**DUDEK** 

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July 13, 2023 8128

LaVona Koretke
Deputy Fire Marshal
Escondido Fire Department
1163 N Centre City Pkwy
Escondido, CA 92026

Subject: Fire Protection Plan - Letter Report for the Oro Verde Tentative Parcel Map Project

Dear LaVona:

This Fire Protection Plan/Letter Report (FPP) demonstrates that the Oro Verde Tentative Parcel Map Project will be in compliance with applicable portions of the Rincon Del Diablo Ordinance No. 2022-116.1-6. The Project's new residence will also be consistent with the 2022 California Building Code; 2022 California Fire Code; and 2022 California Residential Code, Section 337, as adopted by the Rincon Del Diablo Fire District. The Project would be required to meet the adopted codes at the time of construction. This FPP-Letter Report has been prepared as prescribed in the County's "Guidelines for Determining Significance and Report Format and Content Requirements for Wildland Fire and Fire Protection (County of San Diego 2010)" document. For purposes of this FPP-Letter Report, the Oro Verde Tentative Parcel Map Project will be referred to as the "Project".

#### Introduction

This Fire Protection Plan (FPP) has been prepared for the proposed Oro Verde Tentative Parcel Map Project in unincorporated San Diego County, California. The purpose of the FPP is to assess the potential impacts resulting from wildland fire hazards and identify the measures necessary to adequately mitigate those impacts. As part of the assessment, this plan has considered the fire risk presented by the site including property location and topography, vegetation, climatic conditions, fire history and the proposed land use and configuration. This FPP addresses water supply, access, structural ignitability and ignition resistive building features, fire protection systems, fire department access, defensible space, and vegetation management. The plan identifies fuel modification/management zones and recommends the types and methods of treatment that will protect this project. The FPP recommends measures the property owner will take to reduce the probability of structural ignition for the project.

The FPP is consistent with the 2022 Rincon Del Diablo Fire Protection District (RDDFPD) and Escondido Fire Code and the 2022 San Diego County Consolidated Fire Code. Furthermore, it is consistent with the California Code of Regulations Titles 14 and 24 and State Fire and Building Codes (2022). The purpose of this plan is to generate and memorialize the fire safety requirements of the Fire Authority Having Jurisdiction (FAHJ), namely the Escondido Fire Department (EFD). Requirements are based on site-specific characteristics and incorporate input from the project landowner (Wohlford Land Company, LLC), project planners, engineers, and architects.

#### **Executive Summary**

This subdivision creates two lots, with Lot 1 including construction of a single family dwelling unit and Lot 2 continuing the avocado grove operations. The Project is located north of Highway 78, generally, 1.5 miles east of Escondido, 3.0 miles east of Interstate 15, and roughly half mile northwest San Pasqual Valley (Figure 1, Vicinity Map). The entrance to Lot 1 will be accessed via a private driveway off Vista Lucia and Oro Verde Road. Lot 2 will remain in grove use with access off State Route 78 and San Pasqual Valley Road via Diamond Ranch Road.

The property lies within an area statutorily designated a State Responsibility Area (SRA) very high fire hazard severity zone (VHFHSZ) by CAL FIRE (2022). Fire hazard designations are based on topography, vegetation, and weather, amongst other factors with more hazardous sites including steep terrain, unmaintained fuels/vegetation, and wildland urban interface (WUI) locations.

The site is currently undeveloped, disturbed and dominated by active agricultural activities. The area, like all of San Diego County, is subject to seasonal weather conditions that can heighten the likelihood of fire ignition and spread, however, considering the site's terrain and vegetation, would be expected to result in primarily a low- to moderate-intensity wildfire.

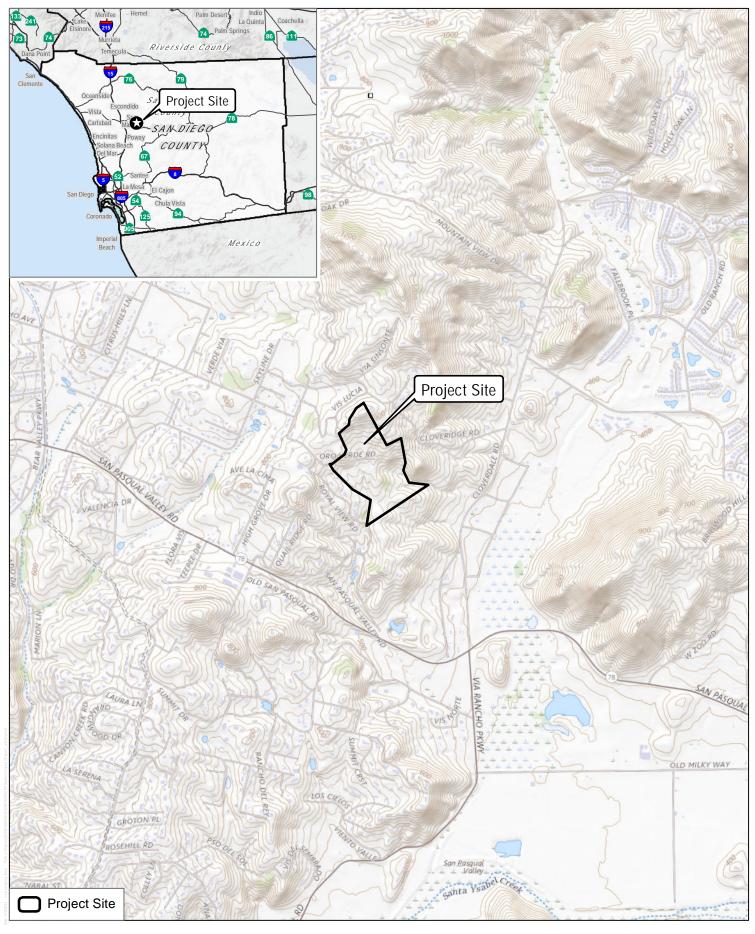
The project site is within the jurisdiction of the Escondido Fire Department (EFD), District 2. The EFD operates at least two fire stations that could respond to an incident on the site under 7.5 minutes travel time. In addition, automatic/mutual aid agreements are in place with neighboring fire agencies to augment response, especially at the fringe area of EFD's jurisdiction.

The Project's residence will be constructed to the ignition resistant code requirements of the 2022 Escondido Building Codes, as amended. Construction shall include enhanced ignition resistant features, automatic interior sprinklers, appropriate fire flow, and fuel modification areas, as well as measures above and beyond the requirements where they are expected to compensate for modified fuel management areas. The identified non-conformities related to fuel modification are provided alternative materials and/or methods for consistency with the currently adopted codes/requirements and the secondary access achievable road widths are discussed in detail.

## 1 Project Description

The Oro Verde Tentative Parcel Map Project includes the development of Lot one for a single-family dwelling. Access to Lot 1 will be provided via a private driveway off of Vista Lucia, which connects to Oro Verde Road (Figure 2 and Figure 2A Project Site Plan). Avocado trees may remain on-site after grading, and if so, will be maintained in perpetuity by future property owners as a part of the lot. This FPP includes language that will require any trees that decline and die to be removed. Lot 2 will continue operation as an avocado grove.

