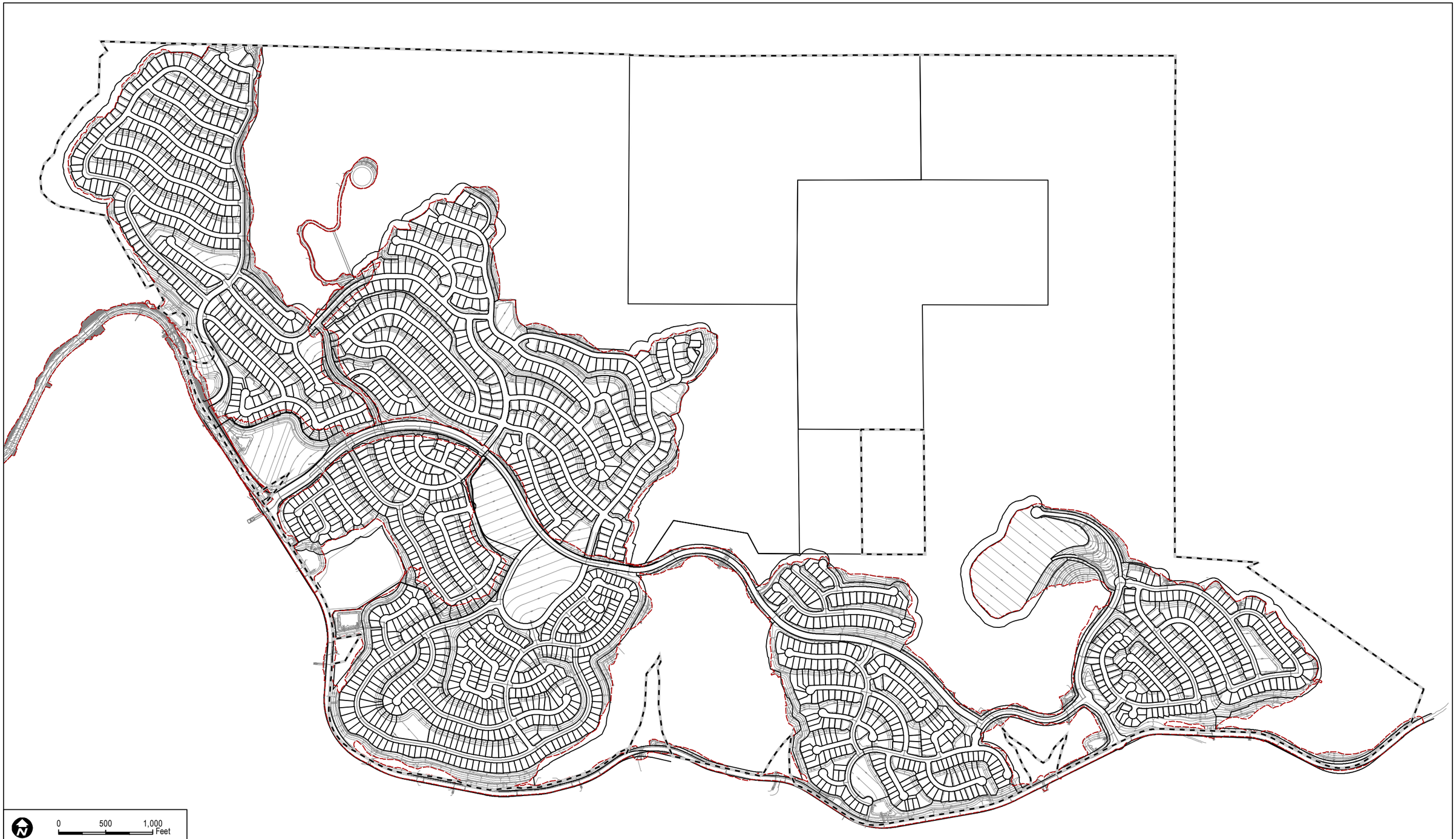
# APPENDIX A

*Site Tract Map*




DUDEK

6524

SOURCE: Hunsaker 2014

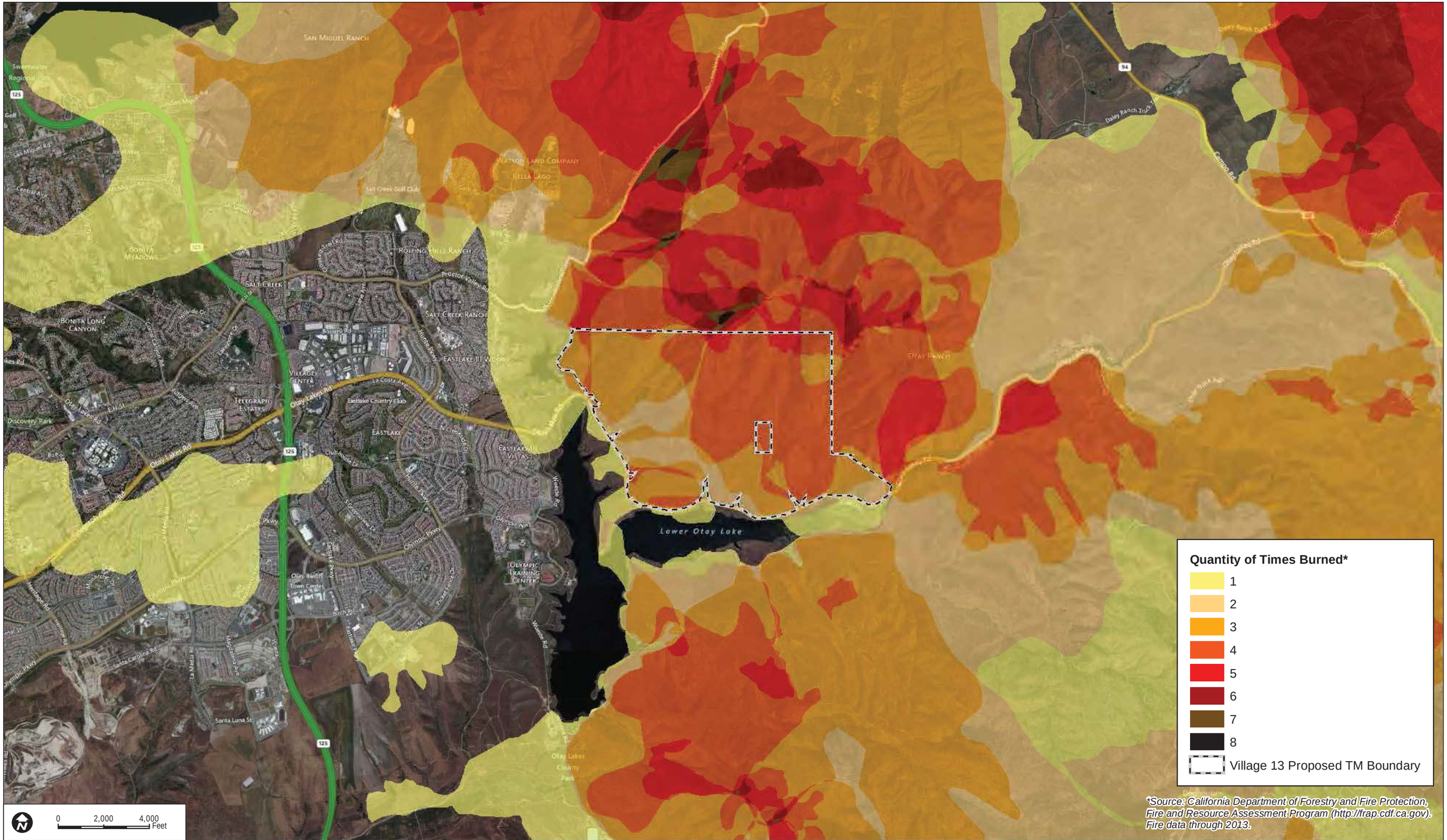
**APPENDIX A**

**Site Tract Map**

THE OTAY RANCH RESORT VILLAGE FIRE PROTECTION PLAN

# APPENDIX B

*Fire History Exhibit*

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SOURCE: CAL FIRE 2014; BING 2014

APPENDIX B

**Fire History**

THE OTAY RANCH RESORT VILLAGE FIRE PROTECTION PLAN

# APPENDIX C

*Fire Behavior Modeling Input Data*

## BEHAVEPLUS FIRE BEHAVIOR MODELING

Fire behavior modeling includes a high level of analysis and information detail to arrive at reasonably accurate representations of how wildfire would move through available fuels on a given site. Fire behavior calculations are based on site-specific fuel characteristics supported by fire science research that analyzes heat transfer related to specific fire behavior. To objectively predict flame lengths, spread rates, and fireline intensities, the BehavePlus 5.0.5 fire behavior modeling system was applied using predominant fuel characteristics, slope percentages, and extreme weather variables for the site.

Predicting wildland fire behavior is not an exact science. As such, the movement of a fire will likely never be fully predictable, especially considering the variations in weather and the limits of weather forecasting. Nevertheless, practiced and experienced judgment, coupled with a validated fire behavior modeling system, results in useful and accurate fire prevention planning information.

To be used effectively, the basic assumptions and limitations of BehavePlus must be understood.

- First, it must be realized that the fire model describes fire behavior only in the flaming front. The primary driving force in the predictive calculations is dead fuels less than one-quarter inch in diameter. These are the fine fuels that carry fire. Fuels greater than one inch have little effect while fuels greater than three inches have no effect on fire behavior.
- Second, the model bases calculations and descriptions on a wildfire spreading through surface fuels that are within six feet of the ground and contiguous to the ground. Surface fuels are often classified as grass, brush, litter, or slash.
- Third, the software assumes that weather and topography are uniform. However, because wildfires almost always burn under non-uniform conditions, length of projection period and choice of fuel model must be carefully considered to obtain useful predictions.
- Fourth, the BehavePlus fire behavior computer modeling system was not intended for determining sufficient fuel modification zone widths. However, it does provide the average length of the flames, which is a key element for determining “defensible space” distances for minimizing structure ignition.

Although BehavePlus has some limitations, it can still provide valuable fire behavior predictions which can be used as a tool in the decision-making process. In order to make reliable estimates of fire behavior, one must understand the relationship of fuels to the fire environment and be able to recognize the variations in these fuels. Natural fuels are made up of the various components of vegetation, both live and dead, that occur on a site. The type and quantity will depend upon the soil, climate, geographic features, and the fire history of the site. The major fuel groups of grass, shrub, trees, and slash are defined by their constituent types and quantities of litter and duff

layers, dead woody material, grasses and forbs, shrubs, regeneration, and trees. Fire behavior can be predicted largely by analyzing the characteristics of these fuels. Fire behavior is affected by seven principal fuel characteristics: fuel loading, size and shape, compactness, horizontal continuity, vertical arrangement, moisture content, and chemical properties.

