master Plan
- Develop a Park Tree Master Plan
- Develop parkway vegetation planting and care guidelines/checklist to better articulate and document plantings during land development review
- Update City ordinances and Plans to provide consistency and reflect the UFMP objectives

Community Involvement

The implementation plan would expand community outreach and education through a variety of internal resources (such as web, printed materials, media, and permitting processes) as well as develop new programs. New programs and partnerships would increase community involvement in tree care and foster appreciation of the urban forest. Key tasks include:

- Development of a comprehensive outreach and education program
- Implementation of an Adopt-a-block program to supplement street tree care through neighborhood involvement

- Schedule public workshops to provide technical assistance on care and maintenance plus educate public on City tree policies
- Strengthen partnerships with non-profit organizations, businesses, neighborhood associations, local schools to encourage tree health and planting on private property
- Establish recognition program for urban forestry contributions made by the public

Partnerships may take a variety of forms depending on the type and/or role of an organization. For example, the City may look to partner with the Association of Realtors as a venue to disseminate tree preservation and parkway tree care information to homebuyers while school district partnerships provide opportunities to educate the youth on the benefits of trees and provide tree planting on private property. Other programs can provide volunteer planting and tree care opportunities and engage the community in street tree designations.

Plan Monitoring and Reporting

The Urban Forest Management Plan is intended to be a living document with the ability to be updated and revised periodically to:

- Reflect changes in the urban forest resource structure and function
- Incorporate changes in industry standards
- Consider community response
- Amend and/or develop new recommended actions

Ongoing monitoring, analysis, and reporting will help keep staff and urban forest partners involved and focused on accomplishing Plan objectives. To monitor progress of the Plans' recommended actions, a progress report would be prepared periodically. Annual performance measure (P3) reporting would continue to reflect progress in planting and maintenance, permitting, ordinance violations, and contractor trainings. Analysis may include an updated street tree inventory, i-Tree benefits analyses, or urban tree canopy assessment.

Implementation Matrix

LEGEND

Implementation actions have been coded to indicate the financial resources needed and the implementation status of each action, as follows:

- ◈ Part of program practice and/or no additional funding needed.
- ◆ Short-term project, short-term increase in funding needed.
- ✳ Longer-term project or program, requires additional funding.

Tree Resource Management

OBJECTIVE 1: MAINTAIN CITY TREES TO PROMOTE SAFETY, HEALTH, AND LONGEVITY.

Objectives and Actions	New	Expanding	Existing
Develop a multi-year plan to address tree maintenance, planting and removal citywide.	◆		
Broaden and formalize partnerships with Southern California Edison (SCE), Caltrans and other utility companies through Memorandum Of Understanding's or other means to implement tree trimming plans that minimize conflict/maximize safety while promoting tree canopy, health and longevity.	✳		
Trim/maintain street trees more frequently to promote public safety, neighborhood aesthetics, and tree health.		◈	
Conduct periodic tree assessments to monitor tree performance.		◆	
Develop a young tree training program to reduce the potential for mature trees to conflict with high voltage lines and other utilities and infrastructure.		✳	
Continue to maintain the city tree inventory database to achieve urban forest objectives and monitor tree management.			✳
Continue to work with the Fire Department to develop and implement proactive maintenance plans for street trees located in high fire zones			✳

OBJECTIVE 2: ENHANCE STREET PARKWAY GROWING CONDITIONS WHERE FEASIBLE.

Objectives and Actions	New	Existing	Expanding
Work with adjacent land owners and neighborhoods to provide supplemental water and weed management.	◈		
Revise City infrastructure construction specifications to maximize tree health and longevity and minimize infrastructure damage.	◆		
Identify existing parkways that can be enlarged to accommodate greater canopy and/or larger canopy trees.	◆		

Provide extra protection for newly planted trees such as curb adjustments and protective barriers where necessary.	◆		
Where feasible, include irrigation during parkway and sidewalk redevelopment.	◆		
Develop strategies to manage sensitive parkway trees during drought conditions.	◆		
Develop parkway construction specifications to improve parkway soil conditions that promote young tree root development and minimize infrastructure damage.	◆		
Where feasible, use the latest construction technology such as permeable pavers, to increase storm water infiltration and provide water to tree roots.	◆		
Develop formal parkway and tree planting guidelines and specifications to maximize tree health and minimize conflict with public infrastructure.			◆
Promote streetscape redevelopment to maximize parkway planting area.			✳

OBJECTIVE 3: OPTIMIZE TREE CANOPY.