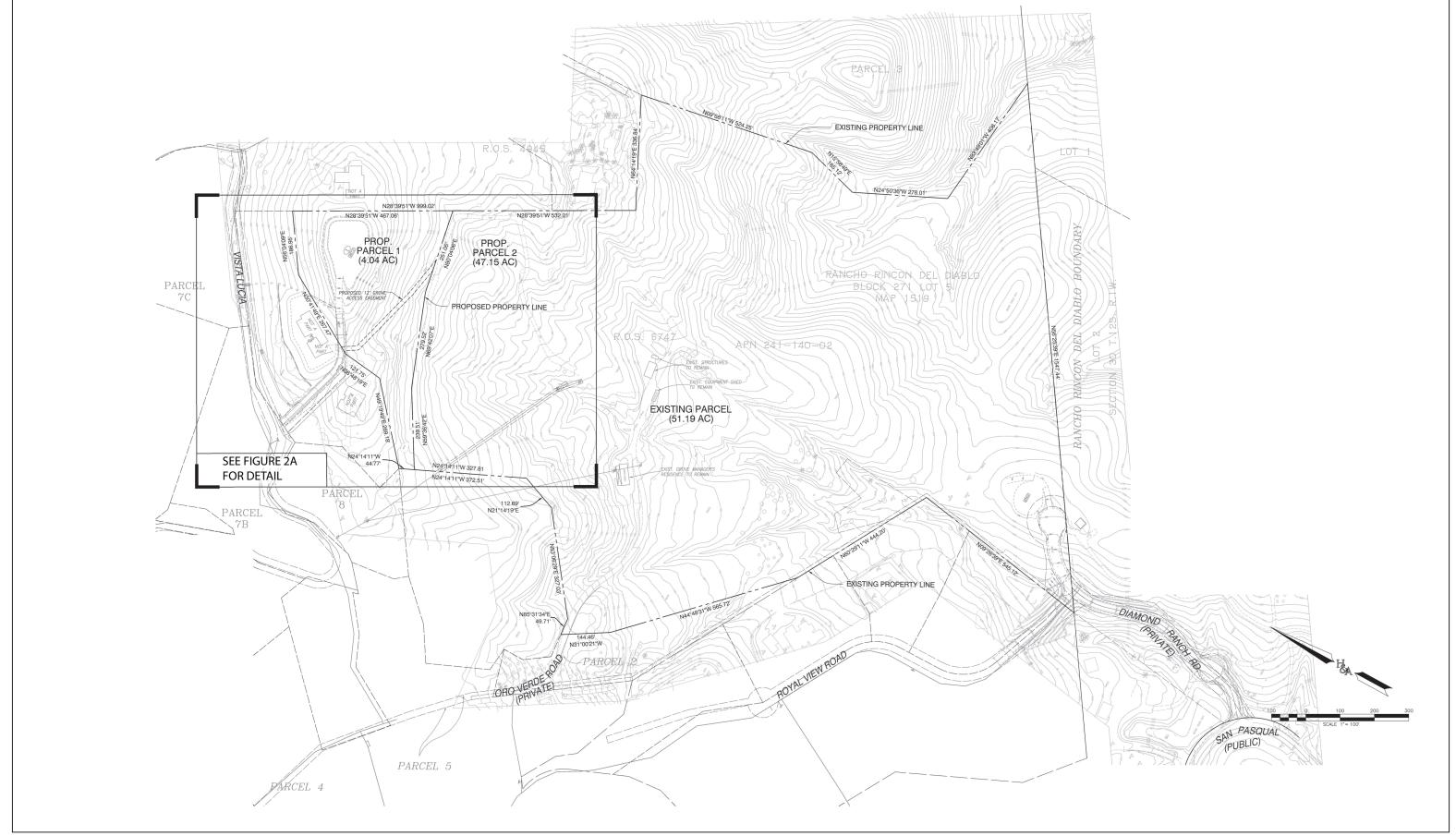




SOURCE: ESRI MAPPING SERVICE 2023

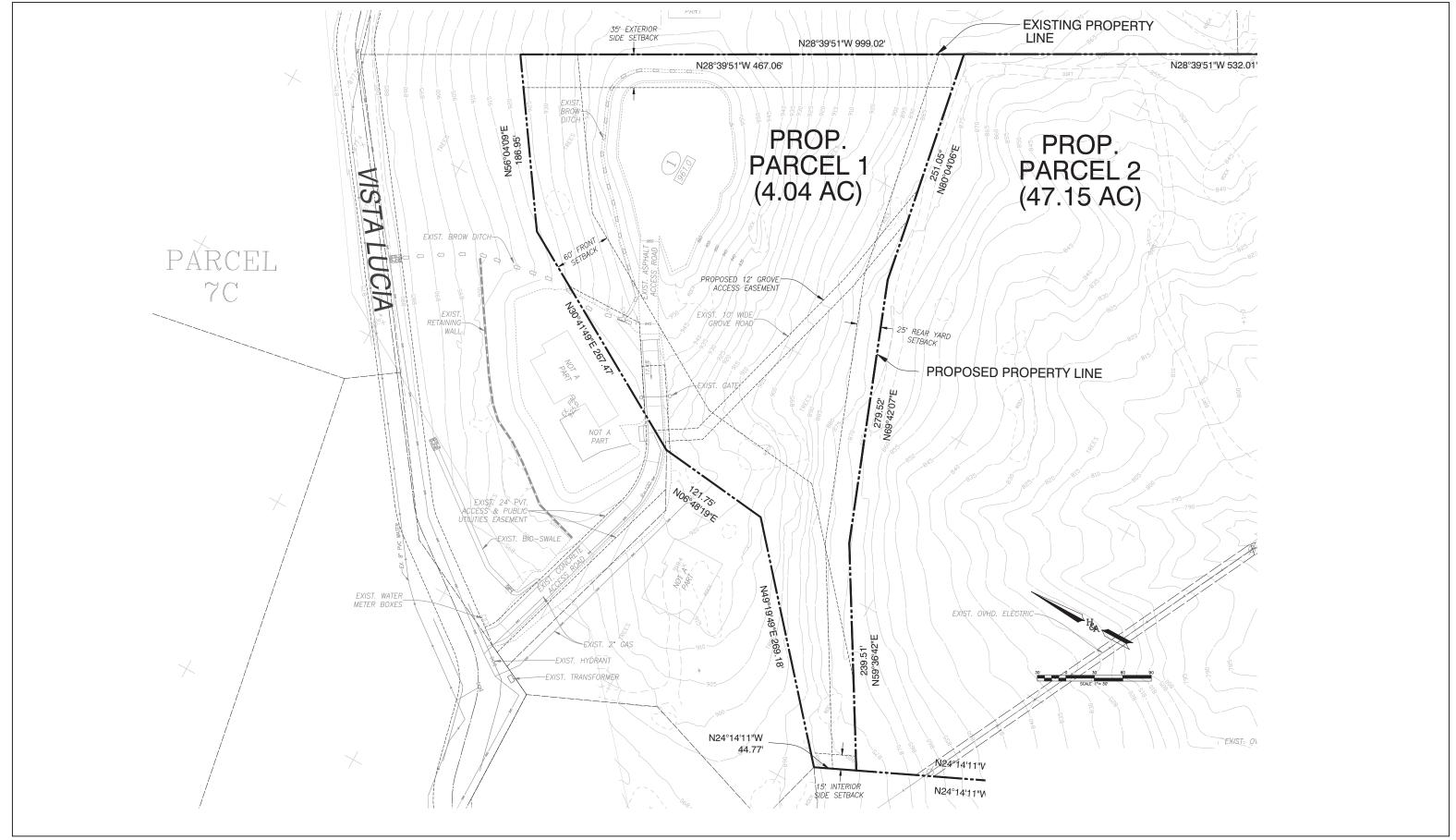
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FIGURE 1 Project Vicinity



SOURCE: HUNSAKER & ASSOCIATES, INC. 2023

FIGURE 2 Project Site Plan



SOURCE: HUNSAKER & ASSOCIATES, INC. 2023

# 2 Environmental Setting

Dudek conducted a site evaluation in October 2020. The site inspection included:

- Topography evaluation
- Vegetation/fuel assessments
- Existing infrastructure evaluations
- Documentation of the existing condition
- Off-site, adjacent property fuel and topography conditions
- Surrounding land use confirmations
- Necessary fire behavior modeling data collection

### 2.1 Location

The Oro Verde Tentative Parcel Map Project is located within an unincorporated portion of eastern Escondido in the San Diego County North Metro Community Planning Area, which is generally 1.5 miles east of Escondido city limits, 3.0 miles east of Interstate 15, and roughly half mile northwest San Pasqual Valley. The project site is north of the intersection of San Pasqual Valley Road and Highway 78.

The Project lies within the local responsibility area (LRA), Moderate Fire Hazard Severity Zone, as statutorily designated by the Escondido Fire Department in cooperation with CAL FIRE.

## 2.2 Observations

The site includes a graded pad and driveway for Lot 1 and Lot 2 is characterized by active agriculture and is nearly completely disturbed by human activities. The site's slopes and hillsides are well-maintained avocado groves and are subject to frequent irrigation.

## 2.3 Topography

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread up-slope and slower fire spread down-slope, unless downslope winds are influencing the fire. Flat terrain tends to have little effect on fire spread, resulting in fires that are driven by wind.

The project site consists of gentle to moderately steep slopes and hillsides. The slopes and hillsides on most of the project site support active avocado groves. Avocado orchards beyond the property with native chaparral, semi-rural residential communities, and more agriculture beyond. Elevations at the site range from approximately 870 feet above mean sea level (amsl) to 970 feet amsl.



## 2.4 Climate

North San Diego County and the project area are influenced by the Pacific Ocean and are frequently under the influence of a seasonal, migratory subtropical high-pressure cell known as the "Pacific High." Wet winters and dry summers with mild seasonal changes characterize the Southern California climate. This climate pattern is occasionally interrupted by extreme periods of hot weather, winter storms, or dry, easterly Santa Ana winds. The average high temperature for the project area is approximately 70°F, with daily highs in the summer and early fall months (July–October) exceeding 95°F. Precipitation typically occurs between December and March.

The prevailing wind pattern is from the west (on-shore), but the presence of the Pacific Ocean causes a diurnal wind pattern known as the land/sea breeze system. During the day, winds are from the west-southwest (sea) and at night winds are from the northeast (land), averaging 2 miles per hour (mph). During the summer season, the diurnal winds may average slightly higher (approximately 16 mph) than the winds during the winter season due to greater pressure gradient forces. Surface winds can also be influenced locally by topography and slope variations. The highest wind velocities are associated with downslope, canyon, and Santa Ana winds.

Typically, the highest fire danger is produced by the high-pressure systems that occur in the Great Basin, which result in the Santa Ana winds of Southern California. Sustained wind speeds recorded during recent major fires in San Diego County exceeded 30 mph and may exceed 50 mph during extreme conditions. The Santa Ana wind conditions are a reversal of the prevailing southwesterly winds that usually occur on a region-wide basis during late summer and early fall. Santa Ana winds are warm winds that flow from the higher desert elevations in the north through the mountain passes and canyons. As they converge through the canyons, their velocities increase. Consequently, peak velocities are highest at the mouths of canyons and dissipate as they spread across valley floors. Santa Ana winds generally coincide with the regional drought period and the period of highest fire danger. The Oro Verde site is affected by strong winds, such as Santa Ana's.

## 2.5 Vegetation

Vegetative fuels on site are characteristic of an agricultural/avocado growing operation. Of the vegetation communities and land cover types that occur on site or nearby, two (orchard and disturbed Oak Riparian Forest) were used to model potential fire behavior. Additionally, two ground cover types (ornamental vegetation and coastal sage scrub) were also evaluated for wildfire behavior. The following descriptions provide an overview of the ground cover types and are a component for determining the associated fuel model used in fire behavior modeling.

Developed land consists of buildings, structures, gravel or paved roads, and maintained areas. Developed areas do not support native vegetation. Developed areas include paved roads and improvements associated with avocado agriculture. Developed areas also include the pads and areas that were approved for development under prior discretionary actions.

Orchards on this site includes well-maintained, avocado groves that are dominated by avocado trees (*Persea americana*). A 4-inch-deep leaf layer occurs predominately underneath the dense, canopies of the trees. Fires

typically run through the surface litter and not through the tree canopy, because avocados are regularly pruned and kept hydrated.

Diegan coastal sage scrub is one of the two major shrub types that occur in San Diego County. Diegan coastal sage scrub is dominated by subshrubs whose leaves abscise during drought. The Diegan coastal sage scrub on site contains California sagebrush (*Artemisia californica*), buckwheat (*Eriogonum fasciculatum*), and dove weed. Small patches (less than two acres) of Diegan coastal sage scrub occurs on vacant property adjacent to residential neighborhoods and drainages bordering on the west and southwest.

Southern California's climate is capable of supporting many types of ornamental landscape plant material (evergreen and deciduous). There is diversity in terms of structure, height, and density of these plants. The ornamental landscape exists because of humans, and in most cases it is dependent upon humans to be irrigated and maintained. An ornamental landscape will commonly blend into native habitat. This vegetation type is usually planned and regularly maintained (pruned, watered, and removal of dead plants). However, not all ornamental landscapes are considered fire safe. For example, a landscape that is poorly maintained, or is planted too densely may be compromised, and therefore, become more flammable. This vegetation type occurs as front or back yards around the existing homes offsite.

