

Unit Fire Plan

Santa Barbara County

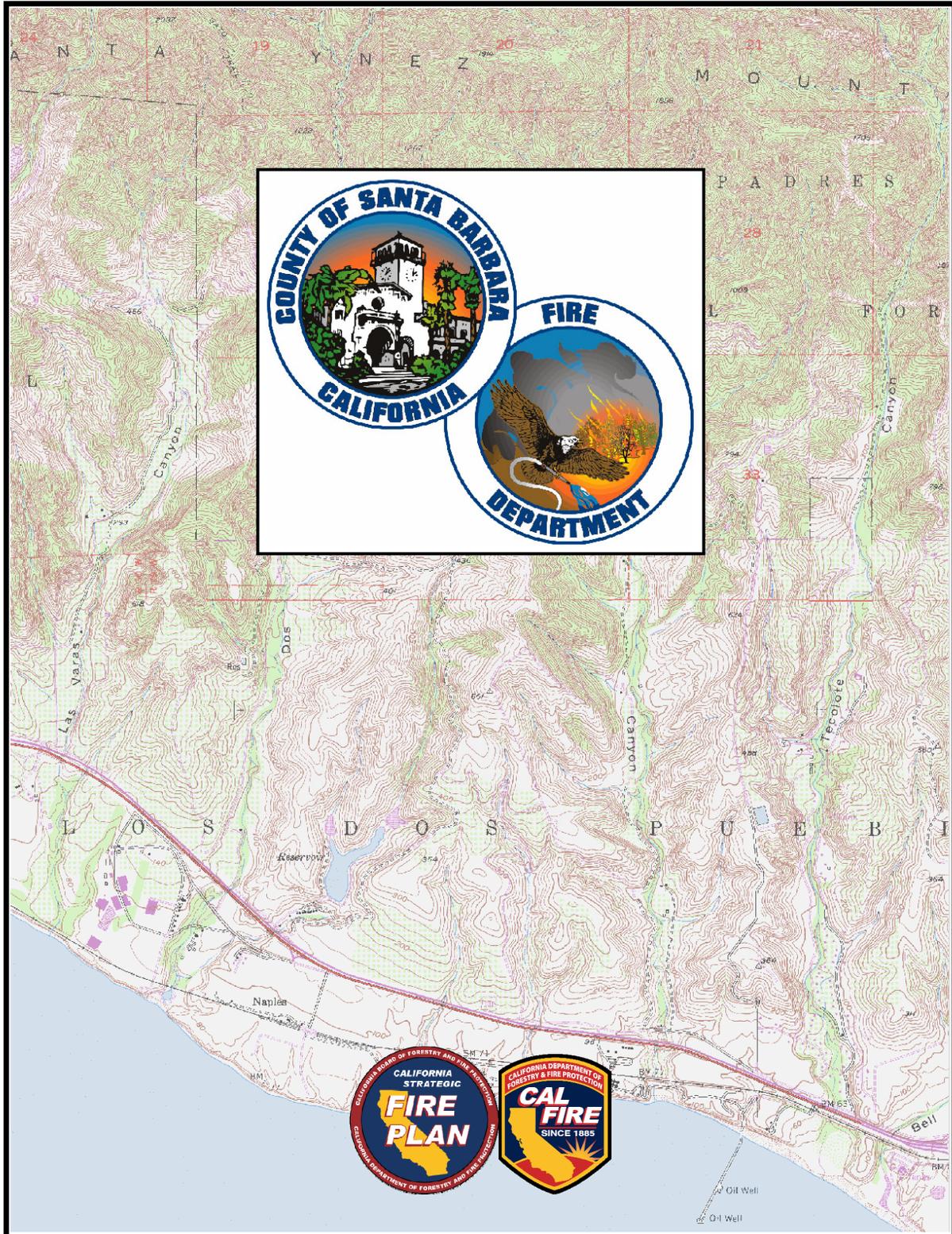


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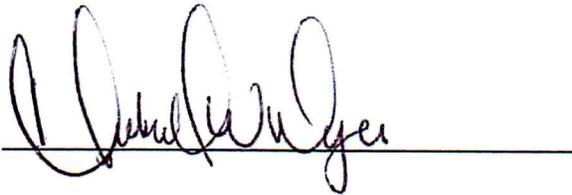
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SIGNATURES

Unit Fire Plan developed for Santa Barbara County:

This Plan:

- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- Is intended for use as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance and permitting processes are met as necessary.



Unit Chief
Michael W. Dyer, Fire Chief

6-14-11

Date



Pre-Fire Engineer
Bob Tanner, PFE

6-14-11

Date

Strategic Fire Plan for California

The 2010 Strategic Fire Plan for California is the first statewide fire plan developed through a collaborative effort between the State Board of Forestry and Fire Protection and the California Department of Forestry (Board) and Fire Protection (CAL FIRE). The Plan recognizes that fire will occur in California and works to answer the question of “how do we utilize and live with that risk of wildfire?” The 2010 Plan builds upon the concept first developed in the 1996 California Fire Plan, which led to collaborative efforts in fire prevention. A copy of the 2010 Strategic Fire Plan for California can be found at <http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fpppdf668.pdf>

The vision of the 2010 Strategic Fire Plan: A natural environment that is more resilient and man-made assets which are more resistant to the occurrence and effects of wildland fire through local, state, federal, and private partnerships.

The 2010 Strategic Fire Plan outlines seven goals focused on enhancing the protection of lives, property, and natural resources from wildland fire, as well as improving environmental resilience to wildland fire. Each of the goals is meant to build upon the previous one; the seven goals are listed below:

1. Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the sharing of all analyses and data collection across all ownerships for consistency in type and kind.
2. Articulate and promote the concept of land use planning as it relates to fire risk and individual landowner objectives and responsibilities.
3. Support and participate in the collaborative development and implementation of wildland fire protection plans and other local, county and regional plans that address fire protection and landowner objectives.
4. Increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires, such as defensible space and other fuels reduction activities, fire prevention and fire safe building standards.
5. Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas.
6. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
7. Address post-fire responsibilities for natural resource recovery, including watershed protection, reforestation and ecosystem restoration.

Santa Barbara County is one of six “contract counties” (Santa Barbara, Ventura, Los Angeles, Orange, Kern, and Marin), which has executed a contract with the State of California to provide wildland fire protection on state responsibility areas (SRA). Santa Barbara County has the responsibility as a contract county to implement the 2010 State Strategic Fire Plan for California in Santa Barbara County. As such the Santa Barbara County Fire Department functionally operates as a Unit of the California Department of Forestry and Fire Protection (CAL FIRE) and is responsible for all Strategic Fire Plan activities within the County. This plan, the *Santa Barbara County Unit Fire Plan*, replaces the previous unit fire plan: *Santa Barbara County Communities Wildfire Protection Plan 2005*.

Santa Barbara County Unit Fire Plan

Mission Statement

The Santa Barbara County Fire Department serves and safeguards the community from the impacts of fires, medical emergencies, environmental emergencies, and natural disasters through leadership, planning, education, prevention, code enforcement, and all-hazard emergency response.

Our *Mission Statement* is a written description of the purpose of the Department.

Vision Statement

The Santa Barbara County Fire Department will be a model public safety agency, widely recognized for our effectiveness, regional strength, and community attentiveness.

Our *Vision Statement* is a compelling description of how the organization will or should operate at some point in the future and of how our stakeholders will benefit from our Department's services.

Core Values

Commitment – Courage - Integrity - Innovation - Teamwork – Service

Our *Core Values* list the key behaviors and beliefs that determine how the Department operates.

The Department's *Mission Statement*, *Vision Statement*, and *Core Values* are the shared attributes and behaviors that inform and guide our actions in delivering services; one of these services is producing and implementing the Unit Fire Plan. As an "all-risk" department it is our duty to protect life, property, and the environment. In order to accomplish this, a frame work is required to guide our efforts. This Unit Fire Plan will provide this frame work and will identify goals and objectives pertaining to reducing and preventing the impacts of wildland fire. The Unit Fire Plan is intended to convey management direction from the County Fire Chief, involve and educate stakeholders on the wildfire environment, establish strategic priorities for wildfire prevention and suppression projects and programs into a single unified plan, and be a living document that will adapt to changing conditions and be updated on a regular basis. The Unit Fire Plan was developed and will be maintained by the Vegetation Management Section at the direction of the County Fire Chief. The Vegetation Management Section is located in the Fire Marshal's Office in the Fire Prevention Services Division of the Santa Barbara County Fire Department.

The Santa Barbara County Unit Fire Plan incorporates elements of other important planning documents that include the Santa Barbara County Fire Department Strategic Plan, Santa Barbara County Seismic Safety and Safety Element of the Santa Barbara County Comprehensive Plan¹, and the County's Multi-Jurisdictional Hazard Mitigation Plan². The Santa Barbara County Fire Department Strategic Plan clarifies what our organization must do as a result of assessing and planning for major issues and opportunities facing us. The Seismic Safety and Safety Element is a guide for land use planning which provides pertinent data regarding geologic, soil, seismic, fire and flood hazards. The Seismic Safety and

¹ The electronic version of the Santa Barbara County Comprehensive Plan can be found at:

<http://longrange.sbcountyplanning.org>

²The electronic version of the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan can be found at:

<http://www.countyofsb.org/ceo/oes.aspx?id=376>

Safety Element also provides recommendations and criteria to aid in land use planning in order to ensure that future development will be compatible with the environment. The Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan coordinates risk assessment, mitigation planning, and implementation efforts in both incorporated and unincorporated areas of the County.

Key objectives identified by Santa Barbara County Fire based on the seven goals of the California Strategic Plan include:

- Maintain an up-to-date GIS database used for operations, planning, and analysis.
- Collaborate with local governmental agencies in the creation and adoption of land use plans, building codes, fire codes, and development standards in High Fire Hazard Areas.
- Create a Santa Barbara County approved Community Wildfire Protection Plan (CWPP) template and provide communities technical support and guidance in the preparation of CWPPs.
- Provide ongoing public education and outreach.
- Enforce defensible space laws and ordinances, and provide defensible space education.
- Conduct collaborative vegetation management projects.
- Maintain suppression forces: engine companies, fuels crew, construction section, air operations unit (helicopter program).

A: UNIT DESCRIPTION

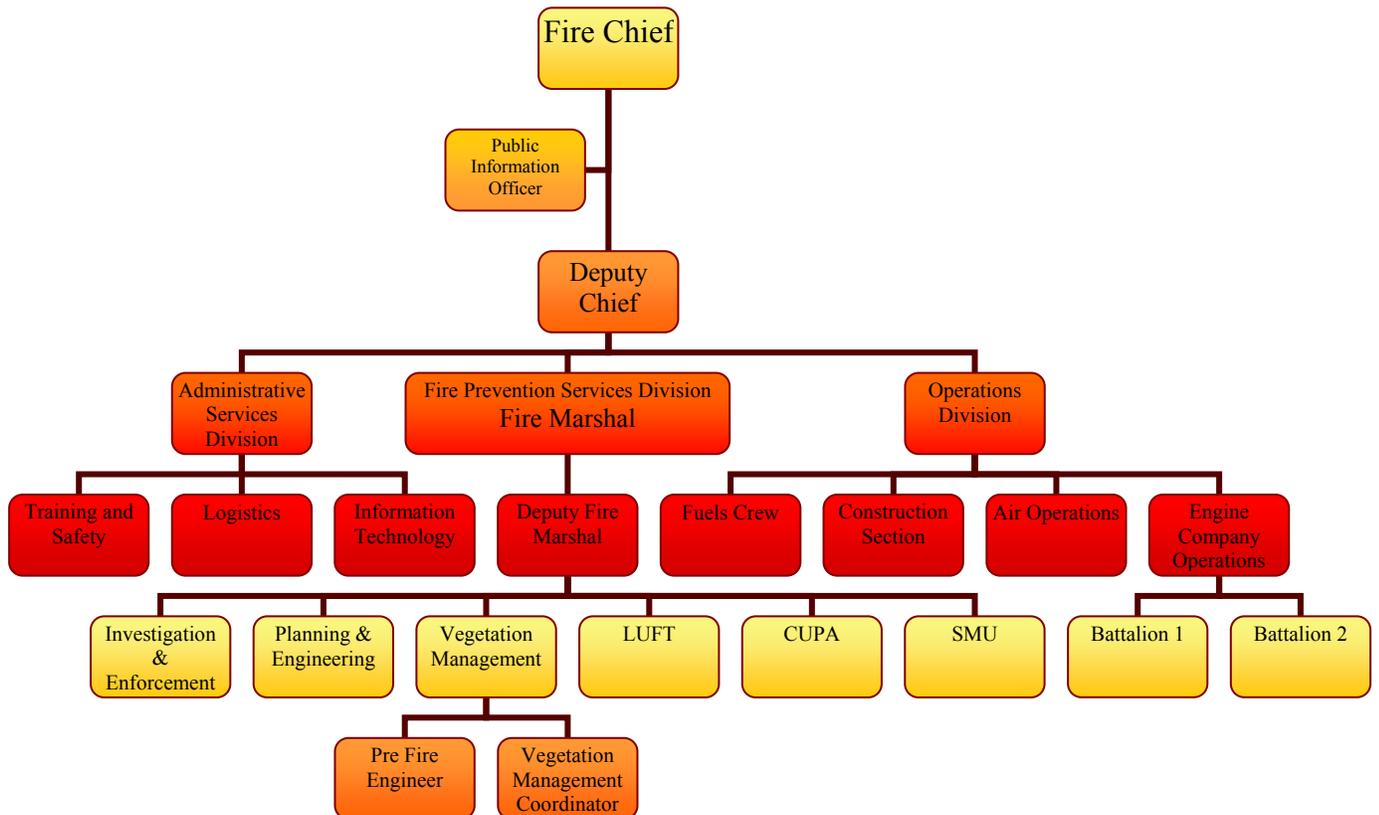


Table 1 Organizational Chart

Contract County

Santa Barbara County Fire Department is one of six contract counties in the State of California. In most cases SRA (State Responsibility Area) is protected directly by CAL FIRE, however, in Kern, Los Angeles, Marin, Orange, Ventura, *Santa Barbara* counties, SRA fire protection is provided by the counties under contract with CAL FIRE. Known as "Contract Counties", they protect 3.4 million acres of SRA.

CAL FIRE provides funding to the six counties for fire protection services including wages of suppression crews, lookouts, maintenance of fire fighting facilities, fire prevention assistants, pre-fire management positions, dispatch, special repairs, and administrative services. CAL FIRE's budget also provides for infrastructure improvements, and expanded fire fighting needs when fires grow beyond initial attack.

Contract Counties are responsible for providing initial response to fires on SRA. When a wildland fire escapes this initial attack, CAL FIRE responds with fire fighting resources to assist the county.

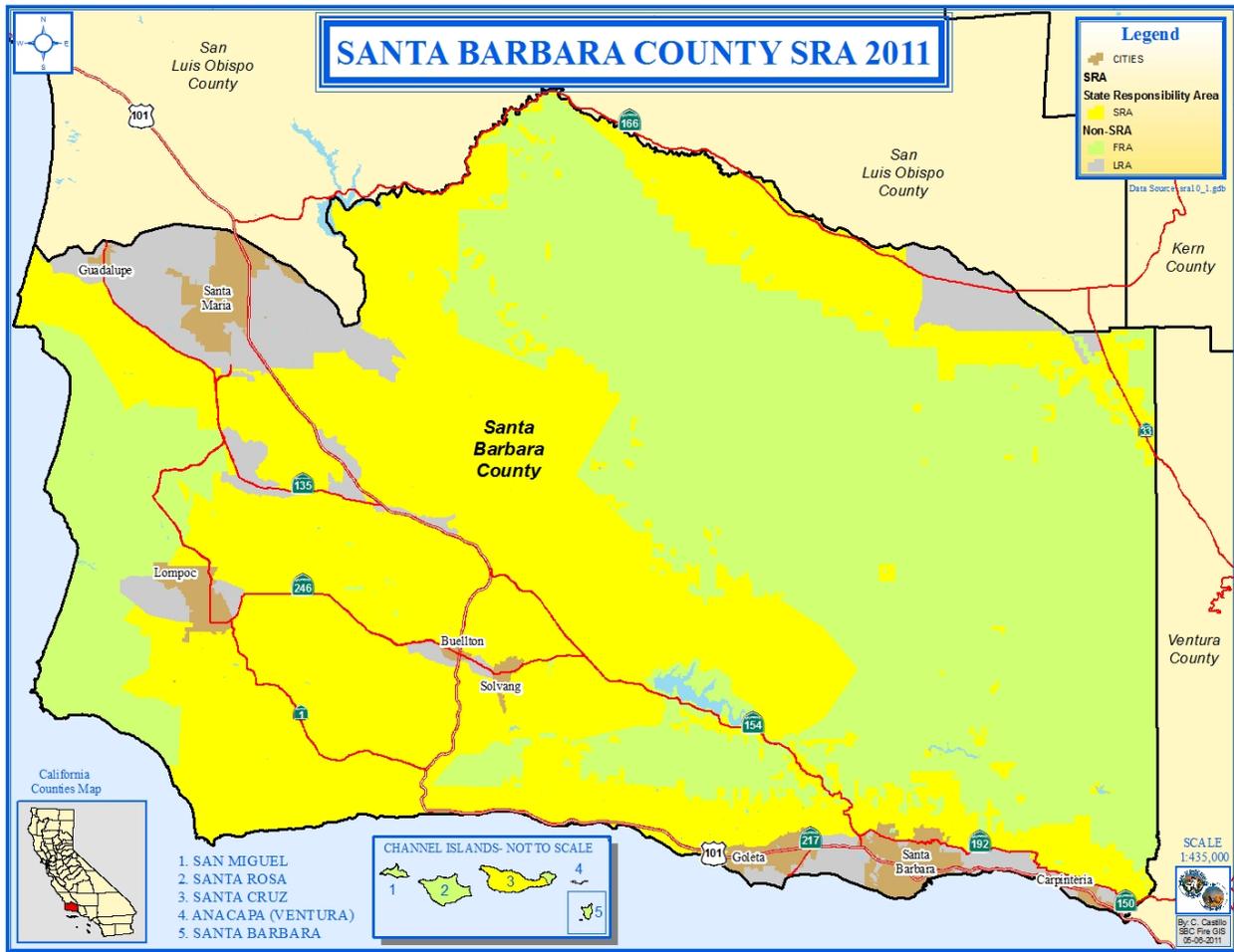


Figure 1

Physical Description

Santa Barbara County is located on the Central Coast of California, approximately 100 miles northwest of Los Angeles and 300 miles south of San Francisco. The County includes four of the five Channel Islands that make up the Channel Islands National Park: San Miguel, Santa Cruz, Santa Rosa, and Santa Barbara Islands. The County occupies approximately 2,748 square miles, one-third of which is located in the Los Padres National Forest. Bordered on the West and South by the Pacific Ocean, the County has 110 miles of coastline. The Counties of Ventura to the east, San Luis Obispo to the north, and Kern to the northeast border the County.

