

CITY OF DEL MAR
URBAN FOREST MANAGEMENT
AND
FIRE SAFETY STRATEGIC PLAN

1999

Urban Forest Management Fire Safety Plan
Steering Committee

Urban Forest: the total of all trees, shrubs and other vegetation growing in the urban setting of a village, small town, or city. Such a forest should enhance the urban environment, provide wildlife habitats, enhance community aesthetics, and improve the quality of people's lives.

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GLOSSARY

CITY OF DEL MAR
URBAN FOREST MANAGEMENT AND FIRE SAFETY
STRATEGIC PLAN

BACKGROUND AND PURPOSE

Del Mar's Forest. Photographs in the archives of the Del Mar Historical Society show that in 1886, when Jacob Taylor opened La Casa Del Mar hotel on 10th Street, the hill above present day Camino del Mar was devoid of trees. In that same year Taylor, the founder of Del Mar, began to plant Monterey cypress saplings on both sides of 10th Street and some of the adjacent streets in what was then the village center. Some of those trees are alive today.

Pictures taken ten years later show a dense planting of hundreds of small eucalyptus trees on portions of the hill. The first Torrey pines in Del Mar did not appear until even later, probably growing from seeds dispersed by natural means from trees to the south in what eventually became the Torrey Pines State Reserve. In succeeding years, the eucalyptus forest was thinned out as roads and houses were built on the slopes, leaving the most dense stand at the north end of the hill, overlooking the San Dieguito River.

Starting in the mid-1950s, more and more Torrey pines were introduced by residents into Del Mar's landscape, with a deliberate effort being made in the late '60s and early '70s, around the time the Torrey Pines State Reserve Extension was established to the south of the city. One year, the City gave away Torrey pine seedlings for the residents to plant at home. Many of the mature pine trees we see today in Del Mar are the products of that program.

The Tree Preservation Ordinance of 1978 gave protected status to Monterey cypress and Torrey pine trees of a certain size. This resulted in a shift in species composition in our urban forest. Because the public was free to remove any tree other than those protected by the ordinance, Torrey pines slowly dominated the landscape and became culturally significant to the city.

Origin of the Forest Management Committee. A report titled "Del Mar's Mismanaged Urban Landscape", presented to the City Council by local resident Brian Capon on March 13, 1995 called for a plan of action for better management of the city's landscape, and asked the council to consider both the tree ordinance and the fuel load in Del Mar in light of a series of devastating wildfires that had occurred in the Oakland-Berkeley Hills, Malibu, Altadena, and Laguna Beach.

The City Council voted to refer the report to the Lagoon Committee, Parks and Recreation Committee, and city Staff. Staff conducted an extensive, 20-month study of the ordinance and fire safety issues in Del Mar. Their report to City Council on November 4, 1996 recommended the development of a comprehensive public fire safety information campaign and a comprehensive city-wide urban forest management/fire safety plan. It was from the latter that the Urban Forest Management Fire Safety Plan Steering Committee was born.

The Committee consisted of representatives from city standing committees (Lagoon, Parks and Recreation, Design Review Board, Planning Commission), the Del Mar Garden Club, and two residents at-large. Two City Council liaisons were appointed and two Staff liaisons completed the group. Its first meeting was held on September 10, 1997 with regular monthly meetings thereafter. The Committee was assisted by Urban Forester Linda J. Romero of the Resource Agency, State of California Department of Forestry and Fire Protection, who gave valuable direction during the preparation of this report. Representatives from the Fire Department were also present to answer questions and give advice.

Purpose of the Forest Management Plan. The century of development of Del Mar's urban forest was marked by a transition from barren hillside to eucalyptus forest, to the woodland dominated by Torrey pine we see today. Absent, however, was a systematic city plan that ensured a balance between aesthetics and fire safety; or guidelines to encourage a mixed species tree composition that guarantees the continuance of a forested landscape even if one species were decimated by disease.

Over the years, trees were planted or allowed to grow from disseminated seeds simply as individual residents saw fit, and without concern for the relationship of those trees to the urban landscape as a whole. The developing forest was allowed to grow in a natural, unstructured fashion, without consideration of the need for fire breaks between trees, or selective thinning of trees, branches and undergrowth to keep the city's total fuel load at manageable levels.

The purpose of this Urban Forest Management and Fire Safety Strategic Plan is to give **direction** to the future of Del Mar's forest, to integrate the concepts of preservation, aesthetics, diversity, and fire safety into a workable program that maintains the attractive appearance of the community. If the community should ever suffer the consequences of a wildfire, or a major insect or disease attack, the Management Plan will be in place to begin an immediate restoration of one of Del Mar's most precious natural resources.

