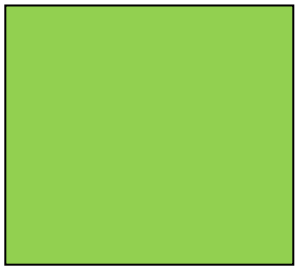
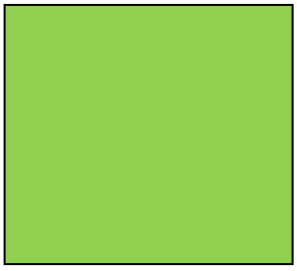
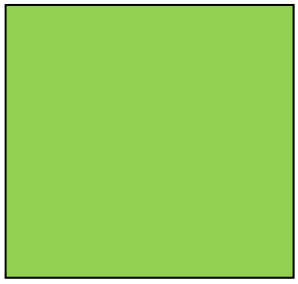
STATE OF THE GOLETA URBAN FOREST REPORT

An Urban Resource Assessment for the City of Goleta

DRAFT October 26, 2009







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Introduction

The City of Goleta has initiated the development of an Urban Forest Management Plan to guide the long term preservation and enhancement of public and private trees within the City of Goleta. One of the first efforts in creating this plan is to develop a set of baseline conditions of Goleta's trees and the administrative practices for managing them. The purpose of this State of the Goleta Urban Forest Report is to present the facts about the current physical, administrative and fiscal conditions of Goleta's urban forest. Goleta's urban forest consists of all public and private trees, which include the street tree system, trees on parks and other public lands, trees on private properties throughout the city, and others.

Individual public trees subject to human interaction (along the edges of parks, walkways, on streets, etc.) need to be proactively managed for health and safety purposes. The City of Goleta shares the responsibility for the management of naturally occurring and planted trees and associated plants in public urban areas with a number of other public agencies. The majority of the urban forest is in private areas and their management is primarily a private responsibility.

To achieve a sustainable urban forest, the ecological, social, and economic functions and benefits of which are maintained over time, the City of Goleta is creating an Urban Forest Management Plan which describes how urban forest goals are to be accomplished within a defined time frame and which will include tasks, priorities, best management practices, standards, specifications, budgets and staffing analyses. Best management practices, or the best available, industry-recognized courses of action, are used to maximize environmental benefits, or improvements to the natural world provided by the urban forest.

This report will be used for pubic discussions about future Goleta Urban Forest goals, policies and standards. The resulting public input and staff investigations will culminate in the preparation of a Goleta Urban Forest Management Plan.

1. History and Environment

a. Historical Setting of the City of Goleta Trees

In 1769, the Goleta Valley was verdant with live oak groves, thickets of willow and alders, sycamores and Castilian roses. So impressed was diarist Juan Crepf that he wrote this first appraisal of the Goleta Valley by a European settler: "This is all a Good Land".

There were 'dense oak grove' all the way to Dos Pueblos Canyon and back to Santa Barbara. Early shipbuilders were not enamored with the local oak and sycamore. It was unsuitable for shipbuilding so the first ships used imported wood. Nevertheless later settlers planted a wide variety of trees. Pepper trees came from Peru in the 1820's. Horticulturalists such as Joseph Sexton planted one sample of each rare new tree he imported in the front yard of his home at 5490 Hollister. In

1869 Colonel Hollister had the largest almond orchard in America, but it failed to be competitive with other areas. Ellwood Cooper's 250 acre olive orchard was the largest in the world at its time but it also couldn't compete with imports.

In the 1870's Ellwood Cooper imported 50 species of eucalyptus for his nursery near Ellwood. He planted the trees close together so they would grow like lodge pole pines and be used for wharf pilings. A pioneer lemon grove of 30 acres planted in the Crestview Oaks subdivision in 1874 produced fruit until 1938.

As new imported trees were introduced and the population grew, the native strands of trees were greatly reduced. The original Witness Tree was cut down to make way for Hollister Avenue. Much of the oak groves of the Goleta Valley were cut down for cattle feed during the drought of 1884, while the groves in Montecito survived. The More brothers removed dense strands of live oaks growing in Isla Vista and along the coast in order to sell the wood to a nearby whaling camp for use as fuel for their blubber pots.

In the Goleta Valley, much of the reduction in native trees took place prior to the 1900's. Nevertheless, during the building booms of the 1950's and 60's, large tracts of orchards and farmland were also taken out of production for new housing for the post World War II generation.

Much of the City of Goleta was already developed during the 1900s prior to the City incorporating on February 1, 2002. Since some urban trees can live for 100 years or more, previous urban forest standards, policies and practices will affect the City of Goleta urban forest for long into the future. Some typical past practices include:

- Most local residential, collector and arterial roads were built with 3.5 to 4' parkways, i.e. an area intended for green space area between the curb and the sidewalk. Most public street trees are planted in the parkways between the curb and sidewalk, or on the other side of a sidewalk if there is no opening between the curb and sidewalk.
- Commercial area tree plantings involved 4' by 4' cutouts in sidewalks such as on Calle Real, or 2' x 2' cutouts for Windmill Palms in Old Town Goleta.
- Medians along major arterials Cathedral Oaks, Hollister Ave, Calle Real, Patterson Ave, and Los Carneros Ave. were generally not landscaped until the mid 1990's. A non profit group, the Goleta Median Landscape Corporation, worked with County staff and the Goleta Water District to secure water meters and to install landscaping. Financing for the ongoing maintenance was to come from the sale of advertising on signs placed in the median. When the Goleta Median Landscape Corporation dissolved in 2002 around the time of Goleta incorporation, the ongoing maintenance responsibilities of the medians resorted to the respective County and City of Goleta jurisdictions.
- Entire streets and in some cases neighborhoods were planted with the same tree species, reflecting the landscape architectural design standards of the time.
- Many fast growing, large tree species such as ash and liquidambar were planted to provide quick shade, along with a great diversity of smaller trees.

- Two trees were normally planted by developers per residence, which provided continuous canopy on those streets with tall trees, such as Del Norte, Carlo and Windsor.

Arboriculture science was not as advanced 40 years ago as it is today. We now know the importance of systematic young tree maintenance programs and planting the right tree in the right place. For example, the 1971 edition of the Street Tree Seminar, Inc., a publication by professional arborists, recommended many trees as potentially suitable for street trees that would not be considered today, such as Eucalyptus, Ash and Ficus. The City of Goleta, like many other southern California cities, has higher mature tree maintenance costs today as a result of previous practices including but not limited to;

- Uncorrected structural deficiencies, such as long branches with canopy at the ends that appear like 'lion's tales', and trees with included bark which contributes to tree failure.
- Street trees with a mature size not suitable for the growing space (Ash, Liquidambar)
- Trees not appropriate for this climate that are prone to disease (Crape myrtle)
- Street Trees requiring high maintenance (Chinese Elm).
- Street trees planted too close to driveways, street lights, underground water or sewer lines, or at intersections where visibility is required.
- Deferred park tree maintenance.

b. Climate Zone

The unique characteristics of our climate zone determine whether or not the trees we plant will live or die. The Goleta area has a mild marine climate with cool summers, mild winters which seldom experiences extreme temperatures. Winter lows average 42 degrees Fahrenheit with extreme cold averaging from 35 degrees to 28 degrees F. Killing frosts are rare and don't last long. Record heat usually comes in early October, carried to the coast by Santa Ana winds. The wind's power and dryness cause more problems for trees than the heat itself.

The average annual rainfall is 15 to 20 inches, although a key requirement for any tree to be sustainable in the Goleta environment is an ability to live for 6 months without rain between the months of May through October.

Generally, a new tree requires watering and staking for two to three years before the tree has become established enough for it to survive on its own without supplemental irrigation and staking. The soil conditions and type of care provided during the establishment period may cause that time of establishment to be increased or decreased.

c. Soil Conditions

Although soil is not a climate condition, the type of soil can encourage or limit tree growth. The original soils in the Goleta area formed in a slightly sloping alluvial fans, flood plains and valleys. The Department of Agriculture has identified and mapped 13 different types of soils in the Goleta area. Many of these soils were very productive for farming and ranching.

However with the development of the area for housing and commercial development, much of the surface soil was removed and a dense clay sub base remains.

Identifying what type of soil exists is important for determining what type of tree to plant. It is generally not practical to amend or replace enough soil to allow a tree to flourish in adverse conditions. Rather, a tree species should be selected to grow in the soil that exists.

d. High Fire Hazard Areas

Certain areas within Goleta have been designated as high wildland fire hazard areas, including areas north of Cathedral oaks Road, portions of the Winchester Commons subdivision, and the Bacara Resort property. Figure 5-2 of the General Plan is a map showing the wildland fire hazard areas within the City of Goleta.