The seven fuel characteristics help define the 13 standard fire behavior fuel models (Anderson 1982) and the more recent custom fuel models developed for southern California (Weise and Regelbrugge 1997). According to the model classifications, fuel models used in BehavePlus have been classified into four groups, based upon fuel loading (tons/acre), fuel height, and surface to volume ratio. Observation of the fuels in the field (on site) determines which fuel models should be applied in BehavePlus. The following describes the distribution of fuel models among general vegetation types for the standard 13 fuel models and the custom southern California fuel models:

- ≠ Grasses — Fuel Models 1 through 3
- ≠ Brush — Fuel Models 4 through 7, SCAL 14 through 18
- ≠ Timber — Fuel Models 8 through 10
- ≠ Logging Slash — Fuel Models 11 through 13

In addition, the aforementioned fuel characteristics were utilized in the recent development of 40 new fire behavior fuel models (Scott and Burgan 2005) developed for use in BehavePlus modeling efforts. These new models attempt to improve the accuracy of the standard 13 fuel models outside of severe fire season conditions, and to allow for the simulation of fuel treatment prescriptions. The following describes the distribution of fuel models among general vegetation types for the new 40 fuel models:

- ≠ Non-Burnable — Models NB1, NB2, NB3, NB8, NB9
- ≠ Grass — Models GR1 through GR9
- ≠ Grass-shrub — Models GS1 through GS4
- ≠ Shrub — Models SH1 through SH9
- ≠ Timber-understory — Models TU1 through TU5
- ≠ Timber litter — Models TL1 through TL9
- ≠ Slash blowdown — Models SB1 through SB4

## BEHAVEPLUS FIRE BEHAVIOR MODELING INPUTS

To support the fire behavior modeling efforts conducted for this Fire Protection Plan, three fuel models were observed on the slopes to the south and east of the Project site and were subsequently used in the modeling analysis. While vegetation types other than the selected three are located on site, the selected areas represent the most likely wildfire threat for the Project site. Table 1 provides a description of the three fuel models:

**Table 1**
**Fuel Model Characteristics**

| Fuel Model | Description | Tons/acre; Btu/lb. | Fuel Bed Depth (feet) |
|---|---|---|---|
| GS2 | Moderate load, dry climate grass/shrub | 2.6 tons/acre; 8,000 Btu/lb. | 1.5 |
| SCAL15 | Chamise | 10 tons/acre; 10,000 Btu/lb. | 3.0 |
| SH7 | Very high load dry scrub | 14 tons/acre; 8,000 Btu/lb. | 6.0 |

Weather values for the modeling runs incorporated two different scenarios: a summer fire and a fall/early winter fire. Weather data was derived from the San Miguel Remote Automated Weather Station (RAWS), and the National Weather Service station in Chula Vista, California. Additionally, 50 mph wind speed values were utilized to represent catastrophic fire weather conditions as observed during the 2003 Cedar Fire. Slope values for this site were measured from site topographic maps and are presented in units of percent. The modeling runs utilized worst-case (steepest) slope values in areas adjacent to proposed development areas with measurements ranging from flat (0%) to 44%. The fire behavior modeling input variables for the Project site are presented in Table 2.

**Table 2**
**BehavePlus Fire Behavior Modeling Inputs**

| Variable | Summer | Fall/Early Winter |
|---|---|---|
| Month | September | October |
| Temperature | 89 °F | 92 °F |
| Relative Humidity | 14 % | 12 % |
| 1-hour Fuel Moisture | 3 % | 2 % |
| Live Fuel Moisture | 70 % | 55 % |
| Wind Speed | 20 mph from SW | 24 mph from NE/50 mph from NE |
| Slope | 44 % (worst case) | 0 % |

## BEHAVEPLUS FIRE BEHAVIOR MODELING RESULTS

Four fire behavior variables were selected as outputs from the BehavePlus analysis conducted for the project site, and include flame length (feet), rate of spread (mph), spotting distance (miles), and ignition probability (percentage). The aforementioned fire behavior variables are an important component in understanding fire risk and fire agency response capabilities. Flame length, the length of the flame of a spreading surface fire within the flaming front, is measured from midway in the active flaming combustion zone to the average tip of the flames (Andrews, Bevins, and Seli 2004). It is a somewhat subjective and non-scientific measure of fire behavior, but is extremely important to fireline personnel in evaluating fireline intensity and is worth considering as an important fire variable (Rothermel 1983). Fireline intensity is a measure of heat output from the flaming front, and also affects the potential for a surface fire to transition to a crown fire. Fire spread rate represents the speed at which the fire progresses through surface fuels and is another important variable in initial attack and fire suppression efforts. The information in Table 3 presents an interpretation of these fire behavior variables as related to fire suppression efforts. The results of fire behavior modeling efforts are presented in Table 4.

**Table 3**
**Fire Suppression Interpretation**

| Flame Length (ft) | Fireline Intensity (Btu/ft/s) | Interpretations |
|---|---|---|
| Under 4 feet | Under 100 BTU/ft/s | Fires can generally be attacked at the head or flanks by persons using hand tools. Hand line should hold the fire. |
| 4 to 8 feet | 100-500 BTU/ft/s | Fires are too intense for direct attack on the head by persons using hand tools. Hand line cannot be relied on to hold the fire. Equipment such as dozers, pumpers, and retardant aircraft can be effective. |
| 8 to 11 feet | 500-1000 BTU/ft/s | Fires may present serious control problems -- torching out, crowning, and spotting. Control efforts at the fire head will probably be ineffective. |
| Over 11 feet | Over 1000 BTU/ft/s | Crowning, spotting, and major fire runs are probable. Control efforts at head of fire are ineffective. |

**Source:** BehavePlus 5.0.5 fire behavior modeling program (Andrews, Bevins, and Seli 2004)

**Table 4**
**BehavePlus Fire Behavior Modeling Results**

| Fuel Model | BehavePlus Output | Summer Fire | Fall Fire | Extreme Fall Fire |
|---|---|---|---|---|
| GS2 | Surface Rate of Spread | 0.7 mph | 1.2 mph | — |
| | Flame Length | 8.0 feet | 11.0 feet | 15.0 feet |
| | Spot Distance from Wind Driven Surface Fire | 0.4 miles | 0.6 miles | — |
| | Ignition Probability | 89% | 100% | — |
| SCAL15 | Surface Rate of Spread | 0.6 mph | 1.1 mph | — |
| | Flame Length | 14.0 feet | 18.0 feet | 20.0 feet |
| | Spot Distance from Wind Driven Surface Fire | 0.6 miles | 0.8 miles | — |

**Table 4**
**BehavePlus Fire Behavior Modeling Results**

| Fuel Model | BehavePlus Output | Summer Fire | Fall Fire | Extreme Fall Fire |
|---|---|---|---|---|
| | Ignition Probability | 89% | 100% | — |
| SH7 | Surface Rate of Spread | 1.1 mph | 2.3 mph | — |
| | Flame Length | 21 feet | 31 feet | 46.0 feet |
| | Spot Distance from Wind Driven Surface Fire | 0.6 miles | 1.1 miles | 2.5 miles |
| | Ignition Probability | 89% | 100% | — |

## REFERENCES

Anderson, Hal E. 1982. Aids to Determining Fuel Models for Estimating Fire Behavior. USDA Forest Service Gen. Tech. Report INT-122. Intermountain Forest and Range Experiment Station, Ogden, Utah.

Andrews, Patricia L., Collin D. Bevins, and Robert C. Seli. 2004. BehavePlus fire modeling system, version 3.0: User's Guide. Gen. Tech. Rep. RMRS-GTR-106 Ogden, Utah: Department of Agriculture, Forest Service, Rocky Mountain Research Station. 132p.

Rothermel, R.C. 1983. How to Predict the Spread and Intensity of Forest and Range Fires. USDA Forest Service Gen. Tech. Report INT-143. Intermountain Forest and Range Experiment, Ogden, Utah.

Scott, Joe H. and Robert E. Burgan. 2005. Standard fire behavior fuel models: a comprehensive set for use with Rothermel’s surface fire spread model. Gen. Tech. Rep. RMRS-GTR-153. Fort Collins, Colorado: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 72 p.

Weise, D.R. and J. Regelbrugge. 1997. Recent chaparral fuel modeling efforts. Prescribed Fire and Effects Research Unit, Riverside Fire Laboratory, Pacific Southwest Research Station. 5p.

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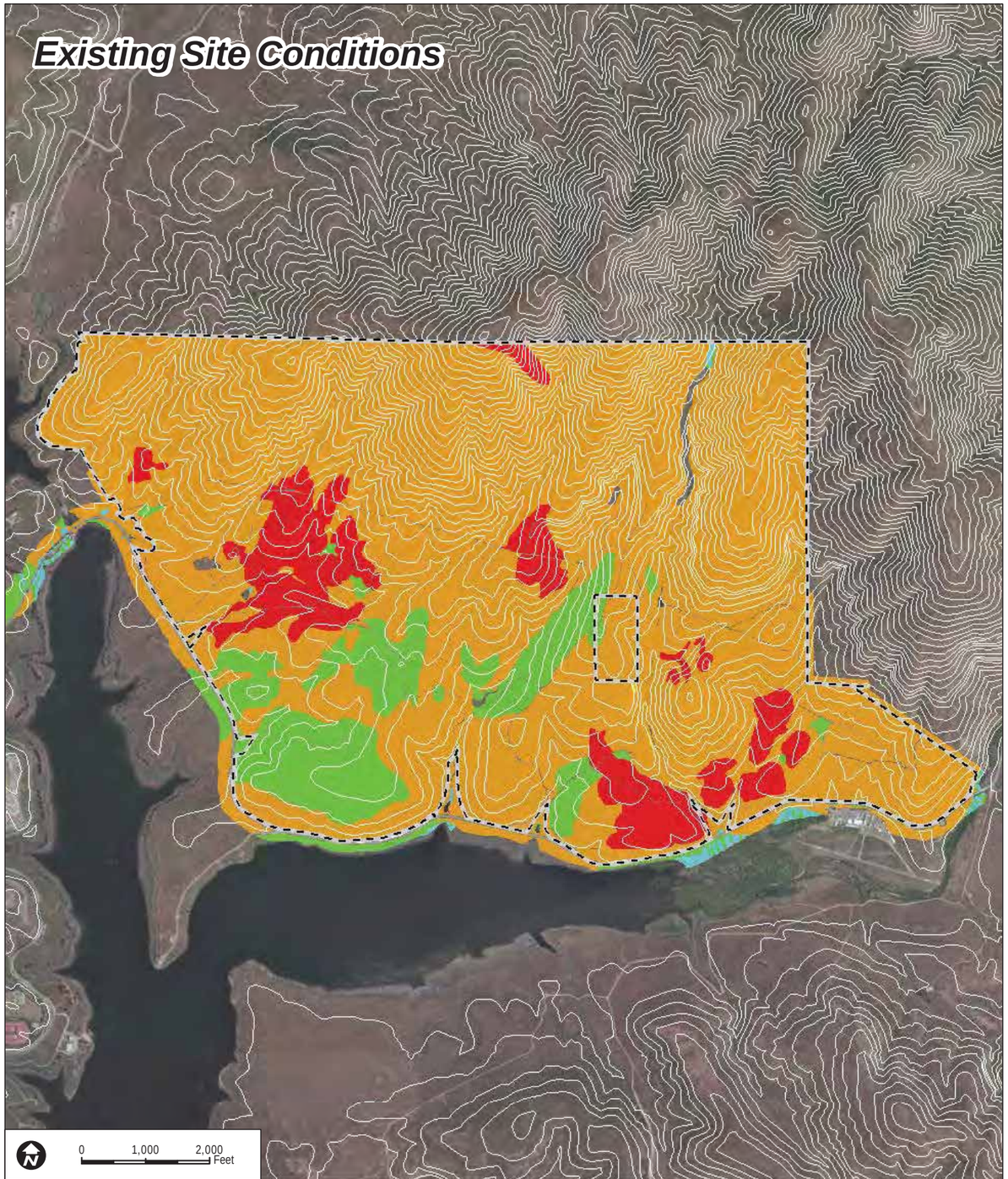
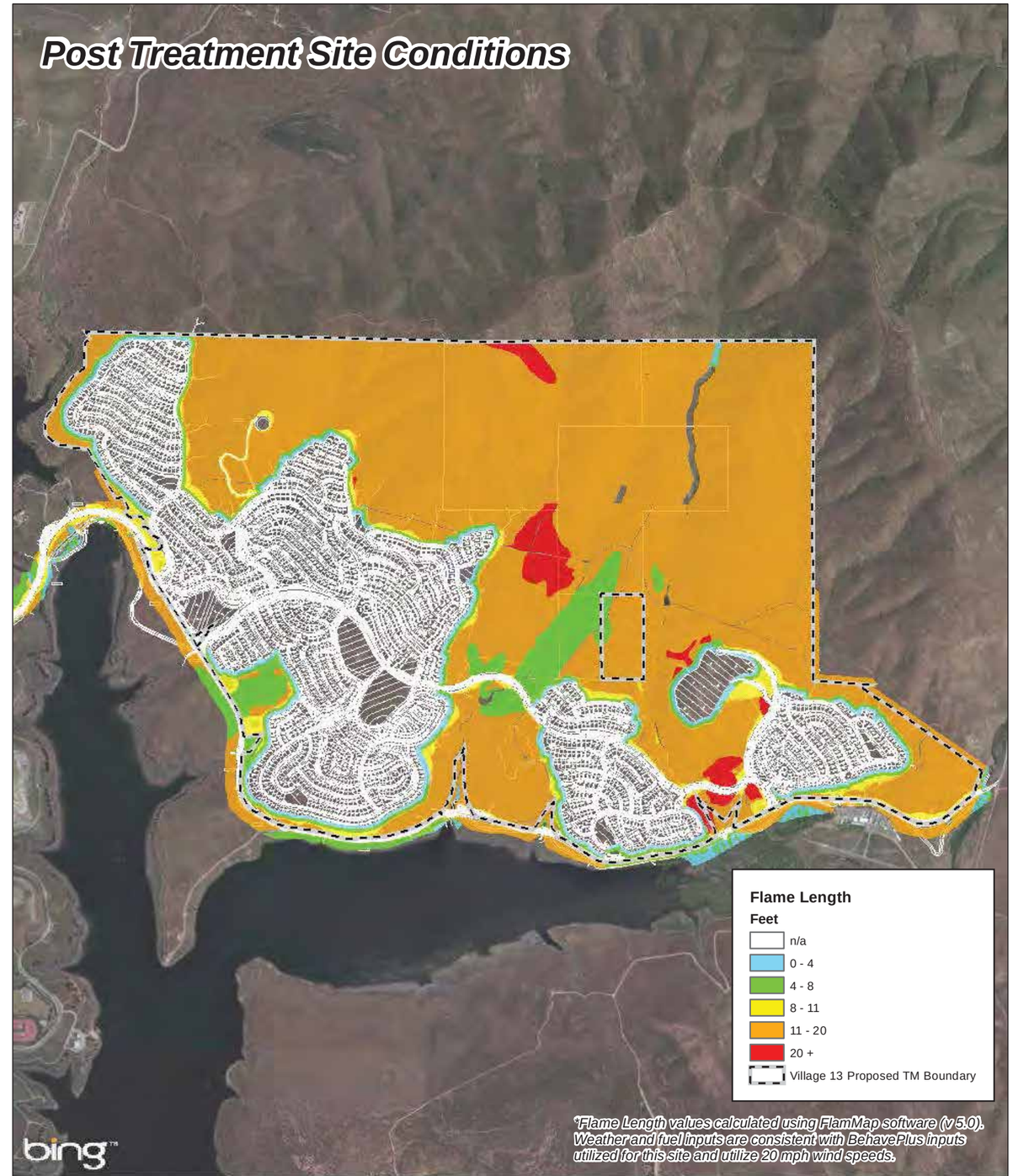
# APPENDIX D