Objectives and Actions	New	Existing	Expanding
Expand street tree planting and replacement program placing priority on neighborhoods with the fewest trees and in neighborhoods willing to provide supplemental early tree care.	◈		
Identify planting locations along City streets, in City parks and on other public property that can support greater canopy and/or large canopy tree species.	◆		
Complete a comprehensive inventory of vacant planting sites to determine which ones can support new trees.		◆	
Expand young tree care program to increase plantings and associated care and maintenance.			◈
Identify opportunities to increase available planting space along City streets, in City parks and on other public property.			◆
Increase the use of large canopy trees where practical.			✳

OBJECTIVE 4: OPTIMIZE AGE AND ENHANCE SPECIES DIVERSITY.

Objectives and Actions	New	Existing	Expanding
To the extent feasible, work with local and regional nurseries and other public agencies to grow/propagate unique and desirable tree species not commercially available.	◈		
Assess and develop age and species criteria for City parks and other City property.	◆		
As part of the Street Tree Master Plan update, define appropriate age and species diversity distribution and locate areas where new or replacement trees should be planted.	◆		
Maintain existing species diversity and investigate methods for increasing desirable species that are rare.			◈

OBJECTIVE 5: MAXIMIZE THE ECONOMIC, ENVIRONMENTAL, AND AESTHETIC BENEFITS OF THE URBAN FOREST.

Objectives and Actions	New	Existing	Expanding
Work with private landowners to minimize the potential for private trees to conflict with public infrastructure.	◈		
Develop an economic/environmental tree resource calculator/performance checklist to evaluate the tree resource as it relates to other capital resources during land development.	◆		
Develop long-term street tree plans for major commercial corridors and public areas such as Upper State St, De La Vina Street, Carrillo Street, Milpas Street, Chapala Street and Cliff Drive. Integrate plans in land development projects and public infrastructure improvements.	◆		
Develop tree resource management guidelines that balance tree resource value with solar access and solar energy system design.	◆		
Develop guidance for tree selection and planting along Highway 101 that would improve air quality for nearby sensitive land uses.	◆		
Select new tree plantings that will maximize energy conservation, increase carbon sequestration and provide shade.	✳		
Encourage the use of parking lot and streetscape designs that provide greater amounts of pavement shading.			✳
Require street tree plantings and maintenance as part of permitting for land development and/or redevelopment, when new trees are planted.			✳

OBJECTIVE 6: PROVIDE URBAN FOREST BENEFITS THAT ENHANCE VISITOR EXPERIENCES IN CITY PARKS AND FACILITIES.

Objectives and Actions	New	Existing	Expanding
Develop a tree replacement program that enhances aesthetics and promotes recreation.	◆		
Continue to work with the Fire Department to develop and implement proactive maintenance plans for parks located in high fire zones		✳	
Maintain stands of large trees in open spaces and community and developed parks.		✳	
Increase canopy cover to enhance habitat for wildlife and for public benefit, where appropriate.			◈
Increase park tree maintenance for prolonged health and longevity.			◈

OBJECTIVE 7: ENHANCE AND PRESERVE TREES WITHIN NATIVE HABITATS INCLUDING RIPARIAN AREAS, OAK WOODLANDS, AND PROTECTED OPEN SPACES.

Objectives and Actions	New	Existing	Expanding
As part of the Park Tree Master Plan, address riparian and oak woodland management to preserve and protect mature trees, native tree saplings and native understory vegetation.	◆		
Develop riparian canopy restoration program in parks with creek habitats.	◆		

Minimize compaction of soil under drip lines of trees by routing trails and pathways around trees.	✳		
To the extent feasible, control invasive, non-native vegetation that threatens trees in riparian areas and open space parks.			◈
Use large native trees in riparian zones and areas that connect to native landscaping and open spaces, where feasible.			◆

OBJECTIVE 8: MAINTAIN AND PROTECT HISTORIC AND CULTURALLY SIGNIFICANT TREES CITY-WIDE.

Objectives and Actions	New	Existing	Expanding
Review and revise, as needed, the definition of and criteria for designation of historic and specimen trees.	◆		
Clarify guidance for maintenance, longevity and replacement of designated specimen and historic trees.	◆		
Protect and enhance trees in historically significant parks such as Alameda Park, Alice Keck Park Memorial Garden, Orpet Park and Franceschi Park through increased tree maintenance and tree planting programs.			◈
Maintain the history, design, cultural integrity and functional use of developed parks, as feasible.			✳

City Organization and Policy

OBJECTIVE 9: ENHANCE CITY INVESTMENT IN THE HEALTH AND MANAGEMENT OF THE URBAN FOREST.

Objectives and Actions	New	Existing	Expanding
Increase annual maintenance funding for the management and care of City trees.	◈		
Establish an annual capital improvement program to plant and maintain new trees.	◈		
Establish funding for community outreach programs and public education resources.	◈		
Evaluate the feasibility of the Street Tree/Parkway Management Assessment District to fund street tree maintenance.	◆		
Develop public-private partnerships to address tree resource needs.	✳		
Identify and obtain external sources of funding to support the goals and strategies of the Management Plan.	✳		

OBJECTIVE 10: IMPROVE INTERDEPARTMENTAL COMMUNICATION AND COORDINATION RELATED TO TREE PRESERVATION AND ENHANCEMENT.