As of 2009, the US Census Bureau estimated County population was 407,057³. This includes the unincorporated communities of Burton Mesa, Casmalia, Cuyama, Eastern Goleta Valley, Gaviota, Isla Vista, Los Alamos, Los Olivos, Montecito, Orcutt, Santa Ynez, and Vandenberg Village as well as the incorporated cities of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang. The cities of Santa Barbara and Santa Maria have the largest populations.

³ <http://quickfacts.census.gov/qfd/states/06/06083.html>

The County is situated among a series of transverse mountain ranges, the only ranges within the continental United States to trend in an east-westerly direction. These mountain ranges bisect the County east to west, dividing it into its northern, central, and southern portions. The South Coast area is a narrow coastal terrace between the Pacific Ocean and the Santa Ynez Range, extending from Rincon Point on the east to Point Conception on the west. The Santa Ynez Range rises from 1,500 to 4,000 feet and is characterized by sharp transverse ridges separated by steep-walled canyons.

The central area of the County is characterized by lower rolling hills and broad, flat valleys. The east-west trending Santa Ynez River forms the Lompoc and Santa Ynez Valleys. These valleys, together with the Santa Rita Valley and Santa Rita Hills comprise the southern portion of the central coast lowlands. The Santa Ynez River lies between the Santa Ynez Range on the south and the Purisima Hills on the north. The northern portion of the central coast lowlands is defined by the Purisima Hills on the south and the Casmalia and Solomon hills on the north. These hills range from 1,340 to 1,840 feet and define the San Antonio Valley and the Los Alamos lowland. The Santa Maria Valley lies just north of the Casmalia and Solomon hills and extends northward into San Luis Obispo County, eastward toward the town of Sisquoc, and westward to the Pacific Ocean.

The northeastern area of the County is a diverse region lying almost entirely within the Los Padres National Forest. The Sierra Madre Range binds the Cuyama Valley in the extreme northeast corner on the south with elevations up to 5,485 feet. South of the Sierra Madre Range lies the Sisquoc River Valley and south of this lies the San Rafael Mountains. The County includes two wilderness areas located in the National Forest: San Rafael Wilderness and the Dick Smith Wilderness. Big Pine Mountain (6,828 feet), the highest point in the County, is in the San Rafael Range.

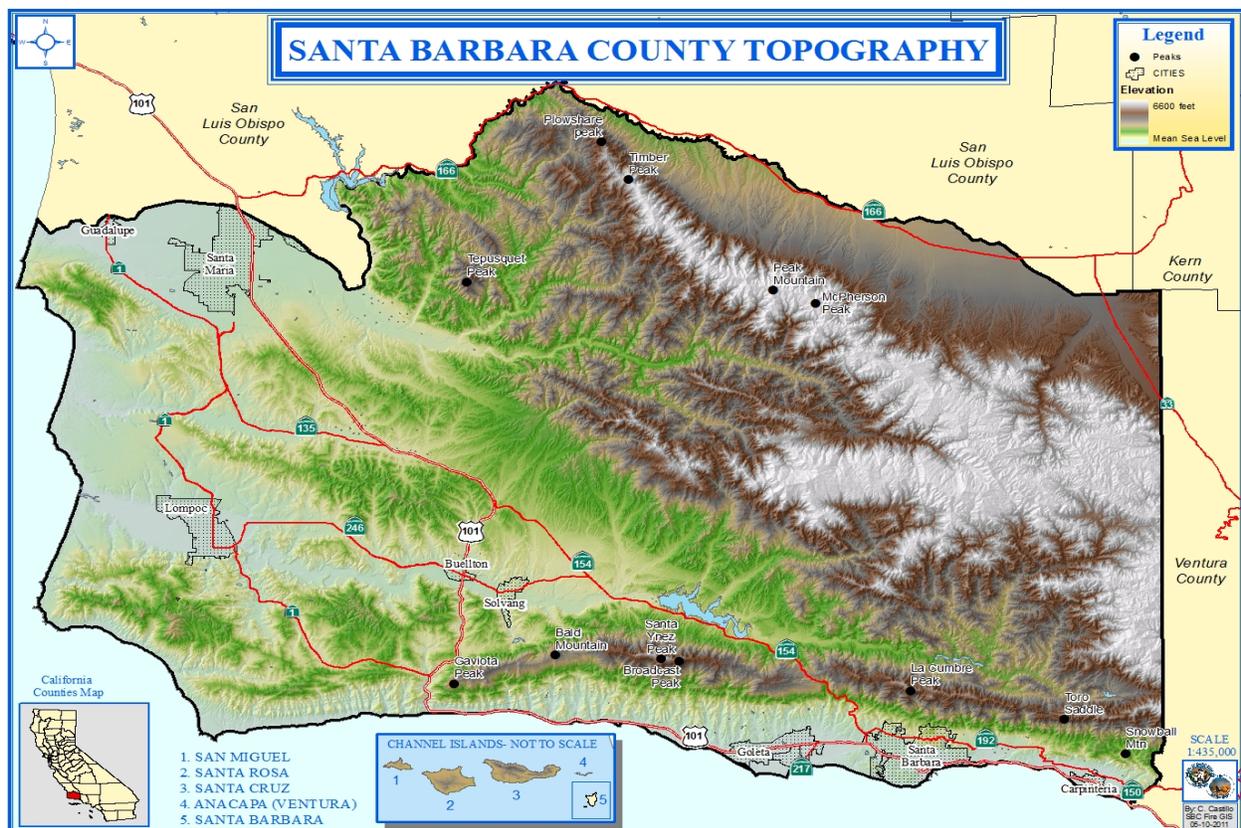


Figure 2

The County of Santa Barbara has land use regulatory jurisdiction in all unincorporated lands not within the jurisdiction of the Federal or State governments. Major Federal land holdings within the County include 154 square miles (98,400 acres) of Vandenberg Air Force base and approximately 1,211 square miles of (775,040 acres) of Los Padres National Forest. Other Federal Agencies that have land holdings within Santa Barbara County include the Bureau of Land Management, Bureau of Reclamation, Bureau of Indian Affairs, and the National Park Service. State lands within the County include 4.76 square miles (3,047 acres) of State beaches, 8.1 square miles (5,200 acres) of the Burton Mesa Ecological Reserve, and 1.5 square miles (966 acres) at La Purisima Mission in the Lompoc area.

Vegetation/Fuels

Santa Barbara County has 791,934 acres of state responsibility area, the bulk of which is covered with fire-prone vegetation. Additionally, there are 820,438 acres of federal responsibility area (FRA) and 146,229 acres of local responsibility area (LRA) within the County (values determined through GIS analysis of the sra10_1 geodatabase). These large areas of vegetation are commonly referred to as “fuel beds” and are often large in size due to steep topography and lack of roads or natural barriers. The average slope in the wildland areas is 40%.

Chaparral provides the most widespread wildland fuel threat in Santa Barbara County. It can be found on the slopes of the Santa Ynez Mountains, throughout the Sierra Madre, and San Rafael mountains, and locally in northern Santa Barbara County in the Casmalia, Soloman, Purisima and Santa Rosa Hills, and in the Lompoc and Tranquillion Peak areas of Vandenberg Air Force Base. These vegetation communities are characterized by woody brush and shrubs of chamise, ceanothus and manzanita, which dominate dry rocky slopes and provide erosion control and watershed protection. A unique chaparral community, the Burton Mesa Chaparral, occurs on the sandy terraces north of Lompoc in the Santa Ynez River watershed. This chaparral community includes plants of special concern such as two manzanita species, two ceanothus species, an unusual form of coast live oak and other species of botanic value. Numerous grasslands and fields are found in the County and present the potential for fast moving wildland fires that can transition into heavier fuel beds and tree canopies.

The system used to categorize fuels is documented in the National Wildfire Coordinating Group (NWCG) document NFES 1574 “Aids to Determining Fuel Models for Estimating Fire Behavior” by Hal E. Anderson. These fuel models are commonly referred to as the Fire Behavior Prediction System (FBPS) fuel models. The assessment process further creates four additional custom models to represent non-wildland fuels: (28) Urban Fuels, (97) Agricultural Lands, (98) Water and (99) Barren/Rock/Other. This method produces a fine-grained portrayal of surface fuel conditions. The Fuel Models for Santa Barbara can be seen in Figure 3.

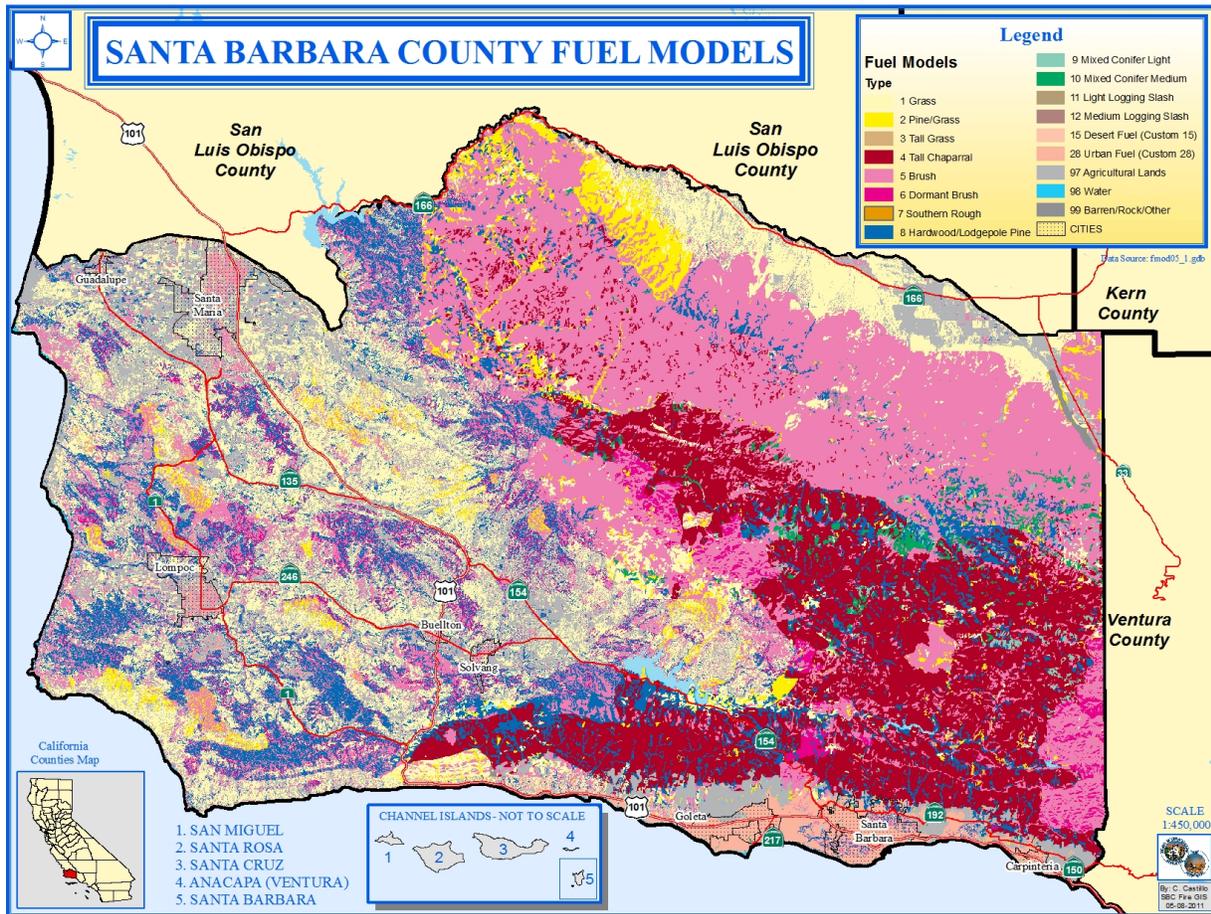


Figure 3

It is a commonly accepted concept that fire is a necessary part of the natural life cycle of the chaparral ecosystems in Santa Barbara County. Without fire, the chaparral-covered terrain of Santa Barbara County reaches an unhealthy state where the ratio of dead material to live plant structure becomes unbalanced. As the chaparral ages, more and more decadent growth adds to the fuel load (expressed in tons per acre), which contributes to the high intensity, costly, large loss wildfires as seen in recent years with the Tea Fire in 2008 and the Jesusita Fire in 2009. Historically, fires occurred naturally as a result of lightning or were introduced by native inhabitants. The Chumash Indians, during the late 18th century, were said to have purposefully burned the native vegetation to promote the growth of certain plant resources. The occurrence of fire on a regular basis, whether natural or introduced, tended to promote ecosystem health and reduced the number of large acreage, high intensity fires.

Climate

Santa Barbara County has a semi-arid Mediterranean climate, characterized by warm dry summers and mild winters. Sunny skies are common throughout most of the area, although seasonal low clouds and fog occur with some frequency over the Pacific Ocean and in the immediate coastline. Mild temperatures occur throughout the year, particularly near the coastline. Considerably more temperature variation occurs in the inland valleys and mountainous areas. Maximum readings in summer average about 80°F

near the coast to 105°F in the interior. In winter, minimum temperatures can range from the 40's along the coast to the 30's inland.

Precipitation is confined primarily to the winter months. Annual averages range from about 6 inches in some inland areas to over 30 inches in higher mountain areas. Occasionally, tropical air masses bring rainfall in summer months. In general, the mountains of the southeastern part of the County receive 20 to 25 inches of rainfall in the course of the year, with less than 20 inches being characteristic of the immediate southern coastline. Most of the western half of the County, receives from 11 to 15 inches of precipitation, up to 20 inches or more falling at some high elevation points in the Santa Ynez Mountains and in parts of the San Rafael Mountains.

Seasonal totals vary considerably from year to year. Low elevations in the western part of the County, for example, during a 20-year period can receive as little as 5 inches in the driest year and 25 inches in the wettest year. In the mountainous areas of the eastern part of the County, annual totals range from a low of 15 inches to a high of 55 inches within a 20-year period. Western stations receive from 10 to 18 inches of moisture in one half of the years, while in the mountains to the east; these figures are 25 to 40 inches.

Wind speeds are usually light to moderate and tend to be highest in association with winter storms. A diurnal wind pattern (land and sea breeze) characterizes most of the area, with westerly (on-shore) winds common in daytime and light easterly (offshore) winds predominant at night. The many deep canyons running out of the coastal mountains towards the coast therefore tend to catch and concentrate these winds, enhancing the fire threat in warm, dry weather.

Santa Barbara County lies in a transitional area between several characteristic air masses. To the west, marine air over the Pacific Ocean exerts a major influence. This area is dominated by a large high-pressure cell, which is present throughout the year but is strongest and most persistent during spring, summer and autumn. This high-pressure cell tends to block storm systems approaching the area from the west, causing them to move well to the north. In addition, clockwise wind flow patterns around the high pressure cell cause relatively cool marine air to flow eastward toward the California coast, producing the characteristic "sea breeze" conditions. A persistent inversion layer (warm air above cold air) accompanies the high-pressure cell.

