

***Fresno-Kings Unit
Strategic Fire Plan***



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SIGNATURES

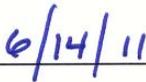
Unit Strategic Fire Plan developed for Fresno-Kings Unit (Unit)

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
Keith Larkin



Date



Pre-Fire Engineer
Shawn Hogan



Date

EXECUTIVE SUMMARY

The Fresno-Kings Unit Strategic Fire Plan was completed by a collaborative effort with the various stakeholders in the Unit, program managers, bureau managers and Battalion Chiefs. The Unit Pre-Fire Engineer compiled the information from the various inputs and presented a document that is a comprehensive Strategic Fire Plan for the Unit that address the needs of the ever changing environment within the Fresno-Kings Unit.

The Unit's Fire Plan is integrated into one, with CAL FIRE and the Fresno County Fire Protection District working together as one. This document will be updated each year on the successes that have been accomplished and new goals and objectives as outlined by the Unit and the California Strategic Fire Plan.

The Fresno-Kings Unit Strategic Fire Plan is broken up into six components:

1. Unit Overview:

- a. The Fresno-Kings Unit has responsibility for protecting 955,167 State Responsibility Area Acres and 1,626,782 Local Responsibility Acres with a Cooperative Fire Protection Agreement with the Fresno County Fire Protection District.
- b. During peak fire season there are 12 State Funded and 14 District Funded fire engines staffed.
- c. Miramonte Conservation Camp has Four (4) Inmate Type 1 Handcrews that respond to emergencies and perform work on pre-fire projects.

2. Collaboration

- a. There is strong collaboration within the Unit with input from various groups such as the Highway 168 Fire Safe Council, Southern California Edison, Pacific Gas And Electric, Sierra National Forest, Sequoia National Forest, and various cities and Fire Districts/Departments.

3. Assets at Risk

a. Values at Risk

The primary purpose of wildland fire protection in California is to protect the wide range of assets found on California wildlands. These assets include life and safety; timber; range; recreation; water and watershed; plants; air quality; cultural and historic resources; unique scenic areas; buildings; and wildlife, plants, and ecosystem health, and cultural and historic.

b. Communities at Risk

The Unit has 17 communities that are listed as high risk for damage from wildfire on the Federal Registrar's "Communities at Risk"

4. Pre Fire Management Strategies

- a. The plan facilitates development of a wide range of management prescriptions, utilizing every program and tool available to the Department, for protecting assets at risk. These tools include every conceivable combination of fuels reduction, ignition management, fire-safe engineering activities, code development and enforcement, public education, and forest health enhancements to protect Public and private assets.

5. Pre Fire Management Tactics

- a. Each Battalion and Bureau within the Unit has specific priorities and projects that were developed to protect specific assets at risk.

6. Appendices, Annual Addendums and Exhibits

- a. Appendix A lists the Units' High Priority Pre Fire projects.
- b. Appendix B is a table that tracks the changes when they were made.
- c. Appendix C is the annual statewide and Unit priority goals and objectives. Each year around August the new goals and objectives that will be worked on will be updated.
- d. The exhibits will include various maps of the Unit including Direct Protection Area (DPA) boundaries and locations of state facilities.

The Fresno-Kings Unit Key Objectives from the California Strategic Fire Plan:

- Analyze trends in fire cause and focus prevention and education efforts to modify behavior and effect change. (Goal 4 Objective K)
- 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.(Goal 5, Objective H)
- Effectively engage and train employees across all disciplines to address both planning and emergency response utilizing a "total force" approach.
- 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. (Goal 7, Objective E)

In the ever-changing world of limited availability of funds for public agencies, creative ways to accomplish fuel reduction projects near Wildland Urban Interface areas will need to be prioritized by sound management approaches to accomplish the greatest benefit. In addition to the Key Objectives from the California Strategic Fire Plan, the Unit will focus on completing existing Fuel Reduction Projects on Black Mountain Fire Control Road and the Meadow Lakes North Shaded Fuelbreak. The Comstock Fuelbreak will complete the mechanical removal portion this year and will work towards completing the hand removal over the next few years. The Unit will focus on the use all available recourses to complete Hazard Reduction Inspections to reduce the threat of fire within the Wildland Urban Intermix (WUI) areas of the Unit.

SECTION I: UNIT OVERVIEW

A: UNIT DESCRIPTION

The Fresno-Kings Unit of the California Department of Forestry and Fire Protection (CAL FIRE) has primary responsibility for over 1,113,284 acres of Direct Protection Area (DPA) lands. CAL FIRE DPA lands are State Responsibility Area (SRA) and intermingled federal lands protected by CAL FIRE. CAL FIRE protects federal lands in state DPA under agreement with federal forest agencies through the California Cooperative Wildland Fire Management and Stafford Act Response Agreement. (CFMA) There are over 955,167 acres of SRA lands in the Fresno-Kings Unit. SRA lands are the areas designated by the State Board of Forestry and Fire Protection on which the state assumes financial responsibility for protecting natural resources from damage by fire. The Fresno County Fire Protection District (Fire District) has a Cooperative Fire Protection Agreement (Contract) with the State of California. As part of the contract with CAL FIRE, Fresno-Kings Unit oversees the day to day operation of the Fire District and Protects 1,626,782 Acres of land ranging from rural to urban.

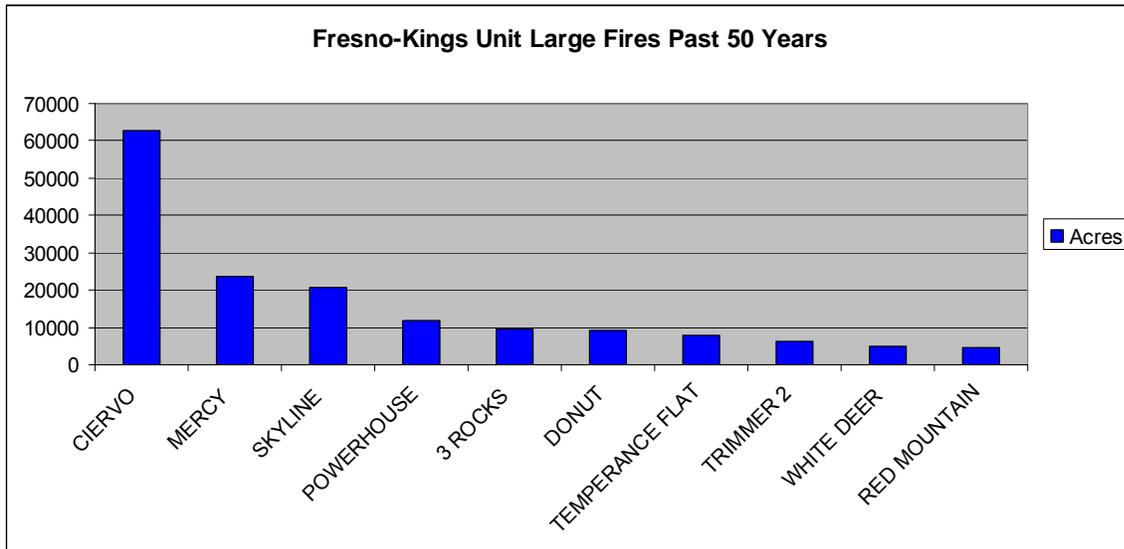
The Unit is divided nearly in half by the San Joaquin Valley. This 70-mile span presents some specific logistical and administrative challenges for the development of a Pre-Fire Management Plan. The fuel and topographic conditions, along with the human activity, risk, and ignition history of the Unit add to the diversity of the Unit. To facilitate, the Unit is divided into two (2) operational divisions.

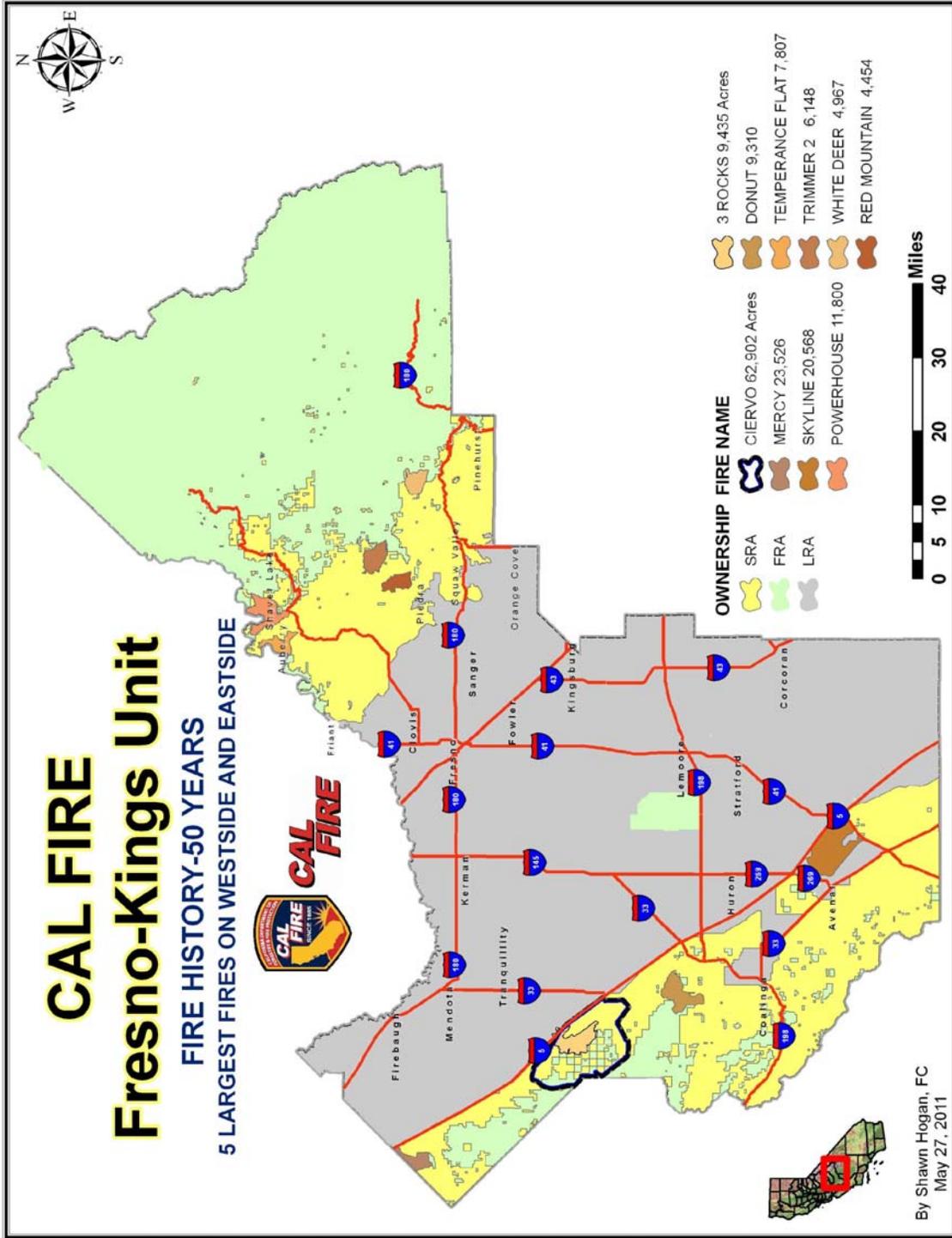
The Eastern Division expands from the floor of the San Joaquin Valley to an elevation of 7,300 feet along the Western slopes of the Sierra Nevada and incorporates two of Central California's major watersheds, the Kings and San Joaquin Rivers. This Division is primarily vegetated at the lower and mid elevations by seasonal grasses, deciduous and evergreen oaks, and brush, while the higher elevations consist of conifers. The Eastern Division contains three (3) lake recreation areas, Shaver Lake, Millerton Lake, and Pine Flat Lake. The recreational use in these areas is moderate to high. The Eastern Division also contains two (2) population centers, the Shaver Lake – Prather area and the Squaw Valley - Dunlap area. Both population centers have a steadily increasing permanent residential growth pattern. The WUI is a real and current concern in these areas.

The Western Division is made up of the eastern slope of the Coastal Mountain Range. Primary vegetation types consist of seasonal grasses, deciduous oaks, and heavy brush. There is a high seasonal recreational use of Bureau of Land Management (BLM) holdings, within the Division. Residential impact in the area is light, with little indication of growth. Industrial use is heavy in some areas, depending on the economic situation in the petroleum industry.

Fire History

The Fresno-Kings Unit over the past 50 years has a history of large, damaging fires with a low frequency or occurrences. This pattern can often be associated with drought conditions and isolated extreme weather conditions. In review of the large fires in the Unit, they can be grouped into two different areas, the Eastern Division and the Western Division. Some of the largest fires in the Unit have occurred in the Western Division. The five (5) largest fires from the Western Division have a combined acreage of 151,811 acres with the largest fire being the Ciervo Fire in 1979 at 62,901 acres. The largest five (5) fires from the Eastern Division have a combined acreage of 35,171 with the largest fire being the Powerhouse in 1989 at 11,799 acres.





B: UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

Fresno-Kings Unit Facilities

- Nine (9) CAL FIRE Stations
- Thirteen (13) Staffed Fire District Stations
- Seven (7) Paid Call Firefighter (PCF) Fire District Stations
- Miramonte Conservation Camp
- Fresno Air Attack Base
- Fire Prevention/Protection/Planning Bureau
- Training Bureau

Initial Attack Resources During Peak Fire Season Staffing

- Twelve (12) CAL FIRE Schedule “B” engines
- Fourteen (14) Schedule “A” engines
- Seven (7) PCF engines
- Two (2) CAL FIRE bulldozers
- One (1) air attack
- One (1) air tanker
- Four (4) inmate type 1 hand crews

Local Fire Departments that Fresno Kings Unit has mutual or automatic aid agreements with:

- Auberry Volunteer Fire Department
- City of Coalinga Fire Department
- City of Firebaugh Volunteer Fire Department
- City of Kingsburg Fire Department
- City of Reedley Volunteer Fire Department
- City of Sanger Fire Department
- City of Selma Fire Department
- County of Kings Fire Department
- County of Madera Fire Department
- County of Merced Fire Department
- Fresno Air National Guard Fire Department
- Laton Volunteer Fire Department
- Pleasant Valley Prison Fire Department
- Riverdale Volunteer Fire Department

Fresno-Kings Emergency Command Center (ECC) Provides Emergency Dispatch Services for:

- Fresno County Fire Protection District
- Orange Cove Fire District
- Laton Fire District
- Shaver Lake Volunteer Fire Department
- Huntington Lake Volunteer Fire Department
- Big Creek Volunteer Fire Department
- Bald Mountain Fire Protection District
- Auberry Volunteer Fire Department
- Mountain Valley Volunteer Fire Department
- Pine Ridge Volunteer Fire Department
- Pleasant Valley Prison Fire Department
- Riverdale Volunteer Fire Department
- City of Fowler Fire Department
- City of Reedley Volunteer Fire Department
- Hume Lake Fire & Rescue Department

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:

Plan Development Team:

Organization	Representative (title)
Southern California Edison	Michael Esposito (Fire Ecologist)
Highway 168 Fire Safe Council	Rich Bagley (Director)
Oak to Timberline Fire Safe Council	Jim Huffman(Director)
Sierra National Forest	Carolyn Ballard(Fuels Specialist)
Sequoia National Forest	Neil Metcalf(District Fire Management Officer)
Pacific Gas and Electric	Pat Denny(Forester)

SECTION III: VALUES AT RISK

A: ASSETS AT RISK

The primary purpose of wildland fire protection in the Fresno-Kings Unit is to protect the wide range of assets found in the Unit from the effects of wildfire. Table 1 lists the identified assets at risk that are found throughout the State of California as well as their asset value basis, level of disaggregation and level of value. All of the assets at risk in Table 1 are also found throughout the Unit. The California Strategic Fire Plan recommends that the limited fire protection resources should be allocated, at least in part, based on the value of the assets at risk.

