Ventura County
Fire Protection District

FIRE MANAGEMENT PLAN JULY 2005

Ventura County Firefighters protect Air Force One during the Simi Fire. The Ronald Reagan Presidential Library and the brush covered hills around Air Force One had been the site of a vegetation management project just two months prior.

Committed to Excellence…Delivered with Pride

Providing protection and preservation of life, property and environment to: The Cities of Camarillo, Moorpark, Ojai, Port Hueneme, Simi Valley, Thousand Oaks and the unincorporated areas of Ventura County.

Kevington VMP

Bob Roper

Bob Roper
Fire Chief
Ventura County Fire Protection District

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Executive Summary

THE CALIFORNIA FIRE PLAN
The State Board of Forestry and the California Department of Forestry and Fire Protection (CDF) have drafted a comprehensive update of the fire plan for wildland fire protection in California. The planning process defines a level of service measurement, considers assets at risk, incorporates the cooperative interdependent relationships of wildland fire protection providers, provides for public stakeholder involvement, and creates a fiscal framework for policy analysis. Ventura County Fire Protection District is one of the Contract Counties that maintain a contractual relationship with CDF and utilizes the California Fire Plan within Ventura County.

Goals and Objectives
The overall goal is to reduce total cost and losses from wildland fire in California by protecting assets at risk through focused pre-fire management prescriptions and increased initial attack success.

The California Fire Plan has five strategic objectives:

- To create wildfire protection zones that reduces the risks to citizens and firefighters.
- To assess all wild lands. Analyses will include all wildland fire service providers – federal, state, local government and private. The analysis will identify high risk, high value areas, and develop information on and determine who is responsible, who is responding, and who is paying for wildland fire emergencies.
- To analyze and identify key policy issues and develop recommendations for changes of public policy. Analysis will include alternatives to reduce total cost and losses by increasing the fire protection system effectiveness.
- To have a strong fiscal policy focus and monitor the wildland fire protection system in fiscal terms. This will include all public and private expenditures and economic losses.
- To translate these analyses into public policy.

Fire Plan Framework
Five major components will form the basis of an ongoing fire planning process to monitor and assess California's wildland fire environment.

Wildfire Protection Zones
A key product of this Fire Plan is the development of wildfire safety zones to reduce citizen and firefighter risk from future large wildfires.

Initial Attack Success
The fire plan defines an assessment protection system for wildland fire. This measure can be used to assess the department's ability to provide and equal level of protection to lands of similar type, as required by Public Resources Code 4130. This measurement is the percentage of fires that are successfully controlled before unacceptable cost is incurred.

Knowledge of the level of service will help define the risk to wildfire damage faced by public and private assets in the wildland.

Assets Protected
The plan will establish a methodology for defining assets protected and their degree of risk from wildfire. The assets addressed in the plan are citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality. Stakeholders-national, state, local, and private agencies, interest groups, etc., will be identified for each asset at risk. The assessment will define the areas where assets are at risk from wildfire, enabling fire service managers and stakeholders to set priorities for pre-fire management project work.

Pre-fire Management
This aspect focuses on system analysis methods that assess alternatives to protect assets from unacceptable risk of wildland fire damage. Projects include a combination of fuels reduction, ignition management, fire-safe engineering activities, and forest health to protect public and private assets. The priority for projects will be based on asset owners and other stakeholders' input and support. Pre-fire management prescriptions designed to protect these assets will also identify who benefits and who should share in the project cost.

Fiscal Framework
The Board and CDF are developing a fiscal framework for assessing and monitoring annual and long-term changes in California's wildland fire protection systems. State, local and federal wildland fire protection agencies, along with the private sector, have evolved into an interdependent system of pre-fire management and suppression forces. As a result, changes to budgeted levels of service of any the entities directly affect the others and the services delivered to the public. Monitoring system changes through this fiscal framework will allow the

Board and CDF to address public policy issues that maximize the efficiency of local, state, and federal firefighting resources.

The Fire Plan framework applications:
The Fire Plan framework identifies for state, federal, and local officials and for the public those areas of concentrated assets and high risk.

- Allow Ventura County Fire Protection District to create a more efficient fire protection system focused on meaningful solutions for identified problem areas.
- Give citizens an opportunity to identify public and private assets to design and carry out projects to protect those assets.
- Identify, before fires start, where cost-effective pre-fire management investments can be made to reduce taxpayer cost and citizen losses from wildfire.
- Encourage an integrated intergovernmental approach to reducing cost and losses.
- Enable policy makers and the public to focus on what can be done to reduce future cost and losses from wildfire.

Description Of The County And The Fire Protection District

Ventura County Overview

Ventura County was formed in 1873 from Santa Barbara County and is home to beautiful, livable communities with unique characteristics. Many have names that reflect the native Chumash Indian, Spanish and Mexican heritage of the area. Early Spanish settlers described the area as the "land of everlasting summers" and named the region "San Buenaventura", which means "good fortune." The 10 incorporated cities in Ventura County are Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura (Ventura), Santa Paula, Simi Valley, and Thousand Oaks.

Each city has distinct features that make their communities stand out. From the natural beauty of the terrain to mild climates with diverse recreational opportunities, the cities offer safe neighborhoods and family-oriented communities that make for a satisfying lifestyle.

Ventura County Geography

- Covers an area of 1,873 square miles, including 43 miles of coastline.
- Located northwest of Los Angeles County, and bordered by Kern County to the north, Santa Barbara County to the west, and the Pacific Ocean on the southwest.
- 7.5 miles of shoreline are public beaches and 411 acres are State beach parks.
- The Los Padres National Forest accounts for 860 square miles of the northern portion of the county (46% of the county's land mass.)
- Elevation ranges from sea level to the highest point on Mount Pinos at 8,831 feet.
- Ventura County ranks 26th in land size among California's 58 counties.
- Gateway to Channel Islands National Park, one of only four designated national marine sanctuaries composed of five tranquil islands located a few miles off the Ventura County coast, comprising a 250,000-acre wilderness preserve/marine sanctuary.

Demographics of Ventura County

- Population of 742,000 makes Ventura County the 12th most populous county in the State of California.
- Median household income in Ventura County consistently exceeds national and state levels; median family income in 1999 estimated at $61,944.

- 63.8% of households in Ventura County with $35,000+ income.
- Median home price (May 2005) - $667,130.

Climate of Ventura County

- Coastal areas offer a Mediterranean climate often described as the best in the world, with average annual temperatures of 74.2 degrees.
- Ventura County's mountains, valleys and seashore give the area six different microclimates, more than any other county in the nation.

Ventura County Fire Protection District

Ventura County Fire Protection District (VCFPD) has 32 fire stations, communications center, training center and three support facilities. 33 fire engines, 2 ladder trucks, 2 paramedic squads, 2 wildland fire crews, 3 bulldozers, with many other specialized response vehicles. The VCFPD serves the cities of Camarillo, Moorpark, Ojai, Port Hueneme, Thousand Oaks, and Simi Valley, as well as the unincorporated areas of the county.

Wildland Fire Protection Strategy

Prevention

The most effective way to limit damage and loss due to wildfire is to prevent all but the most blatant ignitions due to arson or unforeseeable circumstances. The focus of the entire department is on prevention through educational programs, permits for hazardous operations and mass appeals. These initiatives are focused on awareness of fire causes, fire spread potential and the total costs and effects of fire damage. Moreover, while not intended to be punitive, the cost recovery program reinforces these lessons and encourages caution and safety in those living and doing business in Ventura County.

Passive Protection

When the inevitable wildfire does occur, the primary protection of life and property will come from passive protection such as defensible space (fuel reduction), fire-resistive landscaping, fire-resistive construction and good housekeeping. Sufficient fire fighting water must be on site for use by the property owner and/or the fire department. Moreover, residents must have the means of self-evacuating and escaping danger through safe and sufficient egress routes while maintaining appropriate ingress routes for responding fire equipment.

The sum effect of passive protection is a force multiplier for active fire fighting resources. A single fire fighting resource may protect many more structures when passive protection is properly employed. In some cases, fire fighting resources may not be necessary at all thus freeing them for other uses.

Fire Suppression

The most effective time to control a wildfire is in the incipient stages when intensities are lower and the perimeter is short. The combined resource attack is a coordinated suppression effort including ground assets (engines, crews & dozers), aviation assets (fixed and rotary wing), passive fire protection measures, and command elements. Using in-place passive fire protection systems, incident commanders weave the varied active fire suppression assets into an aggressive and coordinated fire fighting effort.

Fuel Bed Management

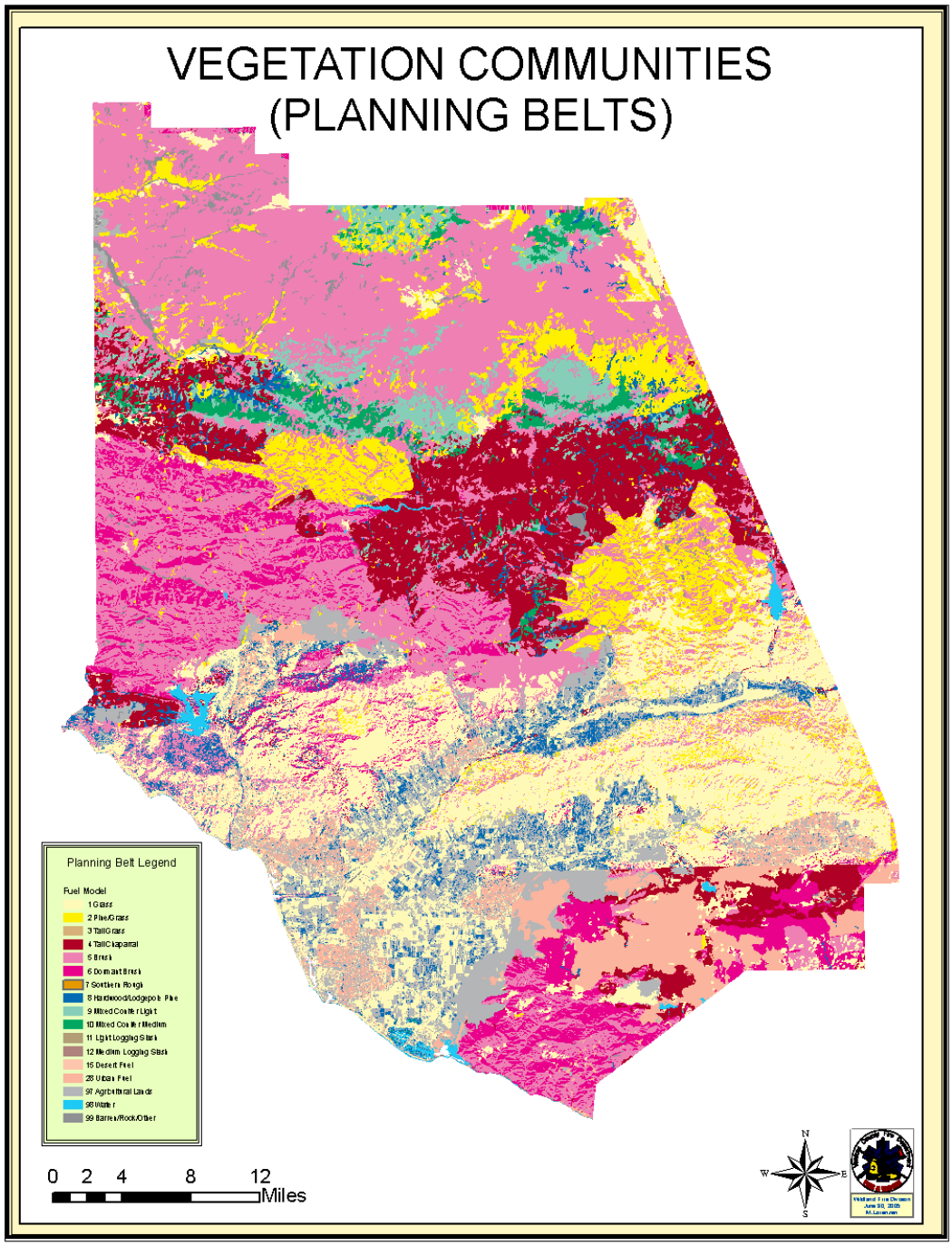
Aggressive prevention and suppression policies can artificially age fuel beds to a point of uncontrollable volatility. Fuel beds are managed to reduce the age and expanses of volatile fuel and provide barriers between values at risk and large areas of hazardous fuel. Particular attention is given to those areas in fuel beds that are adjacent to the interface.