A second major air mass region lies over the desert areas of the southwestern United States. The generally warm conditions over the desert cause the near-surface air to rise due to the intense heating near the ground. This produces low atmospheric pressure, which tends to draw in surrounding air, including eastern-moving marine air (the sea breeze) near the Pacific High. Occasionally, however, strong high pressure over the desert causes a reversal of this flow pattern. During such periods, strong gusty east winds (commonly known as Santa Ana Winds) carry inland air toward the coastline and out over the Pacific, leading to clean, clear atmospheric conditions in many areas.

Sundowner Winds

Santa Ana winds which occasionally affect the counties of Ventura, Los Angeles, and Orange to the south leave Santa Barbara County virtually untouched. The only disturbance to this idyllic picture comes when downslope winds pour across passes in the Santa Ynez Range, descending onto the Santa Barbara front country.

These winds are “sundowners,” Santa Barbara’s special version of the Santa Ana regime. Sundowners frequently occur in the late afternoon or evening hours – hence the name. Light sundowners create irregular rises in temperature with gentle offshore breezes. Stronger sundowners, occurring two or three times a year, can create sharp temperature rises, local gale force winds, and significant weather-related problems. Rarely, probably about a half dozen times in a century, an “explosive” sundowner occurs. These extremely strong and hot winds present a dangerous weather situation. In these events, super heated air from the Santa Ynez Valley bursts across the Santa Ynez Mountains and onto the coastal plain, reaching gale force or higher speeds within the City of Santa Barbara. Dust storms occur, fires can race down the mountain slopes, and great stress is felt by the human population, by animals, and by plants.

During the Painted Cave Fire sundowner event, the official Federal Aviation Administration (FAA) observing station at Santa Barbara airport reported a maximum temperature of 109°F (42.7°C), remarkable for a location on the coastal plain within 2 km of the ocean itself [where the sea surface temperature was approximately 65°F (18.3°C)]. As noted by [Ryan and Burch \(1992\)](#) and [Ryan \(1994\)](#), however, even this wind event pales in comparison to the 17 June 1859 Sundowner. A rather dramatic and colorful description of this event is provided by the following passage taken from the *Coast Pilot of California* ([Davidson 1869](#)).

- ❖ “The only incident of the “*poison wind*” on this coast, mentioned either in its history or traditions, was that occurring at Santa Barbara, on Friday, the 17th of June 1859. The temperature during the morning was between 75° and 80°, and gradually and regularly increased until about one o’clock p.m., when a blast of hot air from the northwest swept suddenly over the town and struck the inhabitants with terror. It was quickly followed by others. At two o’clock the thermometer exposed to the air rose to 133°F, and continued at or near that point for nearly three hours, whilst the burning wind raised dense clouds of impalpable dust. No human being could withstand the heat. All betook themselves to their dwellings and carefully closed every door and window. The thick adobe walls would have required days to have become warmed, and were consequently an admirable protection. Calves, rabbits, birds, etc., were killed; trees were blighted; fruit was blasted and fell to the ground, burned only on one side; and gardens were ruined. At five o’clock the thermometer fell to 122°, and at seven it stood at 77°. A fisherman, in the channel in an open boat, came back with his arms badly blistered.”

Fire History

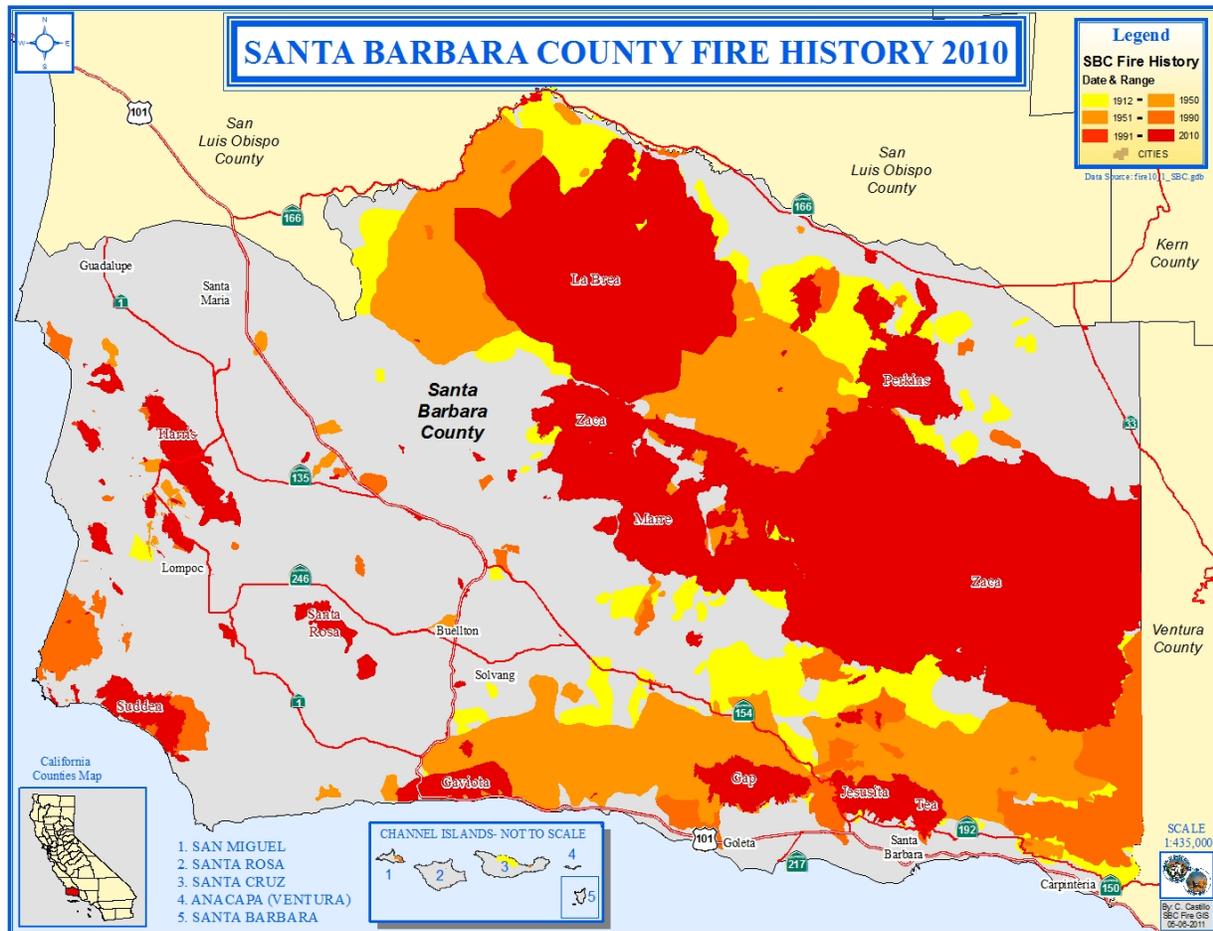


Figure 4

Over the last ten years, Santa Barbara County has experienced seven major fires. Three of these fires (Gap, Tea, and Jesusita) directly threatened the heavily populated Santa Barbara Front Country. Two of these fires: the Tea Fire and the Jesusita Fire destroyed close to three hundred structures and burned a total of 16 ½ square miles. The La Brea Fire and the Zaca Fire combined burned a total of 518 square miles predominately in backcountry areas of the County; though the western edge of the La Brea Fire came within a mile of the community of Tepusquet Canyon. Even though these two fires did not directly threaten urban areas, the smoke and ash produced created air quality issues for over one hundred miles.

Major Wildfires in Santa Barbara County 1955-2010					
Fire	Date	Cause	Acres Burned	Structures Damaged or Destroyed	Deaths
La Brea	August-2009	Miscellaneous	91,622	1	0
Jesusita	May-2009	Equipment Use	8,733	80	0
Tea	November-2009	Campfire	1,940	210	0
Gap	July-2008	Miscellaneous	9,443	4	0
Zaca	July-2007	Equipment Use	240,207	1	0
Perkins	July-2006	Lightning	14,988	0	0
Gaviota	July-2004	Lightning	7,440	1	0
Paint	June-1990	Arson	4,270	673	1
Wheeler	July-1985	Miscellaneous	119,361	26 (on border with Ventura County)	0
Sycamore	July-1977	Kite into powerlines	806	234	0
Romero	October-1971	Arson	14,538	n/a	4
Coyote	September-1964	Undetermined	65,338	94	1
Refugio	September-1955	Structure Fire	79,428	20	0

Table 2 Major Fires Last 55 Years

Unit Priority Landscapes

The recent *California's Forests and Rangelands: 2010 Assessment*⁴ prepared by the California Department of Forestry and Fire Protection Fire and Resource Assessment Program (FRAP) presents an analysis of trends, conditions, and the development of priority landscapes in California. The assessment showed that in addition to communities in the wildland urban interface being a high priority from the threat of wildfire, rangelands and protected habitats in the County are high priority areas as well.

Unit Priorities

General Unit priorities:

- ✓ Maintain suppression and emergency response resources.
- ✓ Update and implement Fire Department Development Standards.
- ✓ Enforce adopted California Fire Codes.
- ✓ Enforce Defensible Space laws and ordinances.
- ✓ Educate and inform the public.
- ✓ Implement and maintain the Red Flag Warning Plan.
- ✓ Maintain roadside vegetation clearance along key roads throughout County.
- ✓ Work collaboratively with the public and other agencies on mutually beneficial prescribed (control) burns and vegetation management projects.
- ✓ Investigate all wildland fires.

⁴ <http://frap.cdf.ca.gov/assessment2010.html>

B: UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

Santa Barbara County Fire

The Santa Barbara County Fire Department responds to emergencies from sixteen fire stations throughout the County, air operations located at the Santa Ynez Airport, construction section located in Los Alamos, and fuels crew located at Lake Cachuma. The Department operates 16 Type I Engines, 13 Type III Engines, 1 Truck Company, 1 Fuels Crew, 3 Type II Bulldozers, 2 Type II Helicopters with water dropping and rescue capabilities, 3 Water Tenders, 2 Ambulances, 1 Hazardous Materials Unit, 1 Urban Search and Rescue (USAR) Unit, 1 Water Rescue Unit (includes 3 Personal Watercraft “PWCs” and 1 Inflatable Rescue Boat “IRB”) and 1 Breathing Support Unit.

Santa Barbara County Fire has a contractual agreement with CAL FIRE to provide wildland fire protection on state responsibility areas (SRA). The Gray Book is an Exhibit of the “Contract County Agreement” which identifies resource allocations, which CAL FIRE considers necessary for the protection of SRA and provides funding accordingly. In Santa Barbara County the Gray Book provides for nine stations, two bulldozers, two vegetation management positions, and fire prevention staffing.



Figure 5

Additional Fire Agencies in Santa Barbara County

- Santa Barbara City Fire Department
- Santa Maria Fire Department
- Lompoc Fire Department
- Guadalupe Fire Department
- Carpinteria-Summerland Fire Protection District
- Montecito Fire Protection District
- USDA Forest Service-Los Padres National Forest
- Department of Defense- Vandenberg Air Force Base Fire Department

Cooperative Fire Services

A cornerstone of the fire protection system in Santa Barbara County is the *Santa Barbara Operational Area Mutual Aid Plan* which is updated on a regular basis. In Santa Barbara County, no single local fire agency can muster the resources necessary to mitigate large scale emergencies on an on-going basis, such as large wildfires, hazardous materials responses, and urban search and rescue responses. The California Fire Master Mutual Aid Agreement requires each county to have a mutual aid plan. Because several cities and unincorporated areas of the County provide their own fire protection services, the *Santa Barbara Operational Area Mutual Aid Plan* becomes an essential mechanism for coordinating fire protection resources.

Mutual Aid takes on several different forms. For initial attack purposes, mutual aid and automatic aid facilitates the day-to-day responses where the closest resources are dispatched regardless of jurisdictional boundaries. Because several of the agencies maintain their own dispatch centers, any aid request must be relayed between dispatch centers. Within Santa Barbara County agreements have been made between all agencies with regard to dispatch protocols and dispatch procedures (automatic aid and mutual aid). In addition, Santa Barbara County also has agreements with Kern County, San Luis Obispo County, and Ventura County.

If an incident requires reinforcement resources that cannot be met through local mutual aid agreements, the California Fire Service and Rescue Emergency Mutual Aid Plan is followed. All fire service entities in California are signatory to the California Fire Service and Rescue Emergency Mutual Aid System, Mutual Aid Plan⁵.



Santa Barbara Operational Area

⁵[http://www.oes.ca.gov/WebPage/oeswebsite.nsf/ClientOESFileLibrary/Fire%20Documents/\\$file/Mutual%20Aid%20Plan%202010.pdf](http://www.oes.ca.gov/WebPage/oeswebsite.nsf/ClientOESFileLibrary/Fire%20Documents/$file/Mutual%20Aid%20Plan%202010.pdf)

SECTION II: COLLABORATION

A: COMMUNITY / AGENCIES / FIRE SAFE COUNCILS

Representatives involved in the development of the Unit Strategic Fire Plan are included in the following table. Their organization and title are indicated below:

**Due to the limited time to prepare this document, it was difficult to solicit input from outside organizations. In future updates the planning team will grow as interested parties provide input. The goal is to involve as many organizations as possible and meet the intent of the California Strategic Fire Plan.*

Included in italics are organizations Santa Barbara County collaborates with on a regular basis.

Plan Development Team:

Organization	Representative (title)
<i>Santa Barbara County Fire Safe Council</i>	
<i>Los Padres National Forest</i>	
<i>Santa Barbara City Fire</i>	
<i>City of Goleta</i>	
<i>Mission Canyon Association</i>	
<i>Vandenberg Fire</i>	
<i>Department of Fish and Game</i>	
<i>Fire Associates for the Community of Tepusquet</i>	
<i>Carpinteria-Summerland Fire Protection District</i>	
<i>City of Buellton</i>	
<i>Hollister Ranch Owners Association</i>	
<i>Montecito Fire Protection District</i>	
<i>Santa Barbara Range Improvement Association</i>	
<i>City of Solvang</i>	

A: ASSETS AT RISK

Knowledge of the types and magnitudes of assets at risk to wildfire, as well as their locations, are critical to fire protection planning. Given the limits on fire protection resources, they should be allocated, in part, based on the magnitude of the assets being protected. Knowledge of assets at risk is necessary to choose those pre-fire management projects that will provide the greatest benefit for a given amount of investment. Santa Barbara County Fire Department's primary concern is reducing the fire risk and potential loss of the various assets described here in an effort to provide for the safety and protection of life, property, and the environment while reducing suppression costs.

The primary purpose of wildfire protection in Santa Barbara County is to protect this wide range of assets. Santa Barbara County's priority Values/Assets at Risk include:

- public and firefighter safety
- structures
- vital infrastructure (power lines, gas lines, highways, roads, etc.)
- range
- recreation
- water and watershed
- air quality
- soil erosion
- cultural and historic resources
- unique scenic areas
- wildlife and habitat (including rare and endangered species)

Public and firefighter safety is paramount. As development continues and expands into the wildland urban interface, it becomes more and more difficult to provide protection against the threat of wildfire.

The *California's Forests and Rangelands: 2010 Assessment*⁶ produced a variety of GIS data layers identifying assets, threats, and priority landscapes (combinations of assets and threats into priorities). The data from the 2010 Assessment will help the County assess these values at risk and aid in the design of mitigation activities to address these risks.

⁶ <http://frap.cdf.ca.gov/assessment2010.html>

B: COMMUNITIES AT RISK

To help protect people and their property from potential catastrophic wildfire, the National Fire Plan directs funding to be provided for projects designed to reduce the fire risks to communities. A fundamental step in achieving this goal was the identification of communities that are at high risk of damage from wildfire. These high risk communities identified within the wildland-urban interface, were published in the Federal Register in 2001. At the request of Congress, the Federal Register notice only listed those communities neighboring federal lands. The list represents the collaborative work of the 50 states and five federal agencies using a standardized process, whereby states were asked to submit all communities within their borders that met the criteria of a structure at high risk from wildfire. The following list contains the federally regulated (communities which adjoin federal lands) communities at risk within Santa Barbara County:

Orcutt	Santa Barbara
Tajiguas	Vandenberg Air Force Base
Vandenberg Village	Mission Hills
Carpinteria	Cuyama
Casmalia	Gaviota
Goleta	Lompoc

With California's extensive urban Wildland-Urban Interface situation, the list of communities extends beyond just those adjacent to Federal lands. After the 2000 fire season the California Department of Forestry and Fire Protection (CAL FIRE), working with the California Fire Alliance, developed a list of communities at risk from wildfire using 1990 Census and USGS Geographic Names Information System data to identify populated places, and CAL FIRE's Fire and Resource Assessment Program (FRAP) fuel hazard data. In addition to the already-mentioned communities, they designated the following as WUI Communities at Risk:

Buellton	Santa Maria
Santa Ynez	Sisquoc
Solvang	Summerland
Montecito	Los Olivos
Garey	Guadalupe
Isla Vista	Los Alamos
Venucopa	

Combining both lists, there are currently 25 communities on the Communities at Risk List in Santa Barbara County. The California State Forester (CAL FIRE Director) has assigned the role of managing the list to the California Fire Alliance (Alliance). The list can be found on the California Fire Alliance website: http://www.cafirealliance.org/communities_at_risk/communities_at_risk_list.