VISION STATEMENT

A sustainable urban forest that contributes to an optimum quality of life in Del Mar.

MISSION STATEMENT

To develop and maintain an urban forest that benefits the citizens of Del Mar by way of goals and objectives set forth in this Urban Forest Management and Fire Safety Strategic Plan.

Fulfillment of the plan's tactics and strategies shall be the responsibility of a citizen's standing Del Mar Forest Management Committee, appointed by the City Council, working with city Staff.

PRIMARY GOALS AND VALUES

I **Fire safety** for the preservation of life and property through public awareness and fuel load management.

II **Sustainability of Del Mar's ecosystem** to maximize benefits and minimize the cost of a healthy landscape in perpetuity.

III **Visually aesthetic landscaping** for the enjoyment of residents and continuous enhancement of the environment.

IV **Diversity of Del Mar's tree age and species** to ensure the health, fire safety, and visual aesthetics of the landscape.

V **Protection** of historical tree specimens and **preservation** of culturally significant trees.

ADDITIONAL GOALS AND VALUES

Noise abatement, wildlife habitat protection, air quality improvement, watershed protection, calmed traffic flow, and enhanced pedestrian atmosphere.

All strategies and implementations shall meet the intent of all primary goals and values.

OBJECTIVES

I. Fire Safety - The City of Del Mar shall make a continuous effort to reduce the fuel load and heighten public understanding of the relationship between vegetation, local topography, fire behavior, and "defensible space."

II. Sustainability of the Ecosystem - Del Mar's urban forest has become a part of the local ecosystem and should be retained as such. It should be composed primarily of trees and shrubs that can be sustained to maximize the benefits with minimal expenditure by the City and property owners for irrigation, pruning, and disease control.

Preferred species are those that have potentially long lives, are fire resistant, and least prone to attack by common pests and disease organisms. When trees are selected for city property, the amount of maintenance required should be considered (for example, avoidance of certain kinds of fruit-bearing trees).

The City shall provide public awareness programs and encourage citizen participation in planning and maintenance to ensure a sustainable urban ecosystem.

III. Visually Aesthetic Landscaping - The City of Del Mar shall maintain a visually aesthetic landscape by encouraging the following:

- Various heights of trees and associated vegetation citywide to provide overstory and understory where appropriate.
- Trees with various crown shapes such as pyramidal, columnar, spreading, etc.
- Natural appearing tree clusters as well as individual specimens.
- Leaf and flower variation to allow for seasonal color.

IV. Diversity of Tree Age and Species - The City of Del Mar shall encourage the maintenance of a multi-aged stand and, over time, a diverse composition of tree species to include deciduous, evergreen, temperate, subtropical, flowering and coniferous types.

To reduce disease and pest infestation and/or the spread of wildfire, ideally no one species should make up more than ten percent of the entire urban forest.

V. Protection and Preservation - The City of Del Mar shall protect its historic trees for the duration of their natural lives. Namely, the Monterey cypress planted along the streets in the old section of the city by Jacob Taylor, the founder of Del Mar, in the 1880s; the Canary Island palms lining Coast Boulevard, planted by local resident, Luke Kibler in 1936; and the three palms in Powerhouse Park, planted in the 1930s.

Because historic trees cannot be replaced when they die, the City should retain a similar aesthetic feeling with replacement trees while not necessarily planting the same species. An exception shall be the three Powerhouse palms that must be replaced by mature specimens of Canary Island palm.

The City shall recognize the significance of the Torrey pine as the one tree species indigenous to this geographic area and of cultural importance to Del Mar. Hence, Torrey pines shall be protected as per regulations of the Del Mar Tree Ordinance (Chapter 23.50 of the Municipal Code).

The **Additional Goals and Values** shall be considered when implementing the Primary Goals and Values.

STRATEGIES

Goal I - Fire Safety

Strategy 1 - **Education.** Through education, the public will become more aware of fire behavior and how it is affected by the type and amount of vegetation present.

Tactics:

- a. Periodic mailings, through utility billing, will depict fire behavior and fire safety concepts.
- b. Apply for grant monies available for developing educational materials.
- c. Develop a tree management/fire safety video for Del Mar residents and business owners.
- d. Periodic columns in local newspaper will give tips on fire safety in the home and garden.
- e. Del Mar Fair should be encouraged to provide an opportunity to display fire safe concepts to the public.