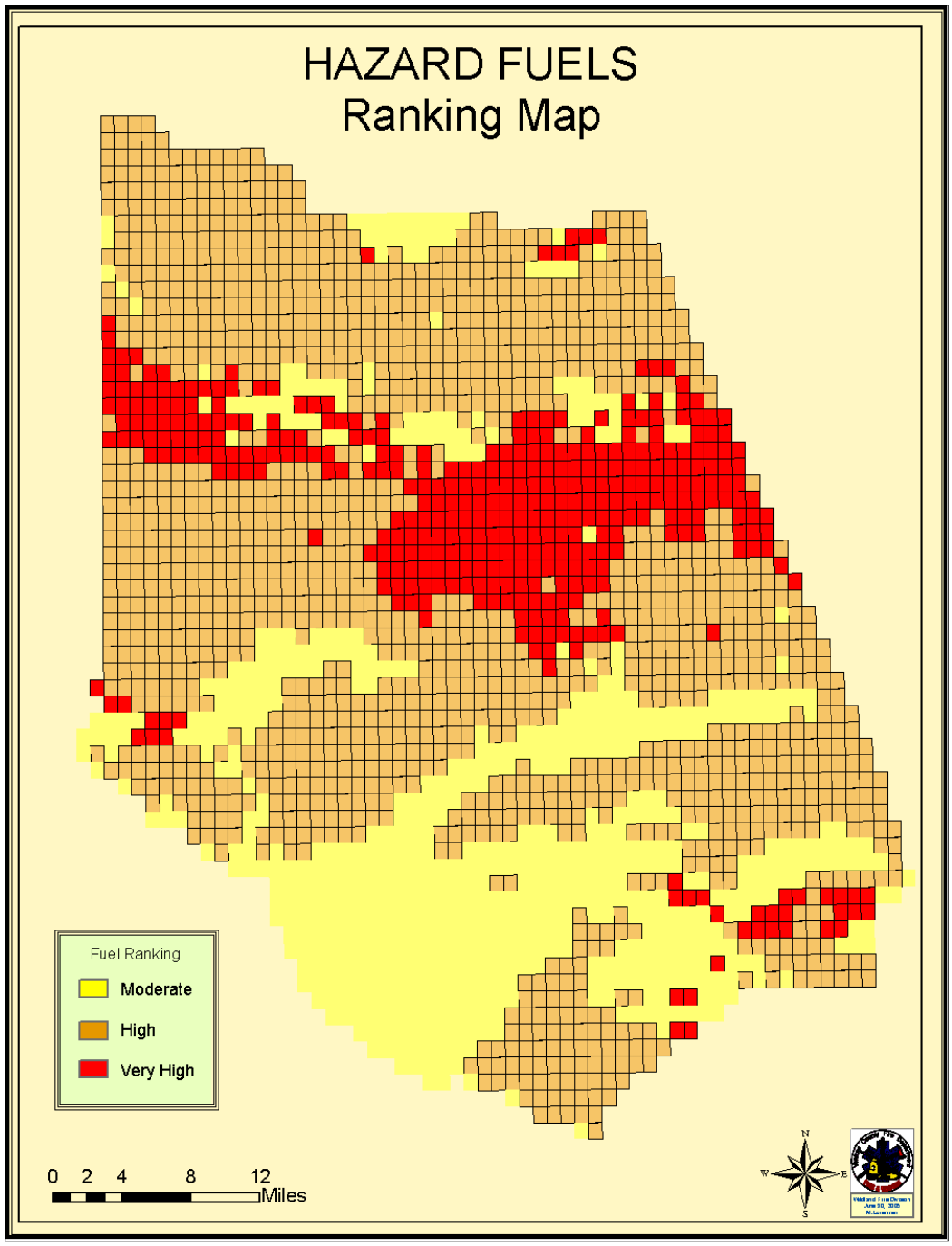
One of the first steps in the hazard assessment process is the development of vegetation coverage maps and corresponding fuel rankings. The initial evaluation begins with identifying the vegetative communities that exist within the County. Having established a base from which to evaluate the available fuels, additional efforts are made to evaluate the hazards generated by these fuels in combination with other factors. The rankings depicted on the Hazard Fuels Ranking Map below are based on a combination of factors that affect fire behavior including the fuel type, slope and presence of ladder and crown fuels.

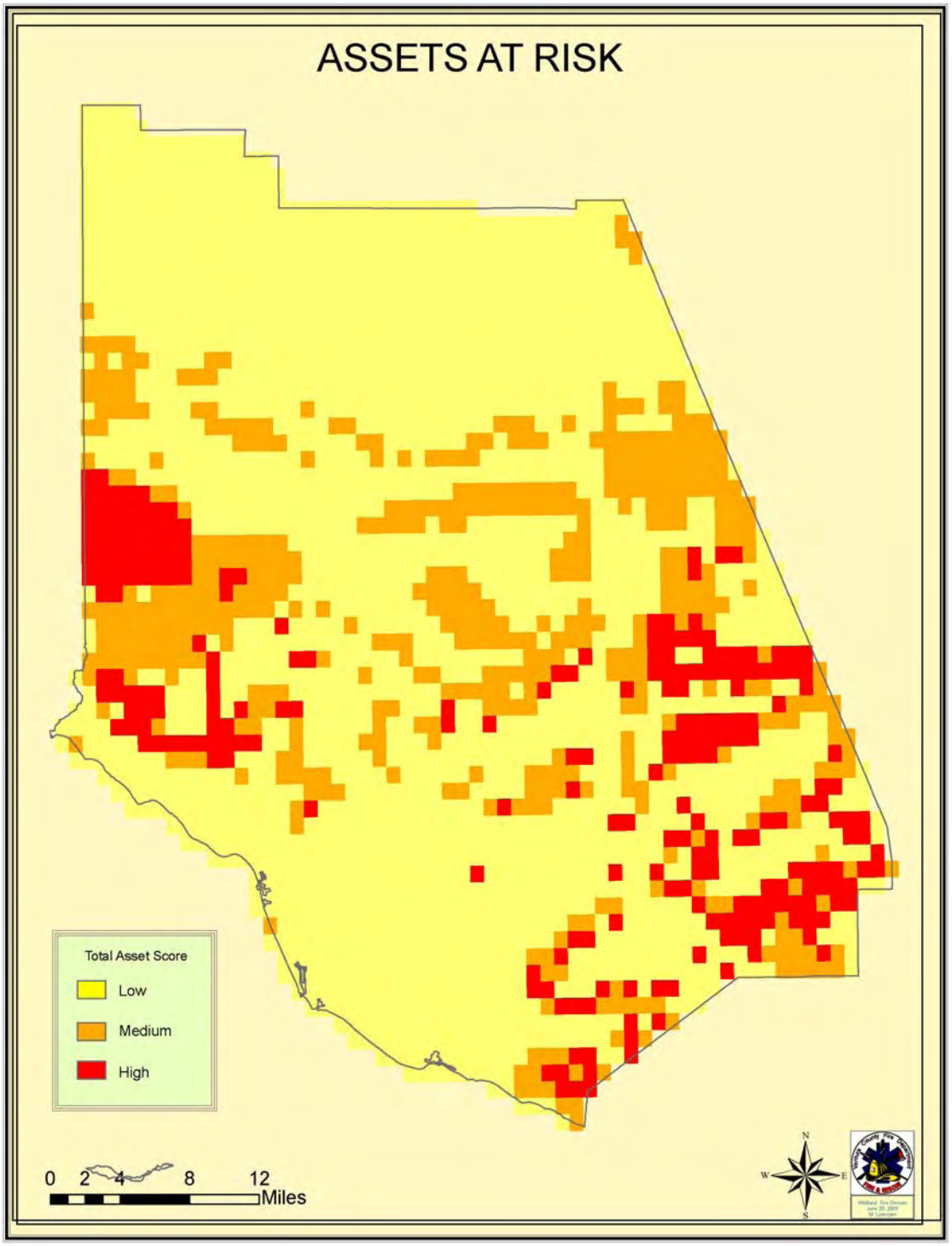
As part of the Fire Plan, methodology was developed for analyzing Assets at Risk (AAR). For each AAR, geographic areas will be ranked based on the potential impacts of a large fire event. This provides a series of displays of spatial

rankings to assist in the identification of “high value” areas. Additional data related to fuels, weather, and level of service will be used to rank areas in terms of the likelihood or “risk” of a large fire event. This data provides the basis for identification of “high value/high risk” areas. As such, the analysis serves as a pointer as to where pre-fire projects might have the highest benefit in terms of reduction of potential damages.

Assets susceptible to fire damage are identified in the Fire Plan as air quality, range, recreation, structures, timber, water and watersheds, wildlife and habitat, and other resources (cultural, historic, and scenic). For purposes of this plan greater weight was given to the protection of structures and infrastructure. Additional assessment maps will be available to assist in locating future pre-fire projects once adequate data is available to evaluate ignition starts and successes and severe fire weather patterns.


VEGETATION COMMUNITIES
(PLANNING BELTS)
Planning Belt Legend
Fuel Model
1 Grass
2 Pine/Grass
3 Tall Grass
4 Tall Chaparral
5 Brush
6 Dormant Brush
7 Southern Rough
8 Hardwood/Lodgepole Pine
9 Mixed Conifer Light
10 Mixed Conifer Medium
11 Light Logging Slash
12 Medium Logging Slash
16 Desert Fuel
28 Urban Fuel
97 Agricultural Lands
98 Water
99 Barren/Rock/Other
0 2 4 8 12
Miles
N
W
E
S


HAZARD FUELS
Ranking Map
Fuel Ranking
Moderate
High
Very High
0 2 4 8 12
Miles
N
W
E
S


ASSETS AT RISK
Total Asset Score
Low
Medium
High
0 2 4 8 12
Miles
N
W
E
S

Collaborative Efforts Between Partner Agencies and Cooperators

Fire knows no boundaries and accordingly, neither should a plan that seeks to reduce the risks from wildland fires. Collaboration is vital in developing a plan that helps us to protect our communities and assets at risk.