In addition to the 25 State and Federal recognized communities, there are other communities within the county that are also at risk of wildfire and need to be identified. Communities that were not captured in any state or federally recognized list, but have been identified by County Fire and other jurisdictions to be at risk include:

Cebada Canyon

Jonata Ranch/Bobcat Springs

Mission Canyon

Refugio Canyon

Toro Canyon

Hope Ranch

Rosario Park

Paradise

El Capitan

Miguelito Canyon

Painted Cave

Tepusquet Canyon

Woodstock

Trout Club

Jalama

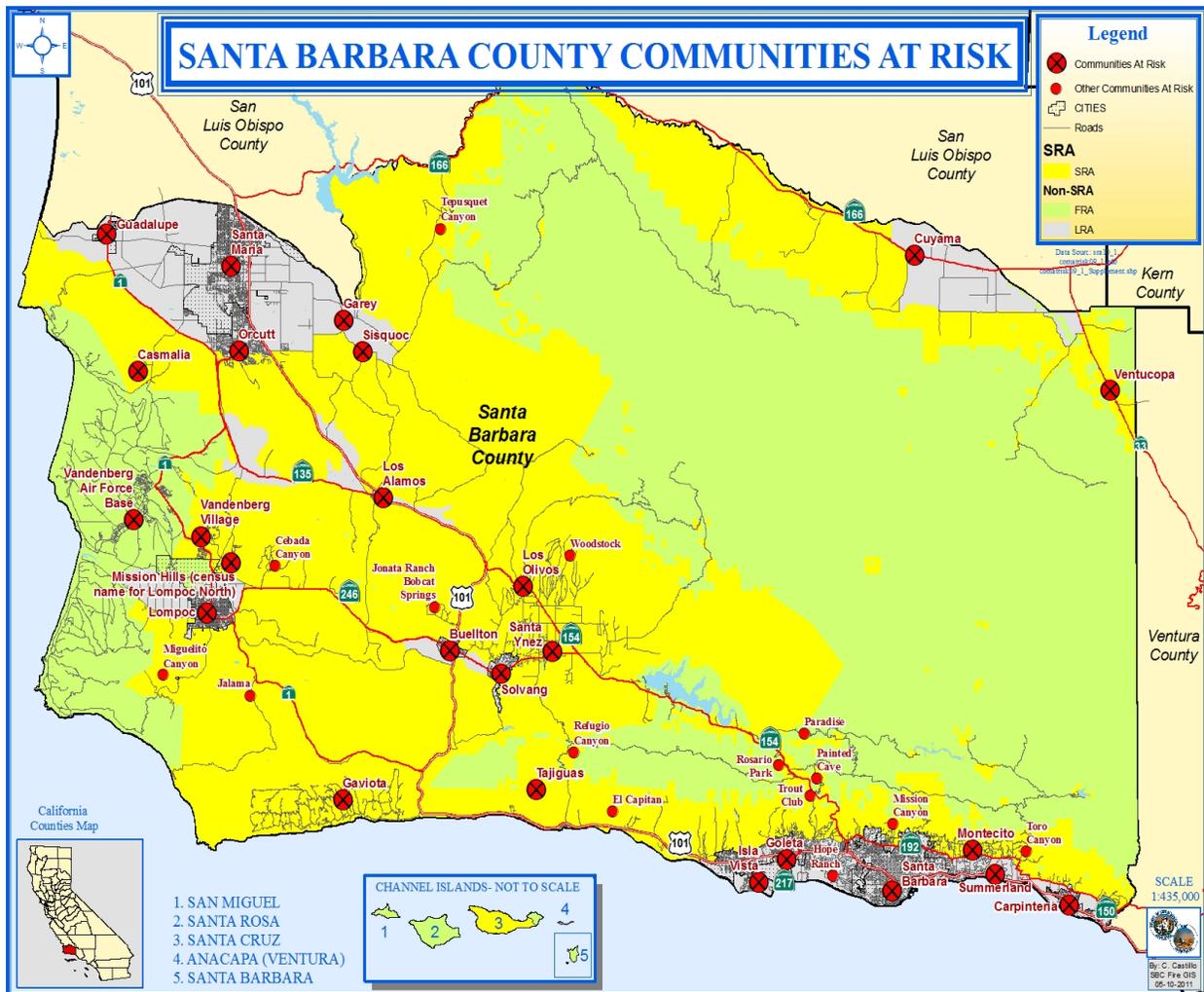


Figure 6

SECTION IV: PRE FIRE MANAGEMENT STRATEGIES

A: FIRE PREVENTION SERVICES DIVISION (FIRE MARSHAL)

The Fire Prevention Services Division is broken into three main sections: Prevention, Investigation, and Vegetation Management. The Fire Prevention Services Division is under the supervision of the Fire Marshal and the Deputy Fire Marshal. The ultimate goal of the Fire Prevention Services Division is to provide for public safety by reducing the number and severity of fires countywide through education, development standards and plan review, defensible space requirements and enforcement, permitting, investigations, and code enforcement.

WILDLAND IGNITION

Understanding the root causes of wildland fires as well as the County's local fire history is a critical first step in developing the necessary policies and actions which can mitigate this threat. The causes of wildland fires are linked to two elements: 1) the ignition source which starts the fire, and 2) the fuel which the fire feeds on in order to further propagate itself.

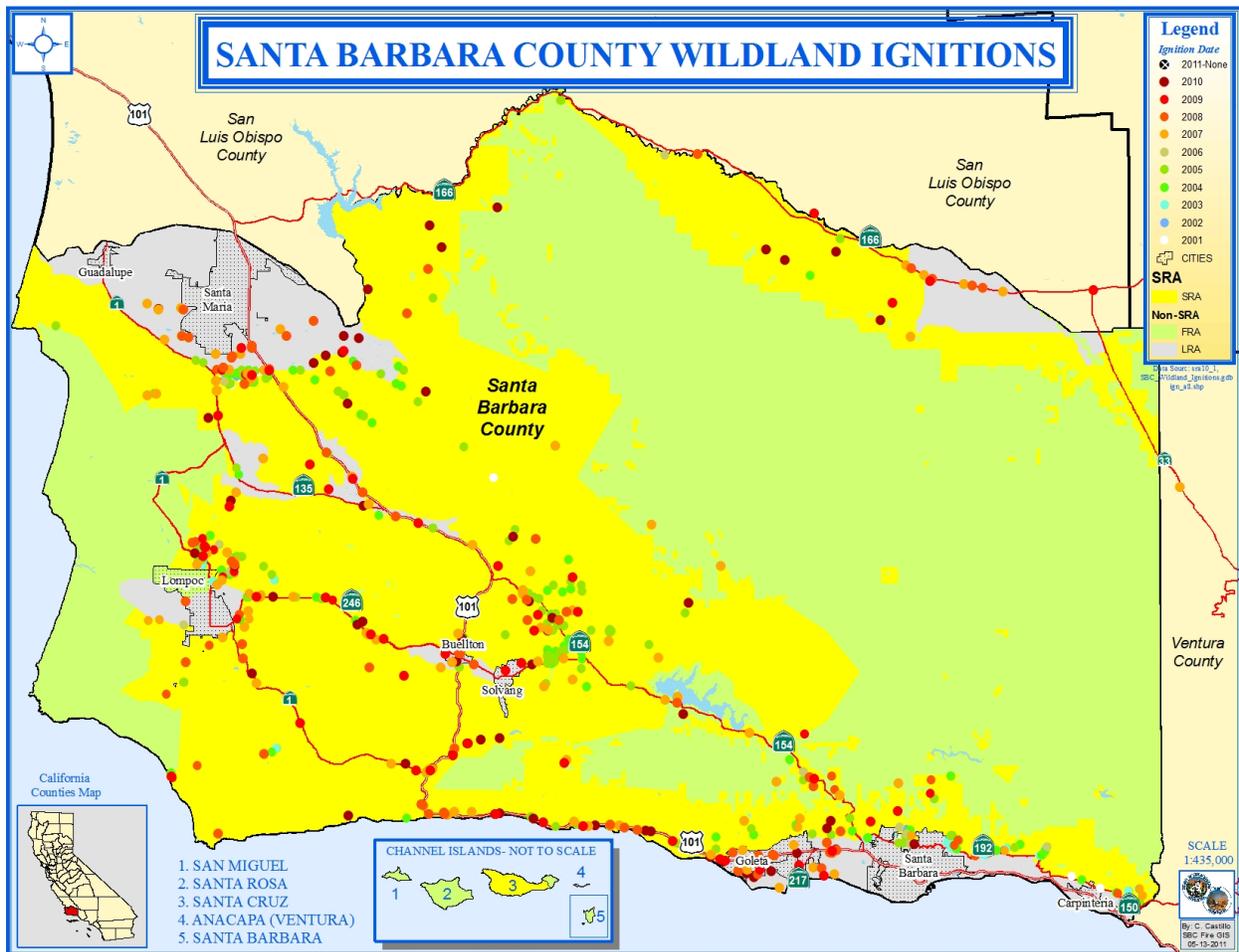


Figure 7

The map on the previous page (figure 7) is a visual representation of where wildland ignitions occurred over the last ten years on SRA and LRA lands. The chart below (table 3) represents the break down by cause of fires occurring over the last ten years.

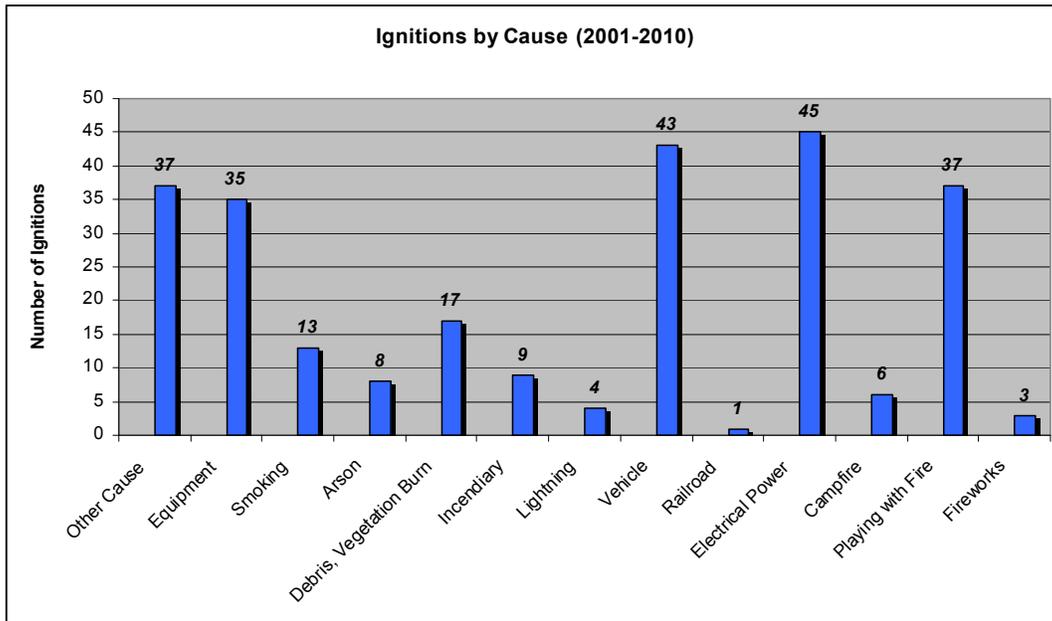


Table 3 *Ignitions by Cause*

Of the six hundred and sixty-six wildland ignitions that occurred from 2001-2010, four hundred and eight were undetermined and not represented in the table 3. The ignitions data is used to prioritize education programs and identify the need for additional laws and ordinances.

- ENGINEERING & STRUCTURE IGNITABILITY (Prevention/New Development)

PREVENTION SECTION

Development in Hazardous Areas

Development in the wildland urban interface provides for a myriad of issues that must be and are addressed through development standards and land use planning. Through a collaborative effort, Santa Barbara County Planning and Development staff and Santa Barbara County Fire Prevention staff work to insure that current building codes, fire codes, State and County policies, statutes, and regulations are followed in new development in the wildland urban interface. Land use planning must recognize the hazards and treat them as constraints in the planning process. Under the California Environmental Quality Act, local County action is directed to achieve a balance between natural processes and urban uses in order to create and maintain conditions of productive harmony. Consequently, the County has ample legal authority to regulate land use and development in order to reduce fire hazard.

The County uses planning to minimize these fire hazards by requiring elevated development standards within especially vulnerable areas (in both the SRA and LRA). These standards include the requirement for fire resistive construction materials, development of adequate emergency access routes, access to fire suppression water supplies (fire hydrants or water tanks), and defensible space around structures (whether inhabited or not). The implementation of these standards help minimize, but not entirely eliminate, the hazards from wildland fires.

In Santa Barbara County, Planning and Development staff work together with County Fire staff to insure development standards are adequate to protect people and structures from the threat of wildfire.

Fire Development Standards

State Law⁷ also requires the use of ignition resistant building methods and materials as a measure to reduce structure ignitability for new buildings located in any Fire Hazard Severity Zone (FHSZ) within SRA, any local agency VHFHSZ (very high fire hazard severity zone), or any Wildland-Urban Interface Fire Area designated by the enforcing agency. The County Planning & Development Department staff refers to the most current and adopted County of Santa Barbara Fire Hazard Severity Zone maps to identify the Fire Hazard Severity Zones and Wildland-Urban Interface Fire Areas for the unincorporated County (see figure 8).

⁷ Fire Ignition Resistant Construction Methods California Code of Regulations, Title 24, Part 2-California Building Code (CBC)

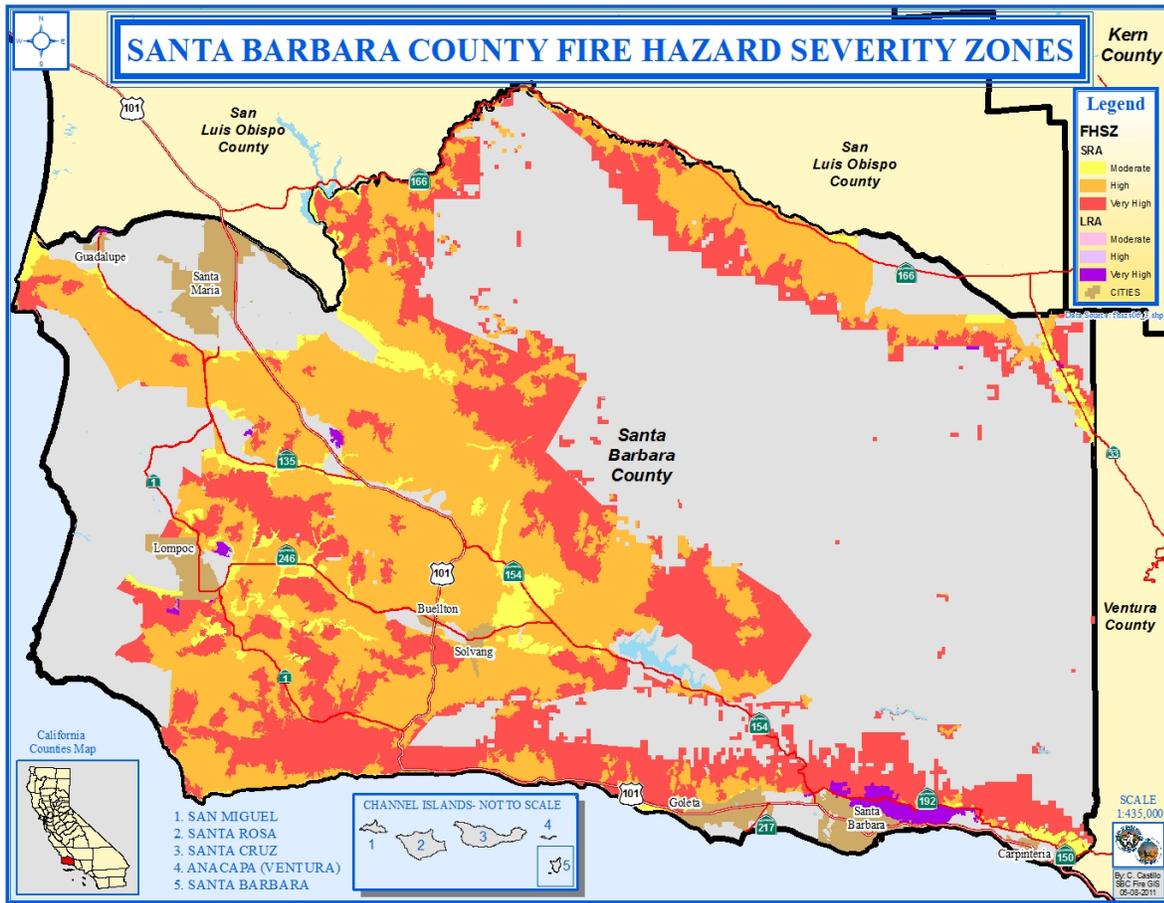


Figure 8

The Fire Prevention section maintains Development Standards which serve as control measures designed to promote fire protection and comply with State law⁸. The adoption of the California Fire Code and Fire Department Development Standards, codified in County Code Chapter 15-Fire Prevention, cover a range of development topics required for new construction. The table below provides a summary of Development Standards 1 through 7. These Development Standards are updated by County Fire as needed to ensure compliance with State law.