Currently the Fresno-Kings Unit is reviewing and validating the base Assets at Risk data. Maps are going to be created to show the current preliminary value of the assets as high, medium, or low. Stakeholder input is critical to determining which assets at risk are present and what value they have. The maps created will be presented to various forums, such as the Highway 168 Fire Safe Council, to help validate the data. If representatives of the various assets at risk such as Southern California Edison, Pacific Gas & Electric Company (PG&E), Army Corps of Engineers, Bureau of Reclamation and the Department of Fish and Game are not present at the Highway 168 Forum, attempts will be made to meet with them individually in order to get their input in the validation process. Involving the various stakeholders in the validation process has the additional benefit of educating them about the problem and issues at hand. In the case of the Highway 168 Fire Safe Council, they will then be aware of the problem and will be more likely to help seek grant funding to address the problem.

Table-1

Resource	Asset Value Basis	Level of Disaggregation	Levels of Value*
Life and safety	Non-economic values are not quantified	By population density	National, state and local
Air quality	Average dollar impact from particulate matter (PM10) emitted per acre burned; non-commodity assets also exist	Air quality basins (13) and basic fuel types (2)	National, state and local
Range	Dollar cost of replacement feed per acre of rangeland burned	Values by regions (8), cover types (9) and ownership classes (5)	State and local
Recreation on public wildlands	Average dollar loss per acre burned; non-commodity assets also exist	Statewide average by public ownership categories (5)	National, state and local
Structures	Average dollar loss per home burned; non-commodity assets also exist	Statewide average	State and local
Timber	Average dollar loss per acre burned	Values by regions (6) and ownership categories (4)	National, state and local
Water and watersheds	Range of economic impacts per acre for value of increased water yields; cost of sediment removal; loss of reservoir capacity; effects on hydroelectric generation; costs of watershed rehabilitation; non-commodity assets also exist	Statewide ranges of economic impacts	National, state and local
Wildlife, habitat, plants and ecosystem health	Qualitative discussion of the tradeoffs in fire impacts	Statewide	State and local
Other resource assets, cultural and historic resources, unique scenic areas	These non-commodity assets cannot be quantified adequately; descriptive enumeration only	Statewide (generically) or place-specific	National, state and local

B: COMMUNITIES AT RISK

During the spring of 2001, a field validation process was conducted in the Fresno-Kings Unit to identify and validate communities at risk. This process was conducted based on a request from Congress, through the FY 2001 Appropriation Bill, that called for a list of “...all urban wildland interface communities, as defined by the Secretaries, within the vicinity of Federal lands that are at high risk from wildfire, as defined by the Secretaries”. The following criteria were provided to help identify communities at risk:

- *Interface* exists where humans and their development meet or intermix with wildland fuels.
- *Community* is a defined area where residents live and are provided services such as fire protection, water, law enforcement, etc.
- *Vicinity* of Federal lands is defined as within the range in which fires can travel.
- *High-risk* exists where there is land condition that is characterized by high-risk fire regimes.

After receiving input from the USDA Forest Service and National Park Service, the following communities in Fresno and Kings Counties were identified as *Communities at Risk* and were placed on the National list in the Federal Register.

Auberry	Dunalp	Piedra
Avenal **	Friant **	Pinehurst
Big Creek *	Hume *	Prather
Big Sandy	Lakeshore *	Shaver Lake
Dinke Creek*	Meadow Lakes	Squaw Valley
	Miramonte	Tollhouse

* *located in Federal Direct Protection Area*

** *Located in Local Responsibility Area*

The significance of a Community at Risk designation has become apparent recently with most Federal grant proposals for wildfire protection requesting information about Communities at Risk in the area of the proposed grant project to help rank the proposal.

SECTION IV: PRE FIRE MANAGEMENT STRATEGIES

A: FIRE PREVENTION

Ignition Analysis, State Responsibility Areas (SRA) and Local Responsibility Areas (LRA)

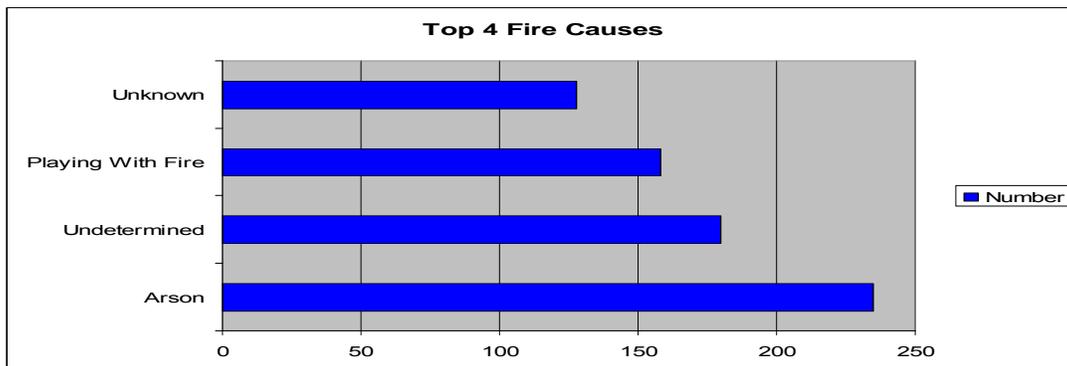
The Fresno-Kings Unit is not unique to California Fire History or activity. The Unit spans from lowlands at 300 feet on the west side to elevations at 7,300 feet in the east. The vegetation transitions from light flashy annual grass fuels to heavy timber. The ignitions too are not out of the ordinary for the population density and geographic make up of the Unit.

The ignition analysis for the year 2010 is very similar to that of year's past. The four (4) primary ignition sources in order of ranking:

- Arson 235 Fires
- Undetermined 180 Fires
- Playing with Fire 158 Fires
- Unknown 128 Fires

These four (4) ignitions make up the Unit's major categories of the total ignitions. The remaining causes are almost insignificant in numbers. They are split between equipment, lightning, campfires, smoking, vehicles, power lines, miscellaneous and debris burning. Ignitions from equipment use have come down significantly due to increased law enforcement and public education activities within the Unit. These statistics slightly vary each year, but remain the same top classes of fire ignition in the Unit. The Unit ranges from 82 to 300 fires a year in the SRA and 1,100 to 2,200 fires in the LRA.

The Unit Fire Plan in the Fresno-Kings Unit combines SRA and LRA as one in order to address the concerns of the county's fire mitigation efforts and integrate the fire plan. Local fire jurisdictions are integrated in the SRA and the potential for large damaging fires is a threat to The Fresno County Fire Protection District, its shareholders, stakeholders, and the county's economy.



Fresno-Kings Ignition Summary				
Cause	2007	2008	2009	2010
Arson	311	355	307	235
Debris burning	85	71	57	49
Equipment use	157	114	137	96
Miscellaneous	226	153	90	84
Playing with fire	182	219	191	158
Powerline	20	14	16	13
Railroad	0	2	1	4
Smoking	74	102	86	52
Undetermined	185	203	151	180
Unknown	199	160	185	128
Vehicle	114	115	98	88
Lightning	10	2	2	0
Campfire	1	0	0	0
Total	1564	1510	1321	1087
Local Responsibility Area				
Cause	2007	2008	2009	2010
Arson	300	338	306	231
Debris burning	60	52	47	45
Equipment use	126	79	123	90
Miscellaneous	192	132	76	72
Playing with fire	157	194	186	150
Powerline	16	10	12	9
Railroad	0	2	1	4
Smoking	67	95	83	51
Undetermined	166	184	144	160
Unknown	162	124	160	110
Vehicle	95	96	92	83
Lightning	10	2	1	0
Campfire	1	0	0	0
Total	1352	1308	1231	1005
State Responsibility Area				
Cause	2007	2008	2009	2010
Arson	11	17	1	4
Debris burning	25	19	10	4
Equipment use	31	35	14	6
Miscellaneous	34	21	14	12
Playing with fire	25	25	5	8
Powerline	4	4	4	4
Railroad	0	0	0	0
Smoking	7	7	3	1
Undetermined	19	19	7	20
Unknown	37	36	25	18
Vehicle	19	19	6	5
Lightning	0	0	1	0
Campfire	0	0	0	0
Total	212	202	90	82

1. ENGINEERING & STRUCTURE IGNITABILITY

Fire Prevention Bureau Goals

Based on the previous identified information the Fire Prevention Bureau has adopted the following actions to provide efforts of ignition mitigation to protect property, natural resource loss, and loss of life or injuries.

- **Protection and Planning**
 - The protection and planning section will continue efforts of plans checking in accordance with California Fire Code Requirements to provide for public safety. School programs and care facilities inspection will continue to be a high priority.
 - The Public Resource Code 4290/Fresno County Fire Safe Ordinance (Chapter 15.60) plans check and inspections program will continue to provide homes with defensible space and construction. This program is essential with the expansion of single family homes into the WUI environment throughout primarily the east side of the Unit
- **Defensible Space**
 - Managing and reducing the flammable vegetation around structures will also reduce the number of structure ignitions from wildland fires. Clearing vegetation and maintaining that clearance is required by section 4291 of the Public Resources Code (PRC 4291). In 2005 PRC 4291 was amended to increase the minimum vegetation clearance requirement from 30 feet to 100 feet around structures. Although this law requires it, many landowners fail to maintain adequate clearance around their structures. CAL FIRE's fire safe inspection program is used to enforce compliance with PRC-4291. Additionally, the fuel reduction projects within the Unit, are aimed at reducing wildland fuels and educating the public on what they can do for themselves to protect their homes from wildfires and reducing structure ignitability.

- **Law Enforcement**

- The enforcement of forest and fire laws will continue to be proactive in efforts to pursue and prosecute violators of statute. Efforts to reduce the miscellaneous category on the ignition statistics has improved. Fires must continue to be investigated in more detail. This may require some additional education/training of our fire personnel to assist them in origin and cause investigation and report writing. Our efforts to collect suppression cost on fires of negligent or criminal nature has improved. Emergency incidents are costly and the ability to collect suppression cost and punitive damages will remain active.
- Lastly, the law enforcement staff is given the authority and responsibility to identify, investigate and arrest subjects involved in criminal related acts. These incidents will be investigated and documented through proper case management. The management of these cases will be conducted with detail of documentation and proper evidence security. Finally, given the correct legal circumstances the cases will be actively pursued and prosecuted.
- Creation and development of new processes relating to Safe and Sane fireworks permitting and use within the District to ensure the safety of public and their properties from fire.

Fire Protection/Planning Statement

- **Mission Statement** – The mission of the fire protection/planning bureau is to reduce losses and cost from fires within the Fresno-Kings Unit in both the SRA and LRA by enforcement and public education of applicable fire and public resource codes. It is additionally the mission of the bureau to be proactive in its approach to preventing ignition, loss and cost of all types of fires.
- **Priorities** – The priority areas for both SRA and LRA are any area, within the Unit, with substantial residential and industrial development that has the potential to affect the Unit's resources. Although new developments have the potential to impact the Unit's resources, a Community Facilities District was established and adopted to generate funds to ensure staffing and equipment are available to handle increased impacts of development. Continue to improve fireworks permitting and use processes to ensure the safety of the public and their properties from fire.

- **Existing Fire Plan Projects**
 - **Web Based Protection and Planning:** Develop and implement web based access to protection and planning requirements for contractors and individual developers. Build efficiency for staff by having available on the District web site all codes and requirements for new and existing construction and PRC 4290 standards.
 - **Develop Inspector Guidelines:** Develop and implement standard operating guidelines for inspectors. Develop and implement of new hire training and personnel standards.
 - **NFPA 1142 Rural Water Supplies:** Developed and implemented the use of NFPA 1142 as an alternative guide for calculation of fire protection water systems for developments within the SRA or LRA areas of the Unit. The guide provides alternative methods while still considering fire and life safety factors.
 - **Business Inspections:** Establish standard operating procedures for staff to conduct annual business inspection for compliance with California Fire Code Standards. Develop standards for conducting mandated inspections.
 - **Sub-division Fire Protection System Maintenance:** Monitor new agreements established by Fresno County Planning and Development for new subdivisions within the County of Fresno to provide ongoing maintenance of fire protection systems. This agreement provides language for establishment of a Homeowner's Association to provide maintenance of these systems.
- **Potential Fire Plan Opportunities, Needs & Problems:** The Unit protection and planning department within the Unit works closely with the Fresno County Planning and Development Department. This relationship is critical for new projects in the county ensuring the implementation of California Fire Code standards. The process of project submission at the county level is complicated and requires the Unit to provide ongoing education of the fire code standards as it applies to projects.
- **Prioritization Of Existing And Potential Projects/Opportunities**
 - Web based Protection and Planning
 - Develop Inspector Guidelines
 - Sub-division Fire Protection System Maintenance

- **Objectives**

- **Objective #1** – Develop and implement web based access to protection and planning requirements for contractors and individual developers. Build efficiency for staff by having available on the District web site all codes and requirements for new and existing construction and PRC 4290 standards.
- **Objective #2** – Develop guidelines for new hire and existing inspectors for training and standard operating procedures for protection and planning services. Develop new hire handbook for tracking of training, gear issuance and office procedures.
- **Objective #3** – Monitor new Sub Division System Maintenance agreement with Planning and Development Department for Fresno County. This will be accomplished through annual inspections conducted by engine companies providing feedback to Prevention staff. Prevention staff will ensure maintenance is completed by Homeowner Associations and will work with these groups to ensure compliance with the new agreement.

2. INFORMATION AND EDUCATION

- **Public Information and Education**

- The information and public education outreach programs provide the Department the ability to educate the public. These efforts will continue to be proactive in providing information to residents that reside in the WUI within the Fresno-Kings Unit. The program will also present homeowners with how they may participate as a shareholder in the Fresno and Kings Counties. This information will continue to be proactive through safety messages, community groups, townhall meetings, fire safe councils and through local media outlets.
- The information and education bureau strive to reduce ignitions in the Unit. Through a collaborative effort with local allied fire agencies, Fire Inspectors, road side public education signs, fire prevention education programs, and participation in various community venues has assisted in reducing the overall fire ignitions within the Unit.