### Fire History

Fire history is an important component of a project FPP. Fire history information can provide an understanding of fire frequency, fire type, most vulnerable project areas, and significant ignition sources, amongst others. Fire frequency, behavior, and ignition sources are important for fire response and planning purposes. One important use for this information is as a tool for pre-planning. It is advantageous to know which areas may have burned recently and, therefore, may provide a tactical defense position, what type of fire burned on the site, and how a fire may spread. According to available data from CAL FIRE's Fire and Resource Assessment Program, numerous fires have burned in the vicinity of the project site since the beginning of the historical fire data record (Figure 3). These fires burned within three miles of the project site. The 1974 fire (unnamed) burned 67 acres southeast of the project site. The 2007 Witch Fire, which burned approximately one mile to the south of the project site, was the most recent, and largest wildfire in the vicinity of the project, with a total burned area of over 160,000 acres.

Based on an analysis of this fire history data set, specifically the years in which the fires burned, the average interval between wildfires burning within a 3-mile radius of the project site was calculated to be 4.1 years with intervals ranging between 0 (multiple fires in the same year) and 19 years. Based on this analysis, the area is expected to be subject to regular, wide-spread wildfire, but may include smaller fires during typical weather conditions and has the potential for larger wildfires during extreme weather conditions. Based on fire history, wildfire risk for the project site is associated primarily with a Santa Ana wind-driven wildfire burning or spotting onto the site from the east, although a fire approaching from the west during more typical on-shore weather patterns is possible.

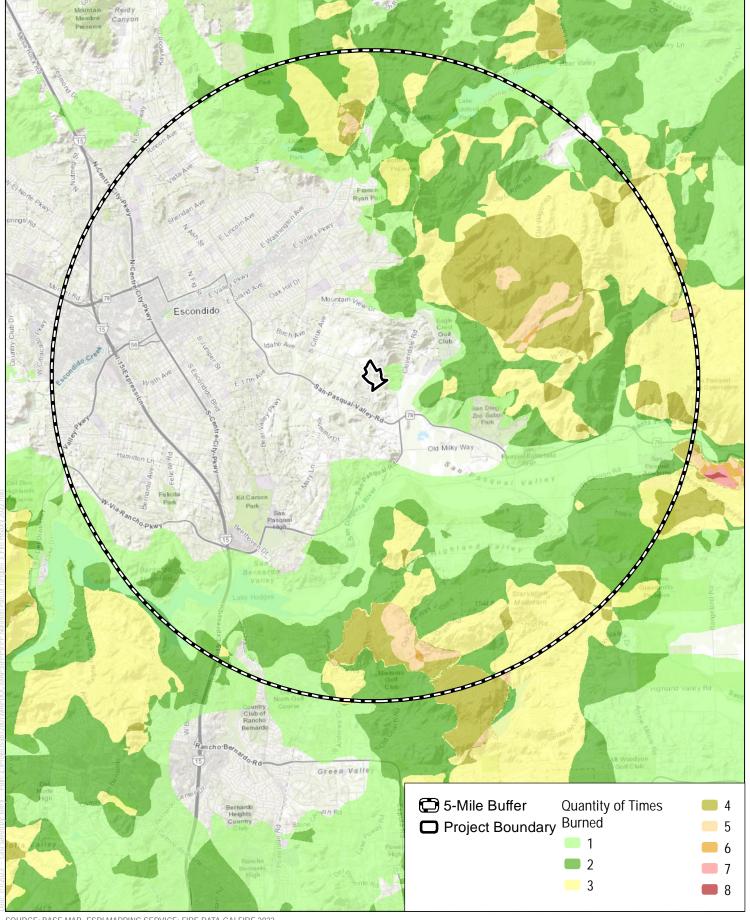
## On-Site Risk Assessment

Given the lack of wildfire history on the site, the history of wildfire in the vicinity of the site, combined with the postproject vegetation conversion, potential ignition sources, and anticipated fire behavior, the project is not expected to be vulnerable to recurring wildfire ignition and spread, but may be subject to nearby wildfire that could, under worst-case conditions, spread into the avocado groves or from burning embers landing in receptive, ornamental



landscape fuels. Fire is not expected to have readily ignitable fuels in the post-project landscape. Should the avocado orchards or ornamental vegetation ignite, it would be expected to burn in a spotty manner due to the presence of heavy shading and hydrated fuels.





SOURCE: BASE MAP- ESRI MAPPING SERVICE; FIRE DATA-CALFIRE 2022



## 3 Project Fire Protection Code Conformance

## 3.1 Water Supply

Water service for the residence on Lot 1 will be provided by City of Escondido. The Rincon Del Diablo Fire Protection District requires new development to meet 2,500 gpm fire flow (SDCCFC Sec. 507.3) and remain above 20 psi when meeting the fire requirements, or as otherwise acceptable to the Fire Department. As planned, the project meets fire flows.

### 3.2 Fire Access Roads

The Project includes fire access and is consistent with the County and Rincon del Diablo Fire Protection District Fire Codes. Access to Lot1 of the Tentative Parcel Map will be provided from an existing road (Vista Lucia, 24-foot width via a 20-foot-wide, all-weather driveway, consistent with code requirements for width, and load bearing capabilities. Grades on the new residence driveway will not exceed 20% and any sections over 15% will be provided concrete with heavy broom finish. Emergency access is considered to meet the intent of the code. Lot 2, which will continue operation of the avocado grove and has primary access via Diamond Ranch Road off the SR-78 and is exempt from road requirements based on its agricultural use, per Title 14, Article 1.

### 3.3 Dead End Roads

Private residential driveways more than 150 feet in length will have a County-approved hammerhead for turning around emergency vehicles. There are no cul-de-sacs proposed for this project. Both Lots 1 and 2 are consistent with Title 14 and RDDFPD dead end road length maximums based on parcel size and/or land use. Lot 1 access complies with the updated Government Code and secondary access will not be required for one single family residence. Lot 2 agricultural is exempt from dead end road lengths per Title 14, Article 1 stating Exception: Roads used solely for agricultural, mining, or the management and harvesting of wood products.

## 3.4 Gates

Access gates, if installed, will comply with EFD requirements. Gates on private roads will comply with EFD standards for electric gates including an emergency key-operated switch overriding all command functions and opening the gate. Gate setbacks from roadway and other code requirements will be required. Lot 2 includes a gate at the primary and secondary access points for grove security.

## 3.5 Premise Identification

Identification of roads and structures will comply with RDDFPD and EFD Codes Section 505.1, as follows:

• All new structures shall have a permanently posted address, which shall be legible from the street. If it is not legible from the street, an address shall also be posted at street entrance to driveway and shall be visible from both directions of travel. Numbers shall be 4 inches high with 0.5-inch stroke and located 6-8 feet above ground level. Numbers will contrast with background.



## 3.6 Fire Hydrants

An existing hydrant is located on Vista Lucia adjacent to the driveway entrance to serve Lot 1. The nearest hydrant for Lot 2 is associated with Royal View Road.

## 3.7 Fire Response

The project site is located within RDDFPD, provided emergency response by EFD. EFD Station 2, 421 N. Midway, Escondido, would provide initial response; it is approximately 3.2 miles from the Lot 1 project site. The station is staffed 24/7 by five personnel: by one captain, one engineer, two firefighter paramedics and one paramedic/EMT. It is equipped with one Type 1 engine, one rescue ambulance and one cross-staffed OES Type 6 brush patrol.

EFD Station 4 would provide secondary response and is staffed 24/7 with career firefighters. Station 4 is located at 3301 Bear Valley Parkway, approximately 4.1 miles from the site. The station is staffed by three personnel: one captain, one engineer, and one firefighter paramedic. It is equipped with one Type 1 engine and one Type 3 brush engine.

Within the area's emergency services system, fire and emergency medical services are provided by Fire Departments (Escondido Fire Department), or Fire Protection Districts, County Service Areas (CSA) and CAL FIRE. Generally, each agency is responsible for structural fire protection and wildland fire protection within their area of responsibility. However, mutual aid agreements enable non-lead fire agencies to respond to fire emergencies outside their district boundaries. In the project area, fire agencies cooperate on a statewide master mutual aid agreement for wildland fires and there are mutual aid agreements in place with neighboring fire agencies (north zone agencies) and typically include interdependencies that exist among the region's fire protection agencies for structural and medical responses but are primarily associated with the peripheral "edges" of each agency's boundary. These agreements are voluntary, as no local governmental agency can exert authority over another.

With seven stations and a service area of 50 square miles and roughly 117 full time safety staff, the EFD is well equipped for the type of responses it routinely responds to within its jurisdiction.

## 3.8 Building Construction

Prior to combustible materials' presence on the site, utilities shall be in place, an approved all-weather roadway in place, and fuel modification zones established and approved.

The new structure associated with Lot 1 will be constructed to 2022 RDDFPD and Escondido Fire Code standards. The proposed building will comply with the enhanced ignition-resistant construction standards of the 2022 or most current California Building Code and California Residential Code, as amended by RDDFPD. These requirements address roofs, eaves, exterior walls, vents, appendages, windows, and doors and result in hardened structures that have been proven to perform at high levels (resist ignition) during the typically short duration of exposure to burning vegetation from wildfires.

The following project features are required for new development in WUI areas and form the basis of the system of protection necessary to minimize structural ignitions as well as providing adequate access by emergency responders:



- 1. Application of ignition resistant building requirements
- 2. Multi- pane glazing with a minimum of one tempered pane
- 3. Ember resistant vents (recommend BrandGuard or similar vents)
- 4. Interior fire sprinklers to code for all occupancies

## 3.9 Fire Protection Systems

Automatic internal fire sprinklers shall be in accordance with National Fire Protection Association (NFPA) 13-D (RDDFPD Fire Code 903. 2). The single-family dwelling and garage will be provided interior residential fire sprinklers per RDDFPD requirements. Automatic, internal fire sprinklers shall meet NFPA 13-D and City of Escondido installation policies.

## 3.10 Defensible Space

## **Fuel Modification**

Fuel modification zones are designed to gradually reduce fire intensity and flame lengths from advancing fire by strategically placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the wildland-urban interface (WUI) exposed structures. Because this site will utilize ignition resistant construction techniques and materials, the proposed fuel modification areas are anticipated to provide adequate set back from naturally occurring fuels.