Other agencies and stakeholders, which VCFPD works closely with, are:

Political Entity	Jurisdiction
VENTURA COUNTY SUPERVISORS	LOCAL GOVERNMENT
LOS ANGELES, CITY OF	LOCAL GOVERNMENT/ LRA FIRE PROTECTION
LOS ANGELES COUNTY FIRE DEPARTMENT	LRA AND SRA FIRE PROTECTION
CONEJO OPEN SPACE CONSERVATION AGENCY	OPEN SPACE CONSERVATOR
NATIONAL PARK SERVICE	PUBLIC LAND OWNERSHIP, DPA FIRE PROTECTION
CALIFORNIA STATE PARKS	PUBLIC LAND OWNERSHIP, SRA FIRE PROTECTION
SANTA MONICA MOUNTAINS CONSERVANCY	PUBLIC LAND OWNERSHIP, RECREATIONAL USE
CONEJO & SIMI REC. & PARK DISTRICTS	PUBLIC LAND OWNERSHIP, RECREATIONAL USE
LOCAL WATER COMPANIES	WATER STORAGE & TREATMENT
NON-PROFIT OPEN SPACE DISTICTS	LOCAL GOVERNMENT
PUBLIC UTILITY COMPANIES	STATE/COUNTY
CALIFORNIA DEPT. OF FORESTRY	STATE/COUNTY
AIR POLLUTION CONTROL DISTRICT	STATE/COUNTY
CALIFORNIA DEPARTMENT OF FISH AND GAME	STATE/COUNTY
USDA-SOILS CONSERVATION	FEDERAL GOVERNMENT
U.S FISH AND WILDLIFE SERVICE	FEDERAL GOVERNMENT
BUREAU OF RECLAMATION	FEDERAL GOVERNMENT

Stakeholders

Political Entity	Jurisdiction
THOUSAND OAKS, CITY OF	LOCAL GOVERNMENT
ROCKETDYNE	PRIVATE/FEDERAL LAND OWNERSHIP
SIMI VALLEY, CITY OF	PUBLIC LAND OWNERSHIP, RECREATIONAL USE
AGRICULTURAL COMMUNITY	PRIVATE LAND/FARMING
VENTURA COUNTY CATTLEMEN'S ASSOCIATION	PRIVATE LAND/RANGE MANAGEMENT
WATERSHED FIRE COUNCIL	STATE/COUNTY
CALTRANS	STATE/COUNTY
ADVISORY COUNCILS	STATE/COUNTY
INSURANCE INDUSTRY	STATE/COUNTY
SERVICE CLUBS (KIWANIS/LIONS)	STATE/COUNTY
WATERSHED FIRE COUNCIL	STATE/COUNTY

LOCAL CHAMBERS OF COMMERCE	COUNTY
LOCAL SCHOOL DISTRICTS	COUNTY
LOCAL LAW ENFORCEMENT	COUNTY
HOMEOWNER'S ASSOCIATIONS	COUNTY
DEVELOPERS AND BUILDERS	COUNTY
PROPERTY MANAGERS	COUNTY
PROFESSIONAL FIREFIGHTER ASSOCIATIONS	COUNTY
YOUTH GROUPS (4-H, FFA, BOY SCOUTS)	COUNTY
ARCHITECTS	COUNTY
LOCAL NURSERIES	COUNTY
AMERICAN RED CROSS	COUNTY

Fire Safe Councils

Fire Safe Councils utilize the combined expertise, resources and distribution channels of its members, the Fire Safe Councils fulfills its mission to preserve Ventura County's natural and manmade resources by mobilizing all residences to make their homes and neighborhoods and communities fire safe.

Ojai Fire Safe Council
Will Castagna, Secretary
1330 Foothill Rd.
Ojai, CA 93023
wdc@mac.com
Office: (805) 646-7307

Ventura-Malibu Fire Safe Council
Thomas White, chair
(805) 457-6407

General Description of the Current Fire Situation

The following assets at risk are considered in evaluating placement of pre-fire projects:

- Hydroelectric power
- Fire-flood watersheds
- Water storage
- Water supply
- Soil erosion
- Infrastructure
- Scenic
  - Timber
  - Range
  - Air quality
  - Game wildlife
- Historic buildings
  - Recreation
  - Structures
  - Non-game wildlife
  - Ecosystem health

In addition the six prescribed fire benefits, as defined by CDF's Vegetation Management Program, are evaluated to prioritize specific projects. These benefits are fire hazard reduction, water yield, wildlife habitat improvement, fisheries habitat improvement, air quality improvement, and range forage improvement.

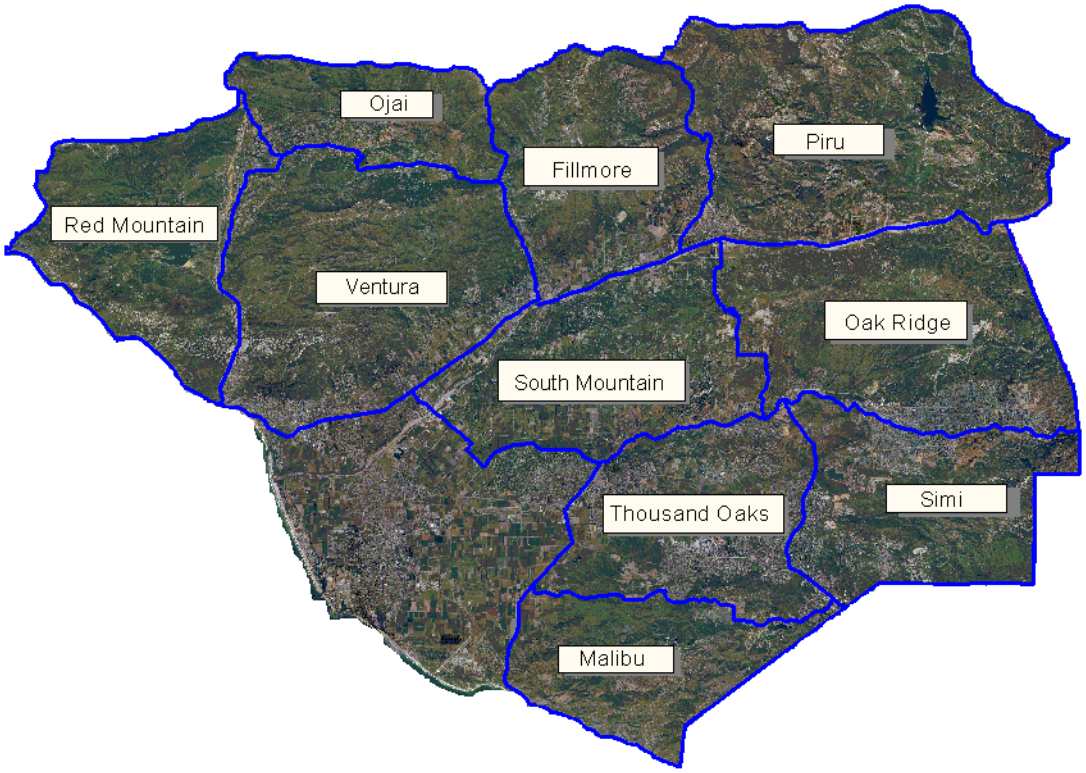
Based on analysis of the fire benefits, projects in each identified area are prioritized as high, medium or low. Projects having significant fire hazard reduction components are rated as a high priority, while projects having benefits other than fire hazard reduction are rated as either a medium or low priority based on the value of the other derived benefits.

Fuel Bed Analysis

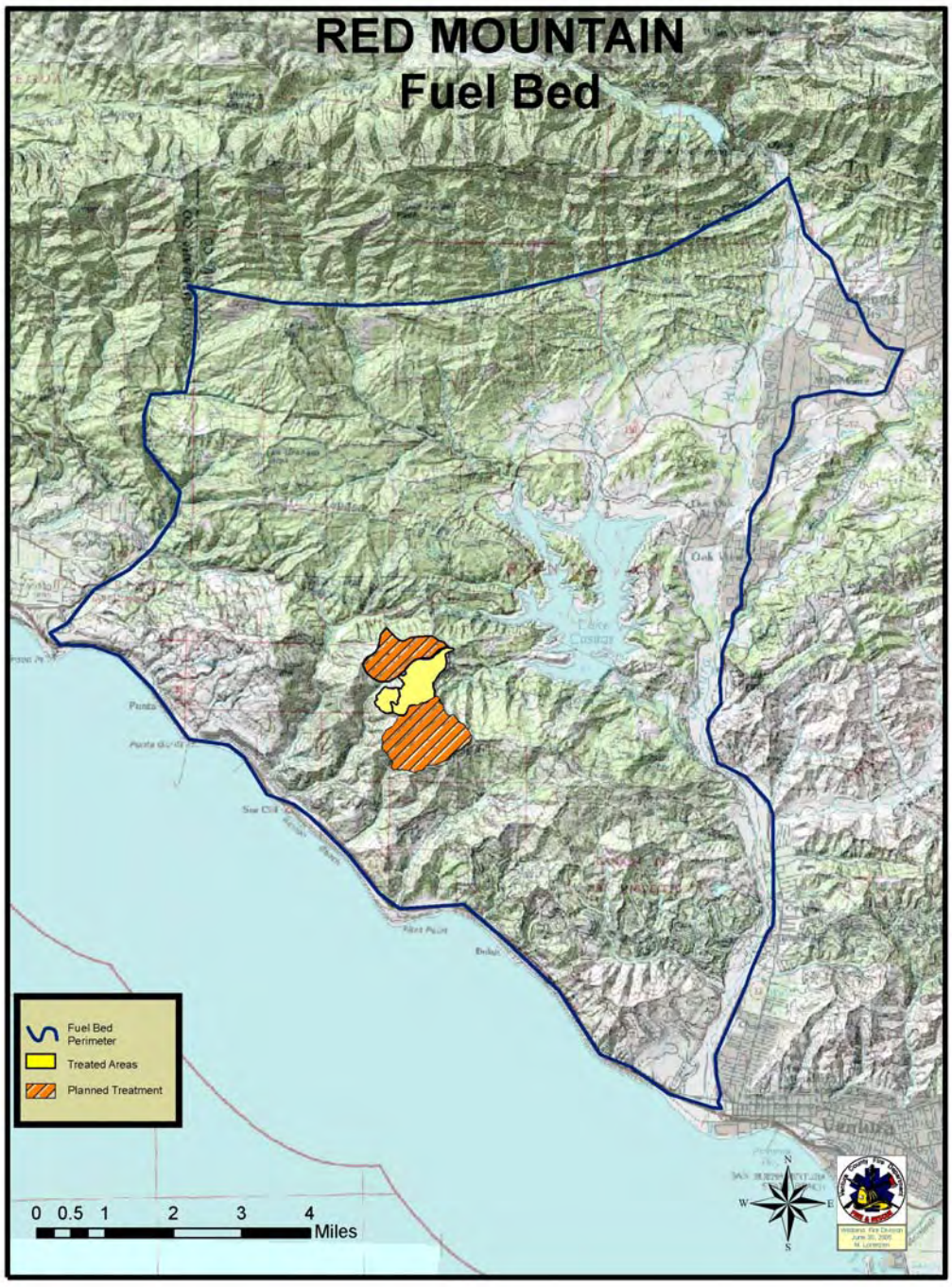
Due to Ventura County's diverse geography and six different microclimates, the county is broken into "fuel beds." Ten fuels beds were identified and serve as the geographical basis from which the plan was developed. Fire history from the past 110 years, assets at risk, fuel types and weather patterns were all considered in the development of this plan and placement of projects. Maps of each fuel bed with proposed fuel modification locations are included for reference. Each fuel bed analysis also includes a summary of the fuel bed, assets at risk, fire history and project descriptions.