B: VEGETATION MANAGEMENT

Program Framework

The current Vegetation Management Program (VMP) is the continuation of the Range Improvement Program that existed in California from the 1950's to the 1970's. The Range Improvement Program was carried out by cooperative groups of ranchers who would band together to conduct prescribed burns primarily for range improvement objectives. These cooperatives had the equipment and expertise to conduct burn projects with limited to no assistance from fire agencies. These groups continued until the mid to late 1970's. At this time, liability issues, available cooperators and air quality restrictions all came together to essentially stop all non-governmental range improvement burning. This led to the passage of Senate Bill 1704, which was signed by Governor Brown Jr. on July 16, 1980. This bill authorized CAL FIRE to assume the liability and project implementation for prescribed burns on private property and thus created the Vegetation Management Program that is utilized by CAL FIRE today. The program became operational with the adoption of the Final Environmental Impact Report for the Chaparral Management Program on May 18, 1981.

The Vegetation Management Program provides CAL FIRE the authority to cooperatively treat vegetation and fuels on private lands. While a vegetation management project obviously improves private property values through reducing accumulated vegetation and increasing land management options, it also has benefits to the general public. The benefits to the general public include wildlife habitat improvement, increased water yield, air quality benefits of controlled releases of smoke during a prescribed project versus the uncontrolled release of smoke during a wildfire and most importantly the potential savings of significant taxpayers funds through increased success of fire suppression in areas treated with vegetation management projects versus areas not treated.

For additional information, see the "California Department of Forestry Chaparral Management Program Final Environmental Impact Report," May 18, 1981.

A specific example of the public benefit of VMP within the Fresno-Kings Unit is the Beal Fuelbreak. The Beal Fuelbreak is located in the Pine Ridge area of Fresno County along Highway 168. The Beal Fuelbreak is a segment of the historic 650-mile long Ponderosa Way Fuelbreak that was constructed by the Civilian Conservation Corps in the 1930's. This project has been maintained periodically over the years to include brushing and road grading. The most recent significant maintenance activity treated in excess of 100 acres funded by a federal grant beginning in the fall of 2010 and continuing into the 2011/2012 winter. The arson caused Highway Fire, which burned from August 13-18, 2000, was ignited down-slope of the Beal, and eventually burned into the fuelbreak. The fire was controlled at the fuelbreak.

Under the Vegetation Management Program, CAL FIRE utilizes a standardized program to address vegetation and fuels projects. Prior to project implementation a standardized formula is utilized to determine the private benefit versus the public benefit of a given

project. Based on the formula, CAL FIRE may pay up to a maximum of ninety percent of a project's costs if it has a high public benefit. The participating landowner(s) and/or other cooperator(s) pay the remainder of the project's cost. The following categories are evaluated in determining private versus public benefits: Fire Hazard Reduction; Water Yields; Watershed Stabilization; Wildlife Habitat Improvement; Fisheries Habitat Improvement; Air Quality Improvement; and Range Forage Improvement.

For additional information on specific VMP implementation, see the "Vegetation Management Program Handbook and Field Guide," California Department of Forestry and Fire Protection, June 2001.

The Environmental Impact Report for the Chaparral Management Program, which was adopted in 1981, provides the statewide California Environmental Quality Act (CEQA) clearance for VMP projects. This environmental clearance means that project that comply with the techniques and mitigations found in the Environmental Impact Report will not have a significant impact on the environment. The environmental analysis for the Chaparral Management Program was specific to lands containing "shrub formations" of all types. The term "Chaparral Management" was used because it was felt that a majority of the public understands that term as meaning "brush lands." Due to the fact that the environmental analysis for the Chaparral Management Program was specific to "lands containing shrub formations," the Vegetation Management Program cannot be utilized on tree-dominated landscapes. In the mid 1990's, CAL FIRE recognizing the need to expand the Vegetation Management Program to other than lands containing "shrub formations" under took development of a Program

Environmental Impact Report (PEIR) to expand the use of Vegetation Management Program. This new PEIR was approved in June 2000. In January of 2002, the newly adopted PEIR was enjoined by the Superior Court of San Francisco County based on a lawsuit by Californians for Alternatives to Toxics and the Environmental Protection Information Center (EPIC). At this time, for vegetation and fuels projects on lands other than those containing "shrub formations" CEQA must be met on an individual project basis.

For additional information on the PEIR see "Environmental Impact Report Handbook for Vegetation Management Program, California Department of Forestry and Fire Protection", Prepared by Jones and Stokes, Sacramento, CA, July 2000.

Fiscal Framework

The state funding support of the Vegetation Management Program recognizes the fact that many of the needed CAL FIRE resources to carry out a vegetation management project are in place and funded for fire suppression activities. Thus, there are minimal added expenses to CAL FIRE to carry out projects. The Fresno-Kings Unit is provided from \$5 - \$30 per acre, in augmented funding, to complete vegetation projects. This funding is intended to cover project expenses over and beyond normal operating expenses. This funding process was established when most VMP projects were large-scale (several hundred to several thousand acre) range improvement projects. Due to the minimal amount of fire control line work needed versus the amount of acres that could be treated in a single prescribed fire project, the augmented funding was

appropriate. In response to the WUI issue and the high assets at risk; CAL Fire's Vegetation Management Program is now focusing more on small scale, intensive treatment projects adjacent to homes. These types of projects require intensive use of personnel and/or mechanical equipment. The result is small areas treated at high expenses compared to large-scale range improvement projects. The \$5 -\$30 per acre augmented funding is insufficient to cover these types of projects. Within the Fresno-Kings Unit, as well as the Madera-Mariposa-Merced Unit, Tulare Unit and the Contract County Kern, the San Joaquin Valley Unified Air Pollution Control District is now charging up to \$5.84 per acre smoke mitigation fee for all non-hazard reduction (PRC 4291) burn projects. This \$5.84 fee offsets much of the augmented funding for vegetation management projects. Additional funding sources are needed to implement WUI vegetation management projects, or individual Units will need to choose to fund projects with operational dollars.

Program Setting

The Fresno-Kings Unit covers a very diverse geographic area. It extends from approximately the 4,000-foot elevation in the Coastal Range on the western side of the Unit then drops to near sea level through the San Joaquin Valley and then climbs again to approximately the 7,300-foot elevation in the Sierra Nevada Range, on the eastern side of the Unit. The vegetation complexes and corresponding fuel types change as one travels across this diverse topography.

Within the Unit, all Fire Behavior Fuel Models can be found. The grass models can be found on the valley floor and the eastern and western foothills. The brush models can be found at the mid to upper elevations on the western side of the Unit and between the oak woodlands and conifer forests on the eastern side of the Unit. The timber models can be found at the highest elevations in the Coastal Range and in the upper elevations on the eastern side of the Unit. The slash models can be found primarily in the northeastern portion of the Unit. This is where the majority of the commercial timber harvesting occurs within the CAL FIRE DPA. However, limited harvesting does occur within the Coastal Range and the southeastern portions of the Unit.

As well as topography and fuels, land ownership patterns vary greatly across the Unit. Within the Coastal Range portion of the Unit, ownerships are primarily large single owners. These ownerships range from several hundred acres to many thousands of acres. The owners are generally long-term owners who are very knowledgeable of their lands and alternatives for land management. A large percentage of the CAL FIRE DPA in this area consists of public lands managed by BLM. As you descend out of the Coastal Range and onto the valley floor the ownership pattern changes to a mixture of smaller rural residential ownerships (less than an acre to several hundred acres) and agricultural production lands. Within the eastern portion of the Unit, as you leave the valley floor there is a mixture of smaller dispersed rural residential ownerships (two (2) to five (5) acre parcels), several hundred to several thousand acre rangeland ownerships and now new subdivisions with lot sizes under two (2) acres. At the mid elevations, on the eastern side, there is a mixture of dispersed rural residential

ownerships and mid sized parcels up to approximately several hundred acres. At the upper portions of the DPA, there is a mixture of small residential parcels (less than an acre); mid sized parcels up to approximately several hundred acres and the largest parcels are industrial timberlands up to several thousand acres. The following communities are all located within the DPA in the eastern portion of the Unit: Friant, Prather, Auberry, Tollhouse, Meadow Lakes, Shaver Lake, Piedra, Squaw Valley, Dunlap, Miramonte, and Pinehurst. These communities all have high population concentrations and very small parcel sizes.

Within the DPA in the eastern portion of the Unit are public lands managed by the California Department of Parks and Recreation, USDA Forest Service (Sierra and Sequoia National Forests) and the BLM.

Program History in the Unit

The combination of diverse topography, fuels, and ownerships results in a diverse Vegetation Management Program for the Fresno-Kings Unit. Within the Unit, most VMP projects have focused on the western portion of the Unit. These projects were a mixture of range improvement and fuels reduction. The eastern portion of the Unit historically has had limited VMP projects. Many that did occur were cooperative with the National Forests. Cressmans Road and Beale Fire Control road fuelbreaks are examples of two recently completed fuels reduction projects in the eastern portion of the Fresno Kings Unit. Both of these projects have had the benefit of being done in collaboration with the Sierra National Forest and the Highway 168 Fire Safe Council. For a complete list of fuels reduction projects either planned, in progress or completed see appendix A

Future Program Direction

With the continuing development of the Unit's Pre-Fire Management Plan, the Unit's Vegetation Management Program and fire suppression repair priorities will be evolving also. Vegetation Management Projects will be responsive to the integrated planning approach of Prefire, Prevention, and Vegetation Management. Projects will be developed and implemented to coordinate with Pre-fire objectives. Fire suppression repair priorities will be based not only on best management practices (BMPs) for resource protections, but on tactical suppression needs in coordination with the Unit's strategic fuels reduction plan. It is anticipated new projects will focus on wildland urban interface (WUI) areas. This will result in an increase in projects within the eastern portion of the Unit. However, as CAL FIRE vegetation management projects occur on private property unexpected interest in the program by landowners may alter immediate priorities.

SECTION V: PRE FIRE MANAGEMENT TACTICS

A: DIVISION / BATTALION / PROGRAM PLANS

Battalion 11 – Millerton Battalion

Overview:

The Millerton Battalion is located on the north end of the Fresno-Kings Unit and includes the communities of Friant, Prather, and Auberry. CAL FIRE wildland fire protection resources are located at the Millerton and Hurley fire stations. CAL FIRE protects 98,020 acres of State Responsibility Area (SRA) within the Battalion. The Fresno County Fire Protection District, via a Schedule A contract with CAL FIRE, protects approximately 1,629 acres of Local Responsibility Area (LRA). Approximately 81,790 acres of SRA are concurrently within the Fresno County Fire Protection District. Approximately 19,314 acres of SRA are concurrently within the County of Fresno Community Service Area (CSA) #51, also known as the Auberry Volunteer Fire Department. Additionally, the Battalion protects approximately 5,070 acres of Sierra National Forest lands under CAL FIRE Direct Protection Responsibility (DPA).

The Battalion is moderately populated with structures on ranch/farm lands and suburban type subdivisions. The communities of Friant, Prather, and Auberry contain some light commercial and retail occupancies. The Fire Hazard Severity Zone classifications in the Battalion are “Moderate” and “High. Most fires in the area travel quickly due to the light fuels and pose an immediate threat to structures. The Millerton Lake recreational area attracts large numbers of people during the summer months and poses a high risk for ignitions. The San Joaquin River below the Friant Dam is in the LRA and receives heavy recreational use during the summer months. Fires originating in the river bottom often pose an immediate threat to the SRA. CAL FIRE and Fresno County Fire Protection District also respond to several swift-water rescue incidents at the river each year.

FUELS:

The wildland fuels are predominately fuel model 1 (annual grasses) and fuel model 2 (annual grasses / oak / grey pine). A brush component is introduced along the northern slope aspects of the San Joaquin River Drainage and at the upper elevations of the Battalion. The upper elevations contain fuel model 4 (mature brush), fuel model 6 (intermediate brush) and fuel model 2 (grass / oak / pine). The north and east slope aspects contain a significant dead fuel load.

TOPOGRAPHY:

The Battalion is situated on the eastern foothill edge of the San Joaquin Valley. Elevations range from approximately 300 feet to 2,800 feet. The predominate

terrain within the Battalion is gently sloped foothills. The San Joaquin River Drainage is a significant topographic feature and presents fire suppression challenges due to steep slopes, difficult access, and spot fire potential across the river onto the Madera-Mariposa-Merced Unit. Unique to the area are the basalt lava table topped mountains. The vernal pools on the table tops contain sensitive plant and animal species, requiring modified fire suppression tactics when possible. Most of the table top mountains are owned by the Sierra Foothill Nature Conservancy.

WEATHER:

Situated near the San Joaquin Valley Floor, the area experiences much of the same hot and dry weather as the valley. Daytime temperatures over 100 degrees with minimal cooling at night are common during the months of July and August. The area occasionally experiences severe fire weather as frontal systems approach or thunderstorms develop. Critical winds do not occur frequently. The last significant fire activity caused by lightning was in 2006. Average annual precipitation is approximately 14 inches.

FIRE HISTORY:

The recent major wildland fires are the Powerhouse Fire in 1989 and the Valerie Meadows Fire in 1979. The Battalion typically experiences a few extended attack fires in the 30 – 300 acre range each year. Most of the lands at the upper elevations have experienced fire within the past 50 years. Fires at the lower elevations generally do not offer fuel reduction benefits in following year(s) due to re-growth of annual grasses.

PRIORITY AREAS

San Joaquin River Drainage

The San Joaquin River serves as the boundary line between Fresno and Madera counties. The San Joaquin River Trail is frequently used by hikers and mountain bikers year around. Access to the river and river trail is limited and there are few natural barriers in the river drainage to use for fire perimeter control. Cell phone service is limited, delaying report of fires and other emergencies. The terrain is steep and fuels are heavy on the northern slope aspect (Fresno County side). The mouth of the drainage is in alignment with the prevailing wind. The drainage is winding and narrow in places. Strong up canyon winds create potential for a fire to spread to both sides of the river and move up-canyon quickly, threatening the communities of Prather, Auberry, Meadow Lakes, and Shaver Lake. Of particular concern along the drainage is the Powerhouse Road area, which has experienced several fires in the past 25 years. A skilled nursing facility (Wish-i-ah Care Center), housing 100 patients, is a significant target hazard in this area. The community of Auberry was partially burned over during the Powerhouse Fire in 1989 which started in the San Joaquin River Drainage.

Morgan Canyon

Morgan Canyon is south of the community of Prather. State Highway 168 travels through the canyon. The area is moderately populated with structures on 5 – 20 acre parcels. Many houses and roads in the area were constructed before the SRA firesafe regulations became effective. Steep slopes, a brush fuel component, and inadequate private road systems pose significant challenges for fire perimeter control, structure defense, and civilian evacuation. Vehicle fires are frequent along Highway 168 which can rapidly spread to the wildland. Structure defense is an immediate priority due to the population density.

PROJECTS

1. Comstock Fuelbreak

CAL FIRE is using federal grant funds to construct a fuelbreak, known as the “Comstock Fuelbreak,” in the Auberry area. The fuelbreak will serve to protect Auberry, the Wish-i-ah Care Center, and the Big Sandy Tribal Rancheria from fires originating in the San Joaquin River Drainage near the Powerhouse Road area. The fuelbreak may also protect the communities of Meadow Lakes and Shaver Lake from fires originating in the Auberry area. The 400 feet wide fuelbreak is approximately 150 acres. Fuels will be treated by mechanical and hand methods. The fuelbreak adjoins Sierra National Forest land. The Sierra plans to treat its properties to make the fuelbreak contiguous. The Battalion expects to mechanically treat at least 40% of the project in 2011 by incorporating the project into the annual dozer proficiency training. Additional treatment will continue for 18-24 months.