Most Goleta homes that are not in the rural-urban interface are not in danger of being in the path of wildfires. However, homeowners in any area where a grass, brush or forest fire might occur should adhere to rules for creating what firefighters call 'defensible space'. Even then, it does not mean 'no trees' Rather, widely spaced, deciduous trees (with lower limbs pruned to 6 to 10 feet and no limbs touching the house) can be used to assure energy savings while posing minimum threat to spreading a fire.

2. Measuring Goleta's Tree Resources

a. Urban Forest Composition- Number, Species Distribution

City of Goleta Tree Inventories

Tree inventories are the starting point for understanding and managing the urban forest, but can quickly go out of date, or lack sufficient information if not designed properly when first conducted. Some of the reasons for conducting inventories include;

- Provides an accurate profile of the speciesand size/age composition of the forest
- Engenders public support, particulalry if citizens are involved as data collectors.
- Reveals planting needs and suggests priorities to assure balance and diversity
- Determines tree maintenance needs, providing a sound basis for how many people are needed to do the work, and how much it will cost.
- Provides information for defensible budget requests and may be used to establish the monetary value of the urban forest and show the effects of budgeting and management on resource value
- Locates trees that are special because of their large size, unusual form or connections with history

- Enables quick and intelligent responses to property owner questions and requests
- Allows keeping records of work performed to be used for:
    a. reporting to administrative and elected officials
    b. better planning of time and crew size needed for tree maintenance
    c. assuring systematic care of all trees, and
    d. continuity of information when personnel changes occur.

Tree inventories are conducted by multiple individual agencies for different reasons and levels of accuracy. Thus the information we have about the entire Goleta Urban Forest is an approximation with some gaps in the data, particularly in dealing with trees on private property and those public agencies with small tree populations.

The latest City of Goleta comprehensive street tree inventory (i.e. surveying every tree) was completed in 2004. The street tree inventory is updated on a continuous basis as trees are maintained by the City's contract arborists. A working copy of the street tree inventory is available for viewing in the City's Community Services Office, but due to its large size and continuous updating, it is not included as an appendix.

The City's partial Park tree inventory was conducted in 2006 by Goleta Valley Beautiful volunteers in an effort to highlight the location, species and condition of major trees close to publicly used areas, and to identify potential sites for new trees. The inventory has not been updated. This inventory is also available with the City Arborist at the Community Service Department.

Other sources Southern California Edison has a continuously updated inventory that is maintained through their contractor Asplund. Southern California Edison is a privately owned company regulated by the California Public Utilities Commission, which among other items mandates the distance from power lines that utility companies must prune trees. When trees within Edison easements are also within City of Goleta right of way, the City and Edison have different responsibilities for ongoing maintenance. The City does not currently have a formal relationship with Edison to access the inventory data.

CalTrans maintains approximately 1,500 trees within the City of Goleta in planted medians and parkways along Highway 101 and along State Route 217. Primary concern to CalTrans is to insure that trees complement but do not interfere with travel corridors, including travel lanes, shoulders and supporting infrastructure such as signs and lights. Landscaping is also used for erosion control as well as aesthetic purposes. The City does not currently have a formal relationship with CalTrans to access the inventory data

Number of Trees The total estimated number of trees within the City of Goleta's public and private urban forest is approximately 50,190. These figures are estimates only based on available data.

Trees	%	Agency	Location

30,000	59.8	Private Sector	Citywide including riparian corridors
6,727	13.4	City of Goleta	Street parkways and medians
5,000	10.0	City of Goleta	Natural and public areas - passive
3,128	6.2	City of Goleta	Parks and Open Spaces-Managed
2,000	4.0	Southern CA Edison	Utility Easements
1,500	3.0	CalTrans	Highway 101, Route 217
1,000	2.0	Goleta Union School Dist	10 Elementary campuses
600	1.2	SB Secondary School Dist	1 High, 1 Jr. High School
200	0.4	Foundation for Girsh Park	Girsh Park
35	0.1	County Fire	Fire Stations 11, 14
0	0	Special Districts	Service Easements
0	0	County of Santa Barbara	Riparian corridors
50,190	100	Total trees in Goleta Urban Forest	

An estimated 60% of the trees in the Goleta urban forest are within private ownership. This includes most of the trees in creeks and riparian drainage ways maintained by the Santa Barbara County Flood Control agency for flood control purposes, but not tree maintenance.

Of the remaining 40% of trees in the Goleta urban forest maintained by public agencies, the City of Goleta is responsible for about 30% of the total or about 14,855 trees. The other 10% or about 5,610 trees are split among 9 other public, semi-public and non-profit agencies

Species Distribution

Species distribution is important for disease and pest resistance, calculating maximum environmental benefit through canopy coverage, identifying sustainable native trees, tree longevity, and resolving tree conflicts with hardscape.

When considering the data from the City's street tree inventory, there are 167 different species of trees along Goleta streets, with over 100 of those species with less than 10 trees represented in the inventory. The top 30 species account for 89% of street trees. 21 of the top 30 species are no longer on the list of species approved to be planted in public right of way. This includes the most numerous tree in the City inventory, the Lemon bottlebrush (Callistemon Citrinus), and the large street trees such as Ash, Sweet gum, Elms and Pines.

b. Urban Forest Data Collection Methods and Results

In 2008, the City of Goleta contracted with the Native Communities Development Corporation to prepare an urban tree canopy map of the City utilizing satellite imagery. The result is a map complementary to the City's Geographic Information System that provides canopy cover statistics, locations of individual trees, and information on land use data that can be used in development of an urban forest management plans... This is a snapshot of what canopy exists in 2008. The data does not tell us whether the canopy has been expanding or contracting. Many urban forest planning efforts in other communities use a comparison of aerial photographs over the last fifty years to show the impacts of urbanization on urban forestry.

Within the City of Goleta, the satellite imagery shows how land uses in Goleta can be categorized to assist in analyzing the urban forest. The 2008 aerial data provides the following information;

Percentage	Acres	Category
19%	949	Tree and large shrub canopy
6%	319	Irrigated acreage
28%	1,409	Non-irrigated acreage
44%	2,280	Impervious/paved acreage
2%	83	Bare soil acreage
1%	37	Water acreage
100%	5,077 acres	Total

The satellite imagery was also used to determine coverage by land use. One option of analysis is to allow for review of general land use urban forest data by residential, commercial, office/industrial, passive and active open space. This information can be cross referenced with information about existing and potential trees within these types of land uses in order to develop more targeted tree management programs.

GENERAL USE	TOTAL ACRES FOR LAND DESCRIPTION	% COVERAGE FOR LAND DESCRIPTION
Agriculture/Open/Recreation	1119	22%
Commercial	376	7%
Office and Industrial	684	13%
Public/Quasi Public	1219	24%
Residential	1679	33%
Total	**5077**	**100%**

The satellite imagery data is in a format that can be integrated into the City's geographic information system with some additional revisions. This would allow the satellite data regarding the 5,077 acres within the City of Goleta to be analyzed from ~~a multitude of perspectives. We can view the urban forest for the entire City and its relationships to the south coast~~ area.

This data can be viewed in progressively smaller units of analysis, including official areas such as census tracts, census blocks, and Assessor's parcels, as well as unofficial areas such as neighborhoods and service districts.

C. Canopy Cover

Urban tree canopy is the layer of leaves, branches, and stems of trees that cover the ground when viewed from above. Each community must first identify what their tree canopy cover is, and then set their own goals to help meet environmental and quality of life goals, including federal and local clean air and water regulations. Once a specific goal is determined, the local government can pursue that goal using policies, procedures, and budget.

Goleta's overall 2008 canopy coverage is approximately 19%. This figure includes public and private areas, and both tree and large shrub canopy as the analytical tools used could not differentiate between trees and shrubs. The 19% figure is thus a generous interpretation of tree canopy coverage, since shrubs are usually not large enough to provide shade.

d. Available Public Tree Planting Sites - Theoretical Maximum

Other information obtained from the satellite imagery relates to the number of potential tree planting sites. Computer models scanned the satellite imagery, then searched, tested and located available planting sites for small, medium and large trees. The computer models based on constraint criteria assumed all non constrained areas that are large enough for a tree would receive a tree. The impacts of irrigated versus non-irrigated turf areas are also be taken into consideration along with underlying land use/zoning designations. Additional models help identify the impact of a growing urban forest on different air quality scenarios.