*Fire Behavior Analysis – Summer Fire*

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SOURCE: SANGIS 2013; BING 2014; Hunsaker 2014

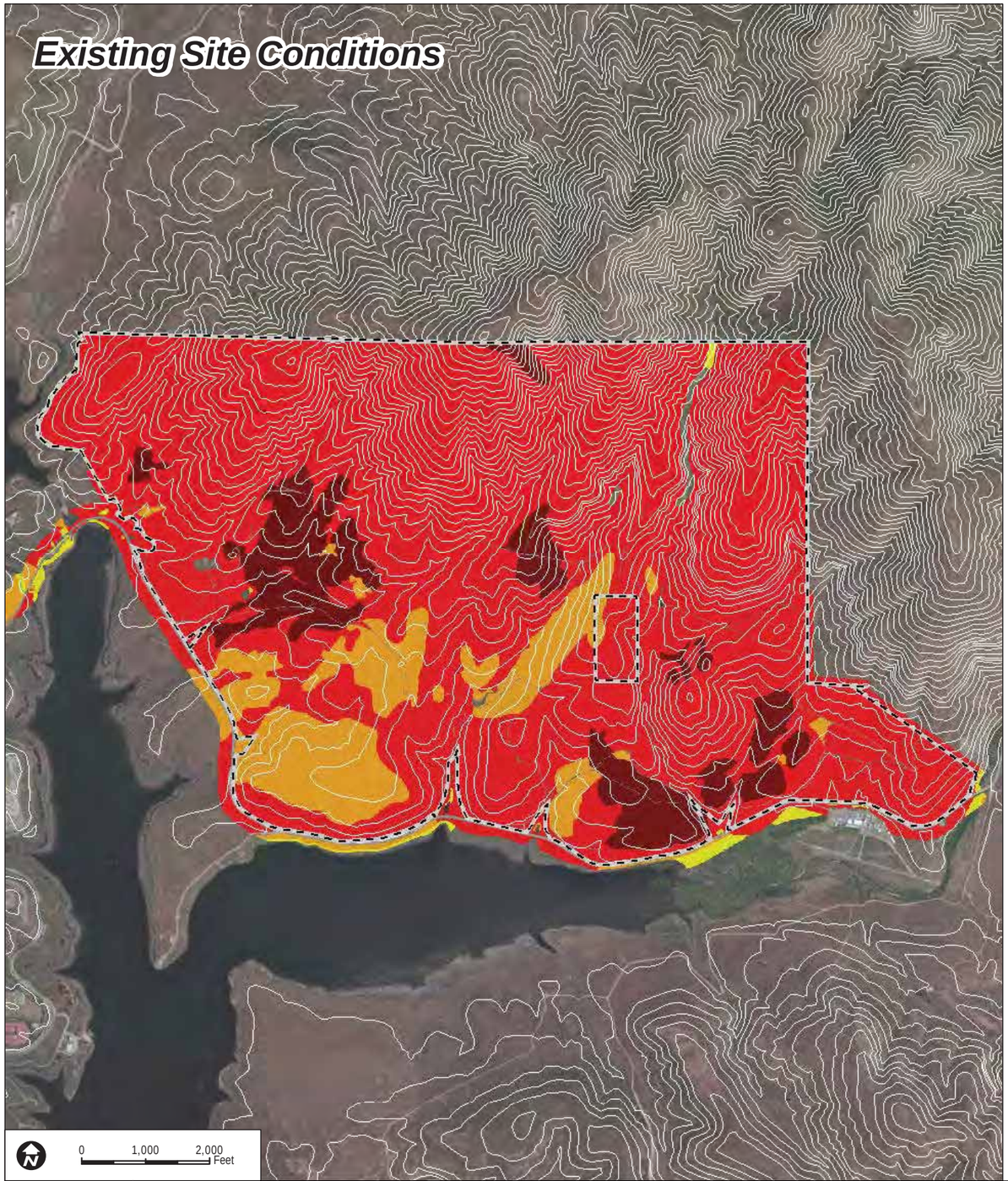
APPENDIX D

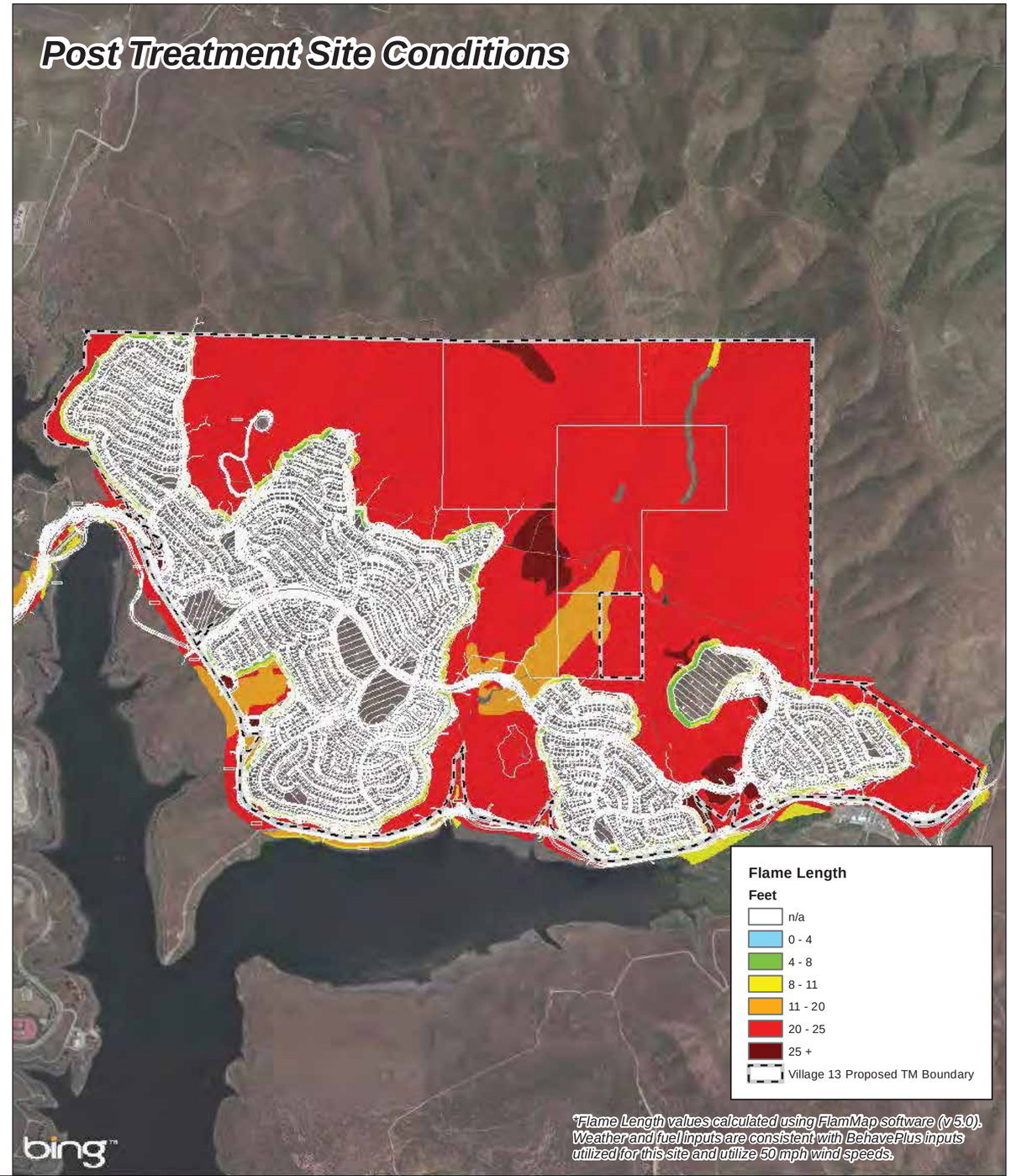
**Fire Behavior Analysis - Summer Fire**