2. Defensible Space Inspections

CAL FIRE personnel enforce Public Resources Code (PRC) 4291 by conducting defensible space inspections (LE100). Engine crews and inspectors (when funded) conduct inspections for the purpose of educating property owners/tenants about fire safety and enforcing the 100 feet defensible space law. There are an estimated 2,500 structures in the Battalion. The goal for 2011 is to inspect at least 80% of the structures.

The Fresno County Fire Protection District has a weed abatement ordinance which is primarily enforced in the LRA. The Sky Harbor Subdivision, which is in the SRA, has small parcels with less than 30 foot setback. Property owners / tenants are not able to achieve 100 feet defensible space around their houses due to the small parcel size. Since this area is concurrently within the Fire District and there is a high potential for structure loss, the weed abatement ordinance is applied to vacant parcels that are adjacent to structures. The weed abatement ordinance is similarly applied to the Mira Bella, Ventana Hills, Brighton Crest, and any future subdivisions.

3. Sky Harbor Road Pre-Suppression Fire Line

A pre-suppression fire line, approximately two (2) miles in length, is established along Sky Harbor Road to slow the spread of fires originating from the roadside. The fire line is re-constructed annually by fire crews from the Miramonte Conservation Camp.

4. Roadside Fire Prevention Signs

The Battalion maintains two (2) roadside signs year-around to educate the public about fire safety. The signs display seasonal appropriate messages. The goal for 2011 is to add a sign in the community of Auberry and south of the community of Friant.

Current Signs:

- Auberry Road / Foothill Rd
- Willow Avenue / Copper Avenue

5. School Team Teaching

The Battalion actively participates in annual team teaching programs at the following schools:

- Auberry Elementary School
- Big Sandy Tribal Rancheria Headstart Preschool

This is a cooperative effort with the Sierra National Forest and is accomplished during the month of April.

6. High-Visibility Public Interaction

The Millerton Lake State Recreation Area and the County of Fresno Lost Lake Park attract thousands of visitors during the summer months. High-visibility interaction with the public during critical fire weather and occasions of high recreation use prevent unwanted fires. The Battalion's resources engage the public in a positive manner to remind them of the danger of fire.

- July 4 fireworks patrol.
- Red Flag patrols.
- Memorial day weekend visits to recreation areas.
- Weekly visits to the recreation areas.

Collaborators with the Millerton Battalion

- Highway 168 Firesafe Council
- Sierra National Forest
- California State Parks, Millerton Lake Recreational Area
- United States Bureau of Reclamation
- Bureau of Land Management
- Sierra Foothill Conservancy
- Fresno County Sheriff's Office
- Table Mountain Tribal Rancheria
- Big Sandy Tribal Rancheria
- California Highway Patrol
- CAL TRANS
- Pacific Gas and Electric

Battalion 12 – Blasingame Battalion

The Blasingame Battalion of the CAL FIRE Fresno-Kings Unit is located in Central California and makes up part of the Eastern San Joaquin Valley. The Battalion consists of 121,192 acres of state responsibility land under direct CAL FIRE protection. The Battalion is bordered on the east side by the Sierra National Forest.

The elevation of the Battalion ranges from about 400 feet along the western SRA border to the highest point of over 7,300 on the eastern border. Highway 168 runs through the Northern part of the Battalion. This provides a high volume of visitor traffic through the battalion each day to the many recreation areas within the Battalion and Sierra National Forest. Shaver Lake is located in the northern part of the Battalion and provides a high volume of summertime traffic. This reservoir is one of many that supply the San Joaquin River that runs through the Central Valley.

The Battalion has three (3) fire roads which incorporate 15 miles of access that has to be maintained annually. Currently, all roads have been mapped and GIS data gathered for future use in the Unit's fire plan. The Battalion's diverse elevation provides for an array of fuels which relate to the overall potential fire behavior. The primary fuel models at the lower end of the Battalion consist of seasonal grasses which quickly transition into deciduous and evergreen oaks. In the middle of the Battalion, the fuel models transition to California brush models and continue to increase in size and complexity while moving to conifer models, the upper end of the Battalion is timber interspersed with a large number of residential structures. This provides the Battalion with many different fire behavior characteristics to be concerned with and a potential for a large fire growth if weather, fuel and topography come into alignment with an ignition.

The entire Battalion has seen a major increase in population over the past several years. This provides for an increase potential in ignitions along with the added WUI

problems that are associated in the foothill and mountain areas of California. Recent Battalion fire history indicates an average of 18 ignitions per year over the last decade. We have seen several large extended attack fires during the last few years in the Battalion. The last major significant event occurred in the 1989. The common denominators for large wildfires are fuel, slope, weather, and assets at risk. We cannot change slope or weather but we can modify fuels and ensure that the individual homes and communities have a defensible space. All new homes being built are subject to PRC 4290 regulations which assist us in the defense of these newest additions to the watershed.

Priority Areas

- Area 1
 - Bald Mt. Subdivision area contains approximately 350 homes. They are located at the ridge top of a south/west –facing slope. It is up slope of a Fuel Model 4. The ridge top is mainly Fuel Model 4 with 8 and 9 mixed. CAL FIRE response times are a minimum of 15 minutes. There is a high fire history in the area.
- Area 2
 - Linson Lane and Shaver Springs subdivisions have approximately 75 homes between them. They are both located at or near the top of a drainage. Drainage fuels consist mainly of Fuel Model 4 type. CAL FIRE response time to the area is approximately 15 minutes. Fire history has been moderate in the area but has high potential.
- Area 3
 - Sugarloaf/Meadow Lake North fuelbreak extensions. There are about 25 homes within this area but this fuelbreak would reduce fire traveling into another 100 homes within the North Bald Mt. Area. This project is located top of drainage with west facing slope. The fuels consist of Fuel Model 4 with 8 and 9 mixed. CAL FIRE response times are a minimum of 15 minutes. This area has high fire history.
- Area 4
 - The community of Cressman's contains approximately 80 homes. It is located mid-slope on a south facing slope. Peterson Mill Road is located below the community of Cressman's. Wildflower subdivision is located above Cressman's. The fuel in the community itself is mainly Fuel Model 8. Fuels below would fall into Fuel Model 4. CAL FIRE response time is 15 minutes. Fire damage potential is extreme.

Existing Fire Plan Projects

- **The Beal Fire Road**

The Beal Fire Road has been in place for many years. It is a joint venture with CAL FIRE, local homeowners and the Highway 168 Fire Safe Council. The road extends from Tollhouse Road near Burrough Mountain Road across Highway 168 at the 4 Lanes, below Meadow Lakes, to Auberry Road. The purpose of the project is to reduce fuel accumulations and to decrease the potential of a wildfire that would cause damage to natural resources including wildlife habitat in the Beal Fire Road area. The last VMP done on the Beal Fire Road was begun in 1994. It was a three (3) year project. Road grading occurs on a yearly basis on parts of the Beal Fire Road. The project was proven successful when put to the test in 1998. A fire burned from the bottom of the 4 Lanes near the bottom of Backbone Mountain, uphill toward Meadow Lakes. Brushing had been completed at the west end of Beal Fire Road that spring and summer. That action allowed fire equipment to enter on the Beal Fire Road and perform successful structure protection. The forward progression of the fire was stopped just beyond the Fire Road. Future needs for the Beal Fire Road include placement of cement water tanks at strategic points along the Fire Road for fire suppression use, and brushing of all the Fire Road. The project was completed in 2007 and the Highway 168 Fire Safe Council is conducting maintenance with the use of grant funding. Continuing maintenance is underway in the Spring of 2011 by CAL FIRE using a USFS grant.

- **Cressman's Road**

This is a grant project administered by the Unit Forester and the Fire Plan Coordinator. It was begun in 2000. The premise of the program is to reduce fuel loading along the main roads in the Cressman's subdivision. This will enhance emergency exit for civilians and make access easier for emergency equipment responding to the area. It will also help slow the spread of a wildfire approaching from below. This project was completed in 2004. Maintenance was started in 2010 as a continuing project for the Highway 168 Fire Safe Council with work completed in the spring of 2011 by CAL FIRE under a USFS grant.

- **Peterson Mill Road**

This is an additional grant project for the Unit that was ultimately started due to the success of the Cressman Road Project. The demonstration project began in the spring of 2005. This project, which is to reduce fuel loading, is dependent upon "Prop 40" funding, the cooperation of the Fire Safe Council, and that of the stakeholders in the area involved. As with the Cressman project, this project will also aid in the emergency access of civilians and emergency equipment and will help slow the spread of a wildfire. This project was completed by the Highway 168 Fire Safe Council with grant funds in

2008. Additional grant funding should be sought to provide maintenance to this project.

- **Meadow Lake / Meadow Lake North**

The Bald Mountain ridge top is a significant fire hazard area. There is great potential in the area for large dollar losses due to fire activity. Currently, the Beal Fire Road stands as the only defense against large fires rising from the slopes below the Meadow Lakes area. The first phase of line was constructed at the top of the ridge along Tower Lane. The second phase of line is under construction from the North end of Tower Lane to Auberry Rd. and the South end of the Acorn / Sugarloaf fuelbreak. The first phase was completed by the Highway 168 Fire Safe Council using grant funding. The second phase is underway by CAL FIRE using USFS grant funding.

- **Four Lane Pre-Suppression Fire Line**

Construction of a Pre-Suppression Fire Line near the bottom of the 4 Lane on Highway 168 at Backbone Mountain is a cooperative project in conjunction with the U.S. Forest Service. The purpose of the trail is to prevent the spread of fires started from material dislodged from hot brake shoes. The project has been ongoing for a number of years.

Roadside Fire Prevention Signs

- The Battalion has a total of eight (8) Fire Prevention signs. Two (2) are in Blasingame's first in area and six (6) are in Shaver Lake's first in area. Shaver Lake Station has an annual fire prevention sign plan which includes Shaver Lake and Bald Mountain regions. This project is done in cooperation with the U.S. Forest Service. The signs are placed along Highway 168 and Auberry Road. Throughout the Battalion, the signs are changed regularly to indicate seasonal messages. Sign examples include: "Ready, Set, Go", "It's flu season – clean your chimney", "Burn permits required", "Clear brush 100 feet around your house", "No Burning" and fire danger indicators. Ongoing projects include replacing and or repainting existing signs that are in poor repair.

- **Locations of Fire Prevention Signs in Battalion 12**

1. Auberry Road at the Beal Fire Road
N37°04.463'
W119.26.608
2. Bald Mountain Road south of Auberry Road
N37°04.324'
W119°24.594'

3. Auberry Road at Alder Springs (bulletin board)
 N37°03.911'
 W119°24.087'
4. Highway 168 at Vista Point (bulletin board)
 N37°03.541'
 W119°22.042'
5. Ridge Road in Ridge Top Subdivision
 N37°04.563'
 W119°20.449'
6. Highway 168 below Bretz Mill Road
 N37°05.550'
 W119°19.028'
7. Sample Road and Pittman Hill Road
 N36°54.540'
 W119°28.009'
8. Highway 168 ½ mile west of 17043 Highway 168
 N36°55.372'
 W119°30.922'

Potential Fire Plan Opportunities

- **Whispering Springs Rd.**

This would be a project by the Highway 168 Fire safe Council using grant money along the existing roadway; it would reduce fuels along both sides of the road for approximately two (2) miles. It would serve to prevent the spread of wildfires originating along Lodge Rd. West of Whispering Springs Rd. into the Whispering Springs subdivision.

- **Lower Beal Fuelbreak**

This would be a potential joint project involving the USFS, Highway 168 Fire Safe Council, and CAL FIRE. This would be used to reduce fuels on an existing fuelbreak that has not had work done on it in many years, running East of Highway 168 from the end of the Beal Fire Road and intersecting Tollhouse Rd below Linson Lane and is approximately one (1) mile in length. It would serve to prevent the spread of wildfires originating in the Tollhouse area upslope into the Linson Lane subdivision.

Prioritization of existing and potential projects/opportunities

1. Peterson Mill Road Project – Maintenance
2. Beal Fire Road – Maintenance
3. Cressman’s Project – Maintenance
4. Lower Beal Fuelbreak - Future
5. Meadow Lakes Fuelbreak – Maintenance
6. Sugarloaf North – Maintenance
7. 4 Lane Prefire Line(Rat Trailing)– Existing
8. Whispering Springs Rd. - Future

Battalion Objectives

- Develop a plan with the Highway 168 Fire Safe Council and have agreements from property owners in the current and future fuelbreak project areas.
- Working with the Highway 168 Fire Safe Council and USFS on the current and future fuelbreak project plans including identifying funding sources.

Collaborators with the Blasingame Battalion:

- Sierra National Forest
- Fresno County Fire Protection District
- Highway 168 Fire Safe Council
- Bald Mountain Fire Protection District
- Pine Ridge Volunteer Fire Department
- Shaver Lake Volunteer Fire Department
- Huntington Lake Volunteer Fire Department
- Southern California Edison – Resource Management

Battalion 13 – Squaw Valley Battalion

The Squaw Valley Battalion of the CAL FIRE Fresno-Kings Unit is located in Central California and makes up part of the Eastern San Joaquin Valley. The Battalion consists of 151,117 acres of State Responsibility Land under direct CAL FIRE protection. The Battalion is bordered on the east side by both the Sierra and Sequoia National Forest.

The elevation of the Battalion ranges from 400 feet along the western SRA border to the highest point of 5,500 on the eastern border. Highway 180 runs through the middle of the Battalion. Also known as Kings Canyon, it is the gateway to the Sequoia National Park and Kings Canyon National Park. This provides a high volume of visitor traffic through the battalion each day. Pine Flat Reservoir is located in the northern part of the Battalion and provides a moderate to high volume of summertime traffic. This reservoir supplies the Kings River that runs through the Central Valley.

The Battalion has 11 fire roads which incorporate 22 miles of access that has to maintain annually. Currently, all roads have been mapped and GIS data gathered for future use in the Unit's fire plan. The Battalion's diverse elevation provides for an array of fuels which relate to the overall potential fire behavior. The primary fuel models at the lower end of the Battalion consist of seasonal grasses which quickly transition into deciduous and evergreen oaks. At the upper end of the Battalion, the fuel models transition to California brush models and continue to increase in size and complexity while moving to conifer models. This provides the Battalion with many different fire behavior characteristics to be concerned with and a potential for a large fire growth if weather, fuel and topography come into alignment with an ignition.

The entire Battalion has seen an increase in population over the past several years. This provides for an increase potential in ignitions along with the added WUI problems that are associated in the foothill and mountain areas of California. Recent Battalion fire history indicates an average of 20 ignitions per year over the last decade. We have not seen any large or devastating fires during the last several decades in the Battalion. The last significant event occurred in the 1950's. History indicates that it's not of matter of "if" we have a fire, but rather "when" we will have a fire. The common denominators for large wildfires are fuel, slope, weather, and assets at risk. We cannot change slope or weather but we can modify fuels and ensure that the individual homes and communities have a defensible space. All new homes being built are subject to PRC 4290 regulations which assist us in the defense of these newest additions to the watershed.