Objectives and Actions	New	Existing	Expanding
Establish formal urban forest team comprised of staff from Parks and Recreation, Public Works, Community Development and Fire to address tree management and coordinate tree review for land development projects.	✳		

Implement an annual staff and board/commission tree training program to review Tree Preservation and Tree Maintenance Policies, plus objectives and actions outlined in the Urban Forest Management Plan.	✳		
Collaborate with the Public Works Department to develop criteria to evaluate tree performance, age and species diversity, as well as options to remove/replace trees and enhance street tree grow space during construction projects that involve sidewalks, curbs, gutters and other infrastructure.			✳

OBJECTIVE 11: ELEVATE URBAN FOREST OBJECTIVES IN CITY POLICIES AND LAND DEVELOPMENT CONSIDERATIONS.

Objectives and Actions	New	Existing	Expanding
Update the Street Tree Master Plan to address long range tree management objectives.	◆		
Develop a Park Tree Master Plan that includes maintenance objectives, and planting and replacement strategies.	◆		
Continue to implement and update, as needed, urban forest objectives in the City's General Plan, Climate Action Plan, Local Coastal Plan, Pedestrian Master Plan, and Wildland Fire Plan.			✳
Integrate tree resource management objectives in the future update to the Parks, Recreation and Open Space Element of the General Plan.			✳

OBJECTIVE 12: ENSURE TREE PRESERVATION AND LAND DEVELOPMENT ORDINANCES SUPPORT URBAN FOREST MANAGEMENT GOALS.

Objectives and Actions	New	Existing	Expanding
Develop Parkway Vegetation Planting and Care Guidelines/Checklist to better articulate and document plantings during land development review.	◆		
Establish a tree mitigation bank program when impacts to trees cannot be avoided	◆		
Review and update, if necessary, the City ordinances pertaining to trees and landscapes to ensure they are consistent with urban forest management plan objectives.			✳

OBJECTIVE 13: IMPROVE INTERAGENCY COORDINATION AND PARTNERSHIPS.

Objectives and Actions	New	Existing	Expanding
Establish and formalize partnerships with Southern California Edison, Caltrans and other utility companies through Memorandum Of Understanding's or other means to implement tree trimming and planting plans that minimize conflict/maximize safety while promoting tree canopy, health and longevity.	✳		
Develop partnerships with organizations, businesses and the public school system to encourage tree health and plantings on private property.	✳		

Community Involvement

OBJECTIVE 14: ENHANCE PUBLIC AWARENESS AND APPRECIATION OF THE URBAN FOREST AS A COMMUNITY RESOURCE.

Objectives and Actions	New	Existing	Expanding
Develop a comprehensive tree education program to provide city residents with information about tree preservation policies, the benefits trees provide, and the importance of tree canopy.	◆		
Develop a tree education program to foster appreciation and awareness of the contribution of city owned street trees and park trees to the City's history and cultural heritage.	◆		
Hold an annual public workshop to educate public on policies, maintenance and care of trees.	✳		
Develop partnerships with organizations, businesses, private and public schools to encourage tree health and plantings on private property.	✳		
Institute a program to acknowledge and publicize contributions to urban forestry by residents, businesses, institutions, and neighborhood group organizations.			✳
Strengthen city-wide approaches for communicating about trees through web, print and social media. Continue to provide resources about urban forestry to the public through newsletters, permitting, websites, and other resources.			✳

OBJECTIVE 15: EXPAND PUBLIC PARTICIPATION IN URBAN FOREST PRESERVATION AND ENHANCEMENT.

Objectives and Actions	New	Existing	Expanding
Develop a technical assistance program to support the planting and care of trees on private property.	◈		
Develop Adopt-a-block or Adopt-a-Tree program to encourage healthy long-lived street trees.	◆		
Increase community involvement in street tree designations, maintenance, plantings and care.	◆		
Develop volunteer maintenance programs to increase public participation opportunities.	◆		
Engage the community to identify opportunities and barriers for tree planting and preservation on public property.		◆	
Develop community service opportunities with schools and other institutions for urban forest stewardship projects.			◆

OBJECTIVE 16: EXPAND PUBLIC/PRIVATE PARTNERSHIPS.

Objectives and Actions	New	Existing	Expanding
Develop partnerships with non-profit organizations, businesses, neighborhood associations, private schools and the public school system to encourage tree health and plantings.	◆		

Encourage private landowners to apply a tree resource calculator when selecting trees to increase economic, environmental and aesthetic benefits and enhance property values.	◆	
Seek opportunities to collaborate with universities and colleges and the public school system on urban forestry science and current research.		◆

Glossary

Canopy
The branches and foliage of a tree above ground or water.