The ten fuel beds are:

- Red Mountain Fuel Bed
- Ojai Fuel Bed
- Ventura Fuel Bed
- Fillmore Fuel Bed
- South Mountain Fuel Bed
- Thousand Oaks Fuel Bed
- Malibu Fuel Bed
- Piru Fuel Bed
- Oak Ridge Fuel Bed
- Simi Fuel Bed



Fuel Bed and Project Descriptions



Red Mountain Fuel Bed

Fuel Bed Description
The Red Mountain Fuel Bed is bordered on the south by the Pacific Ocean, on the north by Camino Cielo, on the east by Highway 33 and on the west by the county line with Santa Barbara.

The ground cover and vegetation consists of very heavy oak and heavy brush on the north facing slopes and light to medium brush on the remaining slopes

Predominant Risk Exposure
Structures and orchards in the interface area pose the greatest risk. Homes, ranches and orchards along Highway 150 pose the most significant risk in this fuel bed and also are the most difficult to protect through fuel modification because of their sporadic placement. Homes along Santa Ana Road present a lesser risk due to the nature of the surrounding fuels and historical fire data. The Lake Casitas watershed is a low risk, high value community resource that needs consideration in the planning process.

Oil production facilities dominate the interior canyons of this fuel bed south of lake casitas, east of Highway 33 and north of Highway 101. The arrangement of these facilities and the brush clearances around them normally will reduce the risk posed in a wildfire.

Historical Fire Data

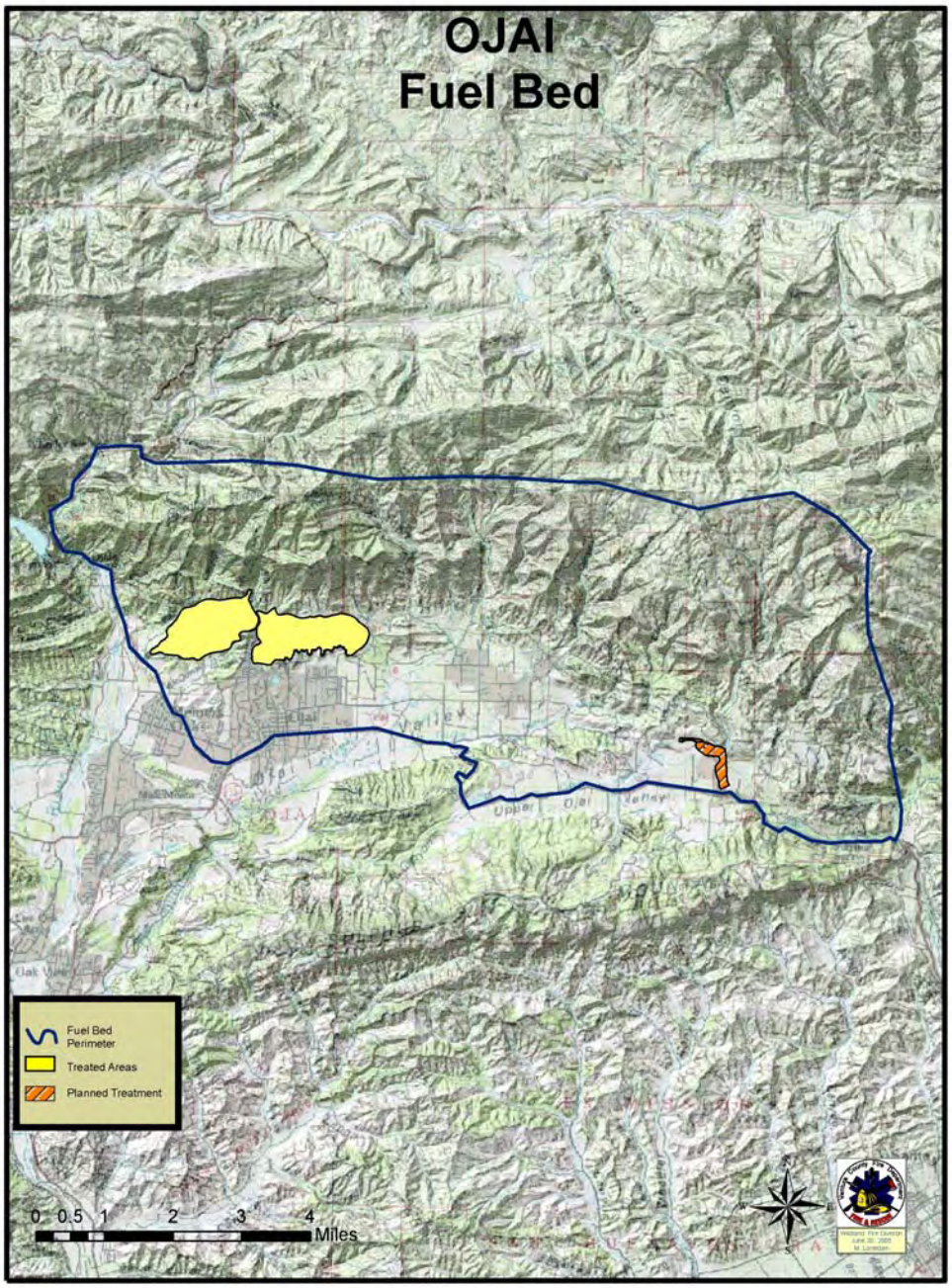
Number of 300+ Acre Fires	Average Size	Time of Occurrence	Fire Spread Characteristics
6	21,025 acres. 686 acres without the 122,724 acre Wheeler Fire	Varied	4 of 6 large fires were wind driven. 2 of 6 were fuels and topography driven.

Fuel Break Location And Method

<u>Haley Project</u>
The fuel modification area will be located north of the oil facilities in Padre Juan Canyon, south of Hwy 150, east of Los Sauces Creek and west of Lake Casitas. This area will serve to protect the Lake Casitas watershed and viewshed and support range improvement. This project area may also prevent fire from entering into Forest Service lands when a fire start occurs off the oil leases with an on-shore wind influence. The method of treatment will be prescribed fire.

The Haley Project has a medium priority rating because the project is not immediately adjacent to any interface areas, but other fire benefits are numerous. It will be divided into four or five units. Units one and two were completed in 2003/04, unit three is planned for 2005/06, and unit four for 2006/07. Fuel consumption on the prescribed burn is planned to be 65-90%. The project area was be reseeded by the property owner for erosion control and increased grazing opportunities. Because of the continual grazing that will occur, reentry is not planned for at least 20 years.

Haley prescribed fire project. Post-burn aerial reseeding.


OJAI
Fuel Bed
Fuel Bed Perimeter
Treated Areas
Planned Treatment
0 0.5 1 2 3 4
Miles

Ojai Fuel Bed

Fuel Bed Description
Highway 150, borders the Ojai Fuel Bed on the south, on the north by the Sespe River, on the east by the Santa Paula Creek, and on the west by Highway 33**.**

The ground cover and vegetation of concern consists of light to medium brush north of the City of Ojai and adjacent to the Upper Ojai community. The main ridges primarily run from east to west.

Predominant Risk Exposure
Structures and orchards in the interface area pose the greatest risk. The areas of greatest concern are on the northern border of the City of Ojai, where fingers of development into the urban interface have created potential problems. Orchards are mixed in with this development creating additional assets that are threatened in a wildfire. The majority of the residents in the community of Upper Ojai live in areas that blend with their natural surroundings creating an environment that will be challenging to defend in a wildfire.

Oil production facilities exist in the area east of Santa Paula Creek. The layout of these facilities and the brush clearances around them normally will reduce the risk posed in a wildfire.

Historical Fire Data

Number of 300+ Acre Fires	Average Size	Time of Occurrence	Fire Spread Characteristics
7	27,068 acres	July – October with one large fire in December	7 of 7 large fires were wind driven.

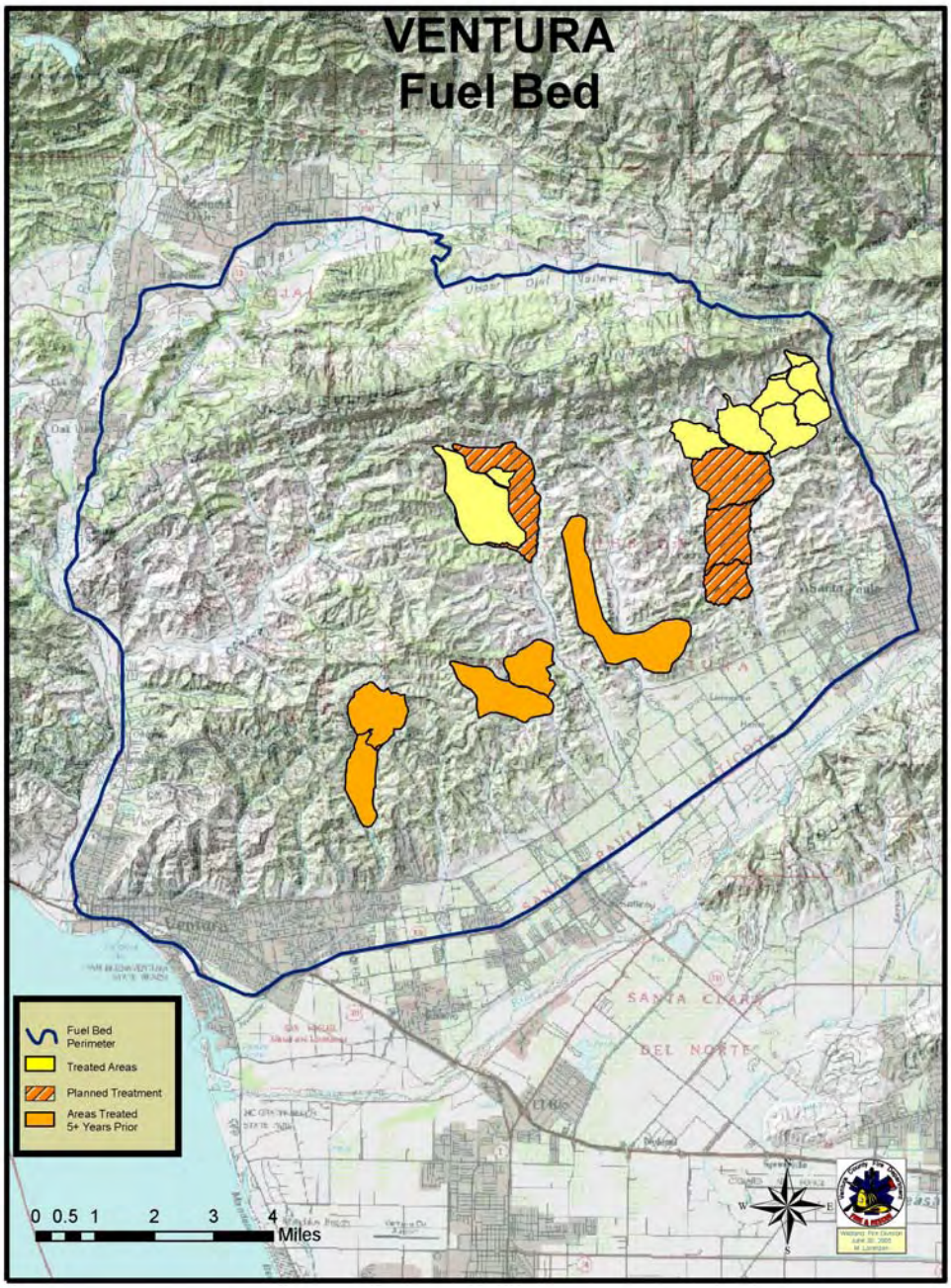
Fuel Break Location And Method

<u>Fairview/Foothill and Shelf Road Project</u>
The fuel modification area will be located north of Fairview and Shelf Roads, south of Nordoff Ridge, east of Cozy Dell Canyon and west of Gridley Road. These areas have been selected due to their ability to provide protection to the at risk assets in east and northeast wind driven fires. Accordingly, the project has been prioritized as high. The method of treatment will be a combination of cut, stack and pile burning, and prescribed fire. This project was previously funded through FEMA and USFS grants. Planning is currently underway to improve this project in conjunction with the Forest Service. This project will reopen a fuel break in this area with the County focusing on privately held lands and the Forest Service treating Federally owned property.