Squaw Valley Battalion Priorities and Goals:

1 Defensible Space Inspection program

- Approximately 1,400 inspections done in the Battalion each year. This comprises about 70% of the Battalion population. Continue to track inspections utilizing GPS coordinates. This provides for a real time picture of the amount and locations of all structures in the Battalion.

2 Pre-Fire Lines (Rat Trailing)

- Utilize the Miramonte Fire Crews to construct hand lines along high prone ignition road roadways to slow and contain potential fire spread.
 - Highway 180
 - Hills Valley Road
 - Sunnyslope Road
 - Sand Creek Road

3 Pre-Attack Plans and Business Pre-plans

- Development of Battalion Pre-Attack plans is essential for pre-identifying the needed resources of a large and rapidly expanding incident. Additionally, this will allow the Battalion personnel to be proactive in the communities, meet with local business owners, ranchers, and local school district personnel to develop positive public relations and interaction.
- In 2011 – Complete Risk Assessment Analysis for the following Communities:
 - a) Dunlap
 - b) Miramonte
 - c) Squaw Valley/Sand Creek
 - d) Wonder Valley
 - e) Tivy Valley
 - f) Pine Flat

4 Fire Control Road Maintenance and Identification

- To continue to maintain these essential accesses to difficult areas in the Battalion for the ability to assist in fire control operations. Continue to pursue the options of marking the entrance of each road with their identified name.

Collaborators with the Squaw Valley Battalion:

- Sierra National Forest
- Sequoia National Forest
- Kings Canyon National Park
- Sequoia National Park
- Oak to Timberline Fire Safe Council
- Mountain Valley Volunteer Fire Department
- US Army Corps of Engineers
- Orange Cove Fire District
- Hume Lake Volunteer Fire & Rescue Department

Battalion 14 – Coalinga Battalion

The Coalinga Battalion of the CAL FIRE Fresno-Kings Unit is located in Central California and makes up part of the Western San Joaquin Valley. The Battalion consists of 563,076 acres of state responsibility land under direct CAL FIRE protection. The Coalinga Battalion also has 151,967 acres of Bureau of Land Management (BLM) Direct Protection Area (DPA). CAL FIRE provides fire protection for most of the BLM property within the Coalinga Battalion. The total CAL FIRE DPA of the Coalinga Battalion is 715,043 acres. The Battalion is bordered by CAL FIRE Units of San Luis Obispo, San Benito Monterey, Mariposa Madera Merced and Kern County. The Coalinga Battalion is also boarded by Local Government of Kings County, Fresno County Fire Protection District and The City of Coalinga.

The elevation of the Battalion ranges from 400 feet along the western SRA border to the highest point of 5,500 on the eastern border. Interstate 5, runs 80 miles along the western boundary of the Battalion. This provides very high transit traffic. State Highway 198 and Los Gatos Creek Road are east west routes to State Highway 101. These routes have high traffic as well.

The Coalinga Battalion has three (3) fire roads which incorporate 42 miles of access that is maintained annually. Currently, all roads have been mapped and GIS data gathered for future use in the Unit's fire plan. There are a large number of ranch roads which provide access to the Battalion. There are several oil fields which crude oil and natural gas is produced and stored and transported by pipeline. This creates unique issues with fire control. The Battalion's diverse elevation provides for an array of fuels, which relate to the overall potential fire behavior. The primary fuel models at the lower end of the Battalion consist of seasonal grasses, which quickly transition into deciduous and evergreen oaks. At the midslope to higher elevations of the Battalion, the fuel models transition to California brush models. There are areas within the Battalion that contain stands of evergreen and conifer trees. These are located at the highest elevations of the Battalion. There are several areas, which are inaccessible, or control measures will be difficult due to steep topography. This provides the Battalion with many different fire behavior characteristics to be concerned with and a potential for a large fire growth if weather, fuel and topography come into alignment with an ignition.

The Battalion has not seen a significant increase in population over the last decade. Predominantly the Battalion is cattle ranches with large land ownership. The Battalion's wildland urban interface areas are along Hwy 198, Los Gatos Creek Road and some areas of Kings County. About 500 structures are in these areas. There are an unknown number of structures located within the ranches located within the Battalion. Recent Battalion fire history indicates an average of 10 ignitions per year over the last decade. Most fires will reach 100 acres or more due to the significant response time of initial attack resources to the Battalion. The Battalion has a significant large fire every five (5) years on average.

Existing Fire Plan Projects

1. Fire Control Roads - Tar Canyon, Juniper Ridge, Mud Run

- a. Although these roads are located in entirely different locals, they are both important to the philosophy of keeping costs to a minimum. For a minimum investment in the late spring, we can provide ourselves with not only an access to some very inaccessible country but also create a secondary defense to stop a wildland fire. The maintenance of these fire roads is imperative to the mission of controlling fires at the earliest possible moment.
- b. Juniper Ridge Fire Road is located west of the City Coalinga running from Highway 198 north to Los Gatos Road. Its most apparent use would be for controlling a fire that originates in the oil fields or the foothills west of Coalinga.
- c. The Tar Canyon Fire Road is in Kings County, beginning just south of Avenal on Highway 33 going west through the hills towards Pacheco Rock. It provides access to some very rough country in and around the Black Hole Quadrant.
- d. Mud Run is a North /South fire control road that starts at the Los Gatos Canyon Road. It continues through several private ranches and ties into Warthan Canyon Rd. The significance of this control road is to provide access into an area that would otherwise be inaccessible to firefighting equipment. It also provides a control point prior to a wildfire moving into an area of WUI.

2. Power Line Ignitions within Oil Fields

- a. Over the years the oil fields in and around Battalion 14 have provided numerous vegetation fires, most were caused due to power lines. Although the numbers have decreased significantly in the past years this is an on going project, keeping the oil companies which control these power lines, aware of their responsibility and liability. Contact by the Battalion Chief as well as the engine companies in the summer on a regular basis assists in the relationship with those companies so that proper maintenance will keep those ignitions to as few as possible.

3. Roadside Fire Prevention Signs

- a. The roadside fire prevention signs are located throughout the battalion on the main arteries. These signs provide the public with information that will make them a friendlier user of the wildlands, both private and public. In 2010, new signs were updated to provide the public with the most current fire prevention information.

Existing Locations:

Sign #1 36° 05.800' N 120° 31.521' W
Sign #2 36° 11.674' N 120° 24.901' W
Sign #3 36° 13.783' N 120° 34.280' W
Sign #4 36° 17.344' N 120° 16.751' W

Proposed Locations:

Sign #5 36° 05.689' N 120° 27.456' W
Sign #6 36° 17.605' N 120° 40.885' W

4. Westland Water District

- a. The Westland Water District has a water distribution system throughout many areas of Battalion 14. This system provides a 24 to 36 inch water line that has various connections, many of which are fire department compatible. These locations have been identified and are being produced in various formats by the Unit's GIS staff.

5. Fire Prevention Displays: Horn Toad Derby and Coalinga Fest

- a. Each year the City of Coalinga has two (2) major events, the Horned Toad Derby, and Coalinga Fest. Both of these are considerable in size and attended by a great majority of the local residents, as well as visitors to the area. The parade provides a venue to display Smokey and entice the public to a Fire Prevention booth where we can reach out to the youth of the area and to put forth any fire prevention message that is pertinent at the time.

Priority Areas

1. PRC 4291

- a. Over the last two (2) years rainfall has been above average for the given time period (7.00 inches), vegetation growth is above normal length of 16" to 18." Also with the above average rainfall, the 1-hour fuel continuity is much denser than in years past. In conjunction with the Unit's Fire Prevention Staff, an aggressive program will be implemented in the State Responsibility Areas.

2. Priority Area # 1 - Los Gatos Canyon

- a. Los Gatos Canyon is a sparsely inhabited area of the Los Gatos Creek drainage on Los Gatos Road west of Derrick Avenue to the County line. It is populated mostly by long time residents of the area which have a better than average knowledge of fire safe regulations and practices. It is this knowledge, which makes them unique in that they are very low maintenance in regards to fire prevention, allowing battalion crews to concentrate on the newer residents to the area. The fuel models consist of mostly 1 and 4 with the biggest challenge in the off road areas, being access. Although fire history does not support a tremendous problem there has been some activity usually related to ranch activities or lightning.

3. Priority Area #2 - Warthan Canyon

- a. This area lies up the Warthan Creek drainage along Highway 198, south the City of Coalinga to the County line and south on Parkfield Road to the County line. Its characteristics are not so different from those of the Los Gatos Canyon area with its problems and solutions being very much the same. Fuel Models are 1 and 4 and fire history has been very limited with most causes being equipment oriented mostly off the highway.

4. Priority Area # 3 - Kings County SRA

- a. The Kings County SRA lies along the Highway 33 corridor to the west from Coalinga to the Kern County line. Since the closing of the Cottonwood FFS, the response times have become considerable with the first in initial attack equipment now coming from CAL FIRE/SLU, Kern County Fire, or the Kings County Fire Department. The primary fuel model is 1 and 4. The extended response times can make this an interesting problem regarding suppression if IA does not have a positive effect in regards to suppression. Fire causes are generally a result of coming off the Highway 33. Support and interface with the cooperative agencies tends to keep a handle on this area's problems. Additionally there are two 230 KV electrical transmission lines. The Diablo-Gates and the Templeton-Gates are located in the south, in and around the junction of the Kings, Fresno, and Monterey County lines.

5. Priority Area # 4 - Oil fields

- a. The Oil fields lay in both the SRA and the LRA and although crisscrossed with roads are a definite threat to the wildland to the west should a fire

escape from this area. Its fuel model is a 1 and the primary cause for fires in this area has been power line related. These are not the normal utility lines in that they are owned privately by the oil companies and are maintained by them. We have an on going process of keeping the oil companies educated regarding their responsibilities about maintenance and the liability, if their lines are responsible for causing a fire. Through this process, along with our enforcement and cost collection procedures, has reduced the numbers of fires.

Potential Fire Plan Opportunities

1. Vegetation Management Program Burns

- a. Due to environmental concerns and rising costs of associated with Vegetation Management Burn it has become difficult to conduct these burns. There are several ranchers in the Coalinga area that would like to conduct VMP burns. Given the fiscal climate of the economy, it is difficult for them to pay their cost share with such a project. Creating a Fire safe Council with the ranchers support may provide some opportunities for fuels reduction.

2. New Water Sources

- a. The development of new commercial and agricultural businesses in and around the Battalion has resulted in draft water sources that may or may not be properly identified. The location of these and their GPS location will be obtained.

3. Fire Road Location

- a. The Tar Canyon, Juniper Ridge, and Warthan Fire Roads are on our standard Unit maps, the GPS location track has been sent to the Unit's GIS staff. Additional roads are being GPS tracked to provide data for a Battalion 14 road layer.

4. Battalion House Numbering System

- a. Personnel of Battalion 14 will make a conscience effort to evaluate the quality of the house numbering of existing residents and monitor for new construction so that new people to the area can be made aware of our standards, thus maintaining the integrity of the house numbering of the battalion.

5. Pre Suppression Map

- a. Personnel assigned to Battalion 14 are currently working with Unit's GIS staff to create a Pre Suppression Map for the Los Gatos and Warthan

Canyon areas. Components of this map will be structure locations, access roads, water sources, staging areas, and any other information that would be useful for outside resources.

Prioritization of existing and potential projects/opportunities

<u>Battalion Priority</u>	<u>Status</u>
Fire Control Roads	Existing
New Water Sources	Existing
Fire Road Locations	Ongoing
Pre Suppression Map	Ongoing
ID Water Sources in Westland Water District	Completed
Power Line Ignitions within Oil Fields	Existing
Horned Toad Derby / Coalinga Fest	Existing
Battalion House Numbering System	Existing
Roadside Fire Prevention Signs	Existing

Objectives:

- Objective #1 Meet with Cooperative Agencies by May 2011
- Objective #2 Meet with Oil Companies by May 2011
- Objective#3 Complete Fire Road Maintenance by June, 2011
- Objective #4 Horned Toad Derby, May 2011
- Objective #5 Coalinga Fest, September 2011
- Objective #6 Locate and map Draft Water Sources by January 2012
- Objective #7 Update roadside Fire Prevention Signs by June 2011
- Objective #8 Create Pre Suppression Maps by January 2012
- Objective #9 Research the feasibility of a Fire Safe Council

Collaborators with the Coalinga Battalion:

- Bureau of Land Management Hollister.
- Fresno County Fire Protection District
- City of Coalinga
- County of Kings Fire Department

Battalion 15 (Fresno County Fire Protection District)

Description

Battalion 15 is located in the central and western area of the Fresno County Fire Protection District (FCFPD) in the Fresno Kings Unit. The Battalion consists of 730,970 acres of Local Responsibility Area (LRA) making up part of the Central San Joaquin Valley. The Battalion is bordered by Merced County Fire to the North, North Central Fire and FCFPD, Battalion 18 to the East, Kings County Fire Department to the South, and FCFPD, Battalion 14 which includes 563,076 acres of SRA to the West. The San Joaquin River acts partially as the north edge boarder, and the Kings River acts as partial boarder on the south edge of Battalion 15.

The elevation with-in the Battalion ranges from 150 in the valley and 600 ft along Interstate 5. Interstate 5, State Highways 180, 33, 41, 145, and 269 all run through Battalion 15. Due to the number of highways, Battalion 15 experiences high volumes of daily traffic.

The Central San Joaquin Valley is primarily used as agricultural land for crops, orchards and milk dairies. This contributes to the high volume of commercial and agricultural vehicle traffic on highways and local roadways. The communities of Laton, Riverdale, San Joaquin, Mendota and Firebaugh are encompassed in Battalion 15. FCFPD provides fire protection for the City of San Joaquin and Mendota.

The Mendota Wildlife refuge consisting of 14,000 acres and a portion of the California Aqueduct is also encompassed in Battalion 15.

Primary fuels for Battalion 15 are Fuel Model 1, annual grasses. This fuel is present along roadways, canals, fallow fields, with-in the housing areas and cities in Battalion 15. The fuel models along the rivers edge are Fuel Model 2, 5. Fuel Models in the Wildlife Refuge are 1, 3 and 5.

The entire Battalion has seen a drop in ignition in the last few years due to drought, lack of and sparse fuels. The drought has also slowed production of crops and left many agricultural fields fallow. Due to rainfall totals for the San Joaquin Valley in winter 2010/11, many fields that were fallow are now crops, and an abundance of annual grasses are present. This will increase commercial and agricultural roadway traffic. It is anticipated that wildland ignitions will increase as additional traffic occurs and agricultural harvests take place.

Priority Areas:

Priority Area # 1 – City of Mendota

The City of Mendota unemployment remains high per capita in the state of California. Due to the unemployment rate, an increase of foot traffic throughout the City occurs both day and night on city streets and on foot trails throughout the City. This has resulted in regular nuisance fires caused by arson or playing with fire. With the establishment of Mendota PD in August of 2009, fires with-in the City has significantly dropped. Nuisance fires still occur with-in the City; both the CAL FIRE/Fresno County Fire Protection District and The Mendota PD remain diligent on Fire Prevention through public education.

Existing Fire Plan Projects:

City of Mendota:

- Battalion 15 remains in contact with the Unit's Prevention Bureau. Work with allied agencies for intelligence and promote fire prevention education within the City.