THE OTAY RANCH RESORT VILLAGE FIRE PROTECTION PLAN

# APPENDIX E

*Fire Behavior Analysis – Fall Fire*

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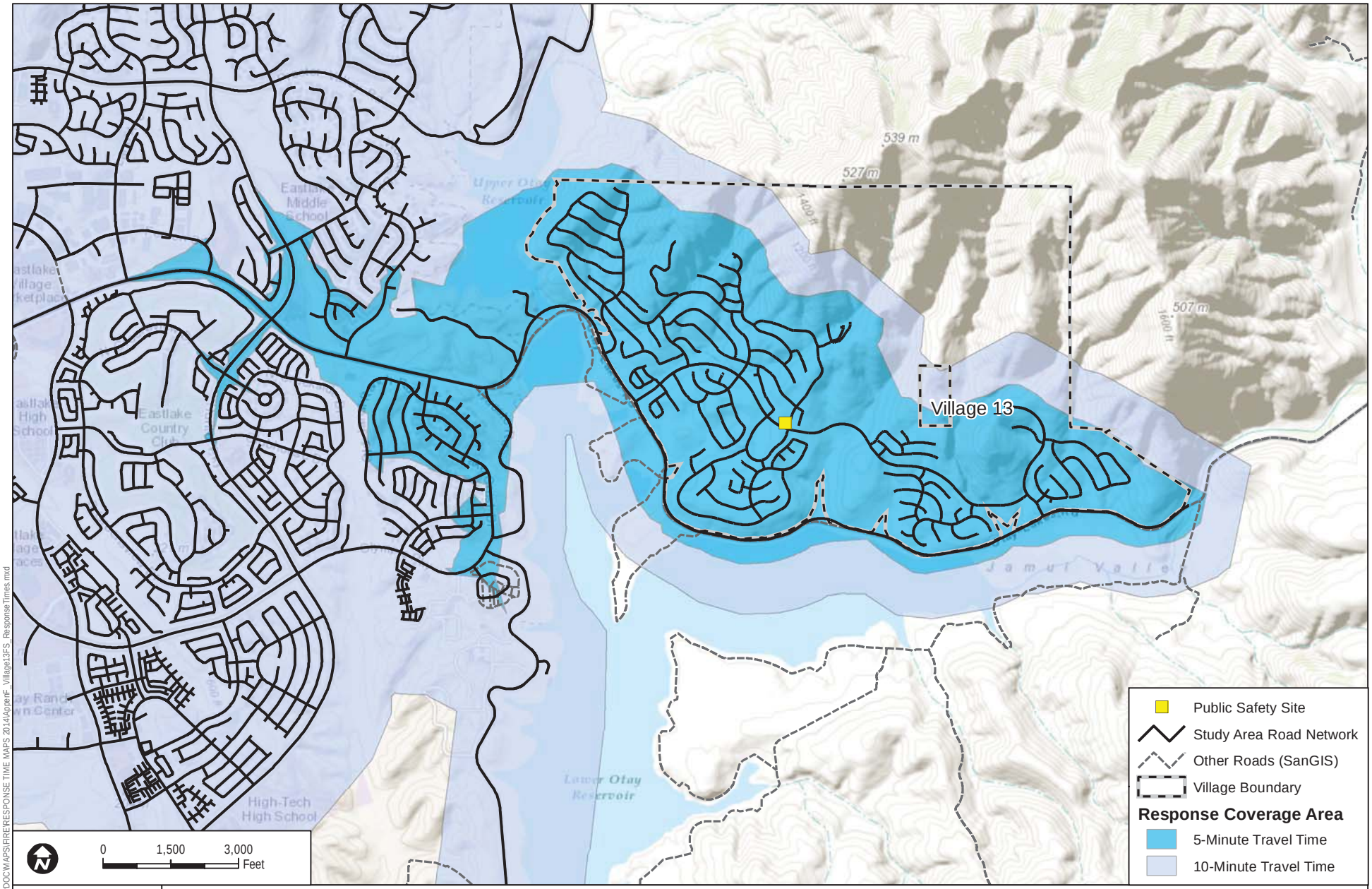
SOURCE: SANGIS 2013; BING 2014; Hunsaker 2014

APPENDIX E

**Fire Behavior Analysis - Fall Fire**

# APPENDIX F

*Fire Department Response Analysis –*
*Permanent Station Site*




DUDEK

6524

SEPTEMBER 2014

SOURCE: ESRI 2014, SanGIS 2013, Hunsaker 2012, Hale Engineering 2012

**Appendix F**

## Fire Department Response Analysis

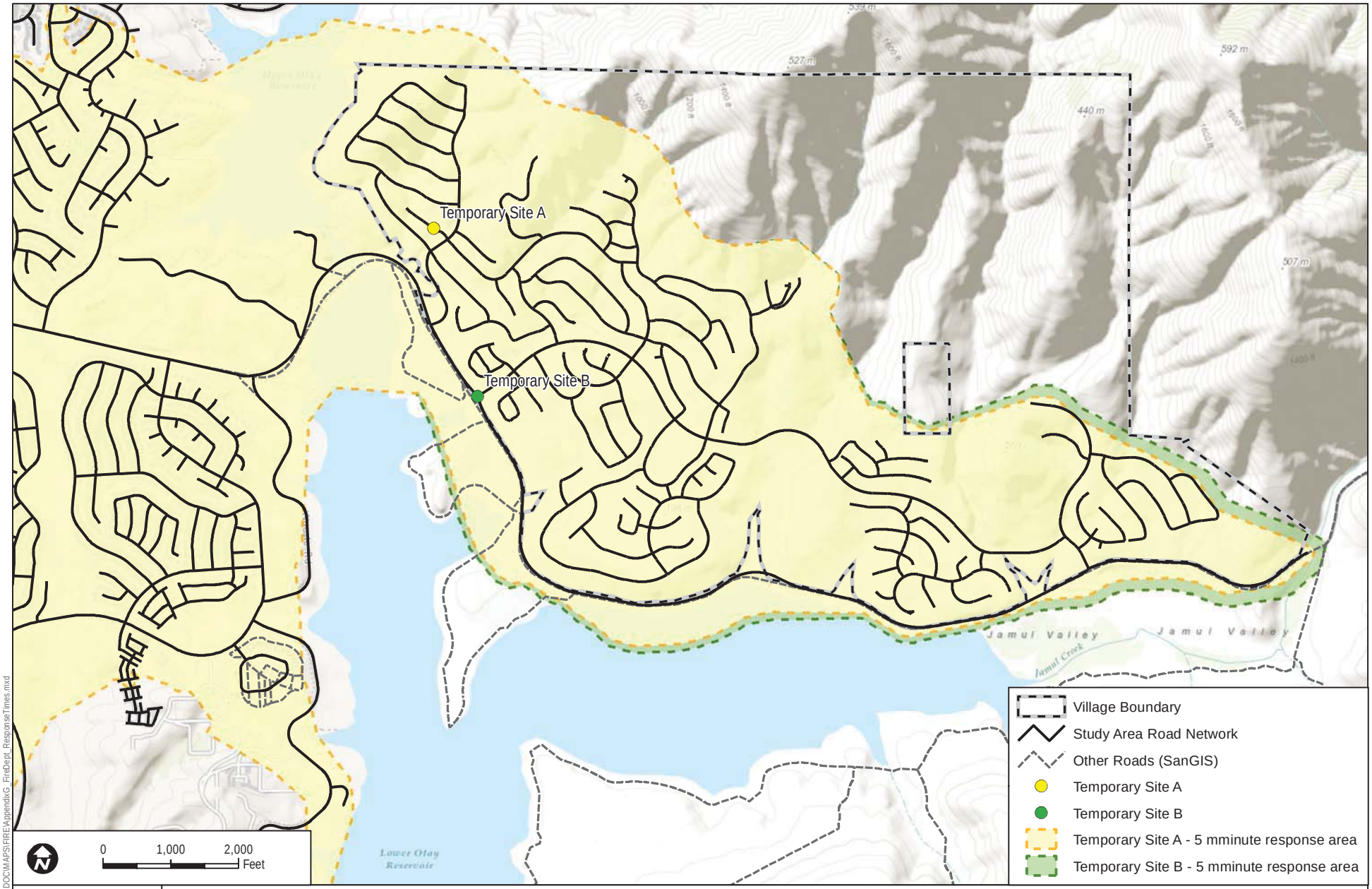
OTAY RANCH RESORT VILLAGE (VILLAGE 13)

**NOTE: Represents 35 mph response travel speed.**

Path: Z:\Projects\652401\MAPDOC\MAPS\FIRE\RESPONSE TIME MAPS 2014\AppendF_Village13FS_ResponseTimes.mxd

# APPENDIX G

## *Fire Department Response Analysis – Temporary Options*




DUDEK

6524

SEPTEMBER 2014

SOURCE: ESRI 2014, SanGIS 2013, Hunsaker 2012, Hale Engineering 2012

**Appendix G**

## Fire Department Response Analysis

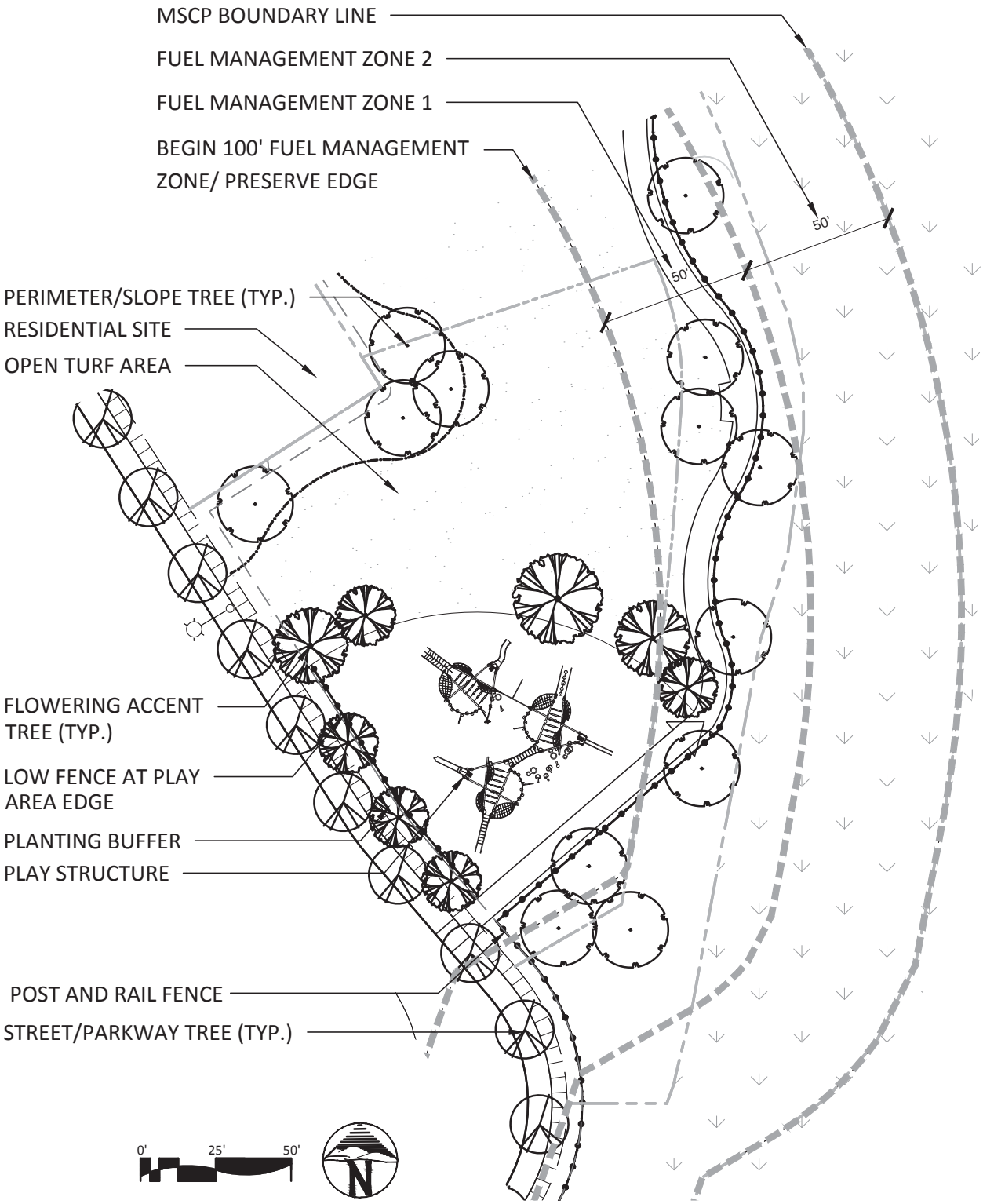
OTAY RANCH RESORT VILLAGE (VILLAGE 13)