Santa Barbara County Fire Department Development Standards⁹	
Development Standard #1 Private Roadway and Driveway Standards	Establishes minimum standards for driveways and private roads. These standards outline minimum road widths and vegetation clearance designed to provide fire vehicles access to residences and associated structures.
Development Standard #2 Fire Hydrant Spacing and Water Flow Rates	Establishes fire hydrant spacing, discharge outlet configuration and flow rate requirements. Flow rate standards are used when calculating peakload water supply requirements for one-and-two family dwelling units.

⁸ Requirement of Title 24 of the California Code of Regulations, Part 9 California Fire Code. Additionally, Section 13108.5(c) of the Health and Safety Code allows local agencies to revise development standards contained in the California Fire Code in order to meet unique local conditions.

⁹ <http://www.sbcfire.com/fp/dr/index.html>

Development Standard #3 Stored Water Fire Protection Systems Serving One and Two-Family Dwellings	Establishes standards for stored water fire protection systems serving one and two-family dwellings.
Development Standard #4 Automatic Fire Sprinkler System Standards	Establishes standards for automatic fire sprinkler systems.
Development Standard #5 Automatic Alarm System Standards	Establishes standards for automatic alarm systems.
Development Standard #6 Vegetation Management Plan	Establishes standards for vegetation management plans.
Development Standard #7 Access Gates	Establishes standards for gates on private roads and private driveway access points.

INVESTIGATION AND INSPECTION SECTION

The Investigation staff is responsible for fire origin and cause investigation, code enforcement, California Fire Code permit issuance, and engine company support with inspections. Santa Barbara County Fire engine companies are responsible for performing building inspections and maintaining inspection records for their district.

Strategies:

- 100% fire cause determination
- identify needed regulations
- identify need for targeted education programs (i.e. juvenile fire starters, proper equipment use, etc.)
- reduce hazards through permit process
- reduce hazards through building inspections
- code enforcement
- cost recovery
- engine company resource

- INFORMATION AND EDUCATION

The Public Information Officer develops specific programs, educational materials, and public statements. Ultimately public education is the responsibility of all members of the Fire Department. Each section interacts with the public and is responsible for increasing the public's awareness of wildfire safety and preparedness. Through public involvement and collaboration, positive relationships are fostered throughout the County.

B: VEGETATION MANAGEMENT PROGRAM

The Vegetation Management section is responsible for the Defensible Space Program, GIS and mapping services, pre-fire planning, and vegetation management programs.

Defensible Space Program

Establishing defensible space around structures is one of the most powerful tools for preventing fire hazards and is therefore required by both County regulations and State law. The California Fire Code Chapter 49 as amended by the County of Santa Barbara through Chapter 15 of the County Code defines defensible space as:

“the area surrounding a structure or building where basic wildfire protection practices are implemented, providing the key point of defense from an approaching wildfire or escaping structure fire. The area is characterized by the establishment and maintenance of fuel modification measures.”

In 2005, the State Board of Forestry adopted provisions now identified in Public Resource Code 4291 that requires all structures on State Responsibility Area (SRA) lands to maintain 100 feet of defensible space clearance. Within the County of Santa Barbara, 100 feet defensible space is also enforced on unincorporated Local Responsibility Area (LRA) in the Santa Barbara County Fire Protection District. The 100-foot defensible space clearance is a minimum, and in some instances this distance may need to be increased due to the location of a structure on a slope or because of the vegetative fuel loading surrounding a structure.

The program is managed by a Vegetation Management Captain. Initial inspections are completed by engine companies. If the property fails to meet the defensible space requirements in the established time frame the property is abated at the direction of Vegetation Management.

GIS and Mapping

The Vegetation Management section collects and maintains the Department's GIS database. The data is used in pre-fire planning, Department map book creation and updating, incident mapping, and individual mapping projects.

Pre-Fire Planning

The Pre-Fire Engineer works with community groups, individuals, cooperative agencies, and land use regulatory agencies (local, state, and federal) to create and maintain wildfire plans.

Vegetation Management Projects

The Vegetation Management section provides a mechanism for conducting projects of varying scales to reduce hazardous wildland fuels and maintain forest and range health. These projects include the use of prescribed fire and mechanical treatments.

SECTION V: PRE FIRE MANAGEMENT TACTICS

A: DIVISION / BATTALION / PROGRAM PLANS

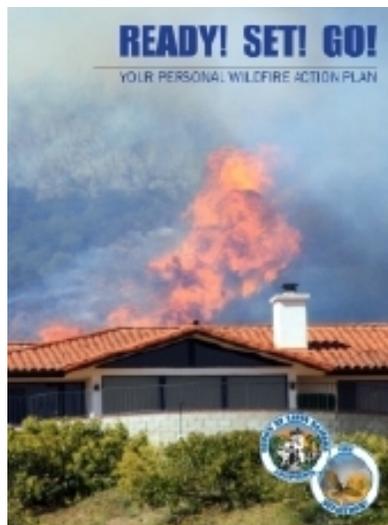
Department Programs

Santa Barbara County Fire has the current department wide programs in place:

- Automatic Vehicle Locator/Mobile Data Computer (AVL/MDC) Program
 - ✓ Installation of hardware on fire department vehicles to aid in managing fire resources in the field and provide emergency responders with up to date information
 - ✓ Provide a platform for maintaining up to date field information and inspection data
- Red Flap Warning Plan
 - ✓ Plan for agency cooperation, enhanced staffing levels, and public notification in the event of an issued “red flag warning” by the National Weather Service or as declared by the Fire Chief



- County Adopted and Approved CWPP (Community Wildfire Protection Plan) Template
 - ✓ Collaboration with County CEO's Office and County Planning and Development
 - ✓ Adopt a CWPP template through the County Board of Supervisors (currently in development)
 - ✓ Establish a core list of stakeholders
- Public Information and Education Programs:
 - ✓ Ready! Set! Go!



- ✓ Fire Safety Trailer Program
 - Provide fire safety training to elementary age children
- ✓ Community Meetings/Fire Safe Council



The Fire Safe Council

- ✓ Santa Barbara County Fire Department Informational Website
 - www.sbcfire.com
 - Provide safety information
 - Hazard, incident updates
 - Defensible space information
 - Tips on hardening structures from the threat of wildfire
- ✓ PSA (public service announcements)
- ✓ Social Media
 - Provide real time updates on incidents
 - Announce Department events and training programs



Administrative Services Division

Training and Safety

- Development of Santa Barbara County Fire Training Plan
- Annual Core Competencies for safety personnel
- Annual wildland training (multijurisdictional)
- Development of Training Manuals

Information Technology

- Information dissemination and network management
 - ✓ Department wide support
 - ✓ Public
 - Website hosting and updating

Fire Prevention Services Division

Prevention

- Maintain and apply Fire Department Development Standards to new development
- California Fire Code adoption and amendments through the Santa Barbara County Code of Ordinances
- Assign parcel addressing
- Work collaboratively with County Planning and Development

Investigation

- Goal to investigate 100% of all wildland ignitions

- Code enforcement
- Building and business inspections
- Issuing fire code permits

Vegetation Management

- Defensible Space Program
 - Enforcement of PRC 4291
- GIS
 - Maintain County Fire spatial database
 - Work collaboratively with other County Departments to share spatial data and maintain enterprise geodatabase
- Wildland Preplan mapping project
 - Creation of large format aerial maps focusing on LRA and SRA areas in the County accompanied by preplan documentation for identified at risk communities
 - Figure 9 represents the preplan project area and the associated zone blocks

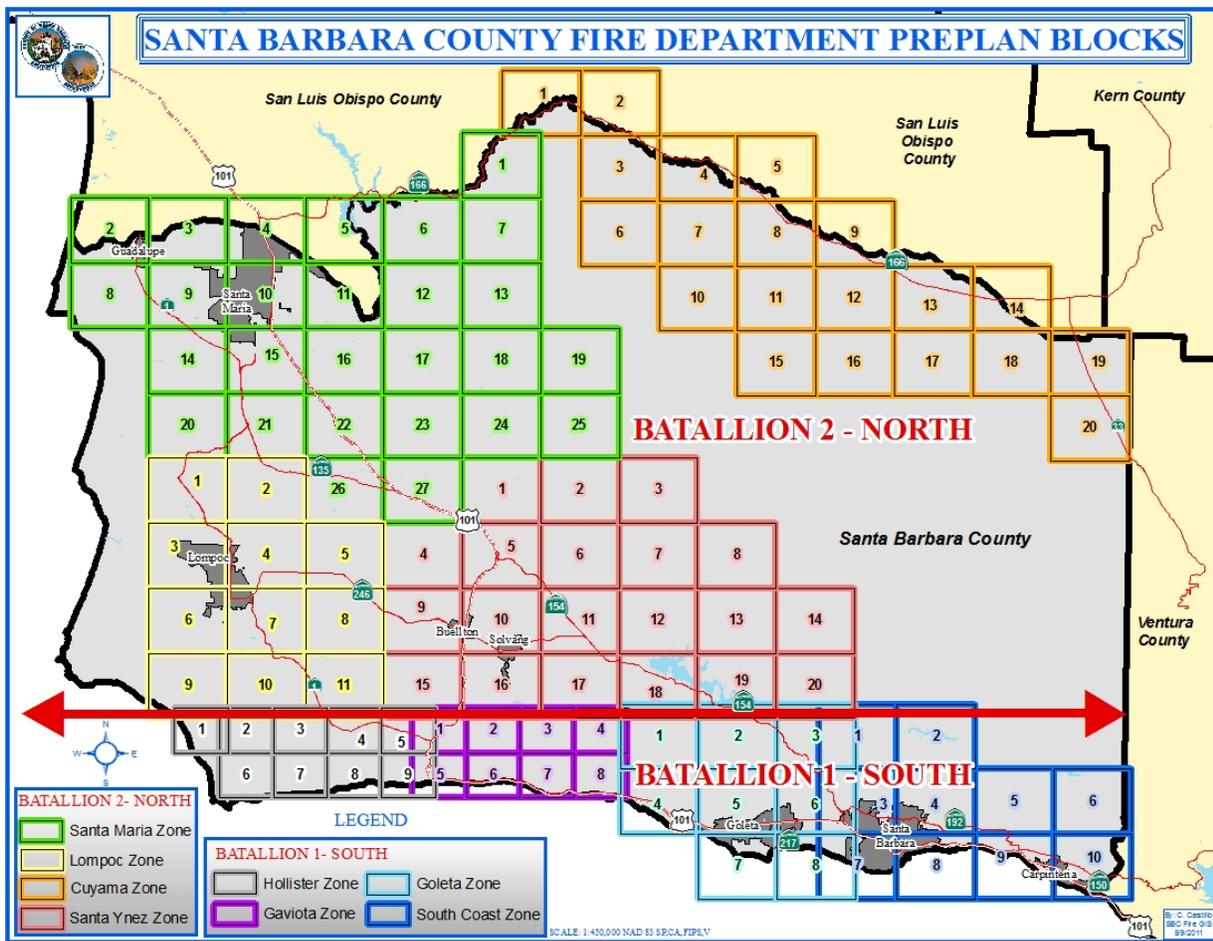


Figure 9

- Hazard Reduction Burn Permit program
 - Permit process so homeowners living in or adjacent to SRA lands can burn piles of hazardous fuels
- Fire Safe Council outreach

- Vegetation Management Captain sits on the Santa Barbara County Fire Safe Council Board
- Community education and outreach
- Vegetation Management Projects
 - At risk communities are a priority
 - Grant funding
- Collaboration with Range Improvement Association
 - Mutually beneficial projects
- Fire Plan updating
 - Assist communities develop CWPPs and/or fire management plans
 - Creation and update of County plans (Multijurisdictional Hazard Mitigation Plan and the Santa Barbara County Seismic Safety and Safety Element of the Santa Barbara County Comprehensive Plan)

Operations Division

Santa Barbara County is divided into two geographical Battalions, as seen in figure 9. Separated by the Santa Ynez Mountain Range, Battalion 1 is to the south and Battalion 2 is to the north. Figure 10 represents the current direct protection areas for the County.

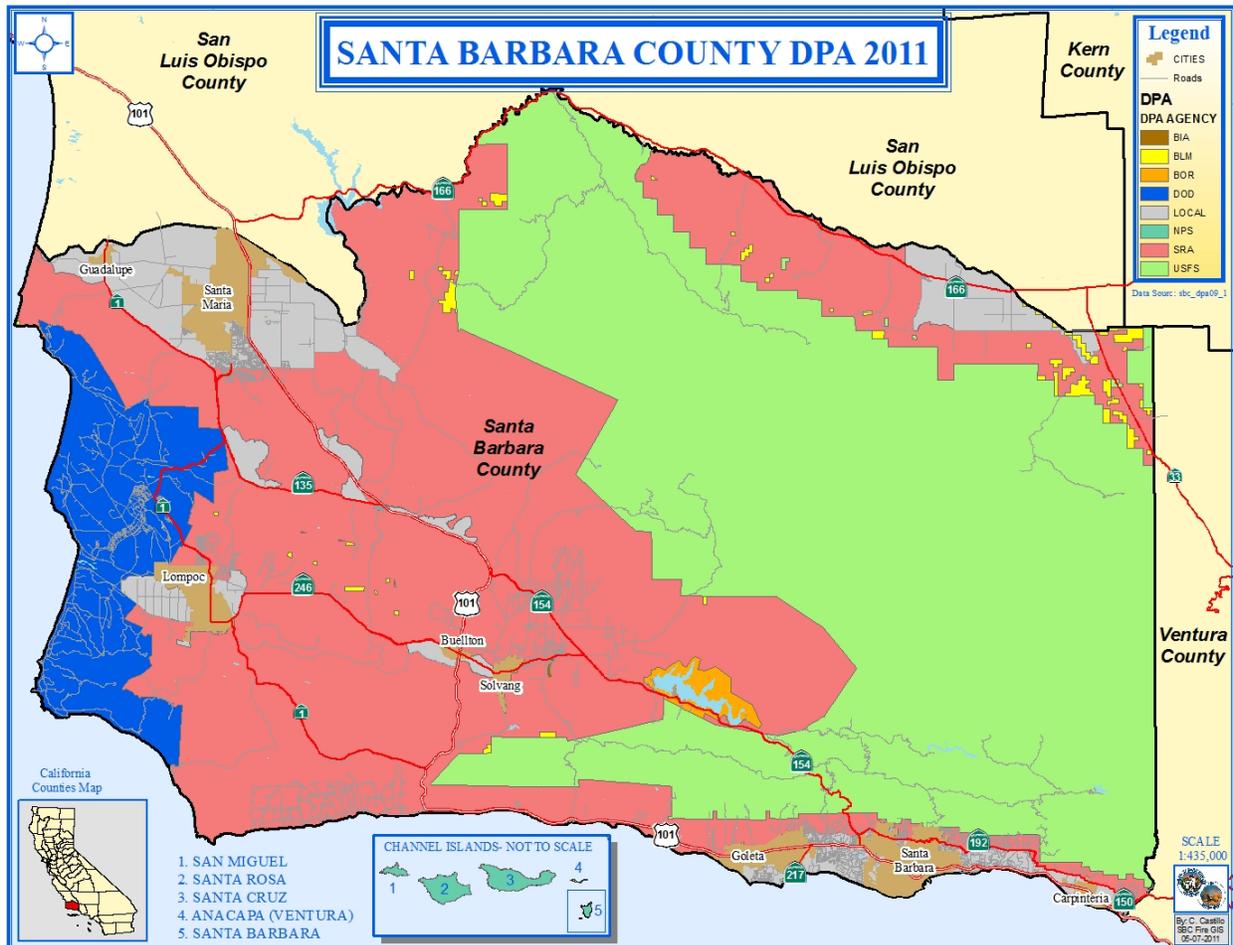


Figure 10

Battalion 1

Battalion 1 is characterized by cities located along the coast and communities sprawling into the southern slopes of the Santa Ynez Mountain Range as well as the rural community of Hollister Ranch to the west. Battalion 1 is served by seven County fire stations distributed throughout the unincorporated areas of the County and the City of Goleta.

The predominate vegetation type in the wildland areas is chaparral and costal sage scrub. With the recent fires in 2008 and 2009, approximately 20,000 acres of chaparral were consumed above the cities of Goleta and Santa Barbara. Even with the recent fires, the majority of the Santa Ynez front country has not been subject to fire in over forty plus years. The Hollister Ranch community located between Highway 101 to the east and the Pacific Ocean to the west has no reported major fire history (fires over 200 acres). The fuel beds are continuous and contain a high percentage of dead and down fuel.