Recruit and Retention:

- Continue to recruit PCF's and Reserves through public recruitment. Train all firefighters and provide incentives that will promote retention.

Battalion Pre-plans

- Continue to update existing and prepare new pre-plans as new business' are opened.

Battalion Weed Abatement within LRA

- Continue inspections to meet the intent of the weed abatement program. Work with the Unit's Prevention Bureau with enforcement of the program.

Panoche Hills and Tumey Hills

- Continue working relationship with BLM representatives. Work with BLM representatives in promoting Fire Prevention Awareness in the Panoche Hills and Tumey Hills BLM areas.

Public Education

- Continue efforts with communities, community leaders and local schools on fire prevention education.

Potential Fire Plan Opportunities:

Vegetation Management Burn

Mendota Wildlife Area (Alkali Sink)

- Assist the California Department of Fish and Game with their efforts for enhancement of wildlife and endangered plants in the Alkali Sink Reserve through noxious non-native vegetation removal.

Prioritization of existing and potential projects/opportunities:

Battalion Priority	Project Name
1.	City of Mendota
2.	Battalion Preplans
3.	Battalion Weed Abatement
4.	Panoche, Tumey Hills BLM
5.	Public Education
6.	Recruitment and Retention
7.	DF&G Alkali Sink

Objectives:

Objective #1 – Continue efforts with local agencies for intelligence gathering. Work with the Unit’s Fire Prevention Bureau to reduce the number of arson fires within the City of Mendota. Promote fire prevention education within the City through public education. Continue weed abatement efforts within City.

- As arson fires have dropped in recent months, these efforts are on going.

Objective #2 – Engine companies to continue updating existing preplans. Continue preplanning new commercial construction. Continue research efforts for Unit wide preplan program that will be available on all Mobile Data Computers (MDC) within the Unit.

- Preplans are ongoing

Objective #3 – Continue weed abatement within the Battalion to meet the intent of the program. Maintain contact with Program coordinator and provide updates as necessary.

- Annual event – Start date April 1, 2011
- Projected completion date – July 1, 2011

Objective #4 – Continue annual meetings with BLM representatives. Exchange information regarding fire suppression efforts and public education within the Panoche Hills and Tumey Hills BLM areas.

- This is an on going annual event.

Objective #5 – Continue involvement with local schools in fire prevention education. Work with community leaders to promote fire prevention education within their Cities through established monthly mailers.

- This is an on going effort and continues annually.

Objective #6 – Continue to recruit PCF's and Reserve's for both the Battalion and Western Division. Provide professional training all firefighters for safety, incentive and motivation.

- Recruitment and training to all personnel is an on going effort.

Objective #7 – The DF&G Alkali Sink Burn was unsuccessful in Fall of 2010 due to unfavorable air quality. We will continue our efforts with DF&G and the San Joaquin Air Pollution Control District through communication and coordination.

- Estimate project completion, Fall 2011.

Collaborators with Battalion 15:

Laton Community Services District
Riverdale Community Services District
City of Firebaugh Fire Department
California Department of Fish and Game

Battalion 17 (Fresno County Fire Protection District)

Battalion 17 is integrating the fire plan into the Battalion Fire Management Plan. By identifying problems and target areas, we will strategically implement the plan into our battalion goals.

Description:

The Metropolitan Area of the Fresno County Fire Protection District is identified as Battalion 17 of the CAL FIRE Fresno-Kings Unit (FKU). It is located in Central California and makes up part of the Central/Eastern San Joaquin Valley. The Battalion consists of 113,810 acres of Local Responsibility Area (LRA) land that is under contractual agreement with CAL FIRE to provide personnel services and management on behalf of the Fresno County Fire Protection District. The Battalion is bordered on the North and East sides by State Responsibility Area (SRA) under direct protection of CAL FIRE.

The elevation of the Battalion ranges from 250 to 400 feet along the western SRA border. State Highways: 41, 99, 168, and 180 run through the Battalion. This highway infrastructure contributes to a high volume of commuter and visitor traffic through the battalion each day.

The primary fuel models within the battalion consist of seasonal grasses adjacent to roadways, within suburban living areas, and transitioning to rural agricultural areas.

The entire Battalion has seen an increase in population over the past several years and as a result has the highest population density of all of the Battalions within the Fresno-Kings Unit. The population density coupled with the high traffic transportation corridors provides for an increases potential for wildland fire ignitions.

Priority Area

Station 85/86 Response Areas

Due to increased urban development within an agricultural/wildland sphere of influence, structure fires have become more frequent within these areas. These types of incidents require a large number of resources, extensive water supply, and extended commitment times.

Existing Fire Plan Projects:

1. Identify Draft Hydrants in Station 85/86 Response Areas:

The onset of new subdivisions in the outlying areas of the county has brought a need for water sources. Draft hydrants are being utilized in certain areas to provide the necessary water for these high value homes. Draft hydrant operations are very specific and require a great deal of familiarity for effective fire ground success. The potential for personnel or cooperating agencies to respond to incidents within these areas without being familiar with these types of hydrants is great. Clearly identifying these hydrants with visible markings, knowing their locations, and having the operational experience to execute their use would improve fire ground operations and lessen the fire loss to homeowners.

This project would cover the following areas:

- Work with Protection and Planning in developing a standard for draft hydrants throughout the Unit.
- GPS the location of all the hydrants within our Battalion and map them
- Mark all draft hydrants to department standard.
- Map and indicate water tank size and pump capacities that are attached to a draft hydrant.
- Establish a service record for these draft hydrants.

Have the Training Bureau establish a quarterly drill for draft hydrant operations.

2. Preplans

Update existing preplans and preplan any new businesses in the Battalion. This contact allows the station personnel to be proactive, meet business owners, school district personnel in their area and create positive public relations. There are numerous industrial complexes in the battalion which can be identified and updating contact numbers or special circumstances pertaining to that business or school

3. School Program Plan

Be more involved with the schools in our response areas. We do participate in some activities, but more intervention would go a long way in developing a strong relationship with the communities. Programs such as Career Days, Fire Safety, Fire Prevention Day or Station Tours are some ways we can interact with the children.

Potential Projects:

Addresses

A common problem found throughout our county is the lack of addresses posted or they are posted but unreadable. This not only increases response times but creates a safety problem as we are trying to search for addresses in the dark or fog. Some possible solutions would be to:

1. Send out fliers explaining the importance of posting legible addresses.
2. Enlisting the help from schools, either as a school project or after school activity.
3. Using the PCF Companies to fund raise for their companies. If the Unit and County can adopt a standard for posting addresses, such as having a sign with their numbers, maybe the PCF Companies can make these to sell. This one is open for discussion.

Prioritization of existing and potential projects/opportunities.

<u>Battalion Priority</u>	<u>Project</u>
1.	Draft Hydrants
2.	PrePlans
3	Addresses
4	Schools

OBJECTIVES:

Objective # 1 - Identify and map all draft hydrants in the Battalion.

Objective # 2 - Complete these preplans in order as identified by importance:

- Schools(concurrent with inspections)
- Care or Foster facilities (rest homes)
- Any Industrial complexes creating mass evacuations i.e; cold storage, bulk hazardous material storage etc.
- Industrial businesses with large work forces.

Objective # 3- Create an informational flier, public spots, and newspaper advertisements stressing the importance of posting addresses.

- This project is still in the planning stages, due to lack of funds.

Objective # 4 - Contact schools and Fire Prevention to coordinate programs.

- This will be in conjunction with the annual school programs. All stations are involved with school programs and local area prevention programs.

Collaborators with Battalion 17:

- Clovis Fire Department
- Fresno Fire Department
- California Air National Guard Fire Department

Battalion 18 (Fresno County Fire Protection District)

Battalion 18 is integrating the fire plan into the Battalion Fire Management Plan. By identifying problems and target areas, we will strategically implement the plan into our battalion goals

Battalion 18 Description

Battalion 18 is a suburban to rural area of Fresno County in the San Joaquin Valley of California . The Battalion consists of 186,950 acres of Local Responsibility Area (LRA) land. The Battalion contains many of the medium to smaller communities in Fresno County such as Sanger, Del Rey, Fowler, Selma, Kingsburg, Reedley and Orange Cove.

The elevation of the Battalion ranges from 260 feet along the Kings River to 1,752 feet on Campbell Mountain on the East side of the Battalion. State Highways 43, 99 and 180 run through the Battalion. This highway infrastructure contributes to a high volume of vehicular traffic through the Battalion every day. The Kings River also runs through the battalion and contributes to a large volume of recreational traffic and related water rescue incidents.

The primary fuel models within the battalion consist of seasonal grasses to oak woodland along the Kings River. The majority of the land in the Battalion is in agricultural production.

Mission Statement

The mission of Battalion 18 is to provide the highest level of customer service while reducing the costs and losses from fire through education of the public, active involvement in school programs and communities and maintaining a positive and professional relationship with allied agencies.

Priority Area

Kings River

The section of Kings River between Adams Avenue and Dinuba Avenue contain a high fuel loading both on the riverbanks and islands. Due to increased usage of the river water ways and urban interface, fires and rescues have become more frequent. These types of incidents require a large number of resources and extended commitment times. Firebrands from resultant fires have a potential for ignition of roof fires in the City of Reedley and adjacent urban residences

Existing Fire Plan Projects:

Preplans

Update existing preplans and preplan any new businesses in the battalion. This contact allows the station personnel to be proactive, meet business owners, school district personnel in their area and create positive public relations. There are numerous industrial complexes in the battalion which can be identified and updating contact numbers or special circumstances pertaining to that business or school.

School Program Plan

Be more involved with the schools in our response areas. We do participate in some activities, but more intervention would go a long way in developing a strong relationship with the communities. Programs such as Career Days, Fire Safety, Fire Prevention Day or Station Tours are some ways we can interact with the children.

Potential Project

Kings River Plan Update

The existing Kings River Plan was created in 1995. The Kings River Plan identifies access points to the Kings River for first responders during all types of emergency incidents. The access points are identified on photocopies of topographical maps. The maps cover the Kings River from the Fresno-Tulare County line to Trimmer Springs Rd. The Plan needs to be updated utilizing GIS to include addresses and parcel numbers printed on aerial images and topographical maps. The mapping should also extend above Pine Flat Reservoir to Kirch Flat. A component of the Kings River Plan update could include identifying areas for fuel reduction projects to help reduce fire behavior and improve access to the River for water rescues.

Prioritization of Projects

<u>Battalion Priority</u>	<u>Project</u>
1.	PrePlans
2.	School Programs
3.	Kings River Plan Update

Objectives:

Objective # 1 – Continue to complete these preplans in order as identified by importance:

1. Schools(concurrent with inspections)
2. Care or Foster facilities (rest homes)
3. Any Industrial complexes creating mass evacuations i.e; cold storage, bulk hazardous material storage etc.
4. Industrial businesses with large work forces.

Objective # 2 – Continue to contact schools and the Fire District Public Information Officer to coordinate programs. This will be in conjunction with the annual school programs.

Objective # 3 - Update the Kings River Plan. Coordinate with Reedley City Fire Department and the Fresno County Sheriff's Office to update and distribute the plan.

Collaborators with Battalion 18:

- City of Selma Fire Department
- City of Sanger Fire Department
- City of Reedley Volunteer Fire Department
- Orange Cove Volunteer Fire District
- Fresno County Sheriff's Office

Training Bureau

The Fresno Kings Training Bureau is responsible for identifying and delivering the Unit's training needs. This training includes CAL FIRE training mandates, Federal and State OSHA mandates, and fire service related training. The training is delivered in the form of multi company drills, scheduled courses including local operational area wildland spring exercise, Firefighter 1 returnee academies, HFEO proficiency training, Joint Apprenticeship Committee (JAC) training and testing and Incident Command System(ICS) qualification courses. The Training Bureau will seek opportunities to train individuals in the various ICS disciplines when appropriate on pre-fire projects.

APPENDIX A: HIGH PRIORITY PRE FIRE PROJECTS

Batt	Project Number	Project Name	Status	Estimated Completion Year	Project Type	Net Acres/Miles
11		Comstock	A	2013	Fuelbreak	160 Acres
12		Meadow Lakes North Fuelbreak	A	2011	Fuelbreak	50 Acres
12		Cressmans Fuelbreak	O	2011	Fuelbreak	165 Acres
12		Beal	O	2011	Fuelbreak Fire Road	382 Acres
12		Black Mountain	A	2011	Fire Road	3 Miles
12		Petterson	M	2005	Fuelbreak	185 Acres
13		Baker	O	Annually	Fire Road	2.Miles
13		Greeley	O	Annually	Fire Road	7 Miles
13		White Deer	O	Annually	Fire Road	15 Miles
13		Fish Creek	O	Annually	Fire Road	7 Miles
13		Hog Mountain	O	Annually	Fire Road	8 Miles
13		Elwood-Kincade	O	Annually	Fire Road	5 Miles
13		Badger-Miramonte	O	Annually	Fire Road	6 Miles
13		Miramonte Access	O	Annually	Fire Road	2 Miles
14		Tar Canyon	O	Annually	Fire Road	16 Miles
14		Juniper Ridge	O	Annually	Fire Road	20 Miles
14		Mud Run	O	Annually	Fire Road	7 Miles
11		Sky Harbor Road	A	Annually	Prefire Lines	3 Miles
11&12		Highway 168	A	Annually	Prefire Lines	.25 Miles
13		Highway 180	A	Annually	Prefire Lines	5 Miles
13		Sandcreek	A	Annually	Prefire Lines	2 Miles
13		Hills Valley	A	Annually	Prefire Lines	2.5 Miles

Status Guide: A = Active, P = Planning, C = Completed, O = Ongoing, M = Maintenance.

APPENDIX C: PRIORITY GOALS AND OBJECTIVES FOR 2010-2012

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) 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 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:

- c) 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:

- d) 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.*

D. ADDITIONAL UNIT SPECIFIC GOALS AND OBJECTIVES

In the ever-changing world of limited availability of funds for public agencies, creative ways to accomplish fuel reduction projects near WUI areas will need to be prioritized by sound management approaches to accomplish the greatest benefit. In addition to the Key Objectives from the California Strategic Fire Plan, the Unit will focus on completing existing Fuel Reduction Projects on Black Mountain Fire Control Road and the Meadow Lakes North Shaded Fuelbreak. The Comstock Fuelbreak mechanical removal portion will be completed this year and will work towards completing the hand removal over the next few years. The Unit will focus on the use all available recourses to complete Hazard Reduction Inspections to reduce the threat of fire within the WUI areas of the Unit.