The satellite imagery models were compared to existing City of Goleta tree inventories to avoid duplicate planting spaces. They list 2,334 available street tree planting spaces as of 2006. The selection process for the proposed sites is based on the crown diameter size of the tree at maturity including small (15'), medium (30'), and large (50') trees. The model started by allocating spaces for large trees, then medium and lastly small trees, to promote and maximize environmental benefits which are greatest with mature large trees. Planting sites also included a 2' buffer of impervious surfaces to avoid conflicts with sidewalks, driveways and buildings. The computer model criteria will ultimately be compared to other site based criteria for determining location of new trees, including setbacks from driveways, utilities, intersection visibility, street lights, and other trees both on and adjacent to the right of way. However, the aerial tree planting analysis does not consider other restrictive constraints such as underground utilities, view sheds, and personal references. As such, the model's estimate of available trees is generous.

The City's partial park tree inventory also identified 618 available vacant park tree planting sites along the peripheries of the City's parks, not including Santa Barbara Shores/Sperling Preserve. New trees were only projected at park peripheries to avoid conflict with open turf areas. The City of Goleta is in the process of developing a Park Management Plan that will coordinate with the Urban Forest Management Plan. A final determination of available park tree planting sites will occur after a Parks Master Planning Process is resolved.

A total of 2,952 potential park and street trees within the City of Goleta provide an initial estimate of potential new publicly managed tree locations. The number of trees to be generated by new development within the City of Goleta is not included in total potential new trees, nor are constraints taken into consideration such as utility locations.

There are few vacant tree site proposals for other public agencies since there are few formally developed public tree management programs. Edison's tree maintenance program is to protect power lines from tree damage as authorized by the Public Utilities Commission. Unlike power companies in northern and southern California areas, Edison does not have a replace and replant program for dealing with replacing inappropriately sited large trees with smaller trees under power lines, nor do they have a program to plant shade trees to promote energy conservation.

CalTrans has severe budget constraints such that any new landscaping is the lowest funding priority with State funds, even though State Architects have identified locations such as the Fairview/101 Interchange for landscape renovation. Tree planting can occur if other jurisdictions provide the financing, such as the City of Goleta is doing at the Los Carneros/101 interchange and in conjunction with reconstruction projects such as at the Winchester canyon/101 interchange. Nonprofits have initiated freeway tree planting projects at the Los Carneros/101 off ramp. Future efforts are dependent upon Federal and/or State funding.

The two School Districts in Goleta depend upon nonprofits for the bulk of their new tree planting efforts, and another 200 trees are planned for the next two years.

e. Cost and Benefit Analysis of Goleta's Trees

Trees within an urban forest have many environmental benefits, including creating oxygen and removing gases and particulates that can be harmful to humans. Trees provide shade to reduce temperatures in heat island areas (large areas of paved surfaces) and protect people from excessive sun. Trees absorb stormwater, allowing it to sink in and recharge our water basins, and also to protect our neighborhoods from flooding by reducing the need to large scale flood protection structures. When sited correctly, trees can also provide energy conservation by decreasing the need for air conditioning in

the summer while still allowing the sun's rays to reach through bare deciduous trees in the winter. And trees surrounding a home or business can make a property much more valuable than a barren location.

Tree scientists have discovered how to estimate a specific dollar value of an urban forest. The process involves directly relating an individual tree's costs and benefits to the local environment where it grows. Scientists are now able to show the cumulative financial impact of individual trees in the urban forest using data unique to a geographic area. Tree scientists can also identify how individual trees grow over their normal lifespan. With this information, we can calculate urban forest costs and benefits for decades into the future

A June 2008 study of Planning and Financing Future Urban Forests by Ken Knight used the City of Goleta managed public trees as a case study. The study, funded by the National Urban and Community Forestry Advisory Council, indicated that the existing trees cost $351,322 annually to maintain and produced $643,574 in annual benefits for a net benefit of $292,252 and a cost benefit ratio of 1.83, or a net positive benefit of trees. A copy of this study can be found at www.goletavalleybeautiful.org.

3 City of Goleta Tree Standards, Polices and Regulations

a. General Plan Urban Forest Policies

The City's 2006 adopted Urban Forestry policies included in the City's General Plan are extracted in Appendix A. Based on the General Plan policies, the City is developing an Urban Forest Management Plan. This State of the Goleta Urban Forest Report is the first step in the preparation of the Urban Forest Management Plan.

The primary General Plan policies are found in the Conservation Element policies CE 14.1 through 14.7. The Conservation Element policies define the urban forest, call for the expansion of the official tree list to include species for all public places, recommends creating a public information program, and developing more effective tree protection ordinances. The Conservation Element also elaborates on the policy elements to be included in an Urban Forest Management Plan, including methods to protect public trees, enhance canopy coverage, species diversity and planting spaces, while decreasing maintenance and maximizing the environmental benefits of mature trees.

The General Plan Conservation Element Polices 9.1 through 9.5 outlines procedures for defining native woodlands as environmentally sensitive habitat areas (ESHA), and protecting and mitigating the impacts to them.

Figure 4.1 in the Conservation Element outlines the four remaining native woodland areas within the City of Goleta, not including riparian corridors. These include woodlands west of Glen Annie Creek adjacent to Dos Pueblos High School, five areas within Lake Los Carneros, areas within Stow Grove Park, and a portion of Oro Verde Open Space south of Via Salerno. All of these areas are north of Highway 101.

Other policies in the General Plan impacting urban forestry can be found in Transportation Element sections 3.7 and 6.6 dealing with the design width of street parkways and medians, and the requirement to develop a street tree guide for selecting appropriate species

The Visual and Historic Resources Element of the General Plan in sections 4.9 to 4-11, 5, 5.3 and 6 provides guidance on the preservation of specimen trees, incorporation of trees as part of streetscape design, tree density in parking lots, inventorying and preserving historic trees and landscapes, and the creation of a historic preservation board or committee to include historic trees.

The Planning Commission and City Council are currently reviewing establishing additional clarifications to General Plan ESHA policies that will eventually be included in City administrative regulations and possibly via ordinance.

b. City of Goleta Tree Ordinances

In general, City General Plan policies are incorporated into ordinances to provide for effective enforcement. The City also has specific ordinances dealing with the protection of native trees in environmentally sensitive habitat areas (ESHA). Upon incorporation, the City inherited prior tree ordinances These City tree ordinances are included as Appendix B. These ordinances need additional refinement in order to provide specific enforcement for policies identified in the General plan document

The City's ordinances provide legal support to city staff in dealing with public trees. However, the City's has very little if any legal control in dealing with privately owned trees.

c. City of Goleta Encroachment Permits

Permitting is an important part of protecting the public while work is being done in the public right of way. It assures that work is performed safely and meets the minimum City standards. A permit also helps avoid conflicting work within the public right of way.

The Public Works Division manages and administers encroachment permits for a variety of uses of the public right of way. Generally, the public right of way begins at the sidewalk and includes the parkway planting strip (which may be on either side of the sidewalk, the curb, and roadway surface. Below is a sampling of work in the public right of way that requires an Encroachment Permit be issued prior to work commencing:

- Any tree trimming, planting or removal on public land, including the parkway. The City has a pre-approved planting list for your use, but planting location and methods need to be approved by the City Arborist.
- Landscaping in the parkway, usually the strip of land between the curb and the sidewalk. Sometimes the parkway is at the back of the sidewalk. Poured concrete or mortared pavers are not allowed in the parkway.

Some property owners are confused about where their personal property ends and City right of way begins. Some property owners plant trees and other permanent structures in the public parkways in front of their properties as if they were extensions of their personal property. As a result, the City's tree inventory reflects a wide diversity of trees that were not part of a County or City authorized permitting process. City Community Services staff are responsible for monitoring and enforcing City ordinances through regular surveys and response to public requests.

4 Tree Management Practices
a. Current City of Goleta Urban Forest Practices

Upon incorporation of the City of Goleta in 2002, the City formally adopted all previous ordinances that were in existence at the time. As the City has gained experience and resources, urban forest practices have been developed to suit local City conditions through formal council actions and administrative practice.

Several City Councils' have acted to provide more specific direction to staff on a case by case basis. For example, City Council directed staff to allow for planting of different species of trees on a street. This direction is different from traditional landscape architecture guidelines that there should be only one type of street tree on a street. But it also reflects a growing ecological movement to increase the diversity of the urban forest in order to minimize impacts of devastating diseases and insect invasions.

During a period of numerous tree removals during a street improvement program, City Council instructed that any homeowner could opt out of a replacement street tree if they so desired. Given limited City resources, the City requires the assistance of adjacent property owners to help maintain a tree during its first few formative years. Only one in five homeowners during one five year stretch would opt for a replacement tree, due in part to fears that a new tree would eventually cause problems for them.