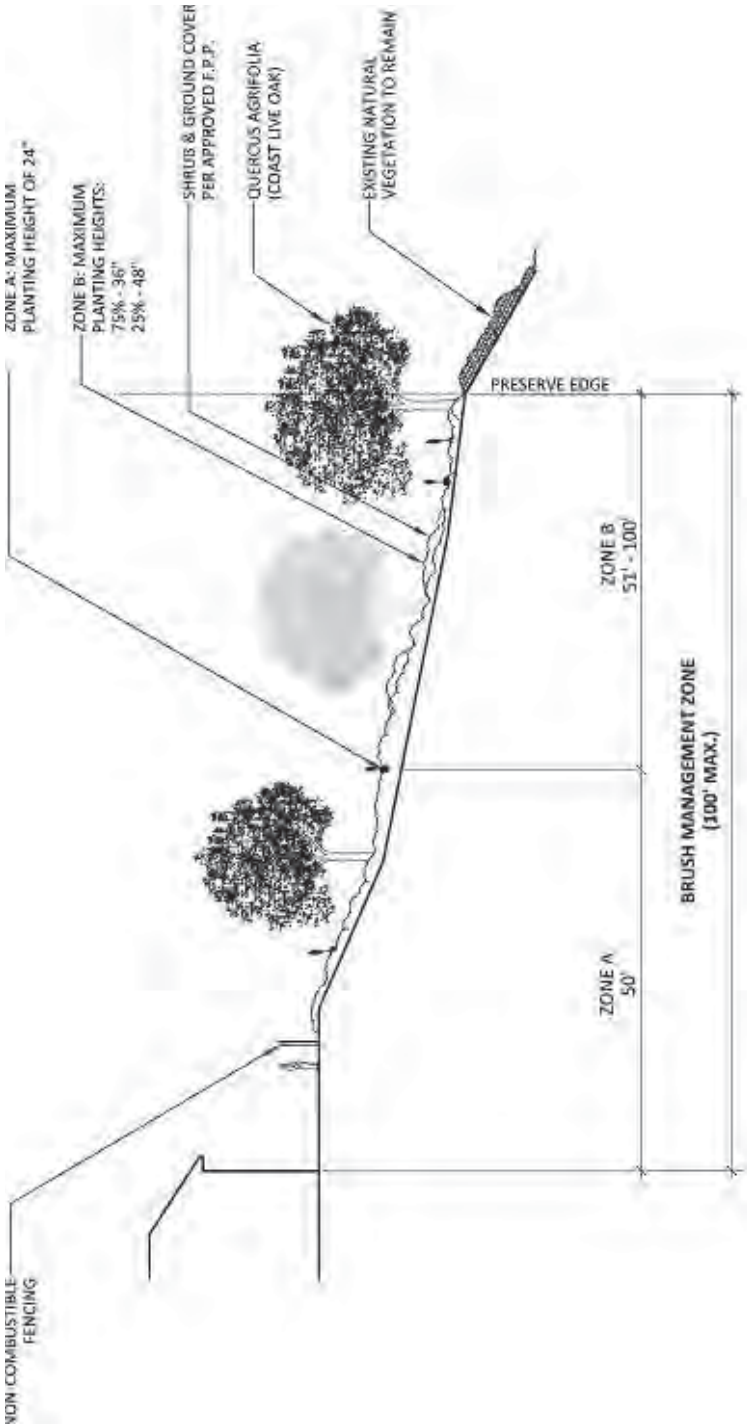
**NOTE: Represents 35 mph response travel speeds.**

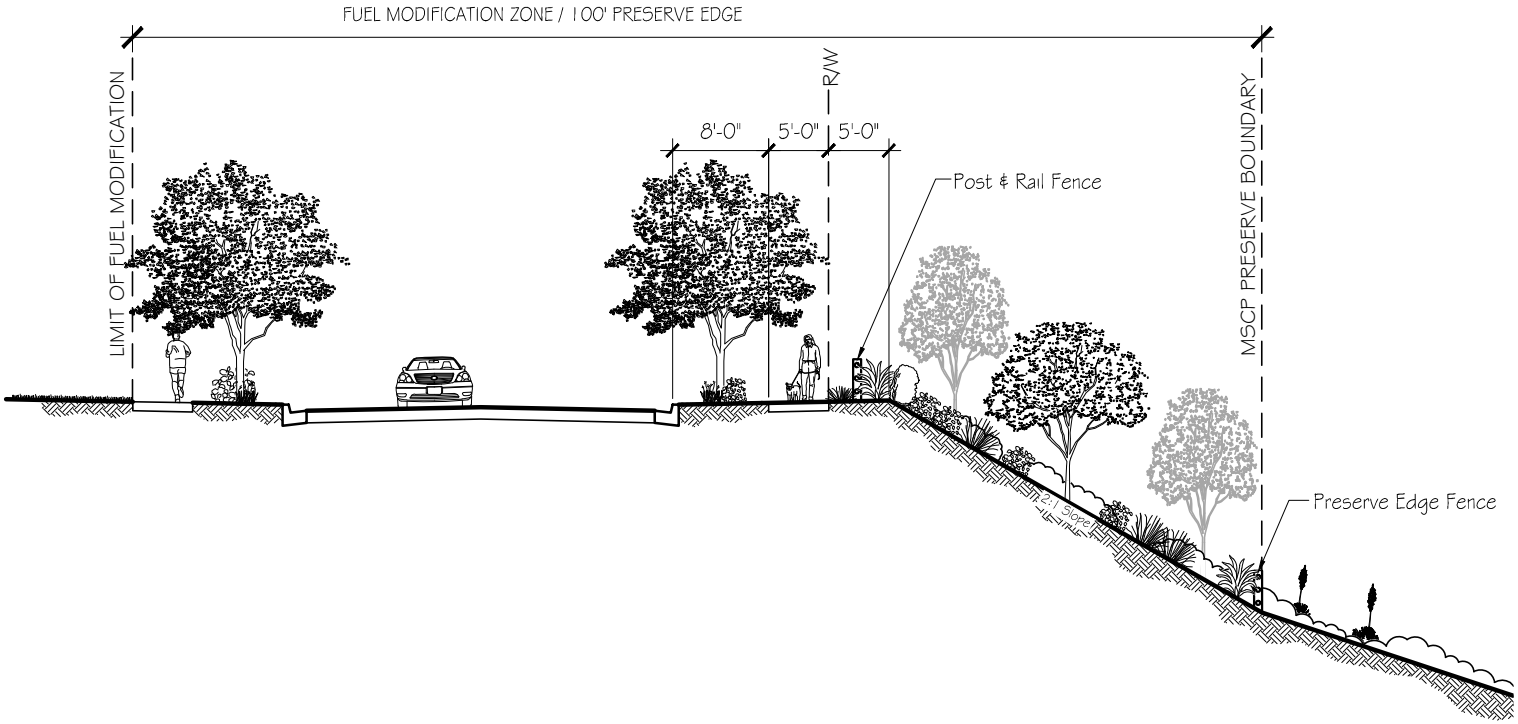
Path: Z:\Projects\6524\01\MAP\DOC\MAPS\FIREA\appendixG_FireDept_ResponseTimes.mxd

# APPENDIX H-1 THROUGH H-3

*Fuel Modification Zone Profile*


MSCP BOUNDARY LINE
FUEL MANAGEMENT ZONE 2
FUEL MANAGEMENT ZONE 1
BEGIN 100' FUEL MANAGEMENT ZONE/ PRESERVE EDGE
50'
50'
PERIMETER/SLOPE TREE (TYP.)
RESIDENTIAL SITE
OPEN TURF AREA
FLOWERING ACCENT TREE (TYP.)
LOW FENCE AT PLAY AREA EDGE
PLANTING BUFFER
PLAY STRUCTURE
POST AND RAIL FENCE
STREET/PARKWAY TREE (TYP.)
0'
25'
50'
N


ZONE A: MAXIMUM
PLANTING HEIGHT OF 24"
ZONE B: MAXIMUM
PLANTING HEIGHTS:
75% - 36"
25% - 48"
SHRUB & GROUND COVER
PER APPROVED F.P.P.
QUERCUS AGRIFOLIA
(COAST LIVE OAK)
EXISTING NATURAL
VEGETATION TO REMAIN
PRESERVE EDGE
ZONE B
51' - 100'
BRUSH MANAGEMENT ZONE
(100' MAX.)
ZONE A
50'
NON COMBUSTIBLE
FENCING




# Otay Ranch, Village 13

## Typical Edge Condition

# APPENDIX I

*Approved Plant List*

# Landscape Palette

## Area #1: Scenic Highway – Otay Lakes Road

**Trees such as, but not limited to:**

| | | | |
|---|---|---|---|
| Arbutus unedo* | Strawberry Tree | Kc 0.3 | CF |
| Platanus racemosa | California Sycamore | Kc 0.5 | |
| Quercus agrifolia* | Coast Live | Kc 0.3 | CF |
| Quercus suber* | Cork Oak | Kc 0.3 | CF |
| Rhus lancea* | African Sumac | Kc 0.3 | CF |

**Shrunbs and Groundcovers such as, but not limited to:**

| | | | |
|---|---|---|---|
| Agave attenuata* | Century Plant | Kc 0.3 | CF |
| Agave shawii* | Coastal Agave | Kc 0.3 | CF |
| Baccharis pilularis* | Dwarf Coyote Bush | Kc 0.3 | CF |
| Ceanothus species* | Carmel Creeper | Kc 0.3 | CF |
| Cistus species* | Rock Rose | Kc 0.3 | CF |
| Dalea orcuttii | Baja Indigo Bush | Kc 0.3 | CF |
| Cotoneaster dammeri Lowfast | Bearberry Cotoneaster | Kc 0.5 | CF |
| Eriophyllum confertiflorum* | Golden Yarrow | Kc 0.1 | CF |
| Mimulus auranticus* | Monkey Flower | Kc 0.3 | CF |
| Muhlenbergia caillaris | Pink Wisp Grass | Kc 0.5 | CF |
| Salvia mellifera* | Honey Sage | Kc 0.3 | CF |
| Yucca schidigera* | Mojave Yucca | Kc 0.3 | CF |
| Yucca whipplei* | Foothill Yucca | Kc 0.3 | CF |

**Perimeter Slope Hydroseed Mix:**

| | | | |
|---|---|---|---|
| Eschscholzia californica* | California Poppy | Kc 0.3 | CF |
| Isocoma menziessii | Goldenbush | Kc 0.1 | CF |
| Lotus scoparius* | Deerweed | Kc 0.1 | CF |
| Nassella pulchra | Purple Needle Grass | Kc 0.1 | CF |

**Drainage Basin Hydroseed Mix:**

| | | | |
|---|---|---|---|
| Artemisia douglasiana | Mugwort | Kc 0.3 | CF |
| Isocoma menziesii | Goldenbush | Kc 0.1 | CF |
| Iva hayesiana* | San Diego Marsh Elder | Kc 0.3 | CF |
| Sisrinchium bellum | Blue Eyed Grass | Kc 0.3 | CF |