Sisar Road Project

The second area will be located north of Ojai Santa Paula Road, south of Nordoff Ridge Road, east of Horn Canyon and west of Bear Canyon. This area has been selected due to its ability to provide protection to the at risk assets in east and northeast wind driven fires. Accordingly, the project has been prioritized as high. The method of treatment will be a combination of cut, stack and pile burning, with the possibility of a prescribed fire. This project was previously funded through FEMA and USFS grants and is currently being funded as the Upper Ojai Wildfire Protection Zone project by the California Fire Safe Council. This project will be completed in 2005/06.

Sisar project, broadcast burning. 2004


VENTURA
Fuel Bed
Fuel Bed Perimeter
Treated Areas
Planned Treatment
Areas Treated 5+ Years Prior
0 0.5 1 2 3 4
Miles

Ventura Fuel Bed

Fuel Bed Description
The Ventura Fuel Bed is bordered on the north by the Ojai Valley, on the south by the City of Ventura and Highway 126, on the east by Highway 150 and on the west by Highway 33. The highest elevation of the fuel bed is approximately 2,727 feet.

The ground cover and vegetation consists of very heavy oak and heavy brush in steep canyons running out to lighter, flashy fuels in the foothills north of the City of Ventura. The main ridges primarily run from east to west.

PREDOMINANT RISK EXPOSURE
The greatest area of risk in the Ventura Fuel Bed is in the interface area that separates the City of Ventura from the County jurisdictional areas. Fingers of development have continued to grow over time. Development in the areas between Harmon, Sexton, and Barlow Canyons would be challenging to protect in a wildfire driven by winds from the northeast. Additional at risk areas include Sulphur Mountain Road, Creek Road and the east side of Highway 33. Orchards are also at risk throughout this fuel bed and need consideration when planning for fuel modifications.

Oil production facilities can be found along Shell Road, the eastern portion of Sulphur Mountain Road and at the north end of Wheeler Canyon. The arrangement of these facilities and the brush clearances around them normally will reduce the risk posed in a wildfire.

Historical Fire Data

Number of 300+ Acre Fires	Average Size	Time of Occurrence	Fire Spread Characteristics
14	8,706 acres	July – October	10 of 14 large fires were wind driven. 4 of 14 were fuels and topography driven.

Fuel Break Location And Method

<u>Sloan Project</u>
This project, previously funded through a FEMA grant, is located at the north end of Aliso Canyon. With the success of the Adams Canyon project discussed below, no treatment is currently planned in this project area. The possibility does exist that a prescribed burn could be planned in this area for range improvement

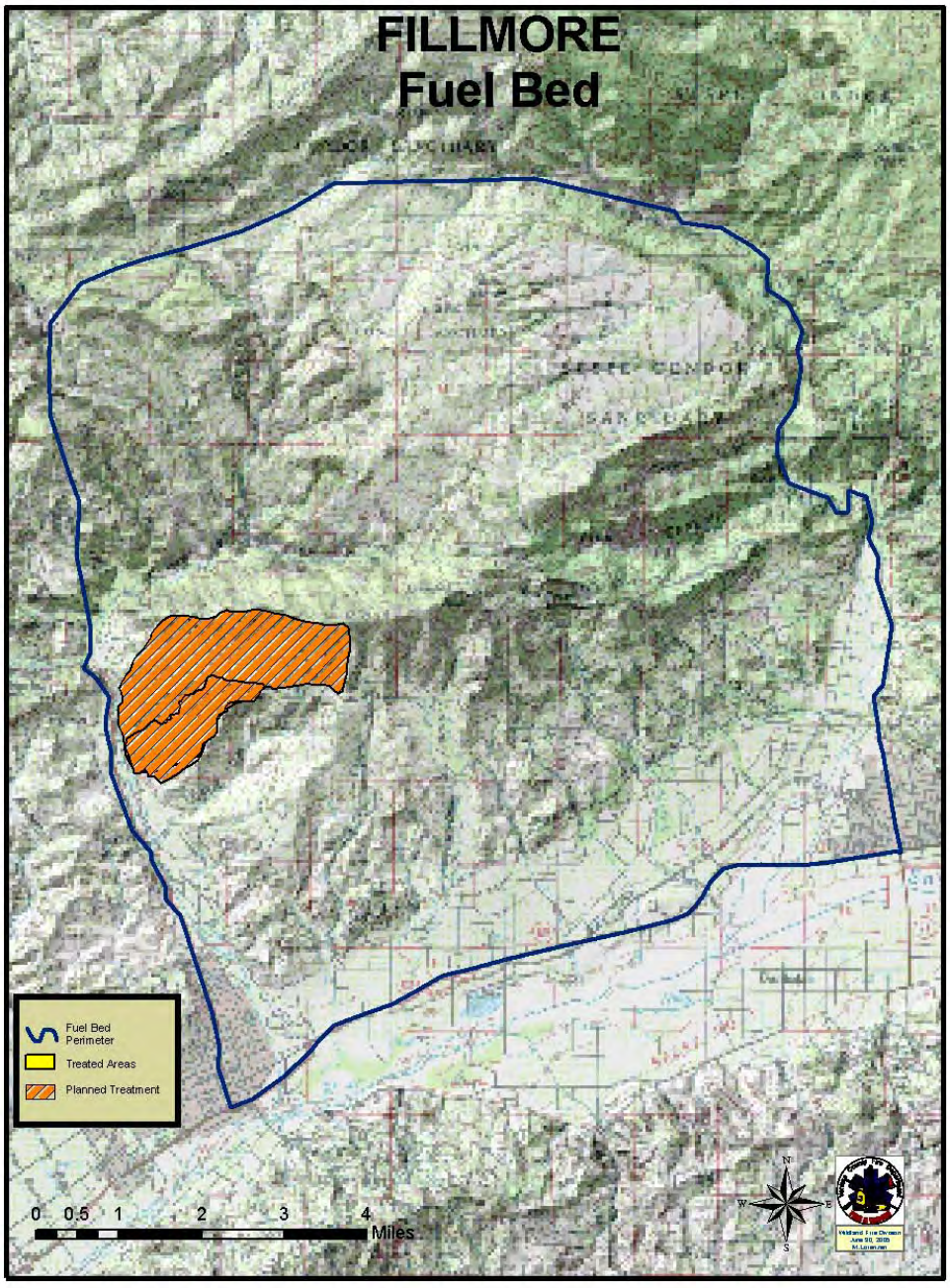
purposes. A burn plan on this project has been completed and is active through the end of 2005.

Adams Canyon Project

The preferred treatment area is the area north of Foothill Road, south of Sulphur Mountain Road, east of Lake Canyon and West of Highway 150. This area has been selected due to its ability to protect the interface area from Ventura to Santa Paula in a wind driven fire. Treatment will also support range and watershed improvement. The plan for the project is to create a fuel modification zone from the bluffs of Sulphur Mountain to the orchards north of Foothill Road. The project area will be maintained through the use of grazing practices. Adams Canyon consists of nine separate units (six are complete) that will be completed by 2008.

Ridgeline prep work for Phase 2 Unit 2 scheduled for August 2005.


Ventura County firing team utilizes a terra torch on the Adams Canyon project.


FILLMORE
Fuel Bed
Fuel Bed Perimeter
Treated Areas
Planned Treatment
0 0.5 1 2 3 4
Miles
N
W
E
S

Fillmore Fuel Bed

Fuel Bed Description
Sespe Creek and River Road border the Fillmore fuel bed on the north, on the south by Highway 126, on the east by Hopper Canyon, and on the west by Santa Paula Canyon. The highest point is the Topa Topa Bluffs at 6,244 feet.

The ground cover and vegetation consists of light to medium brush in the areas of concern. Heavier brush and stands of timber can be found in the Sespe Creek area at the extreme north end of the fuel bed.

Predominant Risk Exposure
Ranches, residences and orchards between Santa Paula and Fillmore present the greatest risk exposure.

Oil production facilities are located in the area of Anlauf Canyon. The arrangement of these facilities and the brush clearances around them normally will reduce the risk posed in a wildfire.