City policy articulated in 2003 is also to plant the right tree in the right place. This has led to changes in tree species selection, infrastructure design, and enhancement of young tree care programs. Young tree care provides critically important care during the first few years of their formative establishment period that results in lower costs and longer lived, stronger and healthier trees than seen in previous generations.

The process of developing a Park Management Plan is a large undertaking that will involve consideration of a multitude of issues including compliance with Americans for Disability Act requirements, ecological preserve considerations

and ultimate park design. The City does have adopted management plans for the Ellwood Mesa and the Lake Los Carneros Preserve. Until more specific park management plan information is available, staff has discouraged planting trees in park areas.

The City Council receives guidance in urban forest policy development through the Goleta Planning Commission and its review and application of the General Plan. The Design Review Board (DRB), an Advisory Body to the City Council and to City Community Services Staff, has an ad hoc Street Tree Advisory Committee composed of three DRB members. They review street tree issues to assist the Design Review Board in recommending design standards to be included in new development. The duties and responsibilities of the Street Tree Advisory Committee have not been formally developed by the DRB, the Planning commission or the City Council.

City Typical Local Road Design – The City of Goleta Comprehensive Plan Transportation element calls for 6 foot parkways as part of a typical local road design, which is two feet larger than most existing parkways. However, most new subdivisions have very few public trees. The majority of new streets and community open spaces and the trees along them are common private areas to be maintained by homeowner associations.

New median landscaping installation and maintenance is generally the responsibility of adjacent development, with most notable new landscaping occurring adjacent to Maravilla on Calle Real, Camino Real Marketplace on Storke, Hollister and Phelps, and La Sumida Gardens on Hollister.

City Street Tree Species List

The current approved street tree species as of February 11, 2009 are limited to the ones listed in Appendix D. There is no separate list for park or natural open space areas, or for other public buildings and areas

The purpose of the City's recommended street tree list is listed on the City's website

"The Recommended Street Trees List will be periodically reviewed and revised as necessary to remove problem trees and to add trees more suitable for Goleta's predominantly narrow street parkways and center dividers, in order to reduce maintenance (leaf litter cleanup, pruning & trimming) and to minimize damage to infrastructure from invasive tree roots, with a resultant cost savings for the City."

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The City's street tree species list is currently under review to relate the species list more closely to the City's adopted urban forest policies, including choosing species for maximum environmental benefit, canopy coverage, native tree

emphasis, longevity, sustainability and Increasing the diversity of species. In addition, the list will be reviewed for expanding to accommodate any public tree and to identify tree sites by the volume of available cubic root capacity of the tree at maturity.

City Tree Maintenance

Young and mature tree maintenance within the City of Goleta is done under contract with private sector firms specializing in tree care. The hazardous nature of the work requires special equipment and training. By contracting for services, the City can meet its tree care needs effectively while retaining budgetary control

The City tree maintenance program is that in addition to a systematic pruning of trees on a five year grid schedule, the City also coordinates with nonprofits to provide young tree care for newly planted trees. The structural pruning of young trees will substantially reduce future tree maintenance costs.

Park trees are maintained on an as needed basis to deal with high priority health and safety issues.

City Sidewalk and Street Hardscape Maintenance

The City recently completed a 5 year capital improvement program to upgrade street, curb and gutter, and sidewalks to urban standards, and continues to upgrade hardscape through an annual improvement program. Staff makes a conscientious effort to modify existing sidewalk design standards to accommodate existing large trees within the parkways, and many older large trees have been saved.

City Heritage Tree Designations

A heritage tree is defined as an outstanding specimen because of size, form, shape, age, color, rarity, genetic constitution, or other distinctive features; a distinctive community landmark; a specimen associated with a historic person, place, event or period; a representative of a crop grown by ancestors and their successors that is at risk of disappearing from cultivation; a specimen recognized by members of a community as deserving heritage recognition.

The Witness Tree, a 250 year old Sycamore located in the patio of the Sizzler Restaurant on Hollister Avenue, was designated as a Historical Landmark prior to the City incorporating. The Witness Tree is actually a substitute, as the original Witness Tree was cut down in the 1800's to build Hollister Avenue. It is the only tree designated as a historical landmark within what is now the City of Goleta. No trees have been designated as historical since the City has formed, and there is no current ~~legal administrative process for protecting any Heritage tree or tree of significance on public or private property.~~

Other City of Goleta Administrative Practices Pertaining to Trees

- The anticipated mortality rate for new trees is based on the experience of City and nonprofit new tree planting efforts within the Goleta Valley over the years 2000-2008. The average new tree mortality rate is 3% of trees planted dying within the first year, and 1% dying each year thereafter.

- IPM – The City manages disease and pest control through Integrated Pest Management (IPM) techniques.

- Maintenance – All pruning and maintenance work by City staff and contractors shall are performed in accordance American National Standards Institute (ANSI) standards and best management practices recommended by the International Society of Arboriculture.

b. City of Goleta Urban Forest Budget

While a separate urban forest budget is not specifically identified, the line items of various components of the city budget can be combined to compile an estimated annual urban forest budget of approximately $300,000. This amount will be reduced in 2009-10 due to across the board budget reductions. The budget chart on the following page is based on the following assumptions;

Number of Trees Maintained - Total managed street and park trees for the City of Goleta is 9,855, which includes 6,727 street trees and 3,128 park trees.

Frequency of Trimming Cycle-- The City currently annually contracts to prune every street tree on a five year cycles. This decreases the cost per tree while increasing the safety and condition of the trees, and reduces demand and storm damage requests.

The City currently annually contracts for pruning of Park and median trees on an as needed basis.

50 new street trees annually are planted and maintained by nonprofits for the first two years of tree establishment before they are transferred to the City for long term maintenance responsibility.

The primary source for funding street tree maintenance is Measure D, which accounted for $209,240 in FY 2008/09, and City General Funds.

Average Annual Tree Management Costs	Total Cost	Park Trees	Street Trees

1. Contract Maintenance - WSA	$175,000	$ 0	$175,000
2. Contract Maintenance – Valley Crest	$ 30,000	$25,000	$ 5,000
3. Pest & Disease Control Contract	$ 8,000	$ 0	$ 8,000
4. Tree Planting	$ 2,500	$ 0	$ 2,500
5. Administration, Inspection, Maintenance	$ 80,000	$40,000	$ 40,000
Total	$295,500	$65,000	$230,500

Notes:

1. West Coast Arborists $175,000 annual contract is for street tree maintenance ($25,000) and pruning ($150,000).
2. Valley Crest $45,000 annual contract is for median and park maintenance. Approximately $5,000 is allocated for tree maintenance in the median, with $15,000 used for general landscaping purposes, and the remaining $25,000 used for general park tree and landscape maintenance.
3. Spraying and injection of trees for disease and insect control occurs every two years at a cost of about $16,000 ($8,000 annualized), and is funded in part through Park Department budget allocation.
4. City tree planting by contractors is limited primarily to replacements and responding to special requests.
5. Personnel costs allocated in Full Time Equivalents

Public Works Mgr for Parks & Open Space	.4 FTE	$57,033
Lead Maintenance Worker	.1 FTE	$ 7,555
Lead Maintenance Worker II	.2 FTE	$13,908

   Also, the amount of Community Services staff time allocated for review of tree related activities in Planning and Environmental Services is less than 50 hours annually.
6. No amounts are included for litigation due to tree related activity as the City does not have a sufficient insurance claims to establish an average cost. Cost allocation costs are not included, nor are concrete repair costs of sidewalks, curb and gutter, which are budgeted in the road maintenance budgets.

c. Public Relations

While many Goleta homeowners enjoy the aesthetic and environmental benefits of large shade trees, those residential areas directly affected by deteriorated hardscape occurring before the City was formed have seen many large street trees removed, parkways paved over, or new trees being planted mostly without formal government approval. These actions are evident by the large number of species present that are not identified on adopted street tree lists, and the number of parkways without trees covered with impervious surfaces.