## **Fuel Modification Zone Requirements**

Sec. 4907.9 Home Ignition Zones:

4907.9.1 Zone 0 "Immediate Zone" 0-5' Meaning from exterior wall surface or patio, deck or attachment to building or structure extending 5 feet on a horizontal plane. This zone shall be constructed of continuous hardscape or non-combustible materials. Removal of combustible materials surrounding the exterior wall area and maintaining area free and clear of combustible materials. The use of mulch and other combustible materials shall be prohibited.

4907.9.2 Zone 1 "Intermediate Zone" from Zone 0 to 50' means from the immediate edge of Zone 0 extending out in a horizontal plane. This zone shall consist of planting of low growth, drought tolerant and fire resistive plant species. The height of the plants in this zone starts at 6" adjacent to Zone 0 and extending in a linear fashion up to a maximum of 18" at intersection with Zone 2. Vegetation in this zone shall be irrigated and not exceed 6' in height and shall be moderate in nature as per Sec. 4907.6.4.1. Firewood inside this zone shall be piled minimum of 30' away from all buildings and structures. Cords of firewood shall also be maintained at least 10' from property lines and not stacked under tree canopies drip lines.

4907.9.3 Zone 2 "Extended Zone" from Zone 1 to 100' means from the immediate edge of Zone 1 extending out in a horizontal plane for 50'. This zone consists of planting of drought tolerant and fire resistive plant species of moderate height. Brush and plants shall be limbed up off the ground so the lowest branches are 1/3 height of bush/tree/plant or up to 6' off the ground on mature trees. This area would be considered selective clearing of natural vegetation and dense chaparral by removing a minimum 50% of the square footage of this area.



The 2022 Escondido Fire Code (Section 4907 - Defensible Space) requires that fuel modification zones be provided around every building that is designed primarily for human habitation or use and buildings designed specifically to house farm animals. Decks, sheds, gazebos, freestanding open-sided shade covers and similar accessory structures less than 250 square feet and 30 feet or more from a dwelling, and fences more than five feet from a dwelling, are not considered structures for the establishment of a fuel modification zone. Fuel modification zones for the project site shall comply with the following:

- 1. When a building or structure in a hazardous fire area is setback less than 100 feet from the property line, the person owning or occupying the building or structure shall meet the requirements in subsection (1) above, to the extent possible, in the area between the building or structure and the property line.
- 2. The building official and the FAHJ may provide lists of prohibited and recommended plants. This FPP includes a proposed list of suggested (Attachment B) and prohibited plants (Attachment C).
- 3. The fuel modification zone will be located entirely on the property except in two locations (Figure 4) where less than 100 feet is achievable on-site, but adjacent land uses provide reciprocal fuel modification zone due to the existence of residential structures responsible for defensible space.
- 4. The project is bordered by agricultural and urbanized (rural residential) land uses. There are no shrub-dominated wildland areas immediately adjacent the site and all on-site fuels within the development pad will be converted to urbanized, maintained landscapes except for the avocado groves that will be retained throughout the property. Avocado groves will be maintained as described in the Avocado Grove Management Section, below. Fuel modification areas will occur along the driveway where maintained landscapes are not adjacent.

#### Special Fuel Management Issues

Trees may be planted within fuel management zones as long as they conform to the RDDFPD defensible space requirements. Roadside tree planting is acceptable, as long as they meet the following restrictions:

- Crowns of mature trees located within defensible space shall maintain a minimum horizontal clearance of 10 feet for fire resistant trees. No non-fire resistive trees will be allowed.
- Mature trees shall be pruned to remove limbs one-third the height or 6 feet, whichever is less, above the ground surface adjacent to the trees.
- Dead wood and litter shall be regularly removed from trees.
- Ornamental trees shall be limited to groupings of 2-3 trees with canopies for each grouping separated horizontally as described in Table 5.

#### **Vegetation Management**

The following requirements are provided for fuel modification zones. These zones are presented graphically in Figure 4. Each zone would include permanent field markers at the property line to delineate the zones, aiding ongoing maintenance activities that will occur on site. All fuel modification zones shall be maintained by the homeowner in perpetuity.



Plants used in the fuel modification areas or landscapes will include drought-tolerant, fire resistive trees, shrubs, and groundcovers. Per RDDFPD/EFD, all plant materials used shall be from the Wildland/Urban Interface Development Standards plant palette. The intent of the plant list is to provide examples of plants that are less prone to ignite or spread flames to other vegetation and combustible structures during a wildfire. The addition of plant material to the approved list will be at the discretion of RDDFPD/EFD. Landscape plans shall be in accordance with the following criteria:

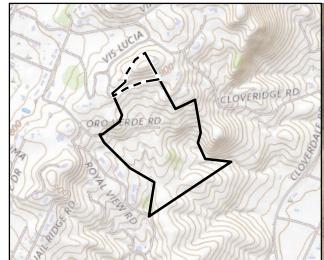
- 1. All fire resistive trees (i.e., trees on the approved-City plant list) shall be planted and maintained at a minimum of 10 feet from the mature tree's drip line to any combustible structure. All non-fire resistive tree species, including conifers, pepper trees, and acacia species shall be planted and maintained so that the mature tree's drip line at maturity is a minimum 30 feet from any combustible structure.
- 2. For streetscape plantings, fire resistive trees can be planted 10 feet from edge of curb to center of tree trunk. Care should be given to the type of tree selected, that it will not encroach into the roadway, or produce a closed canopy effect.
- 3. Limit planting of large unbroken masses especially trees and large shrubs. Groups should be two to three trees maximum, with mature foliage of any group separated horizontally by at least 10 feet, if planted on less than 20% slope, and 20 feet, if planted on greater than 20% slope.
- 4. If shrubs are located underneath a tree's drip line, the lowest branch should be at least three times as high as the understory shrubs or 10 feet, whichever is greater.
- 5. Existing mature trees can be pruned 10 feet away from roof, eave, or exterior siding, depending on the tree's physical or flammable characteristics and the building construction features.
- 6. All tree branches shall be removed within 10 feet of a fireplace chimney or outdoor barbecue.

#### **Avocado Grove Management**

The project includes the retention of the existing avocado groves for portions of Lot 1 and throughout Lot 2 of the property. Avocado groves are not only susceptible to damage from wildfires, but the leaf litter when ignited can spread a fire through the grove into adjacent structures. The avocado grove management will consist of the following fire preventative measures, consistent with Rincon Del Diablo Fire Code Sec. 4907.8.2 Orchards, groves or vineyards:

- All groves will be kept in a healthy state. Tree canopies will have no dead branches or foliage. Dead and/or
  downed trees shall be removed by homeowner to abate the fire hazard within a 30-day period. The grove
  will be kept cleaned of combustible debris and flammable brush, excluding leaf litter.
- 2. At least a 10-foot-wide firebreak will be cleared around the perimeter of the grove as defensible space between the home and the orchard.





Project Boundary
Proposed Parcel 1

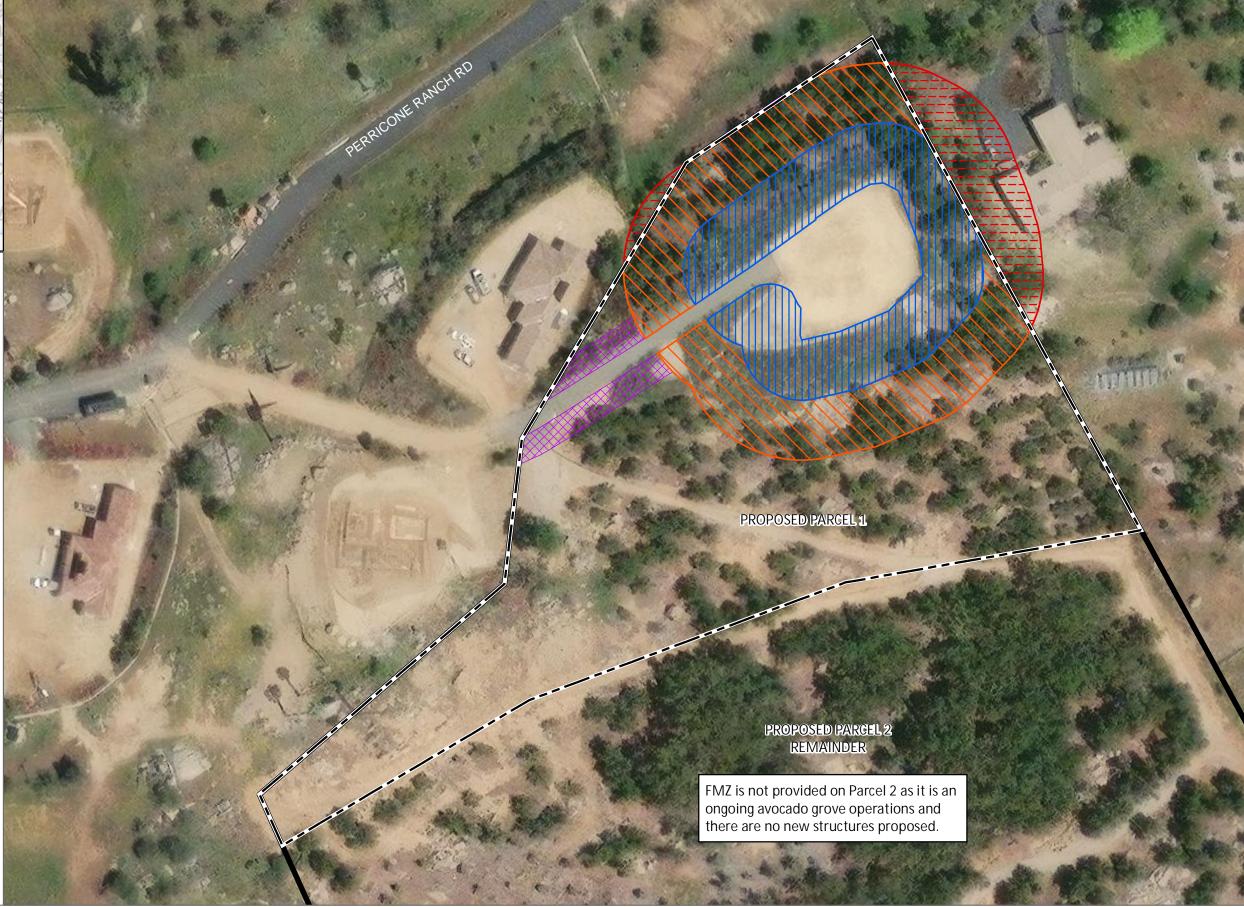
**Fuel Modification Zone** 

Zone 1 (50 feet) - (Zone 0 - 0 to 5 feet included)

**Zone 2 (50 feet)** 

20-Ft Roadside Zone

Off-Site Reciprocal FMZ



SOURCE: AERIAL-ESRI IMAGERY SERVICE 2023; HUNSAKER & ASSOCIATES, INC. 2023

- 3. The irrigation system shall be activated in the orchard to prevent a fire from spreading into an orchard or starting spot fires in the interior of the orchard. For best results, the irrigation system should be turned on well ahead of the arrival of a wildfire to ensure the leaf litter is thoroughly soaked.
- 4. Should a majority of the avocado grove decline due to changing watering applications, disease or insects, or other uncontrollable factors, homeowner shall replace them with healthy trees or convert the grove to extended landscape and/or thinning zones, consistent with Fire Authority requirements.