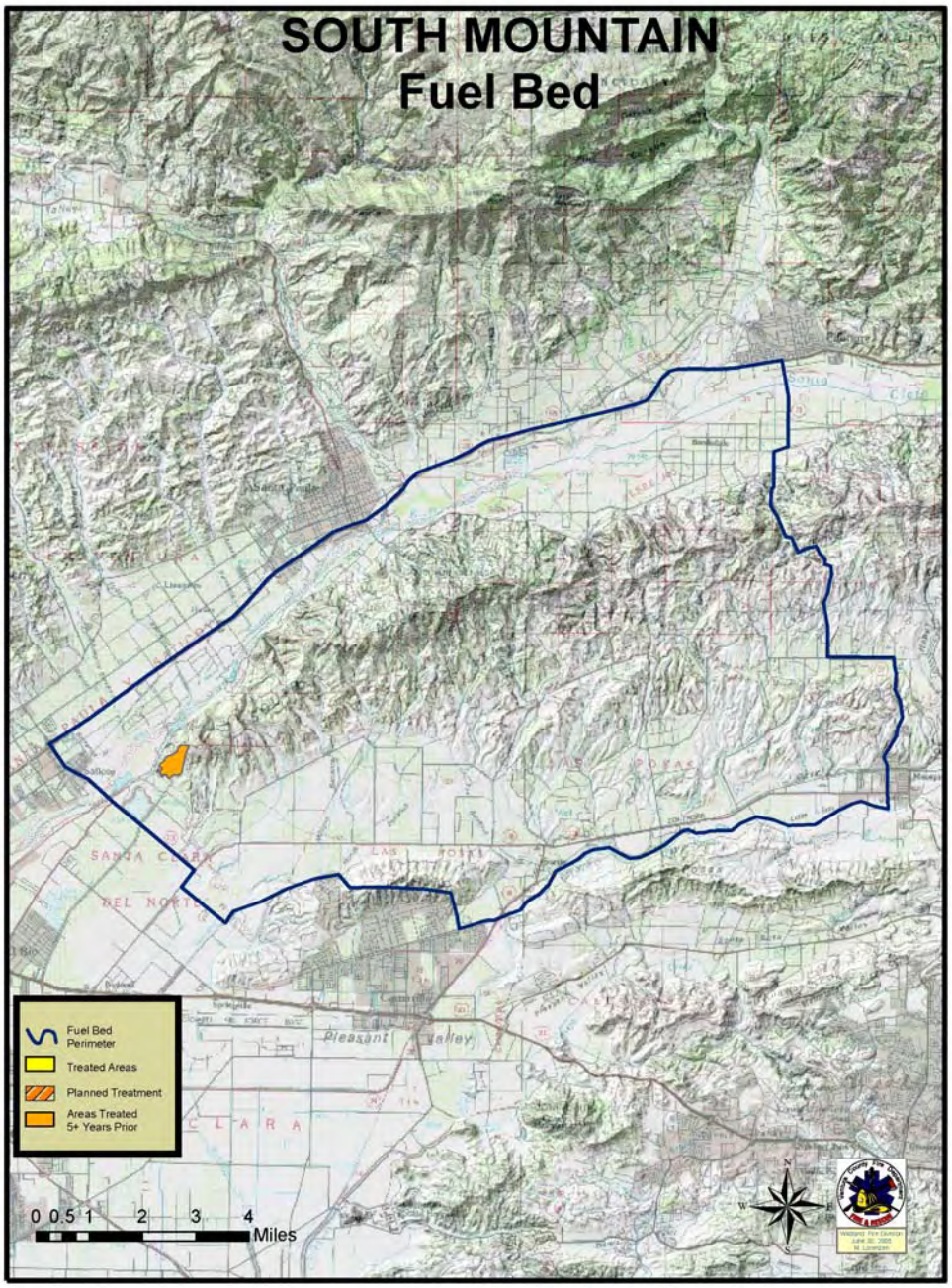
Historical Fire Data

Number of 300+ Acre Fires	Average Size	Time of Occurrence	Fire Spread Characteristics
13	8,213 acres	April – December	12 of 13 large fires were wind driven. 1 of 13 were fuels and topography driven.

Fuel Break Location And Method

The Grand Fire in 1996, effectively modified the fuels in most of the at risk area.

<u>Frost Project</u>
This is a continuation of the Frost prescribed burn. The area to be modified is located north of Toland Park, south of Santa Paula Ridge, east of Steckel Park and west of Timber Canyon. Treatment of this area will support range and watershed improvement. The method of treatment will be prescribed fire. The project consists of one unit, is rated as a low priority because of its location in relation to the interface and is scheduled for completion in 2007/08.


SOUTH MOUNTAIN
Fuel Bed
Fuel Bed Perimeter
Treated Areas
Planned Treatment
Areas Treated 5+ Years Prior
0 0.5 1 2 3 4
Miles

South Mountain Fuel Bed

Fuel Bed Description
Highway 126, borders the South Mountain Fuel Bed on the north, on the south by Highway 118, on the east by Highway 23 and on the west by Highway 118.

The ground cover and vegetation consists of light grasses and light to medium brush.

Predominant Risk Exposure
Ranchlands, scattered residences and orchards are the primary assets at risk in this fuel bed.

Oil facilities are located in the area of South Mountain and have been a source of many of the larger fires analyzed in the historical data. The arrangement of these facilities and the brush clearances around them normally will reduce the risk posed to the facilities in a wildfire.

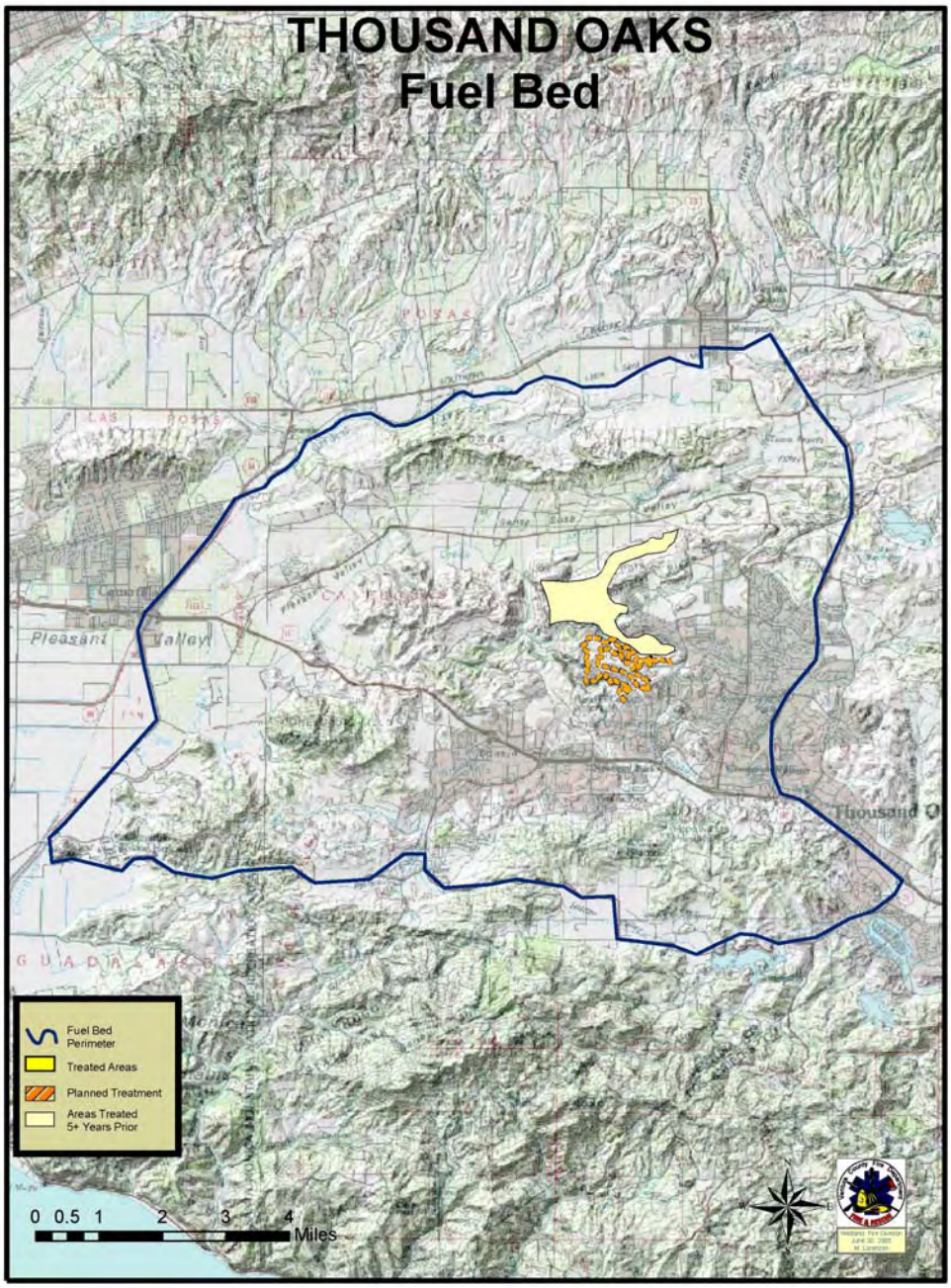
Historical Fire Data

Number of 300+ Acre Fires	Average Size	Time of Occurrence	Fire Spread Characteristics
14	10,464 acres	May – December	14 of 14 large fires were wind driven.

Fuel Break Location And Method

This entire fuel bed was consumed by the October 2003, Simi Fire. After a risk and workload analysis, no modification areas have been identified in the South Mountain Fuel Bed for treatment within the next five years.

South Mountain fuel bed – post Simi fire


THOUSAND OAKS
Fuel Bed
Pleasant Valley
Thousand O
Fuel Bed Perimeter
Treated Areas
Planned Treatment
Areas Treated 5+ Years Prior
0 0.5 1 2 3 4
Miles

Thousand Oaks Fuel Bed

Fuel Bed Description
Highway 118, borders the Thousand Oaks Fuel Bed on the north, on the south by Potrero Road, on the east by Highway 23 and on the west by the Oxnard Plains.

The ground cover and vegetation consists of heavy brush on the north facing slopes just south of the City of Thousand Oaks. Lighter, flashy fuels and medium brush can be found in the remainder of the fuel bed. The main ridges primarily run from east to west.

Predominant Risk Exposure
Thousand Oaks is a growing urban area that has interface issues along its perimeter. This is illustrated by the setting found in the Wildwood Park area where steep topography with hazardous fuels is found below many residences. Because of the significant development in the area many of the fuels that used to exist in the area have been mitigated due to the expanding urban area. As the Dos Vientos project continues to grow to the north of Potrero Road, ongoing evaluation of risk exposure will need to occur.

Historical Fire Data

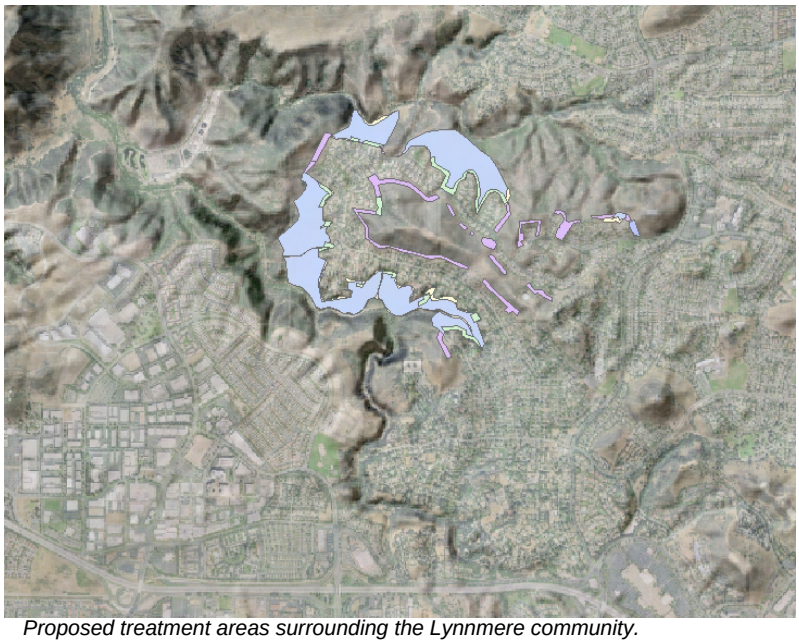
Number of 300+ Acre Fires	Average Size	Time of Occurrence	Fire Spread Characteristics
11	2,681 acres	June - December	10 of 11 large fires were wind driven. 1 of 11 were fuels and topography driven