- f. A fire safe demonstration garden will provide visual aspects of fire safe landscaping - plan to coordinate with Quail Botanical Gardens.
- g. When a local Garden Club conducts garden tours, fire safety concepts can be introduced.
- h. Develop a plant palette emphasizing fire resistant plant species.
- i. Organize workshops/training for gardeners and landscape maintenance professionals on fire safe practices.
- j. Develop and provide pruning and spacing guidelines for Torrey pine and Eucalyptus.
- k. Add to Del Mar's web site fire safe landscaping concepts and a plant palette for fire resistant species, and provide other links to relevant sites.
- m. Publicize the availability of the Fire Department's fire safety advice for property owners.

Strategy 2 - Fuel Reduction. By reducing the amount of fuel (vegetation) in Del Mar, potential fires will be more manageable and less likely to move through the residential areas.

Tactics:

- a. Crest Canyon Management Plan - implement Council-approved sections of the plan.
- b. Extend the fire management plan analysis to other high fire hazard areas in Del Mar.
- c. Investigate incentives for homeowners to create landscapes that conform to fire safe standards.
- d. Expand Del Mar's Fire Department annual Fuel Reduction Program (removal of green waste from curb) to occur at more frequent intervals.
- e. Limit the number and distribution of pyrophytes, such as pines and eucalyptus, at the Design Review level.
- f. Schedule volunteer work days for weed abatement in Crest Canyon and other high fire hazard areas and coordinate with local environmental groups to supervise.
- g. Apply for FEMA grants and investigate other potential sources of funding for fuel reduction.

Strategy 3 - Reduce Ignition Sources. By reducing the number of ignition sources the potential for a fire to start will decrease.

Tactics:

- a. Provide for the removal of household hazardous wastes in Del Mar.
- b. Eliminate overhead electrical lines by relocating all utility lines underground.
- c. Identify "red flag" days and provide warning for residents recreating in the canyon; i.e., no smoking signs, fire hazard sign declaring daily hazard as low, medium, or high.

Strategy 4 - Fire Plan. By reviewing the Del Mar Fire Plan, constraints and opportunities can be identified which may aid the Fire Department's efforts in fire control.

Tactics:

- a. Increase the water flow along Crest Road from 700-1500 gpm to 2500-4000 gpm. (Coordinate trenching of new pipeline with undergrounding of utilities.)
- b. Encourage the City of San Diego to maintain the maintenance road in Crest Canyon for use as a fire road.
- c. Develop an identification grid for use by homeowners to identify the location of a fire in Crest Canyon.

Strategy 5 - Building Codes and Ordinances. By reviewing and making necessary changes in policies and ordinances, and by providing education on fire safe building construction, Del Mar can become a more fire safe community.

Tactics:

- a. Eliminate all shake roofs in Del Mar by reviewing the current ordinance and determining if it can be more stringent.
- b. Provide financial incentives through grants or insurance credits for homeowners to retrofit homes with fire safe materials.
- c. Encourage local construction firms to provide a display in City Hall on various roofing material and construction methods for fire safety.
- d. Review DRB landscaping policies and provide education for DRB members on fire safe landscaping and construction methods.
- e. Promote the use of rooftop sprinklers for non-Class A roofs.

Goal II - Sustainability of the Ecosystem

Strategy 1 - Policy Manual. With the development and adoption by the City Council of a policy manual, specific standards for the care of publicly owned trees will ensure the highest care for the longevity of each tree.

Tactics:

- a. Minimum standards for pruning publicly owned trees shall follow International Society of Arboriculture standards, and shall prohibit the topping of publicly owned trees.
- b. A checklist of the health and condition of each tree shall be developed to determine if it meets the criteria necessary for removal.
- c. A list of reasons that are not valid for removal of a public tree (e.g. messy fruits, obstructing views) shall be developed.
- d. Tree care guidelines regarding cultivation practices and environmentally sound pest control shall be developed.
- e. Tree planting guidelines shall be developed that: ensure selection of trees of diverse age and species, and meeting prescribed quality standards; outline planting specifications including the use of root barriers around trees to prevent their destruction of surrounding hardscape, sewer lines, etc.
- f. A tree/hardscape conflict policy shall be developed to evaluate damage and ways to save the trees involved.
- g. Contract specifications for the care of public trees shall reflect the current policy manual to ensure all tree care contracted out to private entities shall be in accordance with City policy.
- h. The Forest Management Committee shall be responsible for following and reviewing the policy manual, and making recommendations to City Council for revisions.

Strategy 2 - Work Plan. A five year work plan will allow the City of Del Mar to manage its urban forest in a preventive mode rather than a crisis maintenance mode.

Tactics:

- a. Conduct a periodic inventory of Del Mar's street and park trees to determine vacant tree wells and assess the health of the existing stand.
- b. Through analysis of the inventory, identify priorities in the work plan (e.g. over-mature trees, hazardous trees).
- c. Develop a work plan that phases in planting, pruning, and removal to create an urban forest of trees of varied ages.