## Area #2: Village Entries

**Trees such as, but not limited to:**

| | | | |
|---|---|---|---|
| Erythrina caffra* | Coral Tree | Kc 0.3 | CF |
| Olea europea Wilsoni | Fruitless Olive Tree | Kc 0.3 | |
| Phoenix canariensis | Canary Island Date Palm | Kc 0.3 | |
| Phoenix dactylifera | Phoenix Date Palm (See Note #2) | Kc 0.3 | CF |
| Podocarpus gracilior | Fern Pine | Kc 0.5 | CF |

**Shrubs and Groundcovers such as, but not limited to:**

| | | | |
|---|---|---|---|
| Agapanthus Rancho White | White Lily-of-the-Nile | Kc 0.5 | CF |
| Bougainvillea species | Bougainvillea | Kc 0.3 | CF |
| Callistemon citrinus Compacta | Dwarf Lemon Bottlebrush | Kc 0.3 | CF |
| Lantana montevidensis* | Lantana | Kc 0.3 | CF |
| Lavandula angustifolia* | English Lavender | Kc 0.3 | CF |
| Ligustrum japonicum 'Texanum'* | Japanese Privet | Kc 0.5 | CF |
| Phormium species | Flax | Kc 0.5 | CF |
| Rhaphiolepis indica* | India Hawthorn | Kc 0.5 | CF |
| Rosmarinus officinalis* | Rosemary | Kc 0.3 | CF |
| Trachelospermum jasminoides | Star Jasmine | Kc 0.5 | CF |

**Grasses (Parkway planting) such as, but not limited to:**

| | | | |
|---|---|---|---|
| Paspalum vaginatum 'Aloha' | Seashore Paspalum | Kc 0.5 | |
| Dianela spp. | Flax Lily | Kc 0.3 | |
| Carex spp. | Sedge | Kc 0.5 | |

## Area #3: Village Interior Parkways, Streets, Alleys and Traffic Circles

**Trees such as, but not limited to:**

| | | | |
|---|---|---|---|
| Agonis flexuosa | Peppermint Tree | Kc 0.5 | CF |
| Brachychiton acerifolius | Australian Flame Tree | Kc 0.5 | CF |
| Brachychiton populneus | Bottle Tree | Kc 0.3 | CF |
| Geijera parviflora | Australian Willow | Kc 0.5 | CF |
| Koelreuteria paniculata | Golden Rain Tree | Kc 0.3 | CF |
| Lagerstromia inidica | Crape Myrtle | Kc. 0.5 | CF |
| Laurus nobils | Sweet Bay | Kc 0.3 | CF |
| Olea europea Wilsoni | Fruitless Olive Tree | Kc 0.3 | |
| Platanus racemosa* | California sycamore | Kc 0.3 | CF |
| Podocarpus gracilior | Fern Pine | Kc 0.5 | CF |
| Quercus agrifolia* | Coast Live | Kc 0.3 | CF |
| Rhus lancea* | African Sumac | Kc 0.3 | CF |
| Tipuana tipu | Tipu Trees | Kc 0.5 | CF |
| Tristania conferta* | Brisbane box | Kc 0.5 | |

**Shrunbs and Groundcovers such as, but not limited to:**

| | | | |
|---|---|---|---|
| Agapanthus Rancho White | White Lily-of-the-Nile | Kc 0.5 | CF |
| Bougainvillea species | Bougainvillea | Kc 0.3 | CF |
| Buxus microphylla 'Green Beauty' | Dwarf Boxwood | Kc 0.5 | |
| Callistemon citrinus Compacta | Dwarf Lemon Bottlebrush | Kc 0.3 | CF |
| Carissa macrocarpa Green Carpet* | Prostrate Natal Plum | Kc 0.5 | CF |
| Cycas revoluta | Sago Palm | Kc 0.5 | |
| Lantana montevidensis* | Lantana | Kc 0.3 | CF |
| Lavandula angustifolia* | English Lavender | Kc 0.3 | CF |
| Ligustrum japonicum 'Texanum'* | Japanese Privet | Kc 0.5 | CF |
| Mimulus auranticus* | Monkey Flower | Kc 0.3 | CF |
| Muhlenbergia capillaris | Pink Wisp Grass | Kc 0.5 | CF |
| Myoporum parvifolium Putah Creek* | No Common Name | Kc 0.3 | CF |
| Phoneix roebelenii | Pigmy Date Palm | Kc 0.5 | |
| Phormium species | Flax | Kc 0.5 | CF |
| Rhaphiolepis indica* | India Hawthorn | Kc 0.5 | CF |
| Rosmarinus officinalis* | Rosemary | Kc 0.3 | CF |
| Strelitzia nicolia | Giant Bird of Paradise | Kc 0.5 | |
| Strelitzia reginae | Bird of Paradise | Kc 0.5 | |
| Trachelospermum jasminoides | Star Jasmine | Kc 0.5 | CF |
| Trachycarpus fortunei | Windmill Palm | Kc 0.5 | |
| Zamia furfuraccea | Cardboard Palm | Kc 0.5 | CF |

**Grasses (Parkway planting) such as, but not limited to:**

| | | | |
|---|---|---|---|
| Paspalum vaginatum 'Aloha' | Seashore Paspalum | Kc 0.5 | |
| Dianela spp. | Flax Lily | Kc 0.3 | |
| Carex spp. | Sedge | Kc 0.5 | |

## Area #4: Commercial, Multi-Family, Schools and Single Family Residential Lots

**Trees such as, but not limited to:**

| | | | |
|---|---|---|---|
| Agonis flexuosa | Peppermint Tree | Kc 0.5 | CF |
| Brachychiton acerifolius | Australian Flame Tree | Kc 0.5 | CF |
| Brachychiton populneus | Bottle Tree | Kc 0.3 | CF |
| Geijera parviflora | Australian Willow | Kc 0.5 | CF |

| | | | |
|---|---|---|---|
| Koelreuteria paniculata | Golden Rain Tree | Kc 0.5 | CF |
| Lagerstromia inidica | Crape Myrtle | Kc. 0.5 | CF |
| Laurus nobils | Sweet Bay | Kc 0.3 | CF |
| Metrosideros exelsus | New Zealand Christmas Tree | Kc 0.5 | |
| Olea europea Wilsoni | Fruitless Olive Tree | Kc 0.3 | |
| Phoenix dactylifera | Phoenix Date Palm (See Note #2) | Kc 0.3 | CF |
| Pittosporum undulatum | Victorian Box | Kc 0.5 | CF |
| Podocarpus gracilior | Fern Pine | Kc 0.5 | CF |
| Rhus lancea* | African Sumac | Kc 0.3 | CF |
| Tristania conferta* | Brisbane box | Kc 0.5 | |

**Shrunbs and Groundcovers such as, but not limited to:**

| | | | |
|---|---|---|---|
| Agapanthus Rancho White | White Lily-of-the-Nile | Kc 0.5 | CF |
| Agapanthus africanus | Lily-of-the-Nile | Kc 0.5 | CF |
| Aloe species* | Aloe | Kc 0.3 | CF |
| Bougainvillea species | Bougainvillea | Kc 0.3 | CF |
| Buxus microphylla 'Green Beauty' | Dwarf Boxwood | Kc 0.5 | |
| Callistemon citrinus Compacta | Dwarf Lemon Bottlebrush | Kc 0.3 | CF |
| Carissa macrocarpa Green Carpet* | Prostrate Natal Plum | Kc 0.5 | CF |
| Ceanothus species* | Carmel Creeper | Kc 0.3 | CF |
| Chamaerops humillis | Mediterranean Fan Palm | Kc 0.5 | |
| Cistus species* | Rock Rose | Kc 0.3 | CF |
| Cotoneaster dammeri Lowfast* | Bearberry Cotoneaster | Kc 0.5 | CF |
| Cotoneaster lacteus | Parnys Red Clusterberry | Kc 0.5 | CF |
| Cycas revoluta | Sago Palm | Kc 0.5 | |
| Dietes bicolor* | Fortnight Lily | Kc 0.5 | CF |
| Disctus Rivers | Royal Trumpet Vine | Kc 0.5 | CF |
| Distictus buccinatoria | Blood-Red Trumpet Vine | Kc 0.5 | CF |
| Echium fastuosum | Pride of Madeira | Kc 0.3 | CF |
| Euryops pectinatus | Shrub Daisy | Kc 0.3 | CF |
| Heteromeles arbutifolia* | Toyon | Kc 0.3 | CF |
| Lantana montevidensis* | Lantana | Kc 0.3 | CF |
| Lavendula species* | Lavender | Kc 0.3 | CF |
| Ligustrum japonicum 'Texanum'* | Texas Privet | Kc 0.5 | CF |
| Limonium perezii | Sea Lavender | Kc 0.5 | CF |
| Marathon 2e | Dwarf Tall Fescue (See Note #3) | Kc 0.8 | |
| Mimulus auranticus* | Monkey Flower | Kc 0.3 | CF |
| Myoporum pacificum* | Pacifica Saltbush | Kc 0.5 | CF |
| Myoporum parvifolium Putah Creek* | No Common Name | Kc 0.3 | CF |
| Nandina domestica | Heavenly Bamboo | Kc 0.5 | CF |
| Phoneix roebelenii | Pigmy Date Palm | Kc 0.5 | |
| Phormium species | Flax | Kc 0.5 | CF |
| Pittosporum tobira | Common Tobira | Kc 0.5 | CF |
| Pittosporum tobira Wheelers Dwarf* | Dwarf Tobira | Kc 0.5 | CF |
| Rosa species | Rose | Kc 0.5 | CF |
| Rosmarinus officinalis | Rosemary | Kc 0.3 | CF |
| Strelitzia nicolia | Giant Bird of Paradise | Kc 0.5 | |
| Strelitzia reginae | Bird of Paradise | Kc 0.5 | |
| Trachelospermum jasminoides | Star Jasmine | Kc 0.5 | CF |
| Trachycarpus fortunei | Windmill Palm | Kc 0.5 | |
| Verbena species | Verbena | Kc 0.5 | CF |
| Wisteria sinensis | Chinese Wisteria | Kc 0.5 | CF |
| Xyosma congestum | Shiny Xylosma | Kc 0.5 | CF |
| Zamia furfuraccea | Cardboard Palm | Kc 0.5 | CF |

**Grasses (Parkway planting) such as, but not limited to:**

| | | |
|---|---|---|
| Paspalum vaginatum 'Aloha' | Seashore Paspalum | Kc 0.5 |
| Dianela spp. | Flax Lily | Kc 0.3 |

| | | | |
|---|---|---|---|
| Carex spp. | Sedge | Kc 0.5 | |

## Area #5: The Resort

**Trees such as, but not limited to:**

| | | | |
|---|---|---|---|
| Brachychiton acerifolius | Australian Flame Tree | Kc 0.5 | CF |
| Brachychiton populneus | Bottle Tree | Kc 0.3 | CF |
| Cupressus sempervirens Strica | Italian Cypress (See note #2) | Kc 0.3 | |
| Ficus robiginosa | Rustyleaf Fig | Kc 0.5 | |
| Geijera parviflora | Australian Willow | Kc 0.5 | CF |
| Laurus nobils | Sweet Bay | Kc 0.3 | CF |
| Olea europea Wilsoni | Fruitless Olive Tree | Kc 0.3 | |
| Phoenix dactylifera | Phoenix Date Palm (See Note #2) | Kc 0.3 | CF |
| Phoenix reclinata | Senegal Date Palm | Kc 0.5 | |
| Pittosporum undulatum | Victorian Box | Kc 0.5 | CF |
| Podocarpus gracilior | Fern Pine | Kc 0.5 | CF |
| Rhus lancea* | African Sumac | Kc 0.3 | CF |
| Sapium sebiferum | Chinese Tallow Tree | Kc 0.5 | |
| Stenocarpus sinuatus | Firewheel Tree | Kc 0.5 | |
| Tristania conferta* | Brisbane box | Kc 0.5 | |