Weather in Battalion 1 is typical to other coastal communities of central and southern California. Sunny skies are common along the coast, although seasonal low clouds and fog occur with some frequency over the Pacific Ocean and in the immediate coastline. Mild temperatures occur throughout the year. Maximum readings in summer average about 80°F with winter minimum temperatures in the 40's. A diurnal wind pattern (land and sea breeze) characterizes most of the area, with onshore winds common in daytime and light offshore winds predominant at night. The many deep canyons running out of the coastal mountains towards the coast therefore tend to catch and concentrate these winds, enhancing the fire threat in warm, dry weather. As mentioned earlier the area is also subject to "sundowner" winds that have contributed to the severity of wildland fires in Battalion 1 including the Paint Fire that occurred in 1990 and resulted in one death and the loss of 673 homes, the Gap Fire in 2008 that burned 9,433 acres above the city of Goleta, the Tea Fire in 2009 that destroyed 210 homes, and the Jesusita Fire in 2009 that destroyed 80 homes.

Battalion 2

Unlike Battalion 1, Battalion 2 is spread out over a very large area and consists of smaller rural communities like Los Alamos, Sisquoc, and Cuyama. Battalion 2 is served by nine County fire stations; one in the city of Solvang and one in the city of Buellton, the other seven are distributed throughout the unincorporated areas of the County.

Vegetation in Battalion 2 varies from vineyards, agricultural fields, grass covered range land and oak woodlands in the valleys, and chaparral and brush that cover the slopes of Santa Ynez, Sierra Madre, and San Rafael Mountains. The wildland areas are dominated by chaparral, which poses the most widespread wildland fuel threat. The La Brea Fire in 2009 and the Zaca Fire in 2007 (California's second largest wildfire to date) combined burned in excess of 331,000 acres in the backcountry of the County, which was dominated by chaparral. Many of the County's rural communities are located in areas surrounded by vegetation that is in the same condition as the fuels that burned in these two large wildfires.

Weather in Battalion 2 is a typical semi-arid Mediterranean climate. There can be a large variation in weather conditions from the Santa Maria and Lompoc Valleys which are in close proximity to the coast and the Cuyama Valley which is in the far north east corner of the County. Maximum temperatures can reach 105°F in the interior valleys and minimum temperatures can drop to the low 30's. The mountainous terrain also lends itself to strong winds that follow diurnal patterns. When the valleys and slopes are preheated during hot summer days it results in strong upvalley and upslope winds that typically peak in the afternoon creating hazardous fire weather conditions.

Programs

Engine Companies

- Respond to emergencies
- Perform building inspections
- Perform defensible space inspections
- Perform defensible space consultations at the request of residents

Air Operations

- Provide aerial reconnaissance
- Fire suppression
- Rescue operations

Construction Section

- Fire Access Road Program
 - Work collaboratively with land owners to ensure key unimproved roads throughout the County are accessible to firefighting forces
- Work with Vegetation Management Section on vegetation management projects in LRA and SRA lands
- Fire suppression

Fuels Crew

- Work with Vegetation Management Section on vegetation management projects in LRA and SRA lands
- Work collaboratively with other County Agencies for hazardous fuels reduction on County owned properties (maintain clearance around key infrastructure such as communication sites)
- Work with Construction Section to maintain accessibility of unimproved roads throughout the County to firefighting resources

CAL FIRE Units were asked to identify two or more priority objectives under each goal in the 2010 Strategic Fire Plan for California. The Units' priorities are identified in bold and a measurement criteria are provided for each of the identified objectives. Throughout the next year, the Units will implement the identified priorities and report on the measurement criteria by June 2012. The priority objectives are displayed under three headings:

A. SACRAMENTO PROGRAMS OR COMMITTEE ONLY

B. SACRAMENTO PROGRAMS AND STAFF OR COMMITTEE, REGIONS AND UNITS

C. UNITS ONLY

These categories are not intended to exclude Units from addressing priority objectives in any of the three categories, they are only recommendations.

A. SACRAMENTO PROGRAMS OR COMMITTEE ONLY

Goal 1: Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the sharing of all analyses and data collection across all ownerships for consistency in type and kind.

Objectives:

- a) **Identify and provide appropriate automated tools to facilitate the collection, analysis and consistent presentation of datasets.**

Measurement Criteria: *CAL FIRE shall establish policy that specifies spatial databases covering all forest and rangeland to not be older than 10 years. Include minimum requirements for spatial databases. Follow the coordinated work schedule with the USDA Forest Service to maintain cost effective collection and processing of data.*

Goal 2: Articulate and promote the concept of land use planning as it relates to fire risk and individual landowner objectives and responsibilities.

Objectives:

- a) **Identify the minimum key elements necessary to achieve a fire safe community, and incorporate these elements into land use planning, CWPPs and regional, county and Unit fire plans.**

Measurement Criteria: *CAL FIRE to create a working committee with CAL Chiefs, USDA Forest Service and other key organizations to develop, monitor and refine elements of fire safe community, including evacuation plans. The Committee shall review existing templates for FIREWISE Assessments, CWPPs, fire plans and land use plans; identify the common elements and approaches for better integration. Utilize fire protection, planning and engineering expertise to identify the key elements (from existing templates) necessary for fire safe communities. Once agreed upon, these key elements will then be used as a checklist to guide consistency in fire safe planning efforts across jurisdictions. At a minimum, annually report to the Board on results.*

Goal 3: Support and participate in the collaborative development and implementation of wildland fire protection plans and other local, county and regional plans that address fire protection and landowner objectives.

Objectives:

- a) **Establish a working group, consisting of Board members and Departmental staff, to develop minimum standard elements for inclusion in Unit fire plans.**
- b) **Emphasize coordination of Unit fire plans with community wildfire protection plans to encourage and support one consistent approach. Develop county or regional fire plans by bringing together community-based groups, such as fire safe councils and affected fire and land management agencies.**

Measurement Criteria: *These measurement criteria meets objectives a and b. CAL FIRE to revise the template for the Unit fire plans to incorporate the goals and objectives of the 2010 Strategic Fire Plan. During the revision, the template for a CWPP will be jointly reviewed in order to reduce duplication of fire planning efforts. The key elements identified through the process identified in Goal 2, Objective b will also be incorporated into the Unit fire plan/CWPP.*

- c) **Create and support venues in which individual community members can be actively involved in local fire safe councils, community emergency response teams, FIREWISE and other community-based efforts to develop readiness plans and educate landowners to mitigate the risks and effects of wildland fire.**

Measurement Criteria: *The California Fire Alliance to work with the California and local FSCs to develop venues (e.g., workshops) that assist landowners with readiness planning and education. CAL FIRE, California Fire Alliance Liaison to report to the Board annually on Alliance activities.*

Goal 4: Increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires, such as defensible space and other fuels reduction activities, fire prevention and fire safe building standards.

Objectives:

- a) **Educate landowners, residents and business owners about the risks and their incumbent responsibilities of living in the wildlands, including applicable regulations, prevention measures and preplanning activities.**

Measurement Criteria: *In coordination with the CAL FIRE Communications Program, the USDA Forest Service and local fire agencies, University of California and county cooperative extension offices, CAL FIRE to collect information on methods and effectiveness of existing outreach. Complete the information collection within year one of adoption of the 2010 Strategic Fire Plan. Develop a common set of measures to assess CAL FIRE efforts, build those into Unit fire plans and report to the Board. Report the progress of implementation at the end of year two.*

Goal 5: Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas.

Objectives:

- b) **Work to remove regulatory barriers that limit hazardous fuels reduction activities.**

Measurement Criteria: *In conjunction with the Resource Protection Committee, CAL FIRE will develop an approach to identifying and recommending ways to address regulatory and other barriers that limit hazardous fuels reduction activities. This approach should include consultation with the Board's Interagency Forestry Working Group and with other agencies, such as the USDA Forest Service, the US Fish and Wildlife Service, the California Energy Commission, the Department of Fish and Game, regional water quality control boards, local government and the public. Finish this compilation within the first year of adoption of the 2010 Strategic Fire Plan. Based on barriers identified and recommendations for change, report to the Board starting in the second year.*

Goal 6: Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.

Objectives:

- e) **Initiate and maintain cooperative fire protection agreements with local, state and federal partners that value the importance of an integrated, cooperative, regional fire protection system and deliver efficient and cost effective emergency response capabilities beneficial to all stakeholders.**

Measurement Criteria: *CAL FIRE to identify the number and effectiveness of agreements and partnerships. In conjunction with the Board's Resource Protection Committee, CAL FIRE will develop suggested measures of effectiveness of cooperative agreements. This should be in collaboration with its partners, completed within 18 months of adoption of the 2010 Strategic Fire Plan and reported to the Board.*

- i) **Provide for succession planning and employee development at all levels within CAL FIRE to maintain emergency response leadership capabilities, administrative management skills and pre-fire planning expertise.**

Measurement Criteria: *CAL FIRE to revise and update the information developed in the 2005 Succession Planning meetings. This work should be completed within two years of the adoption of the 2010 Strategic Fire Plan, with annual reporting to the Board based on issues raised, including identification of key training needs, funding available and expenditures on the training program, content of Academy curricula, number of students requesting and/or able to take classes at the Academy, local community college or other educational outlets.*

B. SACRAMENTO PROGRAMS AND STAFF OR COMMITTEE, REGIONS AND UNITS

Goal 1: Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the sharing of all analyses and data collection across all ownerships for consistency in type and kind.

Objectives:

- b) Engage and participate with local stakeholder groups (i.e., fire safe councils and others) to validate and prioritize the assets at risk.**

Measurement Criteria: *CAL FIRE shall designate personnel as advisors/liaisons to the California Fire Safe Council (CFSC) and to each county or regional FSC. The advisors will be responsible for reporting activities to the Unit and Region. The advisor to the CFSC will report to the Board. Annual reporting of time-spent working will be displayed in hours at the Unit, Region and Headquarters level. Reporting will include activities with local FSCs, communities, watershed groups or others defining hazards and risk of wildfire and documenting these in a CWPP or Unit fire plan. Emphasize the products developed in Goal 3, Objective b. Advisors will emphasize using standard guidelines and templates for consistency throughout the state.*

Goal 2: Articulate and promote the concept of land use planning as it relates to fire risk and individual landowner objectives and responsibilities.

Objectives:

- b) Assist the appropriate governmental bodies in the development of a comprehensive set of wildland and wildland urban interface (WUI) protection policies for inclusion in each county general plan or other appropriate local land use planning documents.**

Measurement Criteria: *CAL FIRE to appoint a committee including Unit, Region, Headquarters and Contract County representatives. Develop a work plan that identifies key elements of improving WUI strategies, including planning. Reporting should be based on elements identified and priorities for addressing them.*

Under the Board's Resource Protection Committee, review existing Board policies as they relate to wildland fire and the relevance (ease of use, applicability) to incorporation in local general plans. Identify areas of possible improvement and update policies.

Track and report hours at the Unit, Region and Headquarters level spent in reviewing plans and projects; number of local Board/Council, Planning Commission meetings and/or meetings with other cooperators.

Goal 4: Increase awareness, knowledge and actions implemented by individuals and communities to reduce human loss and property damage from wildland fires, such as defensible space and other fuels reduction activities, fire prevention and fire safe building standards.

Objectives:

- c) **Increase the number and effectiveness of defensible space inspections and promote an increasing level of compliance with defensible space laws and regulations through the use of CAL FIRE staffing as available, public and private organizations, and alternative inspection methods.**

Measurement Criteria: *CAL FIRE to form an advisory committee to review PRC §4291 regulations and make recommendations to the Board that will provide for consistency, streamlining and clarification of existing regulations. The Committee shall develop criteria to increase the number and effectiveness of defensible space inspections. The Committee will develop an implementation plan for the recommendations and report on progress to the Board.*

Goal 7: Address post-fire responsibilities for natural resource recovery, including watershed protection reforestation, and ecosystem restoration.

Objectives:

- a) **Encourage rapid post-fire assessment, as appropriate, and project implementation to minimize flooding, protect water quality, limit sediment flows and reduce other risks on all land ownerships impacted by wildland fire.**

Measurement Criteria: *Provide training for CAL FIRE personnel on suppression repair and damage assessment procedures. Develop standard formats and documentation templates for these assessments. Identify and use the findings to reduce the impacts of fire suppression on the landscape and improve resiliency of assets at risk from wildfire.*

C. UNITS ONLY

Goal 5: Develop a method to integrate fire and fuels management practices with landowner priorities and multiple jurisdictional efforts within local, state and federal responsibility areas.

Objectives:

- h) Support the availability and utilization of CAL FIRE hand crews and other CAL FIRE resources, as well as public and private sector resources, for fuels management activities, including ongoing maintenance.**

Measurement Criteria: *CAL FIRE will report to the Board on the number of crews available each year with a description of projects, including acres treated, completed by each Unit. Report the number of agreements and/or amount of funding and acres treated that involve grants or partnerships with federal agencies, resource conservation districts, local FSCs, fire districts, watershed groups or other non-profit or community groups that support the ability to carry out fuels reduction projects.*

Goal 7: Address post-fire responsibilities for natural resource recovery, including watershed protection reforestation, and ecosystem restoration.

Objectives:

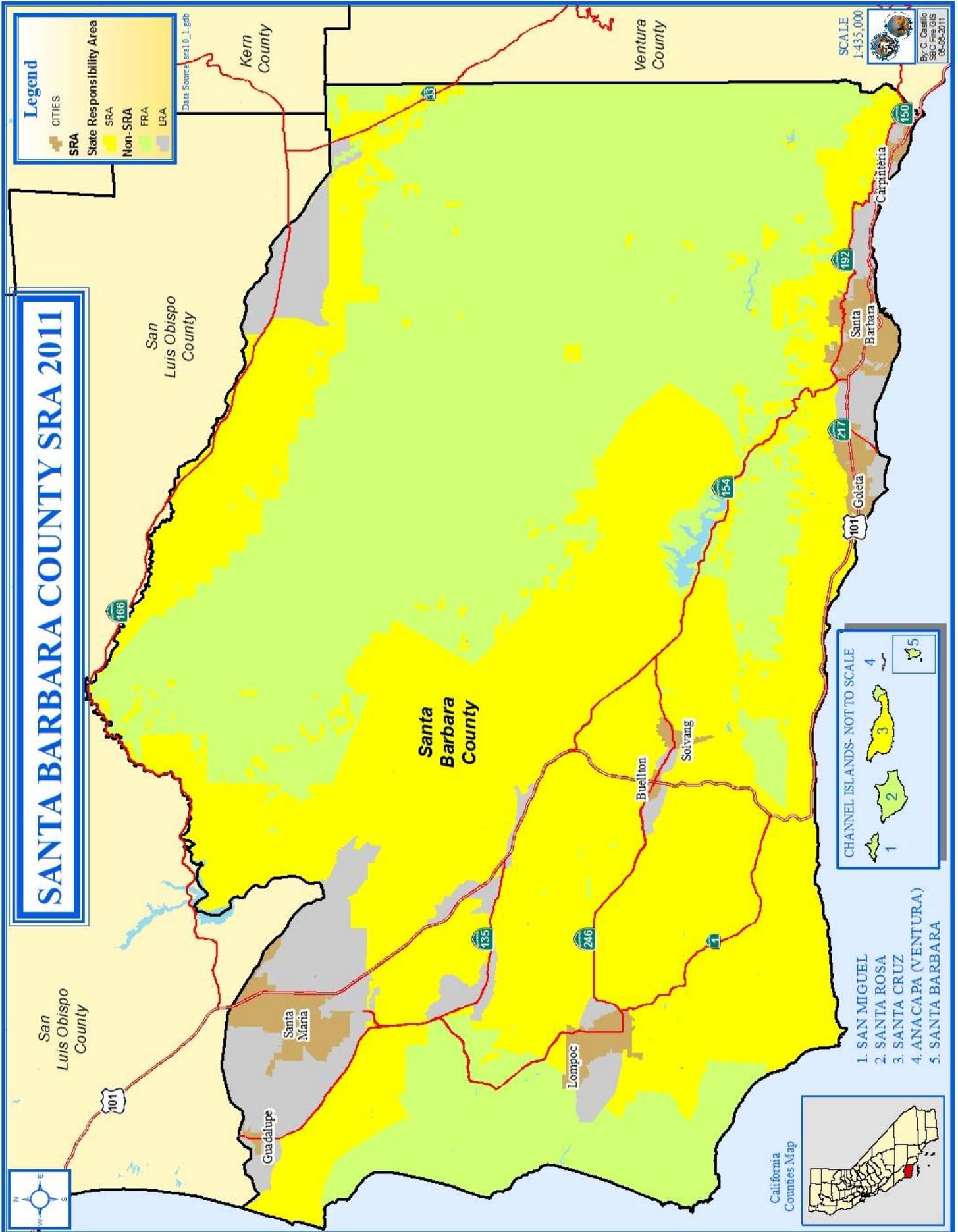
- e) Assist landowners and local government in the evaluation of the need to retain and utilize features (e.g., roads, firelines, water sources) developed during a fire suppression effort, taking into consideration those identified in previous planning efforts.**

Measurement Criteria: *CAL FIRE (utilizing Incident Command Teams) to schedule a post-fire review of the planning documents that cover the area affected by the fire. Review the goals, objectives and projects (implemented and planned) to identify successes and failures. Review the features developed during the fire and incorporate them into the existing Unit fire plan documents. This objective will only be reported when a fire occurs in an area with an existing Unit fire plan document. Incident command teams may conduct this post fire assessment under the direction of the Unit Chief.*

EXHIBITS:**MAPS**

The following maps are the full size version of the maps included in the Unit Fire Plan. Also included is a map depicting the Santa Barbara County Communications Sites.