Public support comes in the form of the public's perception regarding the Urban Forestry program. Public support is necessary in order to obtain the funding necessary to pay for street tree management. Public support can be enhanced

through a wide variety of public relations programs including personal outreach by staff during the course of their daily activities, and public information distributed through the city's website, the Monarch News and during community events.

d. Tree City USA

2007 was the first year in which the City of Goleta was the recipient of a Tree City USA Award. This Award, sponsored by the National Arbor Day Foundation and coordinated with the State Urban Forester, is a very popular program that draws attention to a city's urban forestry program. There are 3,310 communities that are currently a Tree City USA. Over 120 million people live in a Tree City USA. 534 communities have received a Growth Award, also issued by the Arbor Day Foundation. The Growth Award recognizes additional achievement and encourages higher level of tree care in addition to the minimum Tree City USA qualifications

The City received the Tree City USA award again in 2008, and it will continue to be eligible to receive the award as long as it continues to meet four requirements of 1) having a Tree Board or Department, 2) have tree ordinances or by-laws, 3) have a comprehensive urban forestry program supported by a minimum $2 per capita, and 4) make an Arbor Day proclamation and hold a commemorative tree planting public ceremony. Additional details are found in Appendix F. The City is reviewing its eligibility to receive the higher level Growth Award.

e. Volunteers and Voluntary Programs

The City of Goleta partners with numerous public and nonprofit organizations to support public trees. Volunteers are used to assist City Departments in managing the urban forestry program, especially for tree planting and care projects.

Goleta Valley Beautiful Goleta Valley Beautiful, a nonprofit community service organization that has served the Goleta Valley since 1974. Goleta Valley Beautiful leverages community support and financial resources for Goleta Valley urban forestry programs. Approximately 1400 volunteers receive training in proper tree planting and tree care, which results in 500 trees a year being planted in the Goleta Valley.

Goleta Valley Beautiful also operates a Greenhouse and Growing Grounds with 2000 native trees under production that can be used for City projects. Goleta Valley Beautiful initiated the grant which financed the production of the Urban Forest Management Plan, and has contracted with the City to assist in the preparation of the plan.

Goleta Valley Beautiful has planted 1500 trees within the City since the City incorporated in 2002, with 702 trees becoming City responsibility after establishment. The long term maintenance of the rest are other public jurisdiction responsibilities

# of GVB Trees	Public Agency Receiving Trees

2	*Goleta Community Center-City*
6	*Santa Barbara County Fire-City*
88	*City of Goleta Parks-City*
606	*City of Goleta Streets-City*
8	Goleta Boys and Girls Club
140	Cal Trans
51	Girsh Park
52	Brandon Elementary School
48	Kellogg Elementary School
63	Ellwood Elementary School
64	La Patera Elementary School
40	El Rancho Elementary School
8	Goleta Union School District Administration
8	Isla Vista Youth Projects (Storke Ranch)
270	SBSD- Dos Pueblos High School
46	SBSD- Goleta Valley Jr. High School
1500	**TOTAL GVB TREES PLANTED WITHIN THE CITY OF GOLETA SINCE 2002**

Urban Creeks Council

The Santa Barbara Urban Creeks Council was formed 15 years ago to encourage the preservation, protection, and restoration of natural and urban streams. Their goal is to educate decision makers and the general public on the aesthetic, recreational and ecological values of natural streams located near our homes, places of employment, farms, or in commercial and industrial urban areas. They have been active in creek restoration efforts, including tree planting programs along San Jose Creek.

Growing Solutions Restoration Educational Institute

Growing Solutions mission is to build environmental and societal sustainability through hands-on education. Growing Solutions has been working to restore grasslands at the Spalding Preserve, and their work compliments urban forestry restoration efforts in the area.

APPENDIX A- General Plan Polices Pertaining to Urban Forests

Conservation Element

Policy CE 14: Preservation and Enhancement of Urban Forest [GP]

Objective: *To protect, preserve, and enhance Goleta's urban forest for its aesthetic, visual, and environmental benefits to the community.*

CE 14.1 Definition of Urban Forest. [GP] *Goleta's urban forest consists of all public and private trees, which include the street tree system, trees on parks and other public lands, trees on private properties throughout the city, and others.*
Goleta General Plan/Coastal Land Use Plan 4.0 Conservation Element September 2006 4-34
CE 14.2 Public Urban Forest Management. [GP] *Urban forests are recognized as a resource created and sustained for people. The urban forest is different from wildland forests in that it requires a higher level of management. The City considers the urban forest a valuable resource. As of 2005, it was estimated that the total number of trees situated within city street rights-of-way was about 7,500. The public portion of the urban forest shall be protected, preserved, and enhanced to: a. Provide an appropriate shade canopy for each of the various types of land uses so that the average total canopy will increase over time. b. Provide for a tree population of mixed ages, diverse species, and appropriate mix of tree types (evergreen and deciduous; native and nonnative in non-ESHA areas) in order to support a diverse forest ecosystem able to adapt to changing environmental pressures such as disease, pest infestation, and climate change. c. Maximize availability of planting spaces. d. Survive within the limitations of the existing resources with minimal maintenance once establishment occurs. e. Recognize that the maximum environmental benefit, such as those related to air quality, storm water runoff, and shade, occurs as trees reach maturity.*
CE 14.3 Tree Species List. [GP] *The City shall prepare and maintain an official public tree species list and apply it, as appropriate, to streets, parks, and other public areas.*
CE 14.4 Conservation of Trees on Public Property. [GP] *Trees on City property, including street rights-of-way, are valuable resources that will not generally be added to, removed, or substantially altered without City authorization.*
CE 14. 5 Public Urban Forest Master Plan. [GP] *The City may develop and maintain an Urban Forest Master Plan that describes and maps the resource, provides a vision statement, establishes measurable urban forest management goals*
and performance standards, presents a timeline for managing the Goleta urban forest, and includes any additional information that the City determines is appropriate.
CE 14. 6 Public Information. [GP] *The City will create and maintain a public information program to educate property owners on the benefits of and responsibilities for the care of Goleta's urban forest.*
CE 14. 7 Ordinance Standards. [GP] *The City will consider an ordinance to strengthen standards for trees in streets, medians, parkways, parks, or open space; heritage and native trees where they occur in an urban setting; parking lot shade; tree replacement; heat island mitigation; and anti-topping. The ordinance may establish an advisory committee and define its roles and responsibilities. The Urban Forest Ordinance shall be designed with the intention to meet the requirements to obtain Tree City USA status.*

Conservation Element Native Woodlands policies

CE 1.1 Definition of Environmentally Sensitive Habitat Areas. [GP/CP] ESHAs shall include, but are not limited to, any areas that through professional biological evaluation are determined to meet the following criteria:

a. Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and that could be easily disturbed or degraded by human activities and developments.
b. Any area that includes habitat for species and plant communities recognized as threatened or endangered by the state or federal governments; plant communities recognized by the State of California (in the Terrestrial Natural Communities Inventory) as restricted in distribution and very threatened; and those habitat types of limited distribution recognized to be of particular habitat value, including wetlands, riparian vegetation, eucalyptus groves associated with monarch butterfly roosts, oak woodlands, and savannas.
c. Any area that has been previously designated as an ESHA by a competent authority

Policy CE 9: Protection of Native Woodlands [GP/CP]
Objective: *To maintain and protect existing native trees and woodlands as a valuable resource needed to support wildlife and provide visual amenities.*
CE 9.1 Definition of Protected Trees. [GP/CP] New development shall be sited and designed to preserve the following species of native trees: oaks (*Quercus* spp.),walnut (*Juglans californica*), sycamore (*Platanus racemosa*), cottonwood (*Populus* spp.), willows (*Salix* spp.), toyon (*Heteromeles arbutifolia*), or other native trees that are not otherwise protected in ESHAs.
CE 9.2 Tree Protection Plan. [GP/CP] Applications for new development on sites containing protected native trees shall include a report by a certified arborist or other qualified expert. The report shall include an inventory of native trees and a Tree Protection Plan.
CE 9.3 Native Oak Woodlands or Savannas. [GP/CP] Native oak woodlands and savannas are designated as ESHAs and shall be preserved and protected. A minimum buffer area 25 feet wide shall be provided around the woodland, measured from the outer extent of the canopy of the trees or the critical root zone, whichever is greater.
CE 9.4 Tree Protection Standards. [GP/CP] The following impacts to native trees and woodlands shall be avoided in the design of projects except where no other feasible alternative exists: 1) removal of native trees; 2) fragmentation of habitat; 3) removal of understory; 4) disruption of the canopy, and 5) alteration of drainage patterns. Structures, including roads and driveways, shall be sited to prevent any encroachment into the critical root zone and to provide an adequate buffer outside of the critical root zone of individual native trees in order to allow for future growth.
CE 9.5 Mitigation of Impacts to Native Trees. [GP/CP] Where the removal of mature native trees cannot be avoided through the implementation of project alternatives or where development encroaches into the protected zone and could threaten the continued viability of the tree(s), mitigation measures shall include, at a minimum, the planting of replacement trees on site, if suitable area exists on the subject site, at a ratio of 10 replacement trees for every one tree removed. Where onsite mitigation is not feasible, offsite mitigation shall be provided by planting of replacement trees at a site within the same watershed. If the tree removal occurs at a site within the Coastal Zone, any offsite mitigation area shall also be located within the Coastal Zone. Minimum sizes for various species of replacement trees shall be established by ordinance. Mitigation sites shall be monitored for a period of 5 years. The City may require replanting of trees that do not survive.