#### Pre-Construction Requirements

- Fuel modification areas must be implemented and approved by the RDDFPD/EFD prior to combustible materials being brought on site.
- Existing flammable vegetation shall be removed prior to commencement of construction and prior to bringing combustible construction materials on site.
- Dead fuel, ladder fuel (fuel which can spread fire from ground to trees), and downed fuel shall be removed and trees/shrubs shall be properly limbed, pruned, and spaced per this plan.

#### **Undesirable Plants**

Certain plants are considered to be undesirable in the landscape due to characteristics that make them highly flammable. These characteristics can be physical or chemical. The plants included in the Prohibited Plant List (Attachment C) are unacceptable from a fire safety standpoint and shall not be planted on the site unless otherwise approved by the EFD.

All fuel modification area vegetation management shall be completed annually by May 15 of each year and more often as needed for fire safety, as determined by the RDDFPD/EFD.

Additionally, it is recommended that the area from the exterior wall surface of the building, extending five feet on a horizontal plane, shall be constructed of continuous hardscape or limited fire-resistant plantings acceptable to the FAJH. Vegetation in this space shall be ignition resistant and irrigated. Additionally, this space shall be free of combustible materials and the use of combustible mulch is prohibited.

## 3.11 Landscape Requirements

Landscape plantings will be consistent with City of Escondido landscape requirements and RDDFPD's restrictions for defensible space plantings.

# 3.12 Emergency Pre-Planning - Evacuation

Early evacuation for any type of wildfire emergency at the Project site is the preferred method of providing for resident safety, consistent with the RDDFPD's/EFD's current approach. As such, the Project would provide "Ready, Set, Go!" approach to evacuation information to the future resident. The "Ready, Set, Go!" concept is widely known and encouraged by the State of California and most fire agencies. Pre-planning for emergencies, including wildfire emergencies, focuses on being prepared, having a well-defined plan, minimizing the potential for errors,



maintaining the Project site's fire protection systems, and implementing a conservative (evacuate as early as possible) approach to evacuation and Project area activities during periods of fire weather extremes.

## **CONCLUSION**

This FPP is submitted in support of an application for project entitlement of the Oro Verde Tentative Parcel Map Project. It is submitted in compliance with requirements of RDDFPD and Escondido Fire and Building Codes. The requirements in this document meet fire safety, building design elements, fuel management/modification, and landscaping recommendations of state and County codes.

This letter FPP provides basic analysis of the site, it's fire hazards and overall risk, and provides concurrence that the Project will meet fire safety code requirements. Please contact me at 619.992.9161 if you have any questions or need any clarifications to the material presented herein.

Michael Huff, Dudek Principal

Printed Name, Title

Printed Name, Title

Respectfully,

7.10.2023

pared by (Signature) Date

\_\_\_\_\_

Date

Project Applicant (Signature)

Figure 1 – Project Vicinity
Figure 2 – Project Site Plan

Figure 3 - Fire History

Figure 4 – Fuel Modification Exhibit

Attachment 1 - Site Images

Attachment 2 – Suggested Plant List

Attachment 3 - Prohibited Plant List

## References

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# Attachment 1

Site Images

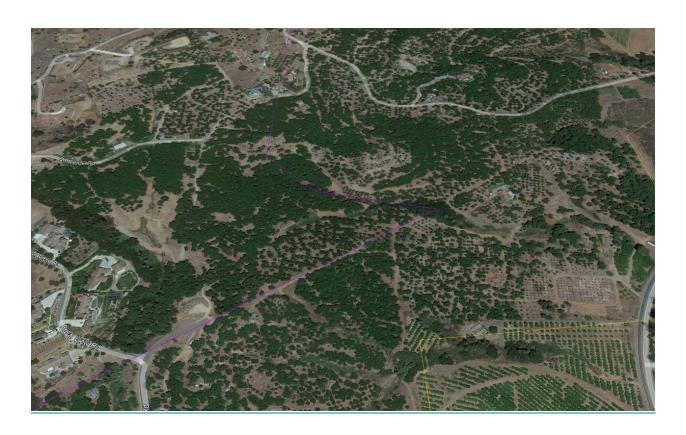


# ATTACHMENT 1 Oro Verde Image Log





# **ATTACHMENT 1 (Continued)**





## Attachment 2

**Suggested Plant List** 



Providing enough fire protection for rural areas of San Diego County has become difficult. This is due to the large number of residents who are moving to the rural areas of the County and the increasing amounts of brush, weeds and other vegetation that provide fuel for wildfires and cause them to burn hotter. While its important to protect the wild native vegetation in the County's rural areas it's also important to take steps for adequate fire protection for structures. Legally clearing vegetation protects the other wild native plants and at the same time eliminates the fire hazards.

During the October 2003 Firestorms, it was painfully evident that there was insufficient "Defensible Space" on many properties which led to destroyed homes and other structures. As a result, San Diego County has amended an ordinance to require residents to keep their property free of fire hazards that include certain vegetation, green waste and rubbish. Residents can comply with these ordinances by creating a "Defensible Space" and taking other preventative steps on their property.

### WHAT IS DEFENSIBLE SPACE?

This is the area around a structure where combustible vegetation, that can cause fire, has been cleared, reduced or replaced. This space acts as a barrier between an advancing fire and a structure.

#### HOW DO I CLEAR LEGALLY?

Combustible vegetation can only be removed by mowing, cutting and grazing as long as the root structure is left intact. Any trees you remove shall have the stumps cut no higher than 8" above the ground. The only exception would be an orchard. Orchard trees may have their stumps completely removed.

#### CAN I CLEAR INTO AN OPEN SPACE EASEMENT?

Depending upon fuel loads and topography, the Local Fire District may require clearing within an open space easement. This clearing does not require a permit so long as you obtain a letter from the Local Fire District specifying the amount of additional clearing required and comply with any clearing provisions stated in the recorded open space easement document or recorded subdivision map.

#### WHAT IS COMBUSTIBLE VEGETATION?

This is any material that in its natural state will readily ignite, burn and cause fire to move to any structure or other vegetation. This would include dry grass, brush, weeds, litter and waste. This would not include fire resistant landscaping some of which can be found in the "Suggested Plant List For Defensible Space" on page 4 of this handout.

### HOW LARGE SHOULD THE DEFENSIBLE SPACE BE?

You need to clear combustible vegetation in a 100' radius from any structure.
 Only the fire agency may authorize you to clear more. You are not required to

cross your property line in order to clear the 100'. The neighboring property owner may be required to clear the additional distance by the fire agency.

### HOW DO I MAINTAIN THE DEFENSIBLE SPACE?

- You may plant fire-resistant, irrigated, landscaping in the first 50'of the 100' from your structure. These plants need to be maintained all year around.
- You need to keep natural vegetation in the remaining 50' of the 100' space. This would be the area furthest away from your structure. The plants need to be thinned and cut back to no more than 6" above the ground. You may need to do this several times a year since the plants grow back.
- Do not completely remove all vegetation which would leave the ground bare. Some vegetation is necessary to prevent erosion.
- Remove dead and dying vegetation.
- Trim trees that overhang or touch your structures.

# WHAT TYPES OF FIRE-RESISTANT PLANTS SHOULD I CHOOSE FOR MY DEFENSIBLE SPACE?

You will find a list of suggested plants for Defensible Space on page 4 of this handout. Generally these plants:

- Grow close to the ground.
- Have a low sap or resin content
- Grow without accumulating dead branches, needles or leaves.
- Are easily maintained and pruned
- Are drought-tolerant

# WHAT TYPES OF PLANTS SHOULD I NOT PLANT OR KEEP ON MY PROPERTY?

On page 16 of this handout you will find an extensive list of plants that you should avoid. These plants and trees burn easily since they have large amounts of oil, sap, rough bark and other material that is flammable.

# WHAT OTHER THINGS SHOULD I DO TO PROTECT MY PROPERTY AGAINST FIRE?

- You should clear combustible vegetation on your property if it is within 30' of your property line.
- Vary the height of plants and adequately space them. Taller plants need to be spaced wider apart.
- Existing trees and large shrubs should be pruned by cutting off any branches up to 6' above the ground to prevent ground fires from spreading upwards into trees.
- For fire truck access, remove vegetation within 10' of each side of your driveway.
- Remove any tree limbs within 10' of your chimney
- Work with your neighbors to clear common areas between houses, and prune areas of heavy vegetation that are a fire threat to both properties.
- Avoid planting trees under or near electrical lines. They may grow into, or make contact with overhead lines under windy conditions, causing fire.

- If you have a heavily wooded area on your property, remove some of the trees to which will lower the fire hazard. You will improve growing conditions for your trees if you remove dead, weak, or diseased trees. This will leave you with a healthy mixture of both new and older trees.
- Any removed trees may be chipped and left on your property if they don't present a fire hazard. Contact your local fire agency to find out how to do this.
- Don't forget to legally despose of all your cut vegetation. You may contact your local landfill to inquire about green waste recycling. Open burning may not be allowed. Contact your fire agency for more information.
- Stack firewood and scrap wood piles at least 50' from any structure and clear away any combustible vegetation within 10' of the piles. Many homes have "survived" as a fire moved past it, only to burn later from a wood pile that caught fire after the firefighters had moved on to protect other homes.
- Check and clean your roofs and gutters on all structures several times during the spring, summer and fall to remove debris that can easily ignite from a spark.