Figure	Title	Pages
Figure 1	Santa Barbara County SRA 2011	7 and 45
Figure 2	Santa Barbara County Topography	8 and 46
Figure 3	Santa Barbara County Fuel Models	10 and 47
Figure 4	Santa Barbara County Fire History 2010	13 and 48
Figure 5	Santa Barbara County Fire Stations	15 and 49
Figure 6	Santa Barbara County Communities at Risk	21 and 50
Figure 7	Santa Barbara County Wildland Ignitions	22 and 51
Figure 8	Santa Barbara County Fire Hazard Severity Zones	25 and 52
Figure 9	Santa Barbara County Fire Department Preplan Blocks	31 and 53
Figure 10	Santa Barbara County DPA 2011	32 and 54
Figure 11	Santa Barbara County Communication Sites	55



SANTA BARBARA COUNTY TOPOGRAPHY



Legend

- Peaks
- ☐ CITIES
- Elevation
- 8600 feet
- Mean Sea Level

CHANNEL ISLANDS- NOT TO SCALE

1. SAN MIGUEL
2. SANTA ROSA
3. SANTA CRUZ
4. ANACAPA (VENTURA)
5. SANTA BARBARA

California Counties Map

SCALE 1:435,000

By: C. Castillo
SBC Fine GIS
08-10-2011



SANTA BARBARA COUNTY FUEL MODELS

Legend

Fuel Models

Type

1 Grass	9 Mixed Conifer Light
2 Pine/Grass	10 Mixed Conifer Medium
3 Tall Grass	11 Light Logging Slash
4 Tall Chaparral	12 Medium Logging Slash
5 Brush	15 Desert Fuel (Custom 15)
6 Dormant Brush	28 Urban Fuel (Custom 28)
7 Southern Rough	97 Agricultural Lands
8 Hardwood/Lodgepole Pine	98 Water
	99 Barren/Rock/Other
	CITIES