Open Space Element 5.4 a. Preservation of Habitat areas
4. a. Priority habitat management activities include ensuring the long-term vitality of the eucalyptus groves and stability in the monarch butterfly population;

Transportation Element

Transportation Element
TE 3.7 Guidelines for Cross Sections
d. Center medians, where required, typically have widths of 14 feet
g. The typical width of a parkway or planting strip between curb and sidewalk is 6 feet.
TE 6.6 Street Trees and landscape Guidelines. The City shall develop a street tree guide for selecting appropriate tree species for landscaped and median strips, sidewalks and other landscaped areas.

VH 4.9 Landscape Design. [GP] *Landscaping shall be considered and designed as an integral part of development, not relegated to remaining portions of a site following placement of buildings, parking, or vehicular access. Landscaping shall conform to the following standards:*
a. Landscaping that conforms to the natural topography and protects existing specimen trees is encouraged.
b. Any specimen trees removed shall be replaced with a similar size tree or with a tree deemed appropriate by the City.
c. Landscaping shall emphasize the use of native and drought-tolerant vegetation and should include a range and density of plantings including trees, shrubs, groundcover, and vines of various heights and species.
d. The use of invasive plants shall be prohibited.
e. Landscaping shall be incorporated into the design to soften building masses, reinforce pedestrian scale, and provide screening along public streets and offstreet parking areas.

VH 4.10 Streetscape and Frontage Design. [GP] *A unified streetscape shall be created to improve the interface between pedestrians and vehicles. The following design elements shall be incorporated where feasible:*
a. Abundant street trees and landscaped medians.
b. Landscaping that buffers pedestrians and bicyclists from traffic without creating site distance conflicts.
c. Coordination of landscaping within the public right-of-way and adjacent development to provide an integrated street frontage.
e. Use of pavement treatments and decorative tree wells.
f. Accent planting, textured paving, and specimen trees used to establish identities at building entries.

VH 4.11 Parking Lots. [GP] *Parking lots shall be adequately designed and landscaped. The following standards shall apply (see related Policy TE 9):*
d. Pedestrian circulation shall be adequate, clearly delineated, and integrated with internal vehicle circulation to allow for safe and convenient pedestrian links from parking areas to building entrances. Planting strips should be used between traffic zones and sidewalks wherever possible.
f. Parking lot landscaping shall provide for adequate visual relief, screening, and shade. Adequate tree density shall be established and shall include approximately one tree for every four parking spaces. Deciduous trees in parking lots are discouraged due to the visual effects of loss of canopy.
g. Parking lot lighting shall be considered relative to the selection and location of parking lot trees and their height at maturity.
i. Permeable parking surfaces and grass-incorporated paving systems are encouraged to reduce stormwater runoff. Water quality protection measures such as storm drain filters should be used to minimize pollutants that would result in impacts to downstream water bodies or habitat.

Policy VH 5: Historic Resources [GP]
Objective: *To identify, protect, and encourage preservation of significant architectural, historic, and prehistoric sites, structures, and properties that comprise Goleta's heritage.*
VH 5.2 Locally Significant Historic Resources. [GP] *Structures or sites, including landscaping, having special historic, aesthetic, or cultural value to Goleta shall be designated as locally significant historic resources. A locally significant historic resource may include those resources listed, or eligible for listing, in the National Register for Historic Places, State Historic Landmarks, or the Santa Barbara County Landmarks/Places of Historical Merit inventories, as well as resources designated by the City. The City shall use the*

following eligibility criteria when considering a site or structure, including landscaping, for designation as a locally significant historic resource:
a. It exemplifies or reflects special elements of the city's cultural, social, economic, political, aesthetic, architectural, landscape architectural, or natural history.
b. It is identified with persons or events of local, state, or national history.
d. It represents works of a notable builder, designer, architect, or landscape architect.
f. It has a location with unique physical characteristics, including landscaping, or is a view or vista representing an established visual feature of a neighborhood or community.
g. It embodies elements of design, detail, materials, or craftsmanship representing a significant structural, architectural, or landscape architectural achievement.
i. It is one of a few remaining examples possessing distinguishing characteristics of an architectural, landscape architectural, or historical type.
j. It includes rare or specimen plant materials associated with a particular period or style of landscape history.

VH 5.3 Inventory of Historic Resources.
[GP] *An inventory of historic resources in Goleta shall be compiled, maintained, and updated. Such an inventory shall include resources previously designated as historic through a federal, state, or county designation process as well as those resources to be designated by the City, including heritage trees of special significance.*
Policy VH 6: Historical and Cultural Landscapes [GP]
Objective: *To identify, preserve, protect, and enhance significant historic landscaping, gardens, and open spaces, including agricultural areas and heritage trees, which contribute to the setting or context of Goleta.*
VH 6.1 Historical and Cultural Landscapes Definition. [GP]*A cultural landscape is defined as a geographical area including both cultural and natural resources associated with a historic event, activity, or person. A historical landscape is composed of character-defining features that contribute to the physical appearance over time. Such features may include vegetation, topography, water features, circulation features, buildings, and furnishings such as lights, benches, or fences. Historical and cultural landscapes may have been created through specific intent of a designer or by vernacular means.*
VH 6.2 Preservation. [GP]Historical and cultural landscapes and the heritage they represent shall be protected, preserved, and enhanced to the fullest extent feasible. Particular attention shall be paid to retention of the elements of agricultural areas that provide a historic context for buildings, such as the landscape around the caretaker's residence on Bishop Ranch. The City may consider acquiring protective easements to maintain such landscapes.
VH-IA-4 Creation of a Historic Preservation Board or Committee. The City shall establish an advisory board or committee to promote and assist in the preservation of Goleta's heritage through the identification, evaluation, and documentation of the City's historic resources. Board responsibilities may include maintenance of the City's historic resources inventory, including trees and landscapes of special significance; recommendations for designation of landmarks or structures of merit; and review and make recommendations regarding plans for exterior alterations and additions, relocations, and demolitions of designated landmarks and structures of merit.

Appendix B
City of Goleta Public Tree Ordinances

When the City of Goleta formed in February 2002, the City adopted previous ordinances and practices. Any references to 'Santa Barbara County' in the following ordinances should be replaced by 'City of Goleta". These ordinances apply to trees in street right of ways and separate ordinances pertaining to trees in park and open space areas,

CHAPTER 28 ROADS*

Article II. Street Trees

Sec. 28-55. Title.

This article may be known and referred to as the "Street Tree Regulations of Santa Barbara County." (Ord. No. 2624, § 1)

Sec. 28-56. Purpose.

The purpose of this article is to regulate and control all street trees along county roads in order to protect and preserve the existence thereof and thereby protect the public welfare. (Ord. No. 2624, § 1)

Sec. 28-57. Definitions.

For the purpose of this article, the following terms, phrases, words and their derivation shall have the meaning given herein. When not inconsistent with the context, words used in the present tense include the future; words in the plural number include the singular number, and words in the singular number include the plural number.

Authorized Agent. An employee of the county department of transportation designated by the director of transportation.

Contracted Agent. Any person, company or corporation hired or under contract for the purpose of performing designated work.

County. The County of Santa Barbara in the State of California.

Director of Transportation. The director of transportation or the assistant director of transportation for the county.

Maintenance or Maintain. Pruning, planting, spraying, watering and staking, and similar acts necessary to promote health, growth and beauty to trees.

Road Right-of-Way. That area of land on which the road is built and that land on each side of the road for the specified distance covered by county road easements or by county owned land acquired for road purposes and within the county maintained road system.

Street Tree. Any perennial plant with a woody trunk, branches and leaves growing in any road right-of-way as defined herein. (Ord. No. 2624, § 1)

Sec. 28-58. Authorization of additional regulations.

In addition to the regulations contained in this article of this chapter, the board of supervisors may, from time to time, by resolution, adopt additional regulations establishing fees for permits hereunder, regulating planting and care of street trees, and otherwise providing for protection and perpetuation of street trees, which shall have the full force and effect of law. (Ord. No. 2624, § 1)

Sec. 28-59. Obstruction of entrance for water and air.

No person shall place, or cause to be placed, any stone, cement or other substance about any tree planted along any road, or on other county owned property, which shall impede the free entrance of water or air to the roots of such tree, without leaving an open space of ground around the trunk of such tree of not less than sixteen square feet. (Ord. No. 2624, § 1)

Sec. 28-60. Replacement planting; variety changes.