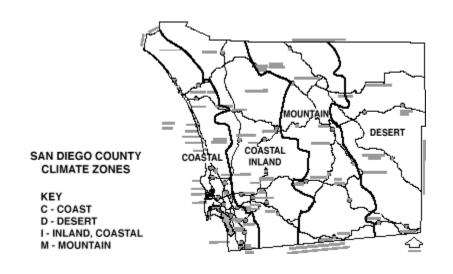
# ACCEPTABLE PLANTS FOR A DEFENSIBLE SPACE IN FIRE PRONE AREAS

All plants on the following list are considered drought-tolerant in the climate zone indicated. Remember, however, that no plant is totally fire resistant. Drought-tolerant plants are trees, shrubs, groundcovers, and other vegetation that can grow and reproduce with only natural moisture such as rainfall. Occasional irrigation is necessary only in extreme drought situations.

Plants that are indicated by the "R" are the least drought-tolerant plants on the list. These plants grow best in riparian areas. Riparian areas can be described as areas where the water table is very near the surface of the ground. Although the ground may be dry, the plants growing there will be green and lush all year around.

When first planting drought-tolerant plants, you need to water deeply to encourage the roots to find natural moisture in the soil. This type of watering needs to continue for at least three years. More water should be provided in summer and less (if any) in the winter. After three years, you should be watering the plants less and depending more on the natural rainfall to provide moisture.

Plants on the list which are noted with \*\* are San Diego County native or naturalizing plant species. These are types of plants native to or brought into the San Diego County area. These plants are able to grow and reproduce in the local climate and the natural rainfall is enough moisture.



## SUGGESTED PLANT LIST FOR A DEFENSIBLE SPACE

BOTANICAL NAME	COMMON NAME	Climate Zone
TREES		
Acer		
platanoides	Norway Maple	М
rubrum	Red Maple	М
saccharinum	Silver Maple	М
saccarum	Sugar Maple	М
macrophyllum	Big Leaf Maple	C/ (R)
Alnus rhombifolia	White Alder	C/I/M (R)
Arbutus		
unedo	Strawberry Tree	All zones
Archontophoenix		
cunninghamiana	King Palm	С
** Arctostaphylos spp.	Manzanita	C/I/D
Brahea		
armata	Blue Hesper Palm	C/D

edulis	Guadalupe Palm	C/D
Ceratonia siliqua	Carob	C/I/D
Cerdidium floridum	Blue Palo Verde	D
** Cercis occidentalis	Western Redbud	C/I/M
Cornus		
nuttallii	Mountain Dogwood	I/M
stolonifera	Redtwig Dogwood	I/M
Elaeagnus		
angustifolia	Russian Olive	I/M
Eriobotrya		
japonica	Loquat	C/I/D
Erythrina caffra	Kaffirboom Coral Tree	c
Gingko biloba "Fairmount"	Fairmount Maidenhair Tree	I/M
Gleditisia triacanthos	Honey Locust	I/D/M
Juglans		
californica	California Walnut	I
hindsii	California Black Walnut	C/I
Lagerstroemia indica	Crape Myrtle	I/D/M
Ligustrum lucidum	Glossy Privet	I
Liquidambar styraciflua	Sweet Gum	C/I/M
Liriodendron tulipifera	Tulip Tree	I
Lyonothamnus floribundus		
ssp. asplenifolius	Fernleaf Catalina Ironwood	С
Melaleuca spp.	Melaleuca	C/I/D

Муо	porum spp.	Myoporum	C/I
Nerio	um oleander	Oleander	C/I/D
Park	insonia aculeata	Mexican Palo Verde	D
Pista	acia		
	chinensis	Chinese Pistache	C/I/D
	vera	Pistachio Nut	I
Pitto	sporum		
	phillyraeoides	Willow Pittosporum	C/I/D
	viridiflorum	Cape Pittosporum	C/I
Plata	anus		
	acerifolia	London Plane Tree	All zones
	** racemosa	California Sycamore	C/I/M
Рорг	ulus		
	alba	White Poplar	D/M
	** fremontii	Western Cottonwood	I
	trichocarpa	Black Cottonwood	I/M
Prun	ius		
	xblireiana	Flowering Plum	M
	caroliniana	Carolina Laurel Cherry	С
	cersifera 'Newport'	Newport Purple-Leaf Plum	М
	** ilicifolia	Hollyleaf Cherry	С
	** lyonii	Catalina Cherry	С
	serrulata 'Kwanzan'	Flowering Cherry	М
	yedoensis 'Akebono'	Akebono Flowering Cherry	М

Quercus		
** agrifolia	Coast Live Oak	C/I
** engelmannii	Engelmann Oak	I
suber	Cork Oak	C/I/D
Rhus		
** lancea	African Sumac	C/I/D
** Salix spp.	Willow	All zones (R)
Tristania conferta	Brisbane Box	C/I
Ulmus		
parvifolia	Chinese Elm	I/D
pumila	Siberian Elm	C/M
** Umbellularia californica	California Bay Laurel	C/I
SHRUBS		
Agave	Century Plant	D
americana	Desert Century Plant	D
deserti	Shaw's Century Plant	D
** shawii		
** Amorpha fruticosa	False Indigobush	I
Arbutus		
** menziesii	Madrone	C/I
** Arctostaphylos spp.	Manzanita	C/I/D
** Atriplex		
canescens	Hoary Saltbush	I
lentiformis	Quail Saltbush	D

** Baccharis		
glutinosa	Mule Fat	C/I
pilularis	Coyote Bush	C/I/D
Carissa grandiflora	Natal Plum	C/I
** Ceanothus spp.	California Lilac	C/I/M
Cistus spp.	Rockrose	C/I/D
** Cneoridium dumosum	Bushrue	С
** Comarostaphylis		
diversifolia	Summer Holly	С
Convolvulus cneorum	Bush Morning Glory	C/I/M
Dalea		
orcuttii	Orcutt's Delea	D
** spinosa	Smoke Tree	I/D
Elaeagnus		
pungens	Silverberry	C/I/M
** Encelia		
californica	Coast Sunflower	C/I
farinosa	White Brittlebush	D/I
Eriobotrya		
deflexa	Bronze Loquat	C/I
Eriophyllum		
** confertiflorum	Golden Yarrow	C/I
staechadifolium	Lizard Tail	С
Escallonia spp.	Escallonia	C/I

Feijoa sellowiana	Pineapple Guava	C/I/D
Fouqueria splendens	Ocotillo	D
** Fremontodendron		
californicum	Flannelbush	I/M
mexicanum	Southern Flannelbush	I
Galvezia		
juncea	Baja Bush-Snapdragon	C
speciosa	Island Bush-Snapdragon	С
Garrya		
elliptica	Coast Silktassel	C/I
** flavescens	Ashy Silktassel	I/M
** Heteromeles arbutifolia	Toyon	C/I/M
Lantana spp.	Lantana	C/I/D
Lotus scoparius	Deerweed	C/I
Mahonia spp.	Barberry	C/I/M
Malacothamnus		
clementinus	San Clemente Island Bush Mallow	С
** fasciculatus	Mesa Bushmallow	C/I
Melaleuca spp.	Melaleuca	C/I/D
** Mimulus spp.	Monkeyflower	C/I (R)
Nolina		
parryi	Parry's Nolina	I
parryi ssp. wolfii	Wolf's Bear Grass	D
Photinia spp.	Photinia	All zones