Data Source: fmod05_1.gdb

Kern County

Ventura County

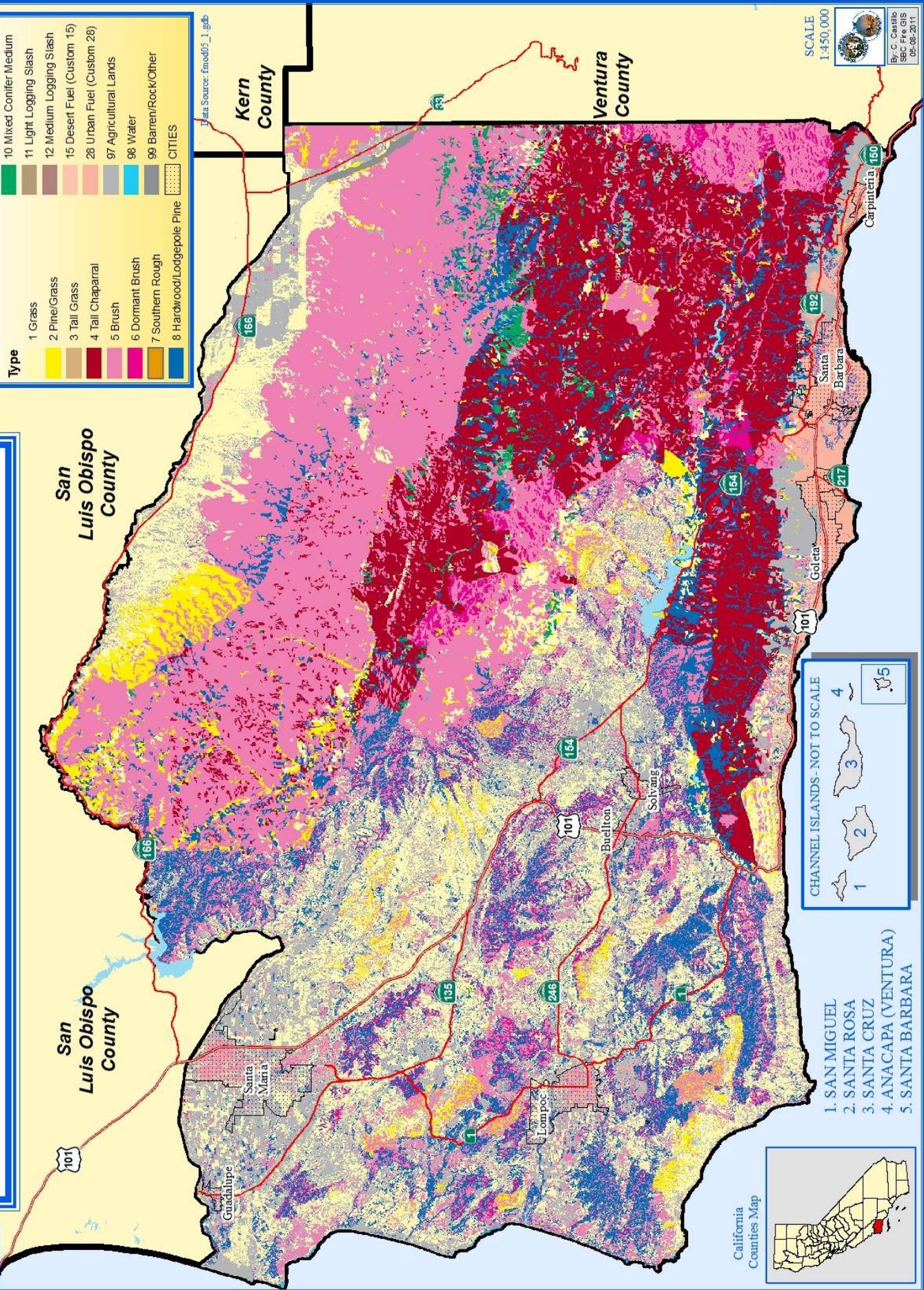
SCALE
1:450,000



By: C. Castillo
SBC Fire GIS
05-08-2011

San Luis Obispo County

San Luis Obispo County



CHANNEL ISLANDS - NOT TO SCALE



1. SAN MIGUEL
2. SANTA ROSA
3. SANTA CRUZ
4. ANACAPA (VENTURA)
5. SANTA BARBARA

California Counties Map



SANTA BARBARA COUNTY FIRE HISTORY 2010

Legend

SBC Fire History

Date & Range

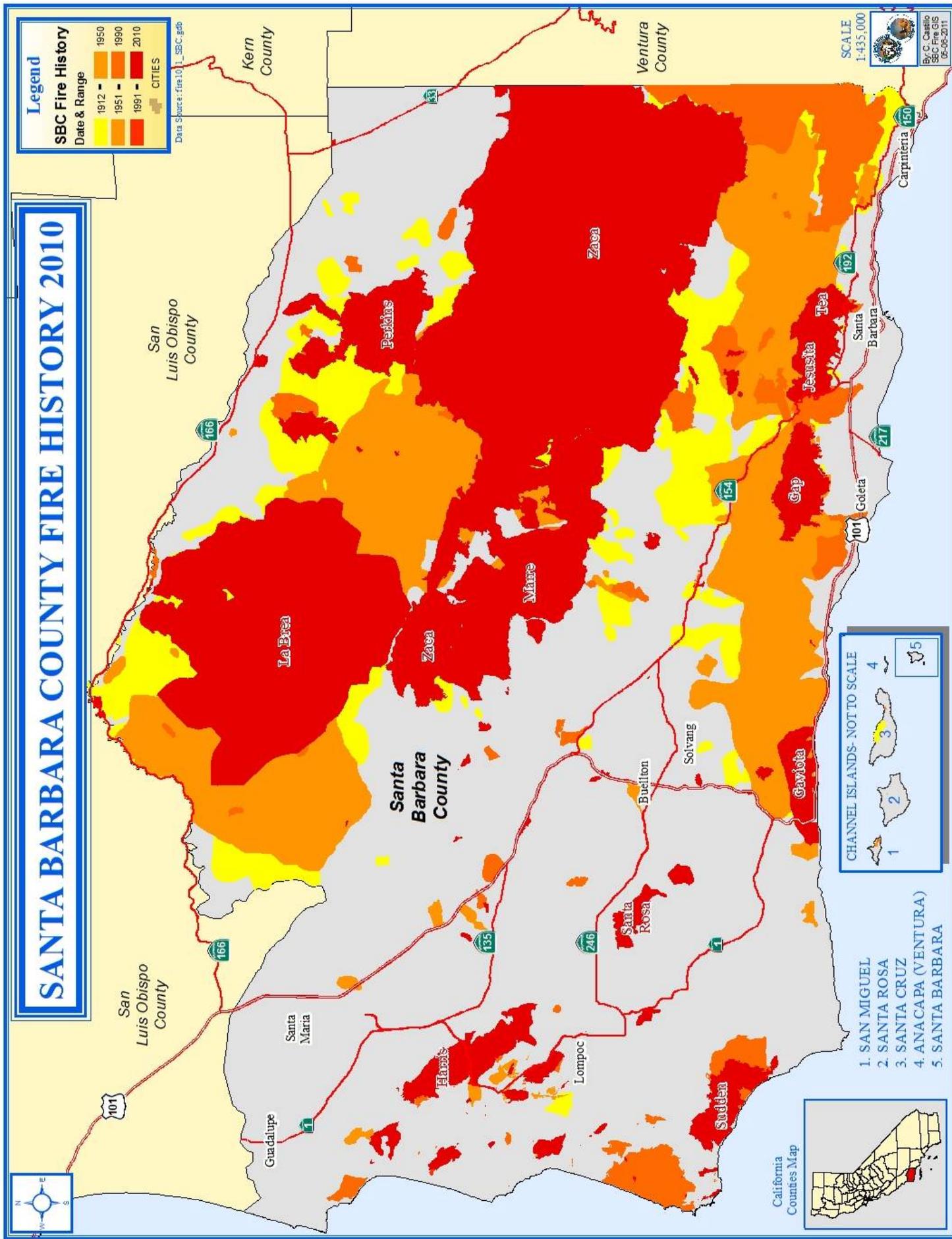
1912 -	1950
1951 -	1990
1991 -	2010

CITIES

Data Source: fire101_SBC.gdb

SCALE 1:435,000

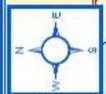
By: C. Castillo
SBC Fire GIS
06-06-2011

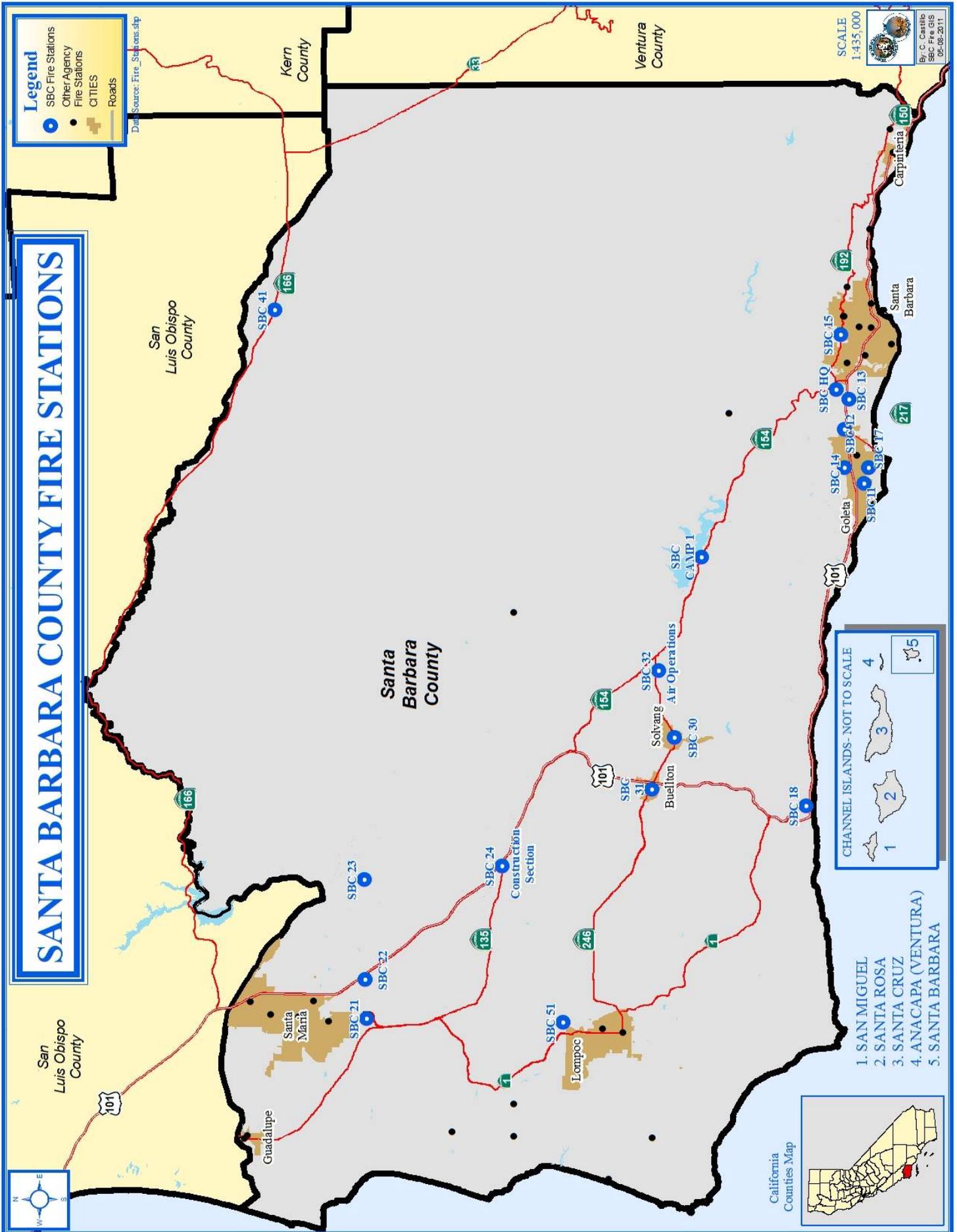


CHANNEL ISLANDS- NOT TO SCALE

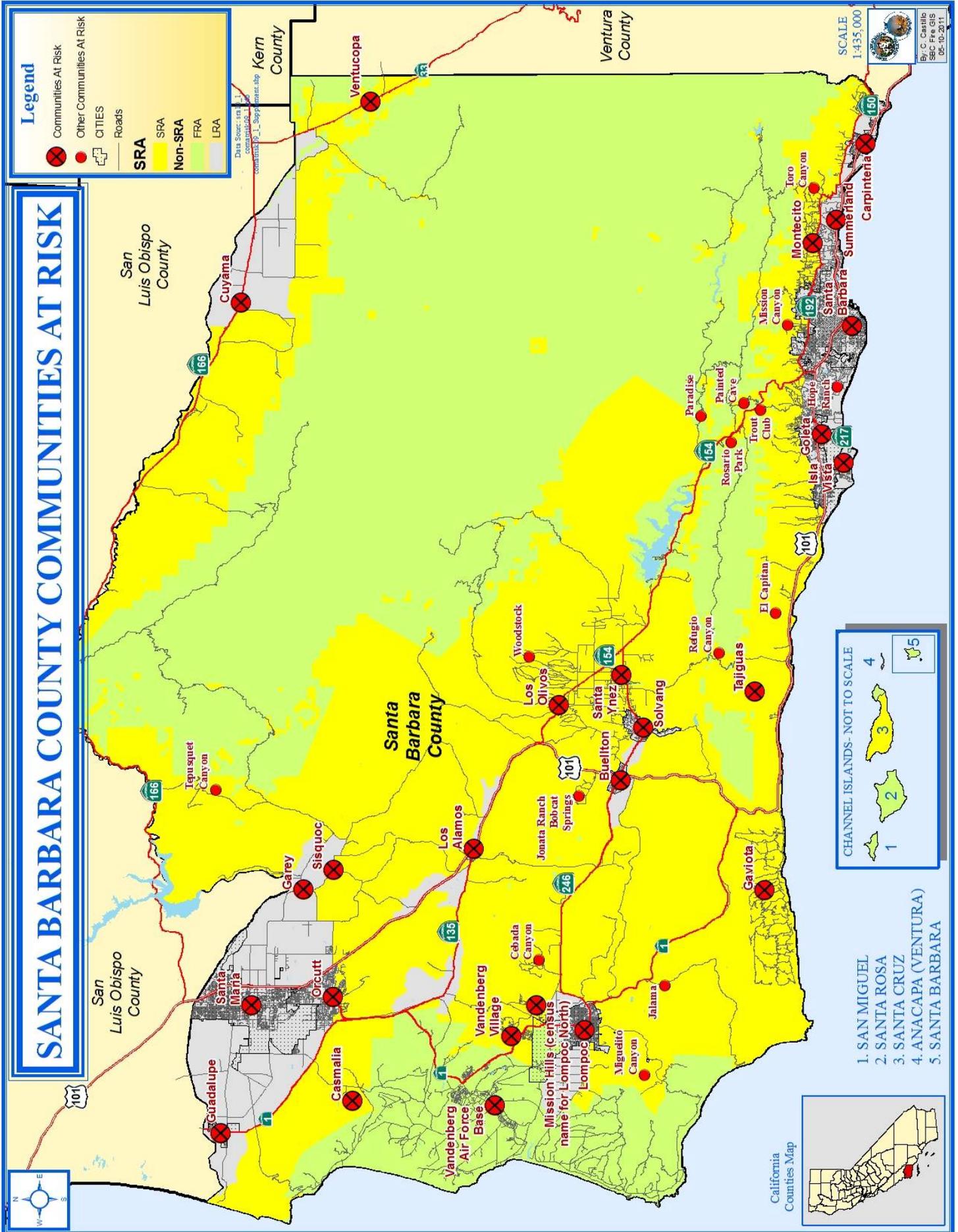
1. SAN MIGUEL
2. SANTA ROSA
3. SANTA CRUZ
4. ANACAPA (VENTURA)
5. SANTA BARBARA

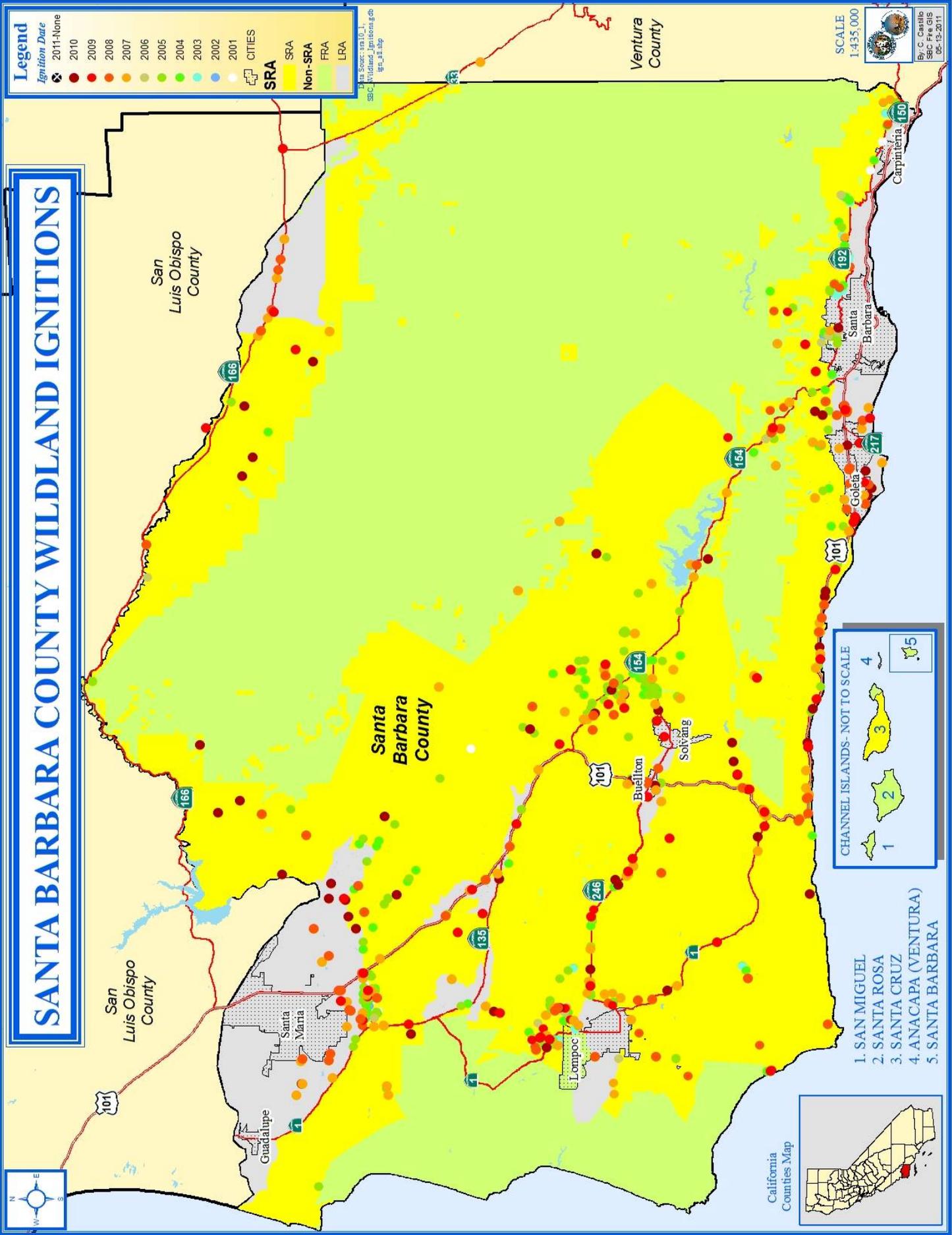
California Counties Map



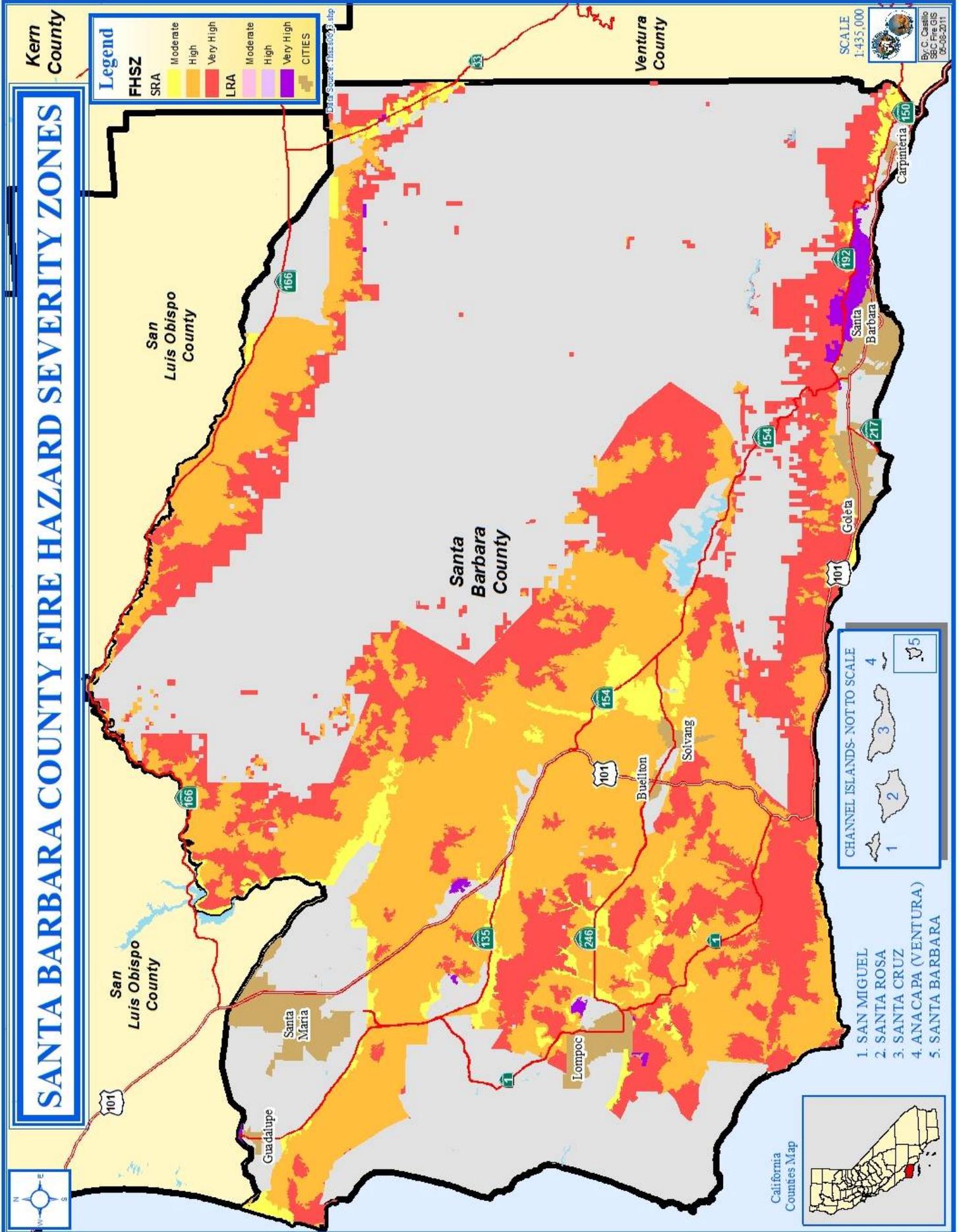


SANTA BARBARA COUNTY COMMUNITIES AT RISK

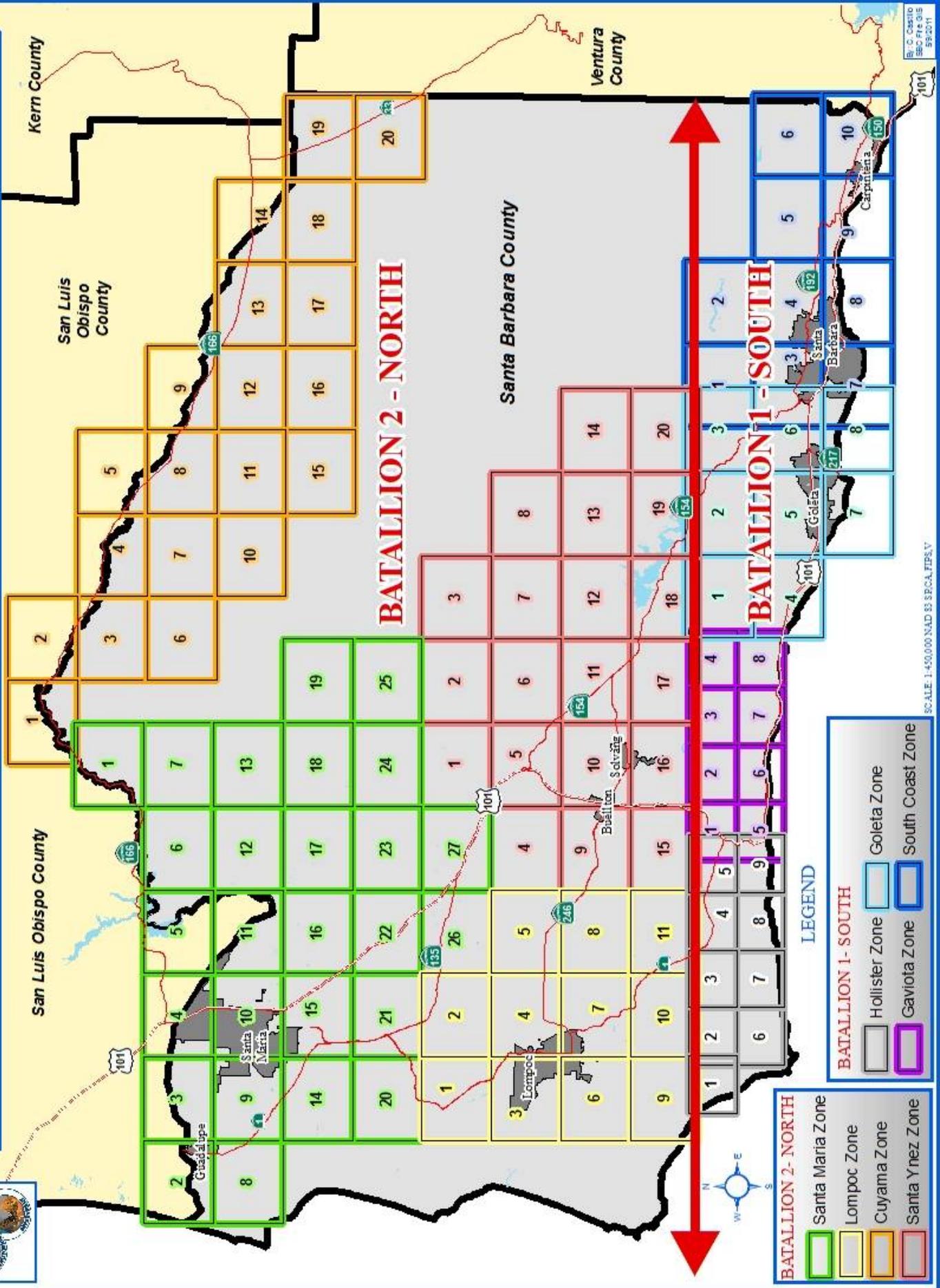




SANTA BARBARA COUNTY FIRE HAZARD SEVERITY ZONES



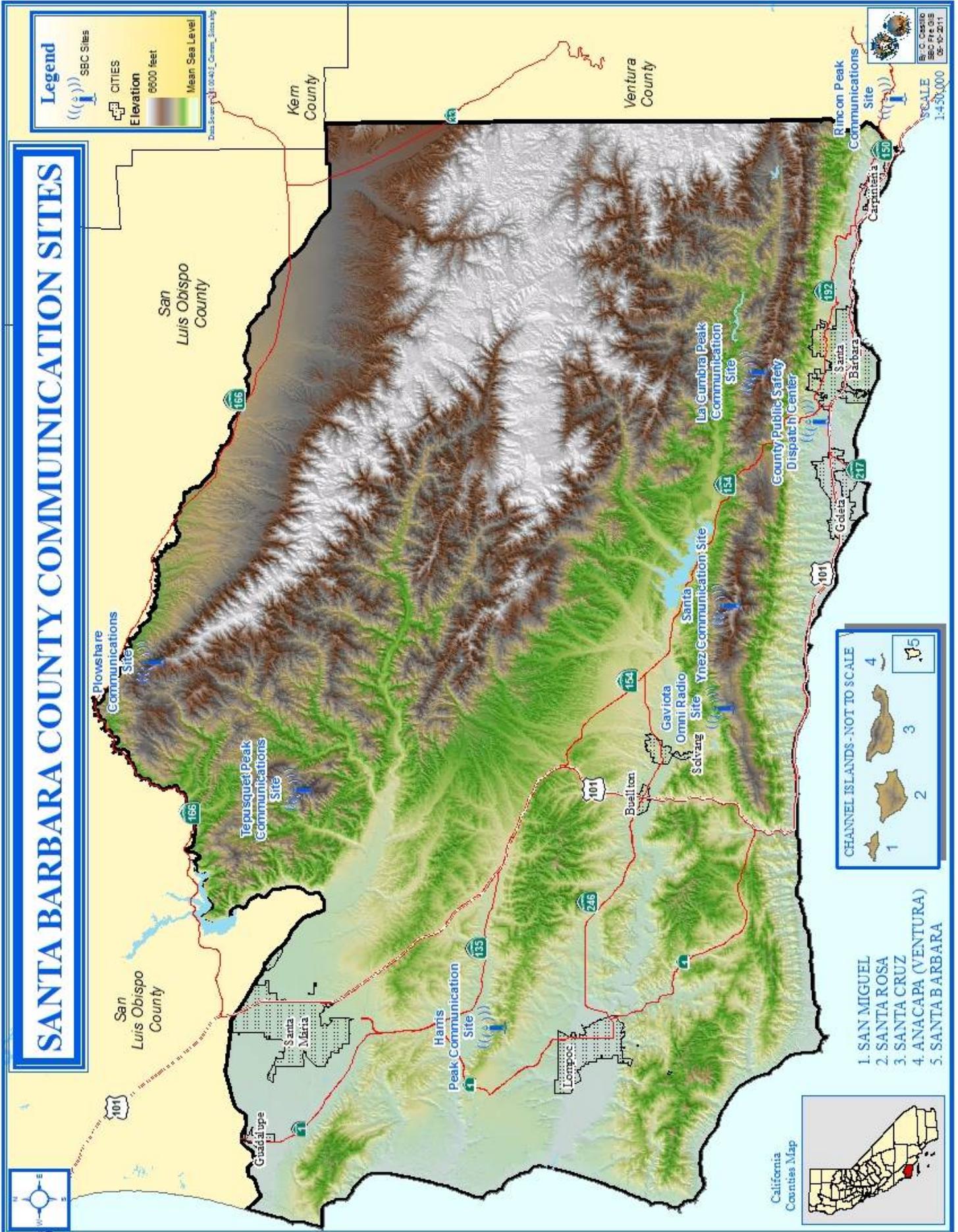
SANTA BARBARA COUNTY FIRE DEPARTMENT PREPLAN BLOCKS



By: C. Castillo
 SEC Pre 03
 5/9/2011

SCALE 1:400,000 NAD 83 SECA, FPA V

SANTA BARBARA COUNTY COMMUNICATION SITES



1. SAN MIGUEL
2. SANTA ROSA
3. SANTA CRUZ
4. ANACAPA (VENTURA)
5. SANTA BARBARA