Strategy 3 - Education. Through education the public will become more aware of the elements of sustainability.

Tactics:

- a. Include the pruning standards and preferred species list on Del Mar's web site, in city mailings and at public facilities.
- b. Promote the use of certified arborists for residents to ensure the highest possible care for private trees.
- c. Develop a check list to assist residents in selecting an arborist.
- d. Encourage the local garden clubs to conduct pruning workshops for residents.

Strategy 4 - Funding. Ensure long range funding sources for urban forestry activities by identifying sources and how to best utilize them.

Goal III - Visually Aesthetic Landscaping

Strategy - Education. Through education, the public will become aware of the various components of the urban forest, how to care for its trees, and the role they play in providing an aesthetically pleasing landscape.

Tactics:

- a. A tree and shrub guide for residents of Del Mar will depict various shapes and seasonal colors.
- b. Use demonstration gardens to explain design techniques that may assist homeowners.
- c. A local garden club may provide design workshops for residents.
- d. Del Mar's website should have links to interactive programs designed to match tree species with planting sites.
- e. For new development applications, a plant palette that depicts trees and shrubs of various shapes and sizes, as well as variation in seasonal color will be available through the Planning Department.
- f. Pruning guidelines will be developed and made available. These will include, for example, the negative results of tree topping.

Goal IV - Diversity of Tree Age and Species

Strategy 1 - Planting. With a comprehensive planting and replacement program, the City of Del Mar will ensure an uneven-aged stand and maximum diversity of species of *public* trees.

Tactics:

- a. Identify empty tree well spaces in the public right-of-way through an inventory process.
- b. Develop a plan and timeline of no more than 18 months for filling empty tree well spaces, to allow for seasonal selection and plantings.
- c. Explore grants available for tree planting.
- d. Identify the age and health of public trees in the right-of-way through an inventory process with the guidance of a Certified Arborist.
- e. Direct the Forest Management Committee to work with the Public Works Department to review the City's tree maintenance and removal plan.
- f. Through an inventory data base, develop a plan to work toward maintaining the ideal composition in which no one species makes up more than 10% of the entire population of public trees. (See also, page 11 - Strategy 2,e.)

Strategy 2 - Education. Through education, the public will become more aware of how species and age of *private* trees plays a role in the sustainability of the urban forest.

Tactics:

- a. Del Mar's web site will provide information on species availability through local nurseries and encourage residents to diversify plantings on private lands.
- b. Periodic mailings, through utility billings and such, will emphasize tree species: their form, seasonal color, pest related problems, and optimum pruning times.
- c. The garden section of local newspapers may promote integrated pest management concepts, reduction in the use of pesticides, and the rapid spread of disease in monocultures.
- d. Review DRB landscaping policies and provide education for DRB members on the importance of age and species diversity.

Goal V - Protection and Preservation**Strategy 1 - Protect Historic Public Trees in Del Mar**Tactics:

- a. Determine criteria for nominating and certifying trees for historic protection (age, species, size, condition, etc).
- b. Determine the standards of care (pruning, pest control) and criteria for removal of historic trees.

- c. Develop a section in the Del Mar Tree Policy Manual to address the designation and protection of historic trees.
- d. Evaluate and revise the local tree protection ordinance to include historic tree preservation, criteria and standards, and permitting process.
- e. Develop standards and techniques for protecting historic trees during construction operations.
- f. Request that the Historical Society develop a guide to the historic trees of Del Mar.

Strategy 2 - Preserve Trees of Cultural Significance in Del Mar

Tactics:

- a. Determine criteria for culturally significant trees.
- b. Develop a replacement mitigation process for culturally significant trees.
- c. Maintain the permit process for removal of privately owned protected trees.
- d. Develop a notice of intent process for pruning privately owned protected trees.
- e. Develop standards and techniques for protecting trees of cultural significance during construction operations.
- f. If the number of Torrey pine trees appears to be declining below 10% of the composition of the urban forest, a city-wide tree inventory should be made and, if needed, new specimens be planted at scattered locations to bring their numbers up to the desired 10% (Objective IV, page 4).

GLOSSARY

Defensible space. An area either natural or man-made where material capable of causing fire has been treated, cleared, reduced or changed to act as a barrier between an advancing wildfire and the loss of lives, properties or resources. In practice, defensible space is an area around a structure that is cleared of flammable brush or vegetation for a minimum of 30 feet.

Overstory. The high growing vegetation in a forest, mostly consisting of tree branches.

Understory. The low growing, ground level vegetation in a forest.