APPENDICES D

Unit Pre Fire Projects:

Fuelbreaks:

- Comstock
- Meadow Lakes North
- Cressmans
- Beal
- Petterson

Fire Roads:

- Baker
- Black Mountain
- Greeley
- White Deer
- Fish Creek
- Hog Mountain
- Elwood-Kincade
- Badger-Miramonte
- Miramonte Access
- Tar Canyon
- Juniper Ridge
- Mud Run

Pre-Suppression Lines(Rat Trails)

- Sky Harbor Road
- Highway 168
- Highway 180
- Sandcreek
- Hills Valley

Public Education:

- Early Detection Program
- Fresno County Fair Display
- Fresno Home and Garden Show
- Central Valley Great Outdoors Exposition
- Health and Safety Fairs
- Earth Day Events
- Fire prevention education with local schools
- Fire Safety Team Teaching with the USFS

EXHIBITS: MAPS

Figure A: Unit Map

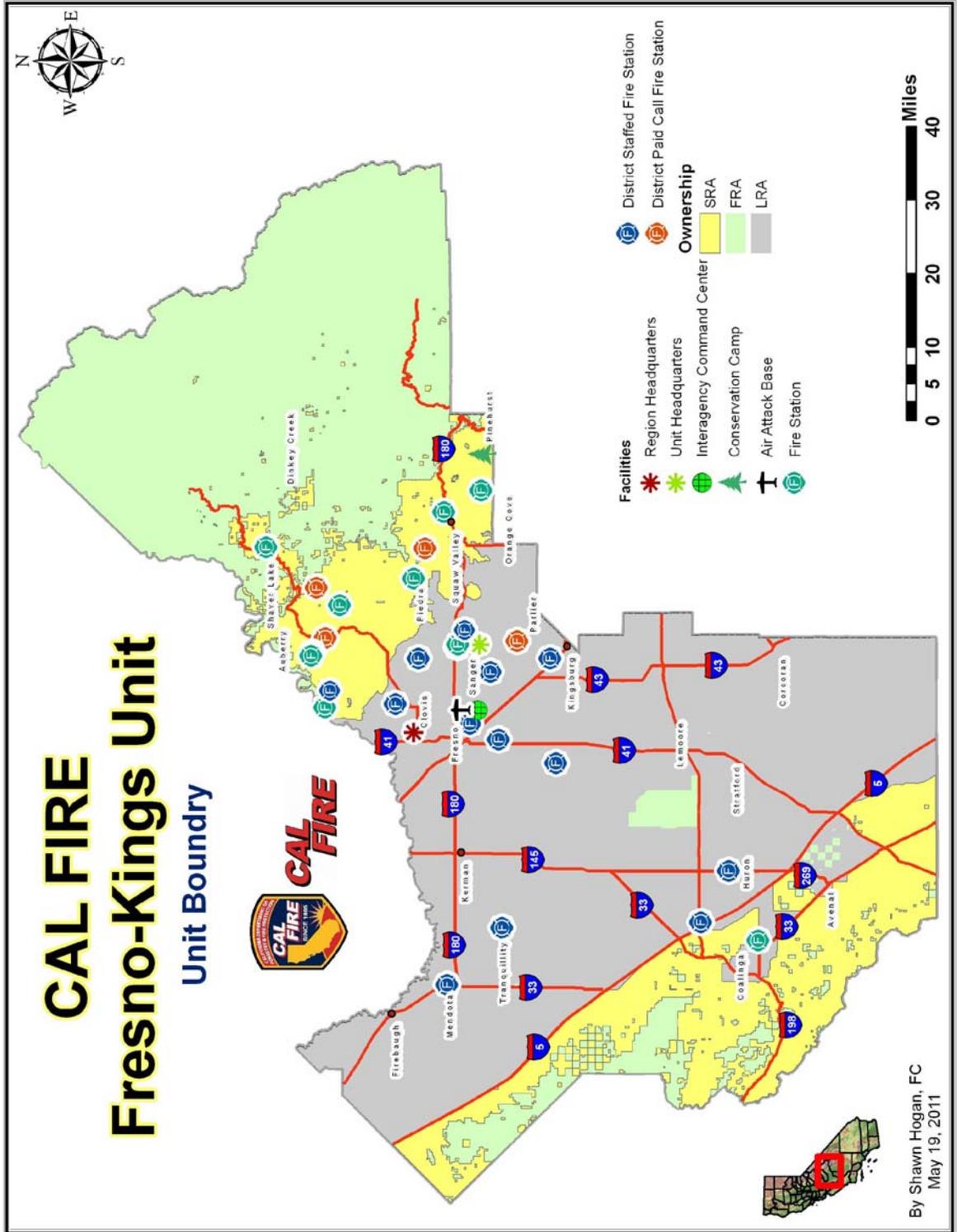
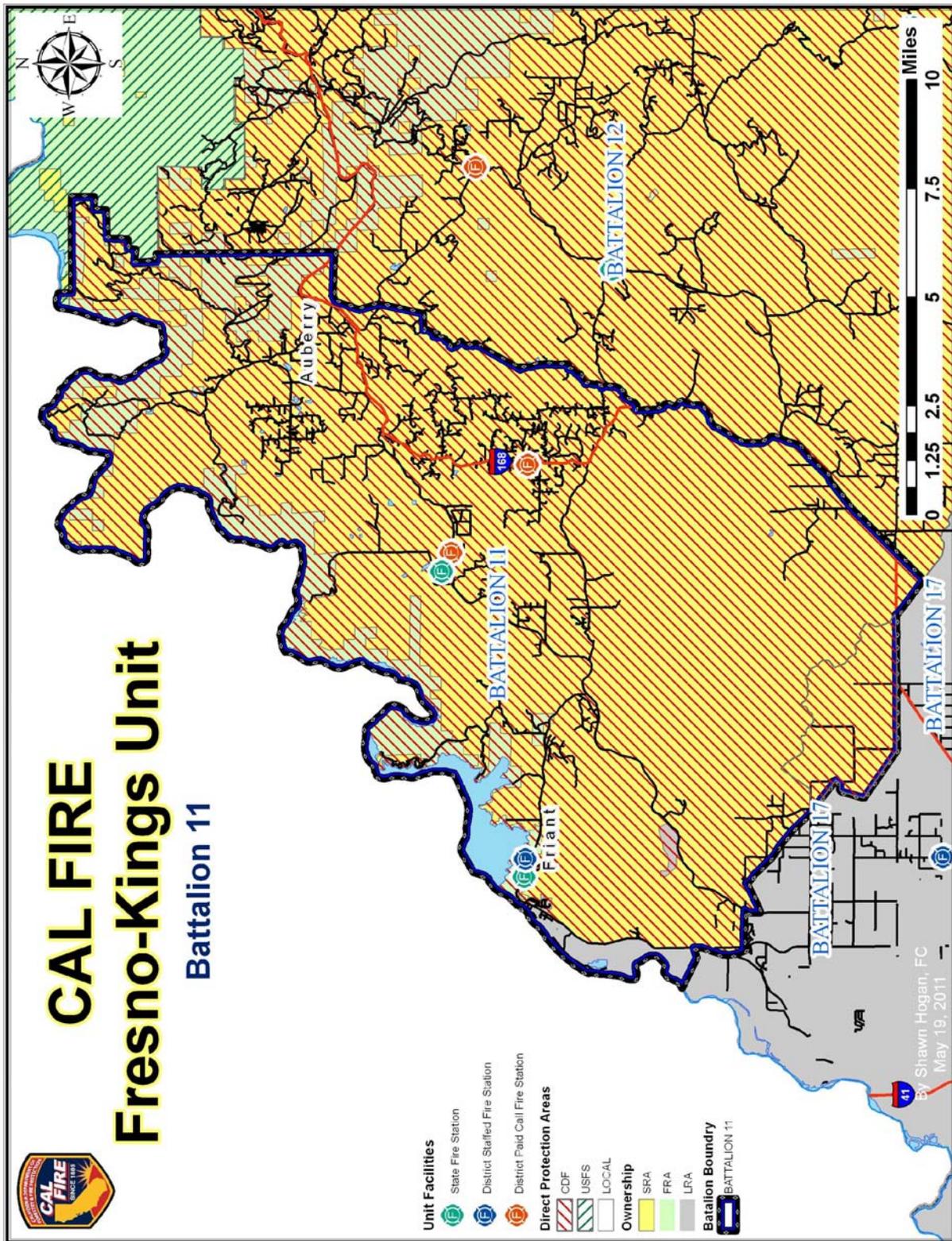
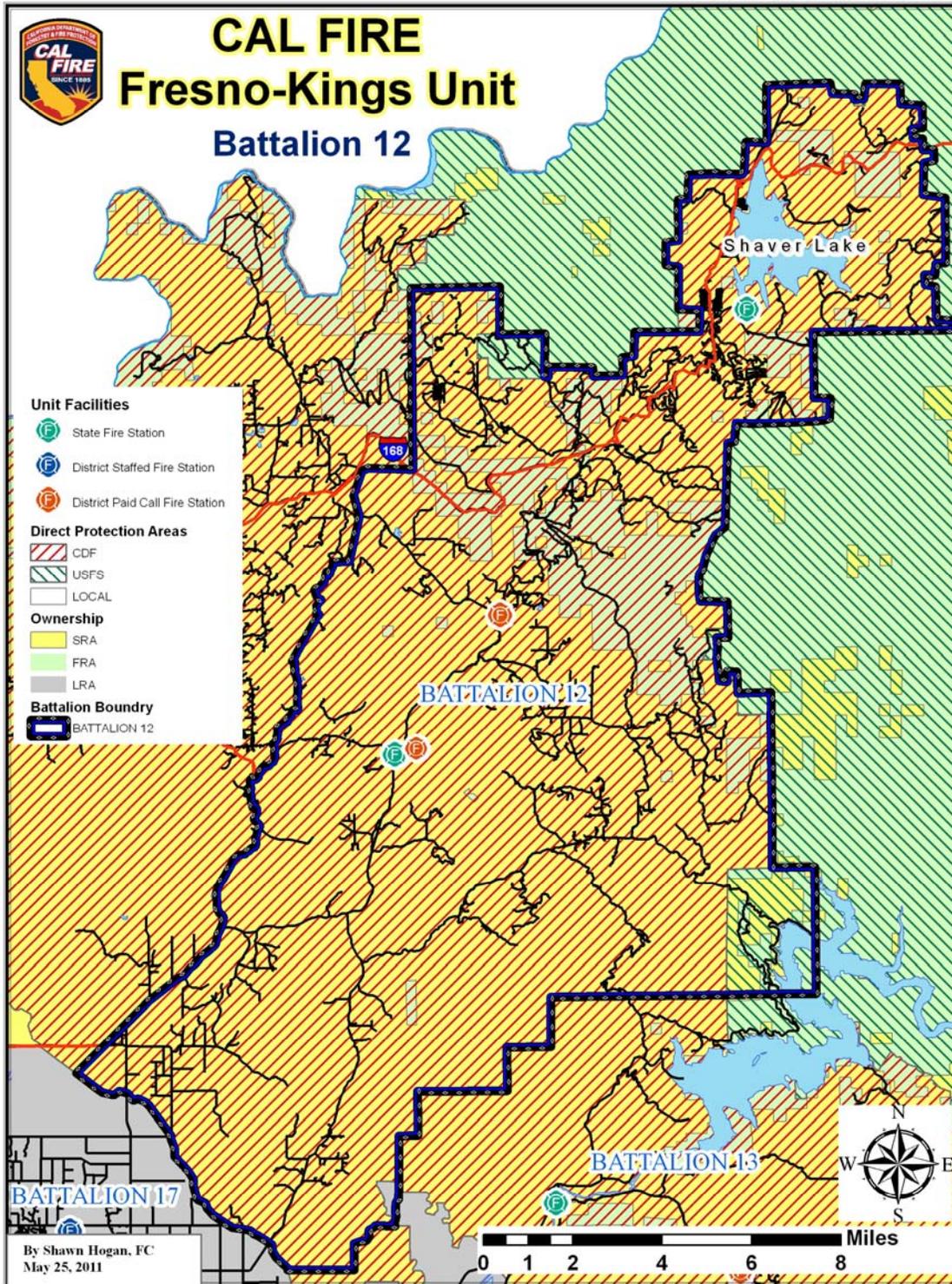
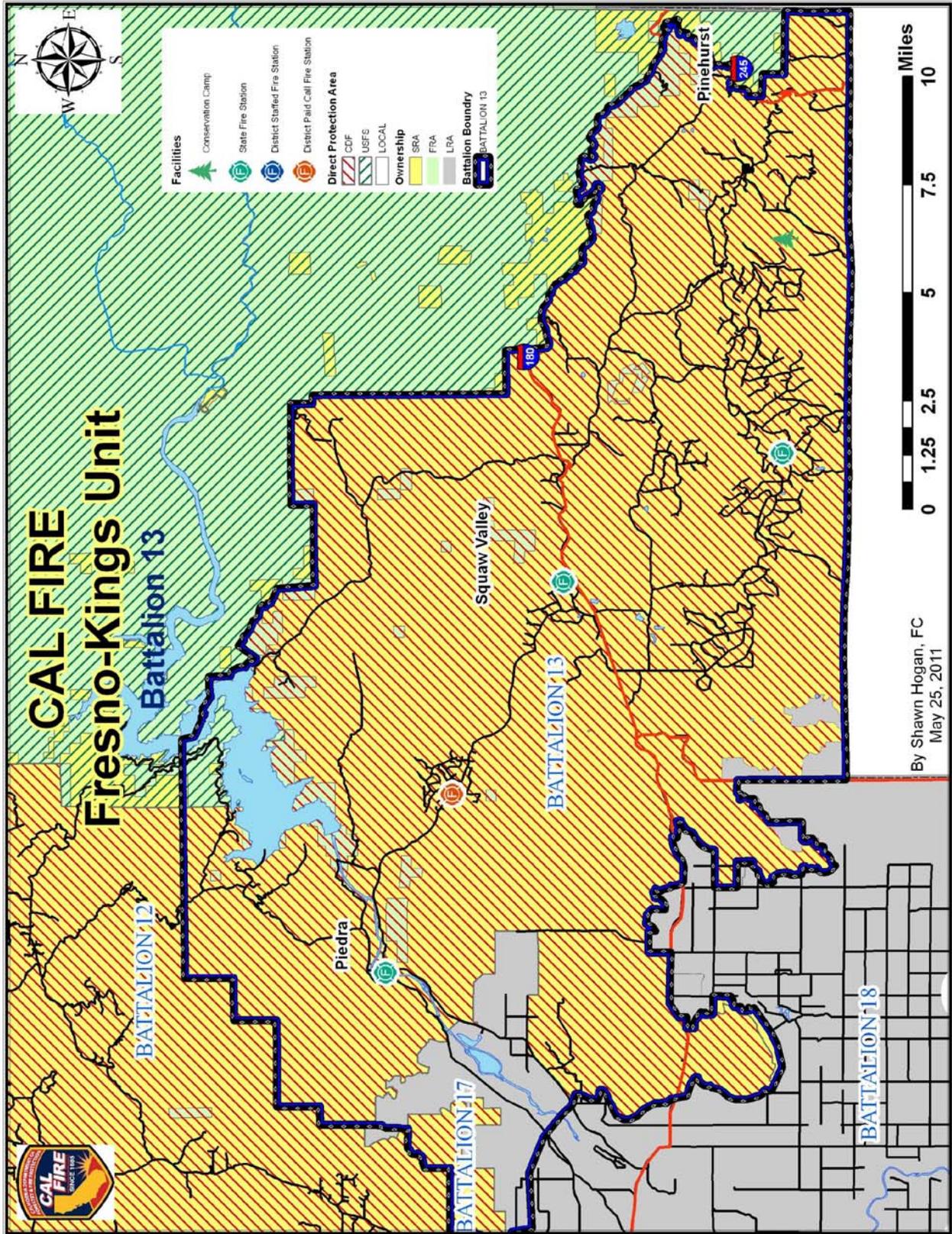
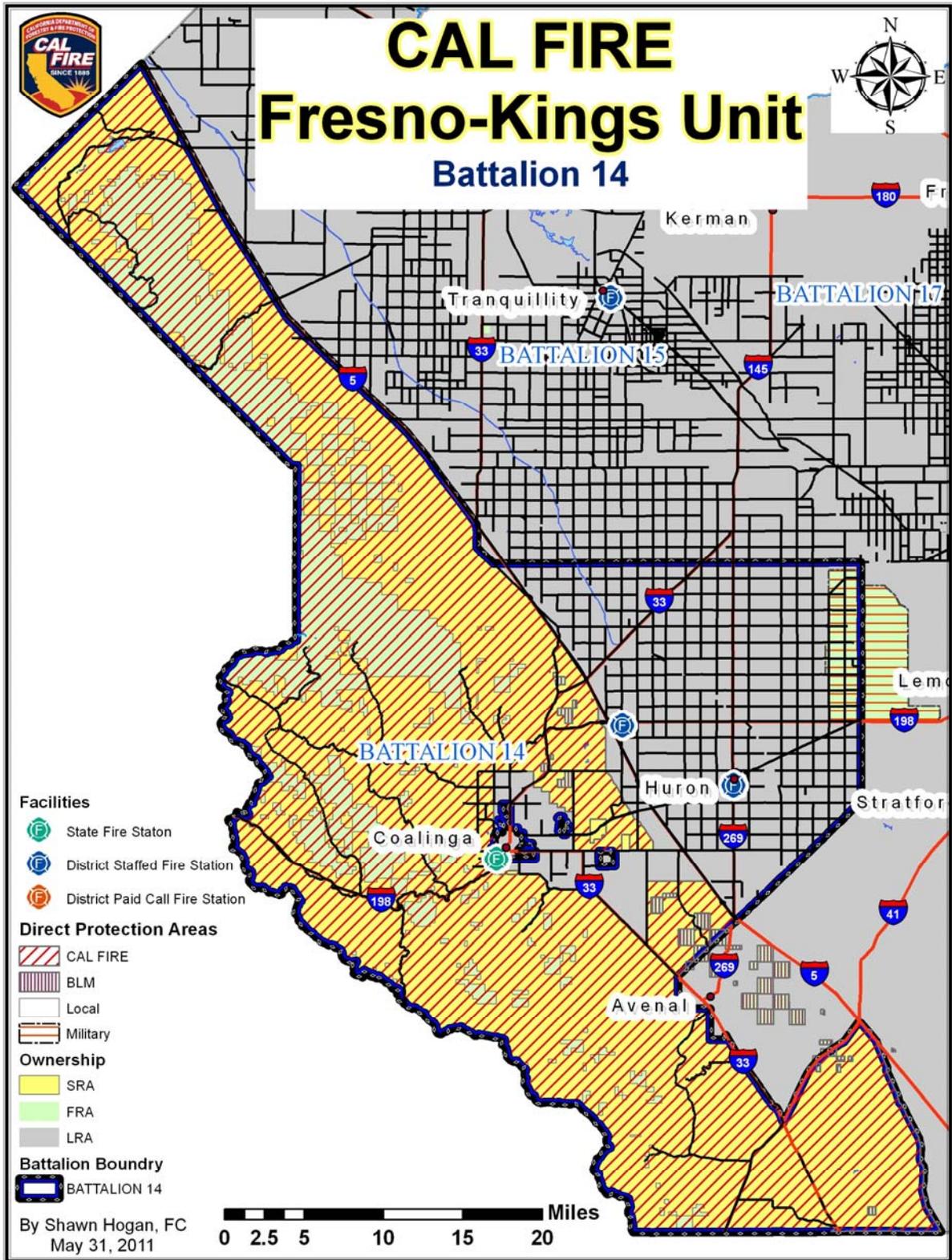