**Shrunbs and Groundcovers such as, but not limited to:**

| | | | |
|---|---|---|---|
| Agapanthus Rancho White | White Lily-of-the-Nile | Kc 0.5 | CF |
| Agapanthus africanus | Lily-of-the-Nile | Kc 0.5 | CF |
| Aloe species* | Aloe | Kc 0.3 | CF |
| Bougainvillea species | Bougainvillea | Kc 0.3 | CF |
| Buxus microphylla ‘Green Beauty’ | Dwarf Boxwood | Kc 0.5 | |
| Callistemon citrinus Compacta | Dwarf Lemon Bottlebrush | Kc 0.3 | CF |
| Carissa macrocarpa Green Carpet* | Prostrate Natal Plum | Kc 0.5 | CF |
| Ceanothus species* | Carmel Creeper | Kc 0.3 | CF |
| Chamaerops humillis | Mediterranean Fan Palm | Kc 0.5 | |
| Cistus species* | Rock Rose | Kc 0.3 | CF |
| Cycas revoluta | Sago Palm | Kc 0.5 | |
| Distictus buccinatoria | Blood-Red Trumpet Vine | Kc 0.5 | CF |
| Echium fastuosum | Pride of Madeira | Kc 0.3 | CF |
| Lantana montevidensis* | Lantana | Kc 0.3 | CF |
| Lavendula species* | Lavender | Kc 0.3 | CF |
| Ligustrum japonicum 'Texanum'* | Texas Privet | Kc 0.5 | CF |
| Limonium perezii | Sea Lavender | Kc 0.5 | CF |
| Marathon 2e | Dwarf Tall Fescue (See Note #3) | Kc 0.8 | |
| Mimulus auranticus* | Monkey Flower | Kc 0.3 | CF |
| Myoporum parvifolium Putah Creek* | No Common Name | Kc 0.3 | CF |
| Myrtus species | Myrtle | Kc 0.5 | CF |
| Nandina domestica | Heavenly Bamboo | Kc 0.5 | CF |
| Phormium species | Flax | Kc 0.5 | CF |
| Phoneix roebelenii | Pigmy Date Palm | Kc 0.5 | |
| Pittosporum tobira Wheelers Dwarf* | Dwarf Tobira | Kc 0.5 | CF |
| Rosa species | Rose | Kc 0.5 | CF |
| Rosmarinus officinalis | Rosemary | Kc 0.3 | CF |
| Salvia mellifera | Honey Sage | Kc 0.3 | CF |
| Strelitzia nicolia | Giant Bird of Paradise | Kc 0.5 | |
| Strelitzia reginae | Bird of Paradise | Kc 0.5 | |
| Trachelospermum jasminoides | Star Jasmine | Kc 0.5 | CF |
| Trachycarpus fortunei | Windmill Palm | Kc 0.5 | |
| Verbena species | Verbena | Kc 0.5 | CF |
| Wisteria sinensis | Chinese Wisteria | Kc 0.5 | CF |
| Zamia furfuraccea | Cardboard Palm | Kc 0.5 | CF |

**Grasses (Parkway planting) such as, but not limited to:**

| | | | |
|---|---|---|---|
| Paspalum vaginatum 'Aloha' | Seashore Paspalum | Kc 0.5 | |
| Dianela spp. | Flax Lily | Kc 0.3 | |
| Carex spp. | Sedge | Kc 0.5 | |

## Area #6: Active Interior Recreation Areas, Pedestrian Parks and Swim Clubs

**Trees such as, but not limited to:**

| | | | |
|---|---|---|---|
| Erythrina caffra* | Coral Tree | Kc 0.3 | CF |
| Olea europea Wilsoni | Fruitless Olive Tree | Kc 0.3 | |
| Podocarpus gracilior | Fern Pine | Kc 0.5 | CF |
| Quercus agrifolia* | Coast Live Oak | Kc 0.3 | CF |
| Tipuana tipu | Tipu Trees | Kc 0.5 | CF |
| Tristania conferta* | Brisbane box | Kc 0.5 | |

**Shrunbs and Groundcovers such as, but not limited to:**

| | | | |
|---|---|---|---|
| Agapanthus Rancho White | White Lily-of-the-Nile | Kc 0.5 | CF |
| Bougainvillea species | Bougainvillea | Kc 0.3 | CF |
| Buxus microphylla 'Green Beauty' | Dwarf Boxwood | Kc 0.5 | |
| Callistemon citrinus Compacta | Dwarf Lemon Bottlebrush | Kc 0.3 | CF |
| Carissa macrocarpa Green Carpet* | Prostrate Natal Plum | Kc 0.5 | CF |
| Ceanothus species* | Carmel Creeper | Kc 0.3 | CF |
| Cistus species* | Rock Rose | Kc 0.3 | CF |
| Echium fastuosum | Pride of Madeira | Kc 0.3 | CF |
| Lantana montevidensis* | Lantana | Kc 0.3 | CF |
| Ligustrum japonicum 'Texanum' | Japanese Privet | Kc 0.5 | CF |
| Marathon 2e | Dwarf Tall Fescue (See Note #3) | Kc 0.8 | |
| Mimulus auranticus* | Monkey Flower | Kc 0.3 | CF |
| Myoporum Pacificum* | No Common Name | Kc 0.5 | CF |
| Myoporum parvifolium Putah Creek* | No Common Name | Kc 0.3 | CF |
| Phormium species | Flax | Kc 0.5 | CF |
| Rosmarinus officinalis* | Rosemary | Kc 0.3 | CF |
| Strelitzia reginae | Bird of Paradise | Kc 0.5 | |
| Trachelospermum jasminoides | Star Jasmine | Kc 0.5 | CF |
| Verbena species | Verbena | Kc 0.5 | CF |
| Wisteria sinensis | Chinese Wisteria | Kc 0.5 | CF |

**Grasses (Parkway planting) such as, but not limited to:**

| | | | |
|---|---|---|---|
| Paspalum vaginatum 'Aloha' | Seashore Paspalum | Kc 0.5 | |
| Dianela spp. | Flax Lily | Kc 0.3 | |
| Carex spp. | Sedge | Kc 0.5 | |

## Area #7: Perimeter Drought Tolerant and Fire Resistant Pedestrian Parks

**Trees such as, but not limited to:**

| | | | |
|---|---|---|---|
| Arbutus unedo* | Strawberry Tree | Kc 0.3 | CF |
| Ceratonia siliqua* | Carob Tree | Kc 0.3 | CF |
| Cercis occidentalis* | Western Redbud | Kc 0.3 | CF |
| Quercus agrifolia* | Coast Live | Kc 0.3 | CF |
| Quercus suber* | Cork Oak | Kc 0.3 | CF |
| Rhus lancea* | African Sumac | Kc 0.3 | CF |

**Shrunbs and Groundcovers such as, but not limited to:**

| | | | |
|---|---|---|---|
| Agave attenuata* | Century Plant | Kc 0.3 | CF |
| Agave shawii* | Coastal Agave | Kc 0.3 | CF |
| Archtostapylos Emerald Carpet* | Emerald Carpet Manzanita | Kc 0.3 | CF |
| Baccharis pilularis* | Dwarf Coyote Bush | Kc 0.3 | CF |
| Ceanothus species* | Carmel Creeper | Kc 0.3 | CF |

| | | | |
|---|---|---|---|
| Cistus species* | Rock Rose | Kc 0.3 | CF |
| Dalea orcuttii* | Baja Indigo Bush | Kc 0.3 | CF |
| Eriophyllum confertiflorum* | Golden Yarrow | Kc 0.1 | CF |
| Heteromeles arbutifolia* | Toyon | Kc 0.3 | CF |
| Lantana montevidensis* | Lantana | Kc 0.3 | CF |
| Marathon 2e | Dwarf Tall Fescue(See Note #3) | Kc 0.8 | |
| Mimulus auranticus* | Monkey Flower | Kc 0.3 | CF |
| Myoporum parvifolium Putah Creek* | No Common Name | Kc 0.3 | CF |
| Rhus lentii* | Pink Flowering Sumac | Kc 0.3 | CF |
| Rosmarinus officinalis* | Rosemary | Kc 0.3 | CF |
| Salvia mellifera* | Honey Sage | Kc 0.3 | CF |
| Sambucus species* | Elderberry | Kc 0.3 | CF |
| Yucca schidigera* | Mojave Yucca | Kc 0.3 | CF |
| Yucca whipplei* | Foothill Yucca | Kc 0.3 | CF |

## Area #8: Interface with Preserve

**Trees such as, but not limited to:**

| | | | |
|---|---|---|---|
| Ceratonia siliqua* | Carob Tree | Kc 0.3 | CF |
| Geijera parviflora | Australian Willow | Kc 0.5 | CF |
| Quercus agrifolia* | Coast Live | Kc 0.3 | CF |
| Quercus suber* | Cork Oak | Kc 0.3 | CF |
| Rhus lancea* | African Sumac | Kc 0.3 | CF |
| Tristania conferta* | Brisbane box | Kc 0.5 | |

**Shrunbs and Groundcovers such as, but not limited to:**

| | | | |
|---|---|---|---|
| Agave attenuata* | Century Plant | Kc 0.3 | CF |
| Agave shawii* | Coastal Agave | Kc 0.3 | CF |
| Archtostapylos Emerald Carpet* | Emerald Carpet Manzanita | Kc 0.3 | CF |
| Baccharis pilularis* | Dwarf Coyote Bush | Kc 0.3 | CF |
| Ceanothus species* | Carmel Creeper | Kc 0.3 | CF |
| Cistus species* | Rock Rose | Kc 0.3 | CF |
| Cotoneaster dammeri ‘Lowfast | Bearberry Cotoneaster | Kc 0.5 | CF |
| Dalea orcuttii* | Baja Indigo Bush | Kc 0.3 | CF |
| Echium fastuosum | Pride of Madeira | Kc 0.3 | CF |
| Epilobium californicum | California Fushcia | Kc 0.3 | CF |
| Heteromeles arbutifolia* | Toyon | Kc 0.3 | CF |
| Mimulus auranticus* | Monkey Flower | Kc 0.3 | CF |
| Myoporum parvifolium Putah Creek* | No Common Name | Kc 0.3 | CF |
| Pennisetum spatheolatum* | Rye Puffs | Kc 0.3 | CF |
| Rhamnus californica* | California Coffeeberry | Kc 0.3 | CF |
| Rhus lentii* | Pink Flowering Sumac | Kc 0.3 | CF |
| Rosmarinus officinalis* | Rosemary | Kc 0.3 | CF |
| Salvia mellifera* | Honey Sage | Kc 0.3 | CF |
| Sambucus species* | Elderberry | Kc 0.3 | CF |
| Yucca schidigera* | Mojave Yucca | Kc 0.3 | CF |
| Yucca whipplei* | Foothill Yucca | Kc 0.3 | CF |

**Hydroseed Mix:**

| | | | |
|---|---|---|---|
| Dichelostemma capitatum | Wild-Hyacinth | Kc 0.5 | |
| Distichlis spicata | Salt Grass | | |
| Dudleya edulis | Lady's Fingers | Kc 0.3 | |
| Dudleya pulverulenta | Chalk Duleya | Kc 0.3 | |
| Lasthenia californica | Goldfields | | |
| Layia platyglossa | Tidy Tips | | |
| Lupinus bicolor* | Miniature Lupine | Kc 0.3 | |
| Sisyrinchium bellum* | Blue-Eyed Grass | Kc 0.3 | CF |

## Notes:

1. KC = Crop Coefficient as defined by University of California Cooperative Extension, California Department of Resources “Wulcols III” report, dated August 2000.
2. Crop Coefficient as defined by University of California Cooperative Extension, California Department of Resources “Wulcols III” report, dated August 2000.
3. CF = Indicates plant material that is considered “California Friendly”, as published by “The Water Conservation Garden” at Cuyamaca College.
4. Cupressus sempervirens Strica (Italian Cypress) is permitted only within the resort developments in limited quantities. These trees must be a minimum of 100 feet away from any part of the open-space preserve.
5. Marathon 2e Fescue Lawn may only be used inactive recreational areas and in minimal amounts within residential applications, as defined under the "Single Family Detached Water Savings" exhibit within this document.
6. Proposed palm species will be planted in limited groupings at entries and along some parkways, streets, etc with Fire Authority approval.
7. All plant material on this proposed plant palette is subject to Fire Authority Having Jurisdiction approval.