crassifolium rhombifolium dobira 'Wheeleri' undulatum viridiflorum Cape Pittosporum C/I  Plumbago auriculata Care Plumbago Carolina Laurel Cherry  ** ilicifolia ** yonii Catalina Cherry Cape Pittosporum Carolina Cherry Catalina Cherry Carolina Carolina Laurel Cherry Carolina Laurel Cherry Carolina Cherry Catalina Cherry Carolina Carolina Collida Carolina Laurel Cherry Carolina Cherry Carolina Cherry Carolina Cherry Carolina Carolina Collida Carolina Laurel Cherry Carolina Cherry Caroli	Pittosporum		
tobira 'Wheeleri' Wheeler's Dwarf C/I/D undulatum Victorian Box C/I Viridiflorum Cape Pittosporum C/I Plumbago auriculata Cape Plumbago C/I/D  Prunus  caroliniana Carolina Laurel Cherry C ** ilicifolia Hollyleaf Cherry C ** yonii Catalina Cherry C Puncia granatum Pomegranate C/I/D  Pyracantha spp. Firethorn All zones  Quercus  ** dumosa Scrub Oak C/I  Rhamus  alaternus Italian Blackthorn C/I ** californica Coffeeberry C/I/M Rhaphiolepis spp. Rhaphiolepis C/I/D	crassifolium		C/I
undulatum viridiflorum Cape Pittosporum C/I CII Plumbago auriculata Prunus  caroliniana Carolina Laurel Cherry C ** ilicifolia Hollyleaf Cherry C ** yonii Catalina Cherry C Puncia granatum Pyracantha spp. Firethorn All zones  ** dumosa Scrub Oak C/I  ** californica Coffeeberry C/I/D  Rhaphiolepis spp. C/I/D  C/I  C/I  C/I  C/I  C/I  C/I  C/	rhombifolium	Queensland Pittosporum	C/I
viridiflorum  Cape Pittosporum  C/I  Plumbago auriculata  Prunus  caroliniana  Carolina Laurel Cherry  ** ilicifolia  Hollyleaf Cherry  Catalina Cherry  Puncia granatum  Pyracantha spp.  Firethorn  Quercus  ** dumosa  Scrub Oak  Rhamus  alaternus  italian Blackthorn  C/I  Child  C/I/D  Child  C/I/D  Child  Cherry  Catalina Cher	tobira 'Wheeleri'	Wheeler's Dwarf	C/I/D
Plumbago auriculata Prunus  Caroliniana Carolinia Laurel Cherry C ** ilicifolia Hollyleaf Cherry C ** yonii Catalina Cherry C Puncia granatum Pomegranate C/I/D  Pyracantha spp. Firethorn All zones  ** dumosa Scrub Oak C/I  Rhamus alaternus Italian Blackthorn ** californica Coffeeberry C/I/D  C/I/D  C/I/D  C/I/M  Rhaphiolepis spp. Rhaphiolepis C/I/D	undulatum	Victorian Box	C/I
Prunus  caroliniana Carolina Laurel Cherry C  ** ilicifolia Hollyleaf Cherry C  ** yonii Catalina Cherry C  Puncia granatum Pomegranate C/I/D  Pyracantha spp. Firethorn All zones  Quercus  ** dumosa Scrub Oak C/I  Rhamus alaternus Italian Blackthorn C/I  ** californica Coffeeberry C/I/D  Rhaphiolepis spp. Rhaphiolepis C/I/D	viridiflorum	Cape Pittosporum	C/I
caroliniana Carolina Laurel Cherry C  ** ilicifolia Hollyleaf Cherry C  ** yonii Catalina Cherry C  Puncia granatum Pomegranate C/I/D  Pyracantha spp. Firethorn All zones  Quercus  ** dumosa Scrub Oak C/I  Rhamus  alaternus Italian Blackthorn C/I  ** californica Coffeeberry C/I/M  Rhaphiolepis spp. Rhaphiolepis C/I/D	Plumbago auriculata	Cape Plumbago	C/I/D
** ilicifolia Hollyleaf Cherry C  *** yonii Catalina Cherry C  Puncia granatum Pomegranate C/I/D  Pyracantha spp. Firethorn All zones  Quercus  *** dumosa Scrub Oak C/I  Rhamus  alaternus Italian Blackthorn C/I  ** californica Coffeeberry C/I/M  Rhaphiolepis spp. Rhaphiolepis C/I/D	Prunus		
** yonii Catalina Cherry C Puncia granatum Pomegranate C/I/D Pyracantha spp. Firethorn All zones  ** dumosa Scrub Oak C/I Rhamus alaternus Italian Blackthorn C/I  ** californica Coffeeberry C/I/M Rhaphiolepis spp. Rhaphiolepis C/I/D	caroliniana	Carolina Laurel Cherry	С
Puncia granatum Pomegranate C/I/D Pyracantha spp. Firethorn All zones  ** dumosa Scrub Oak C/I  Rhamus alaternus tracifornica Coffeeberry C/I/M  Rhaphiolepis spp. Rhaphiolepis C/I/D	** ilicifolia	Hollyleaf Cherry	С
Pyracantha spp.  Quercus  ** dumosa  Scrub Oak  C/I  Rhamus  alaternus  tralifornica  Coffeeberry  Rhaphiolepis spp.  Firethorn  All zones  C/I  C/I  C/I  Rhaphiolepis  C/I/D	** yonii	Catalina Cherry	С
Quercus  ** dumosa  Scrub Oak  C/I  Rhamus  alaternus  Italian Blackthorn  C/I  ** californica  Coffeeberry  C/I/M  Rhaphiolepis spp.  Rhaphiolepis  C/I/D	Puncia granatum	Pomegranate	C/I/D
** dumosa Scrub Oak C/I  Rhamus  alaternus  tralifornica  Rhaphiolepis spp.  Scrub Oak  C/I  C/I  C/I  Rhaphiolepis  C/I/D	Pyracantha spp.	Firethorn	All zones
Rhamus  alaternus  ** californica  Coffeeberry  C/I/M  Rhaphiolepis spp.  Rhaphiolepis  C/I/D	Quercus		
alaternus Italian Blackthorn C/I  ** californica Coffeeberry C/I/M  Rhaphiolepis spp. Rhaphiolepis C/I/D	** dumosa	Scrub Oak	C/I
** californica Coffeeberry C/I/M  Rhaphiolepis spp. Rhaphiolepis C/I/D	Rhamus		
Rhaphiolepis spp. Rhaphiolepis C/I/D	alaternus	Italian Blackthorn	C/I
	** californica	Coffeeberry	C/I/M
Rhus	Rhaphiolepis spp.	Rhaphiolepis	C/I/D
	Rhus		
continus Smoke Tree M	continus	Smoke Tree	М
** integrifolia Lemonade Berry C/I	** integrifolia	Lemonade Berry	C/I
laurina Laurel Sumac C/I	laurina	Laurel Sumac	C/I
lentii Pink-Flowering Sumac C/D	lentii	Pink-Flowering Sumac	C/D

** ovata	Sugarbush	I/M
** trilobata	Squawbush	1
Ribes		
viburnifolium	Evergreen Currant	C/I
** speciosum	Fuschia-Flowering Gooseberry	C/I/D
Romneya coulteri	Matilija Poppy	I
Rosa		
** californica	California Wild Rose	C/I
minutifolia	Baja California Wild Rose	C/I
** Salvia spp.	Sage	All zones
** Sambucus spp.	Elderberry	C/I/M
** Symphoricarpos mollis	Creeping Snowberry	C/I
Syringa vulgaris	Lilac	M
Tecomaria capensis	Cape Honeysuckle	C/I/D
Teucrium fruticans	Bush Germander	C/I
** Toxicodendron		
diversilobum	Poison Oak	I/M
Verbena		
lilacina	Lilac Verbena	С
Xylosma congestum	Shiny Xylosma	C/I
** Yucca		
schidigera	Mojave Yucca	D
whipplei	Foothill Yucca	I
GROUNDCOVERS		

** Achillea	Yarrow	All zones
Aptenia cordifolia	Aptenia	С
** Arctostaphylos spp.	Manzanita	C/I/D
** Baccharis		
pilularis	Coyote Bush	C/I/D
** Ceanothus spp.	California Lilac	C/I/M
Cerastium tomentosum	Snow-in-Summer	All zones
Coprosma kirkii	Creeping Coprosma	C/I/D
Cotoneaster spp.	Redberry	All zones
Drosanthemum hispidum	Rosea Ice Plant	C/I
Dudleya		
brittonii	Britton's Chalk Dudleya	С
** pulverulenta	Chalk Dudleya	C/I
virens	Island Live-Forever	С
** Eschscholzia californica	California Poppy	All zones
Euonymus fortunei		
'Carrierei'	Glossy Winter Creeper	М
'Coloratus'	Purple-Leaf Winter Creeper	М
** Ferocactus viridescens	Coast Barrel Cactus	С
Gaillardia grandiflora	Blanket Flower	All zones
Gazania spp.	Gazania	C/I
** Helianthemum spp.	Sunrose	All zones
Lantana spp.	Lantana	C/I/D

Lasthenia		
** californica	Common Goldfields	I
glabrata	Coastal Goldfields	С
** Lupinus spp.	Lupine	C/I/M
Myoporum spp.	Myoporum	C/I
Pyracantha spp.	Firethorn	All zones
Rosmarinus officinalis	Rosemary	C/I/D
Santolina		
chamaecyparissus	Lavender Cotton	All zones
virens	Santolina	All zones
Trifolium frageriferum	O'Connor's Legume	C/I
Verbena		
rigida	Verbena	All zones
** Viguiera laciniata	San Diego Sunflower	C/I
Vinca		
major	Periwinkle	C/I
minor	Dwarf Periwinkle	M
VINES		
Antigonon leptopus	San Miguel Coral Vine	C/I
Distictis buccinatoria	Blood-Red Trumpet Vine	C/I/D
** Keckiella cordifolia	Heart-Leaved Penstemon	C/I
Lonicera		
japonica 'Halliana'	Hall's Honeysuckle	All zones
** subspicata	Chaparral Honeysuckle	C/I

Solanum		
jasminoides	Potato Vine	C/I/D
PERENNIALS		
Coreopsis		
gigantea	Giant Coreopsis	С
grandiflora	Coreopsis	All zones
** maritima	Sea Dahlia	C
verticillata	Coreopsis	C/I
Heuchera maxima	Island Coral Bells	C/I
** Iris douglasiana	Douglas Iris	C/M
** Iva hayesiana	Poverty Weed	C/I
Kniphofia uvaria	Red-Hot Poker	C/I/M
Lavandula spp.	Lavender	All zones
Limonium californicum		
var. mexicanum	Coastal Statice	С
perezii	Sea Lavender	C/I
Oenothera spp.	Primrose	C/I/M
** Penstemon spp.	Penstemon	C/I/D
Satureja douglasii	Yerba Buena	C/I
Sisyrinchium		
bellum	Blue-Eyed Grass	C/I
californicum	Golden-Eyed Grass	С
Solanum		
xantii	Purple Nightshade	C/I

** Zauschneria		
californica	California Fuschia	C/I
cana	Hoary California Fuschia	C/I
'Catalina'	Catalina Fuschia	C/I
ANNUALS		
** Lupinus spp.	Lupine	C/I/M

#### UNDESIRABLE PLANT LIST

The following species are highly flammable and should be avoided when planting within the first 50 feet adjacent to a structure. The plants listed below are more susceptible to burning, due to rough or peeling bark, production of large amounts of litter, vegetation that contains oils, resin, wax, or pitch, large amounts of dead material in the plant, or plantings with a high dead to live fuel ratio.

#### **BOTANICAL NAME**

<u>Abies species</u>

Acacia species

groundcovers)

Adenostoma sparsifolium\*\*

Adenostoma fasciculatum\*\*

Agonis juniperina

Anthemis cotula \*\*\*

Araucaria species

Arctostaphylos species\*\*

Artemesia californica\*

Arundo donax

Bambusa species

Brassica species\*\*\*

Callistemon species

Calocedrus decurrens

Cardaria draba\*\*\*

**Peppergrass** 

Ceanothus species

Cedrus species

Chamaecyparis species

Cinnamomum species

Cirsium vulgare\*\*\*

Conyza Canadensis\*\*\*

Coprosma pumila

Cortaderia selloana

Cotoneaster lacteus

Cryptomeria japonica

Cupressocyparis leylandii

Cupressus forbesii

Cupressus glabra

Cupressus macrocarpa

Cupressus sempervirens

Cynara cardunculus\*\*\*

Cytisus species

Broom, etc.