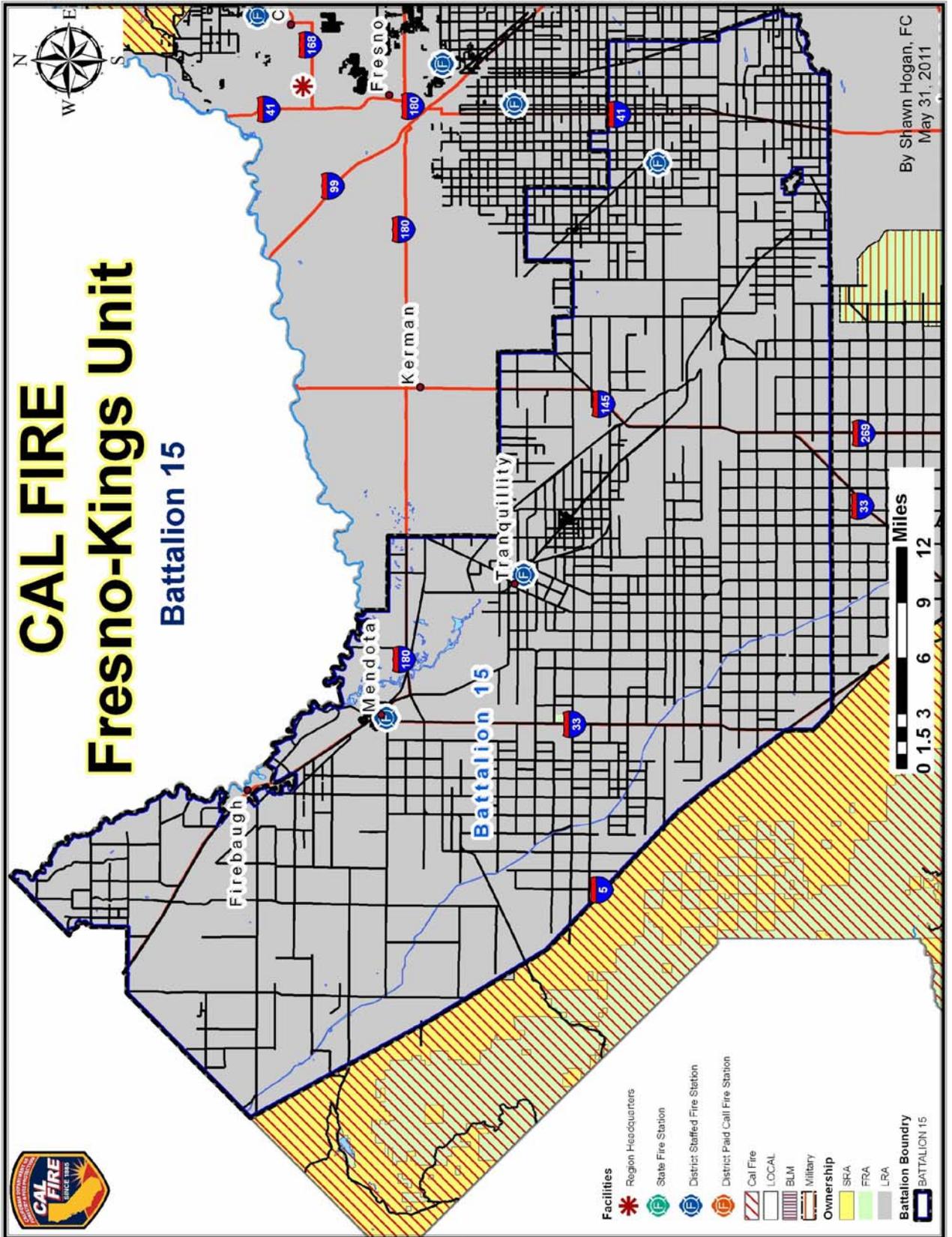
Figure B: Battalion Maps

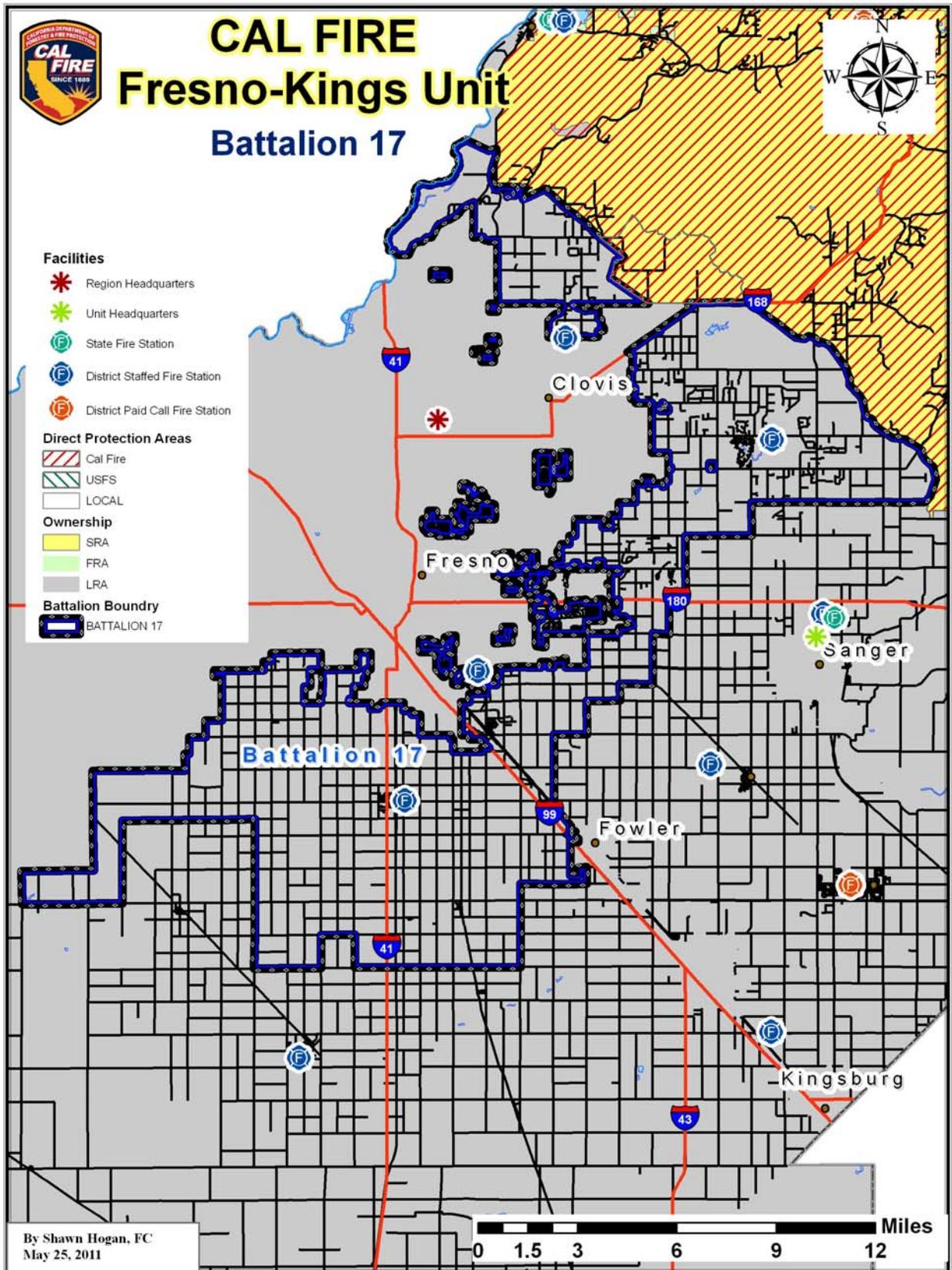


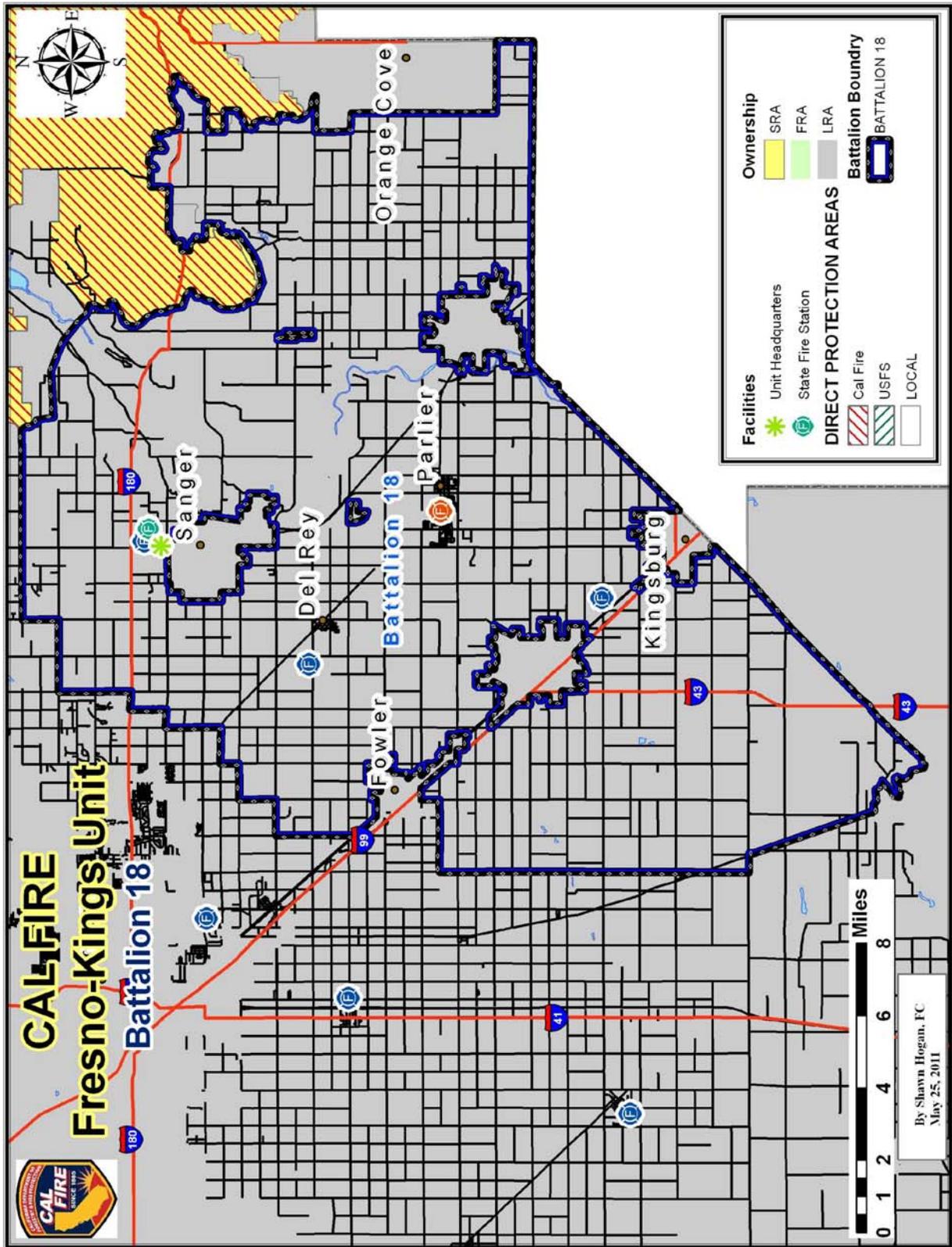












ADDENDUM:

2012