Replacement trees shall be planted by department of transportation personnel or a contracted agent during the proper season of each year. No trees shall be planted by any other persons except with the prior written approval of the director of transportation or an authorized agent. Replacement trees shall be of the same variety and size where applicable. If a variety change is requested, such request must be in written form and submitted to the director of transportation or an authorized agent. (Ord. No. 2624, § 1)

Sec. 28-61. Removal and mutilation.

Trees located within the road right-of-way or in any publicly owned property shall not be removed, cut down, mutilated or otherwise injured, except upon the approval of the county road commissioner or director of parks, or, except further, to the extent reasonably necessary to accommodate the placement or maintenance of public utility facilities. (Ord. No. 2624, § 1; Ord. No. 3703, § 1)

Sec. 28-62. Damage by other means.

No person shall place or cause to be placed any chemical, material, or object or substance deleterious to trees in a location where it will kill, injure or otherwise harm any tree within a road right-of-way or in any publicly owned property, nor so that it will impede the free access of water and air to such trees, including necessary parts of the root system without the approval of the county road commissioner or director of parks. (Ord. No. 2624, § 1; Ord. No. 3703, § 2)

Sec. 28-63. Permits to cut down or remove.

Special written permits may be issued by the county department of transportation to remove or cut down trees within the road right-of-way, in appropriate cases, including, but not limited to, dead, dying or diseased trees and trees that are, or are likely to become, hazards to vehicular or pedestrian travel on public roads. Such permits may contain reasonable conditions, including but not limited to, provisions for replacement of such removed or cut down trees, with other trees, initial maintenance of such replacement trees, protection of the traveling public and the road improvements, reasonable time limits, and a fee to be paid to the county department of transportation to defray the cost of any necessary inspections. (Ord. No. 2624, § 1)

Sec. 28-64. Penalty.

Any person who by any means willfully or maliciously digs up, cuts down, destroys or otherwise injures any street tree as defined herein, or who violates any of the provisions of this article, or who violates any regulations adopted pursuant to section 25-28 of this Code, shall be guilty of a misdemeanor and punishable as provided in section 1-7 of this Code. (Ord. No. 2624, § 1)

CHAPTER 26 PARKS AND RECREATION*

*Note to Chapter 26

Sec. 26-1. Definitions.

As used in this chapter, the following terms shall have the meanings as designated:

"County park" means an area dedicated to public recreational use and designated by the county board of supervisors as a county park.

"County recreation area" or "recreation area" means any area of the county dedicated for park, recreation, trails or open space use, or subject to an easement for active or passive public recreational use, including without limitation, any county park, trail, open space, lake, beach and beach access easement.

"County beach" or "public beach" means any area adjoining a body of water which is subject to public recreation use, including active and passive uses, and including the area of water one hundred yards out from shore, and including, also, any area of such body of water as is marked and identified as a special use area. (Ord. No. 3708, § 1)

Sec. 26-2. Enforcement of rules and regulations.

The park department is authorized to enforce the provisions of this chapter and to provide for regulations, as required, for the safe, healthful, and orderly use of recreation areas; to prevent the misuse of such areas; and to protect the peace, health, safety and welfare of the general public and park resources as the director and staff of the park department determine to be necessary. (Ord. No. 3708, § 1)

Sec. 26-3. Citations.

The park director, any assistant park director, any park superintendent, any assistant park superintendent, any park ranger I, any park ranger II, any park ranger IV and any agent employed or contracted for to provide lifeguard services are public officers as identified in Penal Code section 836.5, specifically authorized to enforce the laws and ordinances necessary for the orderly use of parks and recreation areas, for the protection of public property, and the health, safety and property of park visitors while within property owned or leased by the county, or over which the county has an easement or dedication for recreation purposes, or over which the county exercises responsibilities for recreation by arrangement with the owner. Such public officers are authorized to issue citations requiring an appearance to answer charges whenever the officer has reasonable cause to believe that a person has committed an act or offense within the officer's presence which is a violation of this chapter, or is a public offense, within or in the immediate vicinity of and which affects the use, benefits and/or enjoyment of property owned or leased by the county; or over which the county has an easement or dedication for recreational purposes; or over which the county exercises responsibility for recreation uses or services by arrangement with the owner. (Ord. No. 3708, § 1)

Sec. 26-6. Penalty; continuing violation.

(a) Any entry into or use of a county recreation area, requiring a fee established pursuant to this chapter, which is made without paying or receiving a modification of that fee; and any use or entry in violation of the terms of any permit required for such use or entry; and any violation of any provision of this chapter is a crime. Unless otherwise provided in this Code, the offense may be filed as either an infraction or as a misdemeanor, at the discretion of the district attorney of the county, or deputy.

(b) If filed as an infraction and upon conviction thereof, the crime shall be punishable by:

(1) A fine not exceeding one hundred dollars for a first violation;

(2) A fine not exceeding two hundred dollars for a second violation of a provision of this chapter within one year; and

(3) A fine not exceeding five hundred dollars for each additional violation of this chapter within one year.

(c) Unless otherwise provided in this Code, if the offense is filed as a misdemeanor and upon conviction thereof, the punishment shall be a fine not exceeding five hundred dollars, or imprisonment for a term not exceeding six months, or both such fine and imprisonment.

(d) A person shall be guilty of a separate and distinct offense for each and every day or portion thereof during which any violation of this chapter is committed, continued or permitted. (Ord. No. 3708, § 1)

Sec. 26-25. Picking flowers, injuring trees, etc., prohibited.

No person shall pick flowers, foliage, berries, herbs or fruit, or cut, break, dig up or in any way mutilate or injure any tree, shrub, plant, fern, grass, turf, landscaping, natural feature, railing, seat, fence, equipment, structure or other object or device within any county recreation area, except by permit of the county director of parks, or deputy. (Ord. No. 3708, § 1)

APPENDIX C

City of Goleta 2/11/09 Recommended Tree Species - trees added 2/10/2009 in bold

STREET TREE PLANTING LIST

Minimum Parkway Width	Recommended Trees	Botanical Name	Root Barrier Recommended To Be Used	Height at Maturity	Remarks (NR=Not recommended)
Three feet	BRAZILIAN BUTTERFLY	*Bauhinia forficata*	Yes	30’	OK
	CHINESE FRINGE	*Chionanthus retusus*	Yes		OK
	GEIGERTREE	*Cordia sebestena*	Yes	30’	OK
	JAPANESE MAPLE	*Acer palmatum*	Yes	20’	OK
	JAPANESE SNOWBALL	*Styrox japonicus*	Yes	30’	OK
	PURPLE ORCHID	*Bauhinia varigata*	Yes	30’	OK
	PURPLE-LEAF PLUM	*Prunus cerasifera*	Yes	30’	OK
	SWAMP MYRTLE or WATERGUM	*Tristania laurina*	Yes	20’	OK
	TAIWAN FLOWERING CHERRY	*Prunus campanulata*	Yes	20’-25’	OK
Four Feet	ASH	*Fraxinus holotricha*	Yes	30’-40’	OK
	AUSTRALIAN WILLOW	*Geijera parviflora*	Yes	35’	OK
	BRONZE LOQUAT	*Eriobotrya deflexa*	Yes	25’	OK
	CAPE CHESNUT	*Calodendrum capense*	Yes	25’-40’	OK
	CHINESE FLAME TREE	*Koelreutarria bipinnata*	Yes	40’	OK
	CHINESE MAIDENHAIR TREE	*Ginkgo biloba*	Yes	50’	Ok but males trees only
	CHINESE PARASOL TREE	*Firmiana simplex*	Yes	30’-45’	OK
	CHINESE PISTACHE	*Pistacia chinensis*	Yes	40’	OK
	EVERGREEN PEAR	*Pyrus kawakami*	Yes	30’-35’	OK
	FIREWHEEL	*Stenocarpus sinuatus*	Yes	25’	OK
	FLOWERING CHERRY	*Prunus yedoensis*	Yes	40’	OK
	GOLDEN PENDA or EXPO GOLD	*Xanthostemon chrysanthus*	Yes	30’-40’	OK
	HONG KONG ORCHID	*Bauhinia blakeana*	Yes	20’	OK
	MADRONE	‘Marina’ *Arbutus “marina’*	Yes	40’	OK
	PAPER BARK MAPLE	*Agriseum*	Yes	35’	OK
	PINK TRUMPET TREE	*Tababuia ipe*	Yes	30’	OK
	SERVICE BERRY	*Amelanchier cumulus*	Yes	40’	OK
	SPAETHI	*Acer atropurpureum*	Yes	30’-40’	OK
	SWEETSHADE TREE	*Hymenosporum flavum*	Yes	40’	OK
	SYCAMORE MAPLE	*Acer pseudoplantanus*	Yes	40’	OK
	WEEPING BOTTLEBRUSH	*Callistemon viminalis*	Yes	20’-40’	OK
Five Feet	CAPE CHESTNUT	*Calodendrum capense*	Yes	40’	OK
	FLAME BOTTLE TREE	*Brachychiton acerifolia*	Yes	40’	OK
Six Feet	GOLDEN RAIN TREE	*Koelreuteria paniculata*	Yes	25’	OK
Center Divider	BRADFORD PEAR	*Pyrus callyreana “Redspire, Aristocrat”*	Yes	50’	OK for center divider only
	BRISBANE BOX	*Lophostemon conferta*	Yes	60’	OK for center divider only
	COAST LIVE OAK	*Quercus agrifolia*	Yes	50’-70’	OK for center divider only
	CORK OAK	*Quercus suber*	Yes	60’	OK for center divider only
	EASTERN RED BUD	*Cercis canadensis*	Yes	20’	OK for center divider only
	FRUITLESS OLIVE	*Olea europea ‘Swan hill’*	Yes		OK for center divider only
	ISLAND OAK	*Quercus tomentella*	Yes		OK for center divider only
	INCENSE CEDAR	*Calocedrus decurrens*	Yes	60’	OK for center divider only
	JACARANDA	*Jacaranda acutifolia*	Yes	40’	OK for center divider only