Dodonea viscosa

#### **COMMON NAME**

Fir Trees

Acacia (trees, shrubs,

Red Shanks

Chamise

Juniper Myrtle

Mayweed, Stinking Chamolile

Monkey Puzzle, Norfolk Island

Pine

Manzanita

California Sagebrush

**Giant Cane** 

Bamboo

Mustard

Bottlebrush

Incense Cedar

Hoary Cress, Perennial

Ceanothus

Cedar

False Cypress

**Camphor Tree** 

Wild Artichoke

Horseweed

Prostrate Coprosma

**Pampas Grass** 

Cotoneaster

Japanese Cryptomeria

Leylandii Cypress

**Tecate Cypress** 

Arizona Cypress

Monterey Cypress

Italian Cypress

Artichoke Thistle

Scotch Broom, French

Hopseed Bush

Elaeagnus angustifolia Russian Olive Elaeagnus pungens Silverberry Eriogonum fasciculatum\*\* Common Buckwheat Eucalyptus species Eucalyptus Gensita species\*\*\* **Broom** Heterotheca grandiflora\*\* Telegraph Plant Jubaea chilensis Chilean Wine Palm Juniperus species **Junipers** Lactuca serriola \*\*\* **Prickly Lettuce** Larix species Larch Lonicera japonica Japanese Honeysuckle Miscanthus species **Eulalia Grass** Muehlenbergia species\*\* **Deer Grass** Nicotiana species Tree Tobacco Palmae species **Palms** Pennisetum setaceum **Fountain Grass** Picea species **Spruce Trees** Pickeringia Montana\*\* Chaparral Pea Pinus species Pines Fern Pine Podocarpus species Pseudotsuga menziesii Douglas Fir Castor Bean Ricinus communis Rosmarinus species Rosemary Salsola australis\*\*\* Russian Thistle, Tumbleweed Salvia species\*\* Sage Schinus molle California Pepper Schinus terebinthifolius **Brazilian Pepper** Silybum marianum\*\*\* Milk Thistle Spartium junceum Spanish Broom Tamarix species Tamarisk Taxodium species Cypress Taxus species Yew Thuia species Arborvitae Trachycarpus fortunei Windmill Palm Tsuga species Hemlock Ulex europea\*\*\* Gorse Urtica urens\*\* **Burning Nettle** Washingtonia species California/Mexican Fan Palm

- \*\* San Diego County native species
- \*\*\* Introduced weeds to San Diego County

California Department of Forestry and Fire Protection
(619) 590-3100
United States Forest Service (619) 674-2901
County Fire Service Coordinator (858) 495-5092
County Farm and Home Advisor (858) 694-2845
Insurance Information Network of California Brochures

(www.iinc.org <a href="http://www.iinc.org">http://www.iinc.org</a>) or call (800) 397-1679

### **REFERENCES**

- Combustible Vegetation and Other Flammable Materials Ordinance. Sections 68.401 thru 86.406 of the County of San Diego's Zoning Ordinance.
- California Department of Fish and Game (858) 467-4201
- U.S. Fish and Wildlife Service (760) 431-9440
- <u>Protecting Your Property From Soil Erosion</u>
   (www.sdcounty.ca.gov/dpw/docs/fire/homeerosion.pdf
   <a href="http://www.sdcounty.ca.gov/dpw/docs/fire/homeerosion.pdf">http://www.sdcounty.ca.gov/dpw/docs/fire/homeerosion.pdf</a>)
- Homeowner's Guide for Flood, Debris, and Erosion Control After Fires (www.sdcounty.ca.gov/dpw/docs/fire/AfterFire.pdf
   <a href="http://www.sdcounty.ca.gov/dpw/docs/fire/AfterFire.pdf">http://www.sdcounty.ca.gov/dpw/docs/fire/AfterFire.pdf</a>)
- Burn Institute (www.burninstitute.org)

# **ATTACHMENT 1 (Continued)**

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# Attachment 3

**Prohibited Plant List** 



# APPENDIX D Prohibited Plant List

Botanical Name	Common Name
1	rees
Abies species	Fir
Acacia species (numerous)	Acacia
Agonis juniperina	Juniper Myrtle
Araucaria species (A. heterophylla, A. araucana, A. bidwillii)	Araucaria (Norfolk Island Pine, Monkey Puzzle Tree, Bunya Bunya)
Callistemon species (C. citrinus, C. rosea, C. viminalis)	Bottlebrush (Lemon, Rose, Weeiping)
Calocedrus decurrens	Incense Cedar
Casuarina cunninghamiana	River She-Oak
Cedrus species (C. atlantica, C. deodara)	Cedar (Atlas, Deodar)
Chamaecyparis species (numerous)	False Cypress
Cinnamomum camphora	Camphor
Cryptomeria japonica	Japanese Cryptomeria
Cupressocyparis leylandii	Leyland Cypress
Cupressus species (C. fobesii, C. glabra, C. sempervirens,)	Cypress (Tecate, Arizona, Italian, others)
Eucalyptus species (numerous)	Eucalyptus
Juniperus species (numerous)	Juniper
Larix species (L. decidua, L. occidentalis, L. kaempferi)	Larch (European, Japanese, Western)
Leptospermum species (L. laevigatum, L. petersonii)	Tea Tree (Austrailian, Tea)
Lithocarpus densiflorus	Tan Oak
Melaleuca species (M. linariifolia, M. nesophylla, M. quinqenervia)	Melaleuca (Flaxleaf, Pink, Cajeput Tree)
Olea europea	Olive
Picea (numerous)	Spruce
Palm species (numerous)	Palm
Pinus species (P. brutia, P. canariensis, P. eldarica, P. halopensis, P. pinea, P. radiate, numerous others)	Pine (Calabrian, Canary Island, Mondell, Aleppo, Italian Stone, Monterey)
Platycladus orientalis	Oriental arborvitae
Podocarpus species (P. gracilior, P. macrophyllus, P. latifolius)	Fern Pine (Fern, Yew, Podocarpus)
Pseudotsuga menziesii	Douglas Fir
Schinus species (S. molle, S. terebenthifolius)	Pepper (California and Brazilian)
Tamarix species (T. Africana, T. apylla, T. chinensis, T. parviflora)	Tamarix (Tamarisk, Athel Tree, Salt Cedar, Tamarisk)
Taxodium species (T. ascendens, T. distichum, T. mucronatum)	Cypress (Pond, Bald, Monarch, Montezuma)
Taxus species (T. baccata, T. brevifolia, T. cuspidata)	Yew (English, Western, Japanese)
Thuja species (T. occidentalis, T. plicata)	Arborvitae/Red Cedar
Tsuga species (T. heterophylla, T. mertensiana)	Hemlock (Western, Mountain)
	Shrubs and Vines
Acacia species	Acacia
Adenostoma fasciculatum	Chamise
Adenostoma sparsifolium	Red Shanks



# **APPENDIX D (Continued)**

Botanical Name	Common Name
Agropyron repens	Quackgrass
Anthemis cotula	Mayweed
Arbutus menziesii	Madrone
Arctostaphylos species	Manzanita
Arundo donax	Giant Reed
Artemesia species (A. abrotanium, A. absinthium, A. californica, A. caucasia, A. dracunulus, A. tridentate, A. pynocephala)	Sagebrush (Southernwood, Wormwood, California, Silver, True tarrangon, Big, Sandhill)
Atriplex species (numerous)	Saltbush
Auena fatua	Wild Oat
Baccharis pilularis	Coyote Bush
Bambusa species	Bamboo
Bougainvillea species	Bougainvillea
Brassica species (B. campestris, B. nigra, B. rapa)	Mustard (Field, Black, Yellow)
Bromus rubens	Foxtail, Red brome
Cardera draba	Noary Cress
Carpobrotus species	Ice Plant, Hottentot Fig
Castanopsis chrysophylla	Giant Chinkapin
Cirsium vulgare	Wild Artichoke
Conyza bonariensis	Horseweed
Coprosma pumila	Prostrate Coprosma
Cortaderia selloana	Pampas Grass
Cytisus scoparius	Scotch Broom
Dodonea viscose	Hopseed Bush
Eriodyctyon californicum	Yerba Santa
Eriogonum species (E. fasciculatum)	Buckwheat (California)
Fremontodendron species	Flannel Bush
Hedera species (H. canariensis, H. helix)	Ivy (Algerian, English)
Heterotheca grandiflora	Telegraph Plant
Hordeum leporinum	Wild barley
Juniperus species	Juniper
Lactuca serriola	Prickly Lettuce
Larix species (numerous)	Larch
Larrea tridentata	Creosote bush
Lolium multiflorum	Ryegrass
Lonicera japonica	Japanese Honeysuckle
Mahonia species	Mahonia
Mimulus aurantiacus	Sticky Monkeyflower
Miscanthus species	Eulalie Grass
Muehlenbergia species	Deer Grass
Nicotania species (N. bigelevil, N. glauca)	Tobacco (Indian, Tree)
Pennisetum setaceum	Fountain Grass
Perronskia Atriplicifloria	Russian Sage



# **APPENDIX D (Continued)**

Botanical Name	Common Name
Phoradendrom species	Mistletoe
Pickeringia montana	Chaparral Pea
Rhus species (R. diversiloba, R. laurina, R. lentii)	Sumac (Poison oak, Laurel, Pink Flowering)
Ricinus communis	Castor Bean
Rosmarinus species	Rosemary
Salvia species (numerous)	Sage
Sacsola austails	Russian Thistle
Solanium Xantii	Purple Nightshade (toxic)
Sylibum marianum	Milk Thistle
Thuja species	Arborvitae
Urtica urens	Burning Nettle
Vinca major	Periwnkle
Rhus lentii	Pink Flowering Sumac

#### Notes:

- 1 For the purpose of using this list as a guide in selecting plant material, it is stipulated that all plant material will burn under various conditions.
- 2 The absence of a particular plant, shrub, groundcover, or tree, from this list does not necessarily mean it is fire resistive.
- 3 All vegetation used in Vegetation Management Zones and elsewhere in this development shall be subject to approval of the Fire Marshal.
- Additional plants that are considered undesirable due to their invasiveness nature are detailed on the California Invasive Plant Council's Web site at www.cal-ipc.org/ip/inventory/index.php.
- 5 Landscape architects may submit proposals for use of certain vegetation on a project specific basis. They shall also submit justifications as to the fire resistivity of the proposed vegetation.



# **APPENDIX D (Continued)**

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