Canopy Cover
The percent of the city that is covered by trees.

Carbon Sequestration
Removal of carbon from the air by living trees and plants to be stored in their cells through the process of photosynthesis.

Compaction
The compression of soil, causing a reduction of pore space and an increase in the density of the soil. Tree roots cannot grow in compacted soil.

Diameter At Breast Height (DBH)
Measurement of trunk diameter taken at a four and a half feet (4-1/2') above ground.

Declining Tree
Declining trees are defined as having a permanent and progressive reduction in health, vigor and/or structural stability that can eventually lead to its death or structural failure. Declining trees may typically be over mature, suffering from old wounds or other impacts that have interrupted the living system resulting in impeded growth and followed by the depletion of energy reserves that are normally stored in the root mass resulting in the reduction of health, condition and stability.

Feasible
Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, public safety and technological factors.

Front Setback
An area between the front lot line and a line parallel to the front lot line bounded by the interior lot lines of the lot that are roughly perpendicular to the front lot line, the depth of such area being the distance required by the zoning ordinance. (SBMC 28.04.620)

Geographic Information System (GIS)
A Geographic Information System is a system designed to capture, store, manipulate, analyze, manage and present all types of geographically referenced data. A computerized system organizing data sets through the geographical referencing of all data included in its infrastructure.

Goal
The result or achievement toward which effort is directed. Goals can be short term, long term and adaptable.

Growspace
The ground level space that a tree is allotted to grow.

Habitat
A place where a plant, animal or other organism naturally or normally lives or grows.

Historic Tree
A tree which has been found by the Board of Park Commissioners, the Historic Landmarks Commission, or the City Council to be a tree of notable historic interest and has been designated by resolution of the City Council as an "historic tree". (SBMC 15.24.010)

Infrastructure
The basic physical organization of a city's capital assets (e.g. sewer, utility, street, sidewalk, transportation systems) needed for operational function within a city.

Maintenance
Pruning, spraying, bracing, root pruning, staking, fertilizing, watering, treating for disease or injury, and other work performed to promote the health, beauty, or adaptability of trees and shrubs, but shall not include the watering of such trees in residential zones. (SBMC 15.20)

Native Plant
A plant that lives or grows naturally in a particular region without direct or indirect human intervention. Plants indigenous to a region, naturally occurring and not introduced by humans.

Parkway
Either (i) the area between the curb and sidewalk within a fully improved street right-of-way, or (ii) that area extending six feet from the curb towards the nearest right-of-way line in an area with no sidewalk, or (iii) any area within a street right-of-way in which an official or parkway tree is located. (SBMC 15.20)

Parkway Tree
A tree planted or caused to be planted by the City within a street right-of-way. (SBMC 15.20)

Pruning
Selective removal of branches (or occasionally roots) from a tree or other plant , using approved practices, for the purposes of cleaning, thinning, raising or reducing the crown or to improve structure of the tree or for crown restoration.

Riparian
Areas adjacent to rivers, streams and watersheds with a differing density, diversity and productivity of plant and animal species relative to nearby uplands.

Specimen Tree
A tree which has been found by the Board of Park Commissioners to be of high value because of its type and/or age and which has been so designated by resolution of the City Council as a "specimen tree". (SBMC 15.24)

Street
A public or private way constructed for the primary purpose of vehicular travel. An alley or a driveway is not a street. The term "street" describes the entire legal right-of-way or easement (public or private), including, but not limited to, the traffic lanes, bike lanes, curbs, gutters, sidewalk whether paved or unpaved, parkways, and any other grounds found within the legal street right-of-way. The name given to the right-of-way (avenue, court, road, etc.) is not determinative of whether the right-of-way is a street. (SBMC 28.04.650)

Streetscape
A term used to describe the natural and built appearance of the street that usually includes street trees, ornamentals, landscape and site amenities.

Street Trees
See Parkway Tree

Tree
A usually tall, woody plant, distinguished from a shrub by having comparatively greater height and, characteristically, a single trunk rather than several stems. (SBMC 15.20.020)

Topping
The indiscriminate cutting of tree branches to stubs or lateral branches that are not large enough to assume the terminal role.

Trimming
The same as pruning.

Trimming Cycle
Frequency by which trees are maintained and depends on the size, location and type of tree.

Understory
The underlying layer of vegetation including trees, plants and shrubs between the forest canopy and ground cover.

Urban Forestry
The management, establishment and protection of trees and forests within cities, suburbs and towns.

Vision
Statement that provides a purpose beyond the moment and thinks and plans for the future.

Wildlife Corridor
A pathway or habitat linkage that connects discreet areas of natural open space otherwise separated or fragmented by urbanization. Such a corridor allows animals to move between remaining habitats and provides escape routes from fire, predators and human disturbances.

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