Fuel Break Location And Method

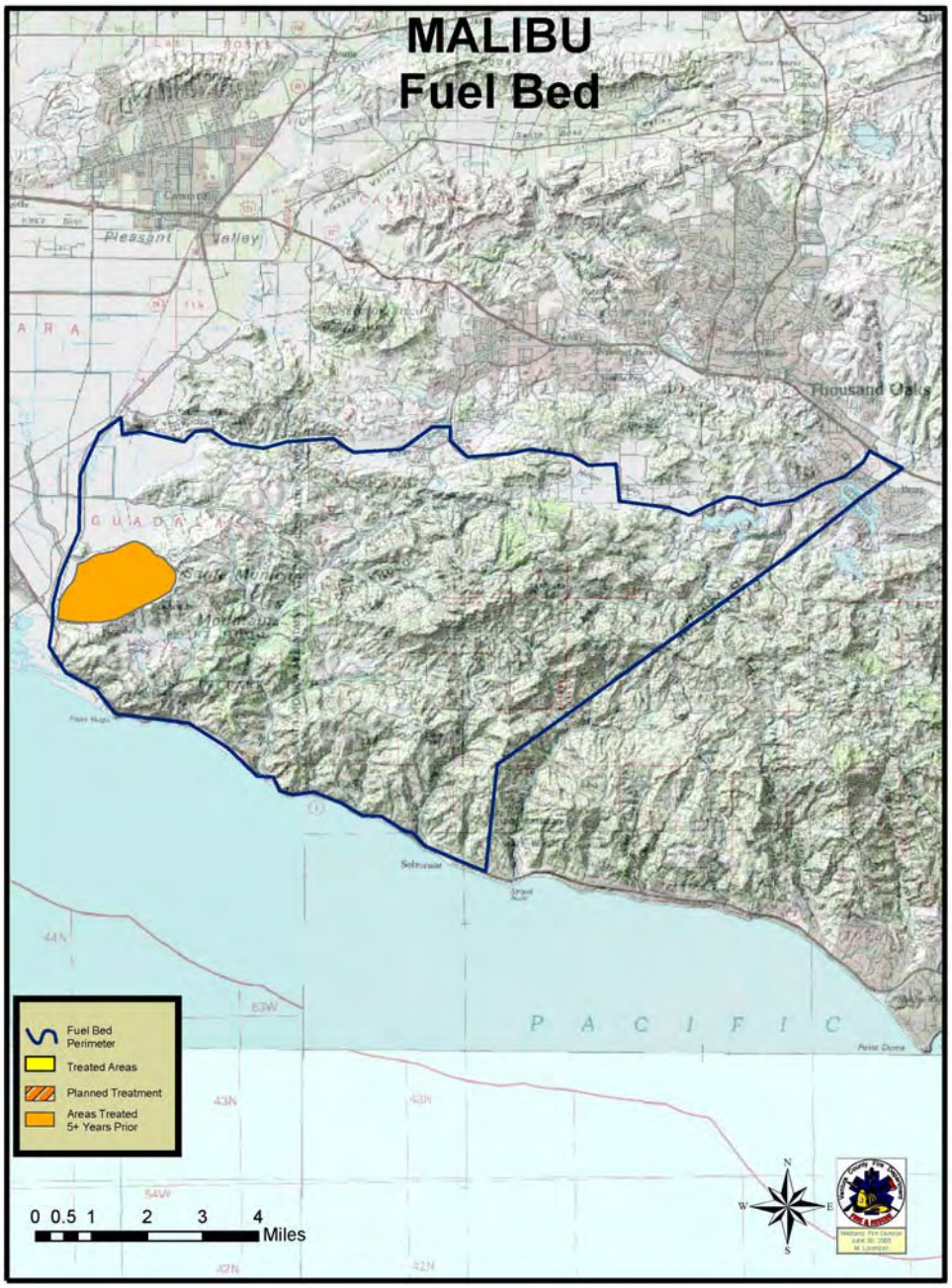
Wildwood Project

The area selected for fuels treatment is in the area of Wildwood Park. This area is north of Newbury Park, south of Santa Rosa Valley, east of Hill Canyon and west of the City of Thousand Oaks. This is a continuation of a prior project that was funded through a FEMA grant. The treatment of this area will afford protection from wildfire to the residences that are in the interface area. Due to the proximity of the homes to the treatment area, fuels will need to be cut, stacked and pile burned. A newly purchased forestry mower will also be used to modify the fuels by mechanical means. This project is rated as a high priority because of its interface protection value.

FEMA has approved additional funding for this project through the Hazard Mitigation Grant Program. The project will be implemented after a plan is developed and an agreement reached with the local open space agency that maintains the lands.



Proposed treatment areas surrounding the Lynnmere community.


MALIBU
Fuel Bed
Pleasant Valley
Thousand Oaks
Fuel Bed Perimeter
Treated Areas
Planned Treatment
Areas Treated 5+ Years Prior
0 0.5 1 2 3 4
Miles
N
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S

Malibu Fuel Bed

Fuel Bed Description
Potrero Road borders the Malibu fuel bed on the north, on the south by Highway 1, on the east by the Los Angeles County line and on the west by Lewis Road. The highest elevation on the fuel bed is Sandstone Peak at 3,111 feet.

The ground cover vegetation consists of light to medium brush, with light flashy fuels on the north end of the fuel bed, turning to medium to heavier brush, as you get closer to the coast and north slopes.

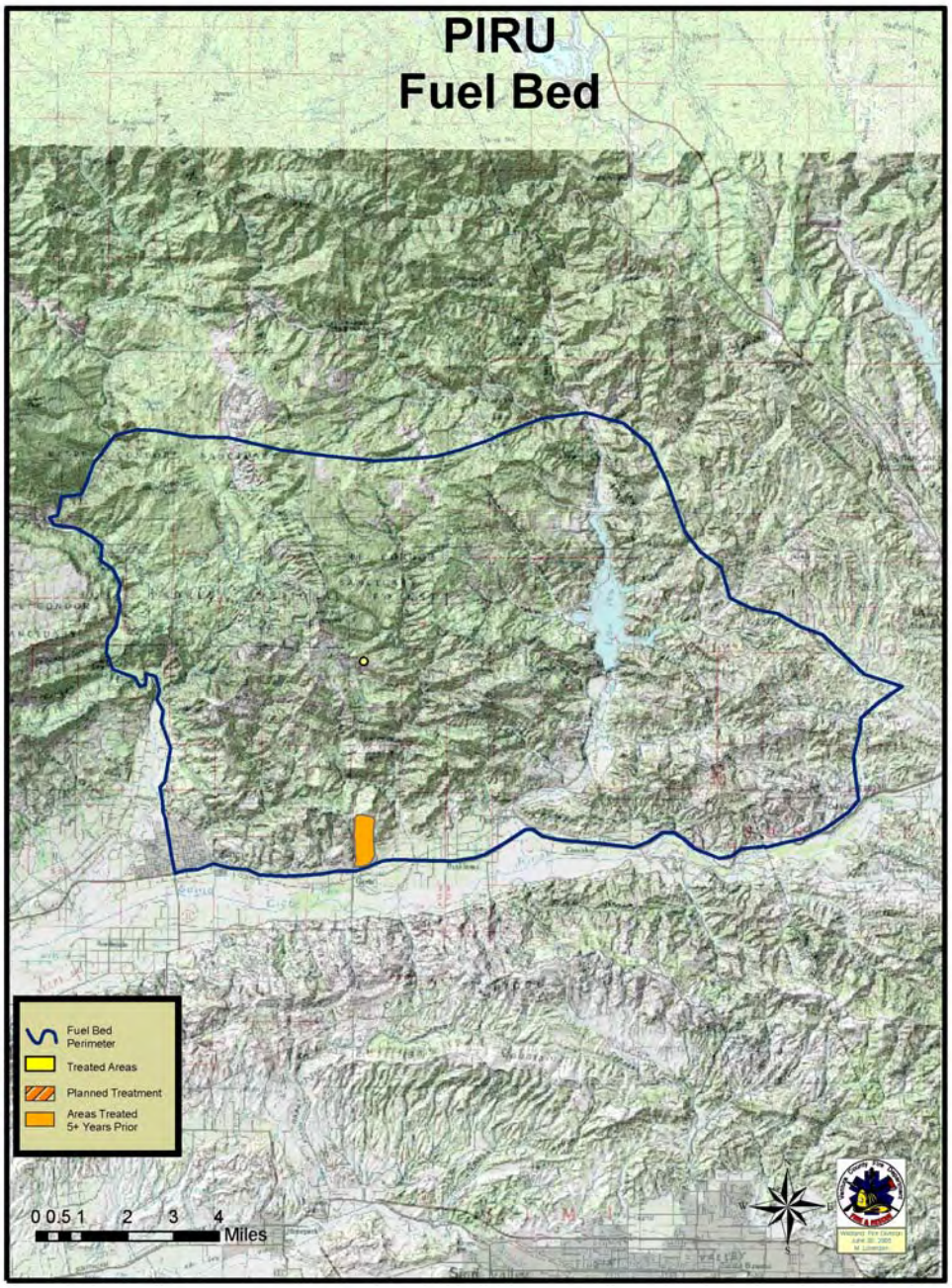
Predominant Risk Exposure
Structures located in narrow canyons with limited access present the greatest risk to both local assets and firefighting resources. The fact that the majority of the structures at risk are scattered throughout the fuel bed makes large-scale prescribed fire projects ineffective for protective purposes. Some ranch and agricultural assets exist in Hidden Valley and on the western portion of the fuel bed in the Broome Ranch area.

Historical Fire Data

Number of 300+ Acre Fires	Average Size	Time of Occurrence	Fire Spread Characteristics
25	6200 acres	July – December	22 of 25 large fires were wind driven. 3 of 25 were fuels and topography driven

Fuel Break Location And Method

<u>Broome Ranch Project</u>
The area selected for fuels reduction is located in the area of Broome Ranch, north of Highway 1, south of Potrero Road, east of Calleguas Creek and west of La Jolla Canyon. The selected area will protect sensitive military communications equipment from wildfire in a northeast wind condition and will also support range improvement. Prescribed fire will be the method used to treat this area. Because this project has the potential to protect valuable assets in has a medium priority rating. Completion date is projected to be 2007/08.


PIRU
Fuel Bed
Fuel Bed Perimeter
Treated Areas
Planned Treatment
Areas Treated 5+ Years Prior
0 0.5 1 2 3 4
Miles

Piru Fuel Bed

Fuel Bed Description
The Piru Fuel bed is bordered on the north by Agua Blanca Creek, on the south by the Santa Clara River, on the east by Del Valle and on the west by the Hopper Canyon west slope.

The ground cover and vegetation consists of light to medium brush in the areas of concern. The fuel bed has large areas of southern aspect slopes. The Santa Clara Valley alignment runs west to east and provides for erratic fire spread with a west wind condition.

Predominant Risk Exposure
Ranches, residences and orchards between Fillmore, Piru and the Los Angeles County Line present the greatest risk exposure.

Oil production facilities are located in the area to the northwest of the line connecting Oat and Hopper Mountains and in the Holser Canyon area. The arrangement of these facilities and the brush clearances around them normally will reduce the risk posed in a wildfire.