* Indicates plants that are on the County of San Diego "Suggested Plant Material For Defensible Space and/or the County of Los Angeles Fire -Wise Plant List.

# APPENDIX J

*Prohibited Plant List*

# APPENDIX I
# Prohibited Plant List

## Prohibited Trees

| Botanical Name | Common Name | Resource |
|---|---|---|
| *Abies* species | Fir trees | S |
| *Acacia* species | Acacia | HS |
| *Agonis juniperina* | Juniper myrtle | S |
| *Araucaria* species | Norfolk island Pine | S |
| *Callistemon* species | Bottlebrush | H |
| *Cedrus* species | Cedar | HS |
| *Chamaecyparis* species | False cypress | S |
| *Cinnamomum camphora* | Camphor tree | H |
| *Conifers* | Evergreen trees | H |
| *Cryptomeria japonica* | Japanese cryptomeria | S |
| *Cupressocyparis leylandii* | Leylandii cypress | S |
| *Cupressus forbesii* | Tecate cypress | S |
| *Cupressus glabra* | Arizona cypress | S |
| *Cupressus sempervirens* | Italian cypress | S |
| *Cupressus* species | Cypress | H |
| *Eucalyptus* species | Eucalyptus | HS |
| *Eucalyptus* | Eucalyptus species | K |
| *Juniperus* species | Juniper | H |
| *Larix species* | Larch | S |
| *Olea europea* | Olive tree | H |
| *Palmae* species | Palms | HS |
| *Parkinsonia aculeata* | Mexican palo verde | K |
| *Pinus* species | Pine | HS |
| *Pittosporum undulatum* | Victorian box | K |
| *Podocarpus* species | Fern pine | S |
| *Prunus caroliniana* | Carolina cherry laurel | K |
| *Prunus lyonil* | Catalina cherry | K |
| *Pseudotsuga menziesii* | Douglas fir | S |
| *Quercus engelmannii* | Engelmann oak | K |
| *Quercus suber* | Cork Oak | K |
| *Schinus molle* | California Pepper Tree | H |
| *Tamarix* species | Tamarix | C |
| *Taxodium* species | Cypress | S |
| *Taxus* species | Yew | S |
| *Tsuga* species | Hemlock | S |
| *Washingtonia filifera* | California Fan Palm | H |

## Prohibited Groundcovers, Shrubs, and Vines

| Botanical Name | Common Name | Resource |
|---|---|---|
| *Acacia* species | Acacia | HS |
| *Achillea millefolium* | Common yarrow | K |
| *Adenostoma fasciculatum* | Chamise | HS |
| *Adenostoma sparsifolium* | Red shanks | HS |
| *Aeonium decorum* | Aeonium | K |
| *Aeonium simsii* | NCN | K |
| *Ajuga reptans* | Carpet bugle | K |
| *Anthemis cotula* | Mayweed | H |
| *Aptenia cordifolia* x 'red apple' | Red apple | K |
| *Arbutus menziesii* | Madrone | H |
| *Arctostaphylos* species | Manzanita | H |
| *Artemisia pycnocephala* | Beach sagewort | K |
| *Artemisia californica* | California sagebrush | HS |
| *Artemisia caucasica* | Caucasica artemisia | H |
| *Artemisia pycnocephala* | Sandhill sage | H |
| *Artemisia* species | Sages | H |
| *Arundo donax* | Giant cane | C |
| *Atriplex* species | Saltbush | H |
| *Atriplex canescens* | Four-wing saltbush | K |
| *Atriplex lentiformis* ssp. *breweri* | Brewer saltbush | K |
| *Baccharis pilularis consanguinea* | Chaparral bloom | H |
| *Baccharis pilularis* var. *pilularis* | Twin peaks | K |
| *Baccharis* species | Coyote bush | H |
| *Bambusa* species | Bamboo | S |
| *Bougainvillea* species | Bougainvillea | H |
| *Brassica nigra* | Black mustard | H |
| *Brassica rapa* | Yellow mustard | H |
| *Cardaria draba* | Hoary cress, perennial peppergrass | H |
| *Carpobrotus* species | Ice plant, hottentot fig | H |
| *Carpobrotus chilensis* | Sea fig ice plant | K |
| *Chrysanthemum leucanthemum* | Oxeye daisy | K |
| *Cirsium vulgare* | Wild artichoke | H |
| *Conyza canadensis* | Horseweed | H |
| *Coprosma pumila* | Prostrate coprosma | S |
| *Cortaderia selloana* | Pampas grass | HC |
| *Crassula lactea* | NCN | K |
| *Crassula multicava* | NCN | K |
| *Crassula ovata* | Jade tree | K |
| *Crassula tetragona* | NCN | K |
| *Cytisus* spp. | Scotch broom, French broom, etc. | HC |
| *Delosperma 'alba'* | White trailing ice plant | K |
| *Dodonaea viscosa* | Hopseed bush | S |
| *Drosanthemum floribundum* | Rosea ice plant | K |
| *Drosanthemum hispidum* | NCN | K |

## Prohibited Groundcovers, Shrubs, and Vines

| Botanical Name | Common Name | Resource |
|---|---|---|
| *Drosanthemum speciosum* | Dewflower | K |
| *Eriogonum fasciculatum* | Common buckwheat | H |
| *Eriogonum* species | Common buckwheat | HS |
| *Eschscholzia mexicana* | Mexican poppy | K |
| *Fremontodendron* species | Flannel bush | H |
| *Gaillardia x grandiflora* | Blanketflower | K |
| *Gazania hybrids* | South African daisy | K |
| *Gazania rigens leucolaena* | Trailing gazania | K |
| *Hedera helix* | English ivy | H |
| *Helix canariensis* | English ivy | K |
| *Heterotheca grandiflora* | Telegraph plant | HS |
| *Hypericum calycinum* | Aaron's beard | K |
| *Juniperus* species | Juniper | S |
| *Lactuca serriola* | Prickly lettuce | H |
| *Lampranthus aurantiacus* | Bush ice plant | K |
| *Lampranthus filicaulis* | Redondo creeper | K |
| *Lampranthus spectabilis* | Trailing ice plant | K |
| *Limonium pectinatum* | NCN | K |
| *Limonium perezii* | Sea lavender | K |
| *Lonicera japonica* | Japanese honeysuckle | S |
| *Lonicera japonica 'halliana'* | Hall's Japanese honeysuckle | K |
| *Lotus corniculatus* | Bird's foot trefoil | K |
| *Mahonia* species | Mahonia | H |
| *Malephora luteola* | Trailing ice plant | K |
| *Miscanthus* species | Eulalie grass | S |
| *Muhlenbergia* species | Deer grass | S |
| *Nerium oleander* | Oleander | K |
| *Nicotania bigelovii* | Indian tobacco | H |
| *Nicotania glauca* | Tree tobacco | H |
| *Ophiopogon japonicus* | Mondo grass | K |
| *Osteospermum fruticosum* | Trailing African daisy | K |
| *Penstemon spectabilis* | Beard tongue | K |
| *Pennisetum setaceum* | Fountain grass | C |
| *Perovskia atriplicifolia* | Russian sage | H |
| *Pickeringia 'montana'* | Chaparral pea | S |
| *Plantago sempervirens* | Evergreen plantain | K |
| *Portulacaria afra* | Elephant's food | K |
| *Potentilla tabernaemontani* | Spring cinquefoil | K |
| *Rhamnus alaternus* | Italian buckhorn | K |
| *Rhus diversiloba* | Poison oak (worker/firefighter safety) | H |
| *Rhus laurina* | Laurel sumac | H |
| *Rhus lentii* | Pink flowering sumac | H |
| *Ricinus communis* | Castor bean | H |
| *Romneya coulteri 'white cloud'* | White cloud matilija poppy | K |

## Prohibited Groundcovers, Shrubs, and Vines

| Botanical Name | Common Name | Resource |
|---|---|---|
| *Rosmarinus* species | Rosemary | S |
| *Salsola australis* | Russian thistle | H |
| *Salvia mellifera* | Black sage | S |
| *Salvia* species | Sage | H |
| *Sedum acre* | Goldmoss sedum | K |
| *Sedum album* | Green stonecrop | K |
| *Sedum confusum* | NCN | K |
| *Sedum lineare* | NCN | K |
| *Sedum x rubrotinctum* | Pork and beans | K |
| *Senecio serpens* | NCN | K |
| *Solanum xantii* | Purple nightshade (toxic) | H |
| *Silybum marianum* | Milk thistle | H |
| *Tamarix* spp. | Tamarisk | K |
| *Tecomaria capensis* | Cape honeysuckle | K |
| *Thuja* species | Arborvitae | S |
| *Trifolium hirtum 'hyron'* | Hyron rose clover | K |
| *Trifolium fragiferum 'o'connor's* | O'Connor's legume | K |
| *Urtica urens* | Burning nettle | S |
| *Verbena* species | Verbena | K |
| *Vinca major* | Periwinkle | H |
| *Vinca minor* | Dwarf periwinkle | K |
| *Vulpia myuros 'zorro'* | Zorro annual fescue | K |
| *Yucca* species | Yucca | K |

**EXCEPTIONS**

1. The use of palm trees is prohibited within any Vegetation Management Zones, however Palm trees may be permitted within the interior of the development (in moderation), with prior approval from the SDRFPD. Proper spacing, irrigation and maintenance required.
2. Bougainvillea species may be used in certain interior areas (in very moderate amounts), with prior approval from the SDRFPD.

**NOTES:**

Various documents are referenced as sources for plant material information in this list of prohibited plant material. The titles of some of those reference documents suggest that some of the plant materials may be somewhat "Fire Retardant." It must be understood that under various fire conditions, all plant materials will burn. Accordingly, some seemingly "Fire Retardant" plants appear in this Prohibited Plant List.

Plant species included on this Prohibited Plant List that also occur on the Landscape Concept Plan may be used in limited quantities in interior locations, with approval of the SDRFPD.

"Fire Resistant." Others are documented as "High Fire Risk." Notwithstanding any other descriptors, the preparers of this document have determined that plants in this Prohibited Plant List shall not be used within the Brush Management Zones within this project.

All vegetation used in Vegetation Management Zones and elsewhere in this development shall be subject to approval of the County Fire Marshal.

Any deviations from the Prohibited Plant List must be submitted to the County Fire Marshal for approval

**SOURCES:**

C: City of Chula Vista, Fire Retardant and/or Drought Tolerant Plant List, Landscape Manual, November 1994

H: Hunt Research Corporation Report, Otay Ranch, Village 7/2 - Fire Protection Plan, June 14, 2005

S: County of San Diego, Suggested Plant List for Defensible Space, http://www.sdcounty.ca.gov/dplu/dos/UndesirablePlants.pdf

K: Appendix K, City of Chula Vista MSCP Subarea Plan: San Diego County Fire Chief's Association Fuel Modification Zone Plant List, July 15, 1997