	NEW ZEALAND X-MAS TREE	*Metrosideros excelsus*	Yes	30’	OK for center divider only
	RIVER BIRCH "HERITAGE"	*Betula nigra 'Heritage'*	Yes	50’-90’	OK for center divider only
	SAUCER MAGNOLIA or TULIP TREE	*Magnolia Soulangiana*	Yes	20’	OK for center divider only
	SOUTHERN MAGNOLIA or BULLBAY	*Magnolia Soulangiana*	Yes	20’	OK for center divider only
	WESTERN RED BUD	*Cercis occidentalis*	Yes	18’	OK for center divider (from 24’box)
Not Recommended for reasons as noted	CRAPE MYRTLE	*Lagerstoemia indica*			NR - susceptible to mold
	RHAPHIOLEPIS ‘Majestic Beauty’	*Raphiolepis ‘Majestic Beauty’*			NR – shrub
	LEMON BOTTLEBRUSH	*Callistemon citrinus*		25’	NR - attracts bees
	LITTLE GEM MAGNOLIA	*Magnolia grandiflora ‘Little Gem’*		20’	NR - bushy / messy
	LONG-LEAFED YELLOW WOOD	*Podocarpus henkelii*			NR – invasive roots
	CATALINA IRONWOOD	*Lyonothamnus floribundus, asplenifolius*		60’	NR - high maintenance
	GOLD MEDALION	*Cassia leptophylia*			NR - large pods are a hazard
	SILK TREE MIMOSA	*Albizzia julibrissin*		40’	NR - high maintenance
	PEPPERMINT TREE	*Agonis flexuosa*		35’	NR - needs space, grows too wide
	SHOESTRING ACACIA	*Acacia stenophyllia*		30’	NR – weak` roots, too much pollen
	CAJEPUT or PAPERBARK TREE	*Melaleuca quinquinervia*			NR - invasive roots, water hog
	CALIFORNIA BAY LAUREL	*Umbellularia californica*			NR - invasive roots
	SWEETBAY or GRECIAN LAUREL	*Laurus nobilis ‘saratoga’*			NR - invasive roots
	CITRUS ‘LEMON or ORANGE	*Citrus sinensis*			NR - drops messy fruit, draws rats
	FERN PODOCARPUS	*Podocarpus gracilior*			NR - invasive roots, drops pods
	ITALIAN STONE PINE	*Pinus pinea*			NR - invasive roots
	CANARY ISLAND PINE	*Pinus canariensis*			NR - large cones are hazardous
	CALIFORNIA SYCAMORE	*Platanus racemosa*			NR - invasive roots, dead leaves
	CAMPHOR	*Cinnamomum camphoraa*		50’	NR - invasive roots
	HOLLY OAK	*Quercus ilex*		40’-50’	NR - hybridizes, drops many acorns

Appendix D - City Tree Planting Procedures

The following is an extract of the City's recommended tree planting guidelines as of 2/11/09

4. Root barriers to be installed when planting a street tree 7.5 ft. or less from hardscape in any parkway or center divider. (Measured from root flair to inside edge of hardscape.)
a. Sidewalk side – 16"-18" high x 8 ft. long barrier centered on tree trunk.
b. Curb side – 18"-24" high x 8 ft. long barrier centered on tree trunk.
c. Tree well – 12" to 18" high barrier, sized to fit perimeter of well, as specified by the City Arborist. (Well to be designed to accept standard sizes and lengths of root barriers so no special joints are required.)
5. Container sizes
a. New developments – 24" box minimum.
b. Replacement trees – 15 gal. container or 24" box, as directed by the City Arborist.
6. Planting details
a. Hole dimensions to be specified and confirmed by the City Arborist.
b. Backfill material to be specified by the City Arborist and to include organic source soil fertilizer containing worm castings.
c. Aeration tubes, if specified by the City Arborist, shall be 3 ft. deep, 3" diameter PVC Schedule 40 pipe backfilled with ¾" gravel.
d. Double stakes and rubber ties to be installed for support.
e. Dirt berm to be constructed around perimeter of planting hole to form a watering basin.
f. After backfilling, staking and initial watering, mulch layer to be placed around planting for water retention.
7. Tree Planting Location Requirements
a. Planting holes should be centered within the parkway or center divider.
b. Planting holes should be a distance of 10 ft. minimum away from water meter boxes, underground utility lines, etc.
c. Trees should be set a minimum of 75 ft. away from the center point of intersections.
d. Trees should be selected and located such that upon reaching maturity, foliage will not block street lighting or grow into overhead power lines.
e. Where possible, replanted replacement trees should be offset, not placed in spaces previously occupied by removed trees.

Appendix E – Tree City USA Award Requirements

1. The City must have a tree board or department;

Someone must be legally responsible for the care and management of the community's trees. This may be a professional forester or arborist, an entire forestry department, or a volunteer tree board. Often, both a professional staff and advisory tree board is present, which is a good goal for most communities. A tree board, or commission, is a group of concerned volunteer citizens charged by ordinance with developing and administering a comprehensive tree management program. Balanced, broad-based community involvement is encouraged. Boards function best if not composed entirely of tree-related professionals such as forestry professors, nursery operators, arborists, etc. Fresh ideas and different perspectives are added by citizens with an interest in trees that is entirely vocational. Limited, staggered terms of service will prevent stagnation or burnout, while at the same time assuring continuity.

2. The City must have a tree ordinance or by-law;

The tree ordinance must designate the establishment of a tree board or forestry department and give this body the responsibility for writing and implementing an annual community forestry work plan. Beyond that, the ordinance should be flexible enough to fit the needs and circumstances of the particular community. A tree ordinance provides an opportunity to set good policy and back it with the force of law when necessary. Ideally, it will provide clear guidance for planting, maintaining and removing trees from streets, parks and other public places

3. The City must have a comprehensive urban forestry program supported by a minimum of two dollars per capita;

Evidence is required that the community has established a community forestry program that is supported by an annual budget of at least $2 per capita. Working toward Tree City USA recognition can be used to re-examine the community's budget priorities and re-direct funds to care properly for its tree resources. Ideally, this standard will be met by focusing funding on an annual work plan developed after an inventory is completed and a report is approved by the city council. Such a plan will address species diversity, planting needs, hazardous trees, insect and disease problems and a pattern of regular care such as pruning and watering.

4. The City must make an Arbor Day proclamation and hold a commemorative tree planting at a public ceremony.

This is the least challenging and probably the most enjoyable standard to accomplish. An Arbor Day celebration can be simple and brief or an all-day or all-week observation. It can be a simple tree-planting event or an award ceremony that honors leading tree planters. For children, Arbor Day may be their only exposure to the green world or a springboard to discussions about the complex issue of environmental quality. The benefits of Arbor Day go far beyond the shade and beauty of new trees for the next generation. Arbor Day is an excellent opportunity for publicity and to educate homeowners about proper tree care. Utility companies can join in to promote planting small trees beneath power lines or being careful when digging. Smokey Bear's fire prevention messages can be worked into the event, as can conservation education about soil erosion or the need to protect wildlife habitat. Still another way to develop Arbor Day is to link it with a tree-related festival.