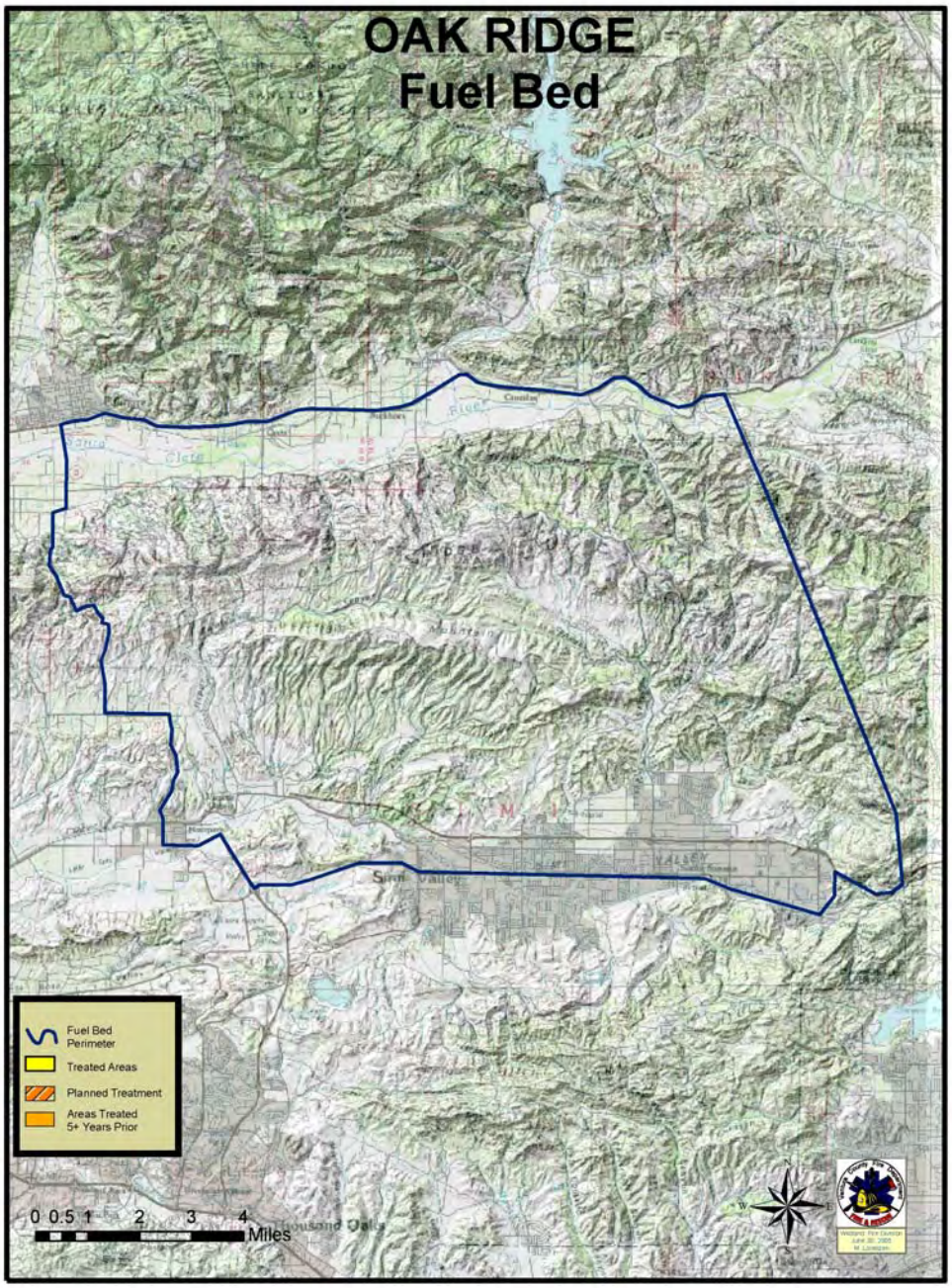
Historical Fire Data

Number of 300+ Acre Fires	Average Size	Time of Occurrence	Fire Spread Characteristics
13	9,427 acres	July - December	7 of 13 large fires were wind driven. 6 of 13 were fuels and topography driven

Fuel Break Location And Method

The Hopper and Piru fires that occurred in the late 1990's and the Piru Fire of 2003 modified the fuels in many areas of this fuel bed. The U.S. Fish and Wildlife Service has contracted with the Ventura County Fire Department to mitigate hazardous fuels in and around the structures and condor holding pens on the Hopper National Wildlife Refuge.

Crews clear around condor holding pens.


OAK RIDGE
Fuel Bed
Fuel Bed Perimeter
Treated Areas
Planned Treatment
Areas Treated 5+ Years Prior
0 0.5 1 2 3 4
Miles

Oak Ridge Fuel Bed

Fuel Bed Description
The Oak Ridge fuel bed is bordered on the north by the Santa Clara River, on the south by the Simi fuel bed, on the east by the Los Angeles/Ventura County line and on the west by Highway 23.

The highest elevation of the fuel bed is 2,992 feet. The ground cover of the bed consists of medium brush on the North Slope and light, flashy fuels on the south slope.

Predominant Risk Exposure
The interface area along the northern boundary of the City of Simi Valley increases in size as rapid development occurs. As this residential area grows, so does the risk from wildfire.

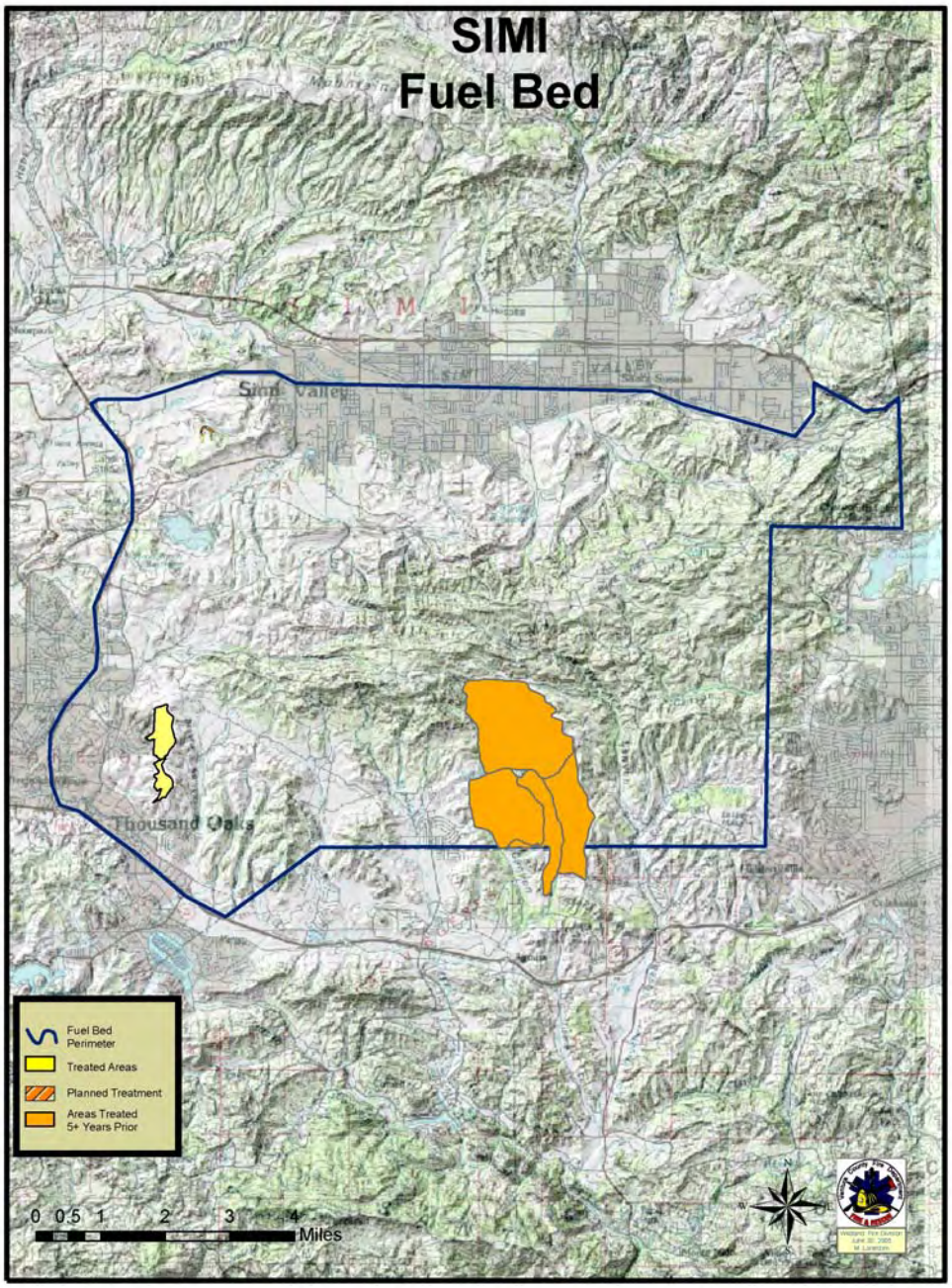
Oil production facilities are located in the area of the Big Mountain Oil Field, Shiells Canyon, Calumet Canyon, Torrey Canyon and the north end of Grimes Canyon. The arrangement of these facilities and the brush clearances around them normally will reduce the risk posed in a wildfire.

Historical Fire Data

Number of 300+ Acre Fires	Average Size	Time of Occurrence	Fire Spread Characteristics
20	11,413 acres	June - November	15 of 20 large fires were wind driven. 5 of 20 were fuels and topography driven

Fuel Break Location And Method

This entire fuel bed was consumed by the October 2003, Simi Fire. No projects are currently planned for the Oak Ridge Fuel Bed. As development occurs and the interface increases, the fuel bed will be reevaluated to determine if any fuel management projects would be of value.


SIMI
Fuel Bed
Simi Valley
Thousand Oaks
Fuel Bed Perimeter
Treated Areas
Planned Treatment
Areas Treated 5+ Years Prior
0 0.5 1 2 3 4
Miles

Simi Fuel Bed

Fuel Bed Description
The Simi Fuel Bed is bordered on the north by Simi Valley, on the south by Highway 101, on the east by the San Fernando Valley and on the west by Highway 23 and Olsen Road.

The highest elevation of the fuel bed is Simi Peak at 2400 feet. The ground cover of the bed consists of medium brush in the steep canyons and light flashy fuels make up much of the fuel bed on the north and the south slopes.

Predominant Risk Exposure
The east end of Thousand Oaks, the community of North Ranch and the City of Oak Park have many assets that are exposed to hazardous fuels along the interface area. The south side of the City of Simi Valley, while exposed to the fuels along the north side of this fuel bed, does not have as great a risk due to the historical patterns of east wind driven fires.

Historical Fire Data

Number of 300+ Acre Fires	Average Size	Time of Occurrence	Fire Spread Characteristics
16	12089 acres	July - November	13 of 16 large fires were wind driven. 3 of 16 were fuels and topography driven

Fuel Break Location And Method

<u>Kevington Project</u>
The project is located in the Skeleton Canyon area. This is a prior project that was funded through FEMA and will be treated for regrowth. The project will be accomplished through hand cutting, stack and pile burning. Once sufficient regrowth occurs, this project will have a high priority due to its proximity to the interface area. The project is planned for 2006/07.

Ronald Reagan Presidential Library

This project increases the defensible space around this valuable community asset. Increasing defensible space will allow civilians and library employees to shelter in place should a wind driven fire run through the fuels surrounding the property. Additionally, fewer resources will need to be committed to structure protection thus allowing allocation to areas of greater need. This project will be accomplished through hand cutting and chipping or mechanically using the Department's forestry mower. The first phase of the project was completed in 2003/04 and the next phase is scheduled to begin in September 2005.

Before

Four hours later after mechanical treatment

Seeking alternatives to burning, the Ventura County Fire Department purchased a Forestry Mower .

SUMMARY

The Ventura County Fire Protection District is responsible for wildland fire protection within Ventura County under policies set forth by the Board of Directors. The elements of effective protection are:

- Comprehensive Planning
- Vigorous Prevention
- Passive Protection
- Aggressive Fire Suppression

With the proper mix of these elements, values at risk within Ventura County can be effectively and economically protected from the risks of wildfire.