

2024

# FKU FIRE PLAN



CAL FIRE

FRESNO-KINGS UNIT

1/1/2024

## UNIT STRATEGIC FIRE PLAN AMENDMENTS

<u>Date</u>	<u>Section Updated</u>	<u>Page Number</u>	<u>Description</u>	<u>Updated By</u>
3/18/2024	Appendix A	37-39	Fire Plan Projects	B. Garabedian
3/18/2024	Appendix B	39	Wildland Activities	B. Garabedian
3/18/2024	Appendix C	40-41	Updated Ignition Data	B. Garabedian
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*Unit Strategic Fire Plan Amendments*

# UNIT STRATEGIC FIRE PLAN DEVELOPED FOR FRESNO-KINGS UNIT

## This Plan:

- Was collaboratively developed. Federal, State, City, and County Agencies and other interested parties 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 impacts to 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  
Dustin Hail

5/7/2024

Date



Fire Captain  
Bryan Garabedian

5/7/2024

Date

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## **EXECUTIVE SUMMARY**

The Fresno-Kings Unit Strategic Fire Plan addresses achieving the goals and objectives of the California 2018 Strategic Plan, and in particular the aims of that plan that are specific to the Unit. This plan was prepared with collaborative efforts from the various stakeholders in the Unit, including program managers, bureau managers and Battalion Chiefs. The Unit Pre-Fire Engineer has compiled the annual summary information from various available data sources and presents this plan as a comprehensive Strategic Fire Plan that is specific to the Unit that address the ever-changing conditions of the fire hazard environment.

The Unit's Fire Plan is integrated into one plan covering the State Responsibility Area (SRA) and the Local Responsibility Area (LRA) within Fresno and Kings County, with CAL FIRE and the Fresno County Fire Protection District working together to accomplish this task. This document will be updated each year and reports the various accomplishments made to meet the goals and objectives as outlined by the Unit and the 2018 California Strategic Fire Plan.

**The Fresno-Kings Unit Strategic Fire Plan is made up of seven key components:**

### **Unit Overview**

- The Fresno-Kings Unit has responsibility for protecting 951,832 acres of State Responsibility Area (SRA) and 1,527,022 acres of Local Responsibility Area (LRA) under a Cooperative Fire Protection Agreement with the Fresno County Fire Protection District. Total area of responsibility is 2,478,834 acres.
- During peak fire season, within the Unit there are thirteen (13) staffed State funded engines and fourteen (15) staffed District Funded fire engines.
- The Unit has the following Type 1 hand crews that respond to emergencies and perform work on pre-fire projects, two (2) Inmate crews, four (4) CNA crews, and one (1) CCC crew .
- The Unit has the following heavy equipment available for fire response: two (2) State bulldozers, and one (1) County funded bulldozer.

### **Collaboration**

- 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 property, timber, range, recreation, water and watersheds, air quality, cultural and historic resources, unique scenic areas, historic buildings, wildlife and plants, ecosystem health, and cultural and historic values.
- The Unit collaborates closely and effectively with various local interest groups and local communities including Highway 168 Fire Safe Council, Oak to Timberline Fire Safe Council, Southern California Edison, Pacific Gas and Electric, Sierra National Forest, Sequoia National Forest, towns and cities, and local Fire Districts/Departments. These collaborative efforts increase the ability of the Unit to determine assets and values at risk needing protection.
- The Unit currently includes seventeen (17) communities that are listed on the

Federal Registrar's "Communities at Risk" as high risk for damage from wildfire.

### **Pre-Fire Management Strategies**

- This plan facilitates development of a wide range of management strategies to protect public and private assets at risk that utilizes every program and tool available to the Department. Specific strategies are developed for each Battalion and Bureau within the Unit, in response to the various specific environmental and physical characteristics. Strategies on the west side are different from the east side due to a difference in the appropriate fuel models and weather conditions.

### **Pre-Fire Management Tactics**

- The specific priorities and goals that were developed to protect specific assets at risk in each Battalion and Bureau within the Unit requires a slate of different tactics. That are most applicable to each situation they face. Tactics are developed to use a combination of tools available to the Unit that include state of the art fire suppression equipment, fuels reduction methods, ignition management methods, current fire-safe engineering activities, building code development and enforcement, defensible space inspections, public education, and forest health enhancements.

### **Appendices, Annual Addendums and Exhibits**

- Appendix A lists the Units' Pre-Fire current projects.
- Appendix B is the Unit Goals and Objectives. Each year the Goals and Objectives are reviewed and may be updated with new obtainable ones added.
- Other appendixes will be added as necessary to support the Unit Fire Plan.
- The exhibits include various maps of the Unit including Direct Protection Area (DPA) boundaries, current projects, and locations of State facilities.

### **Annual Supplements**

- Each year, a report is completed based on the progress and success in reaching the Statewide and Unit specific goals and objectives. Each year annual ignitions summaries are included. A complete list of specific accomplishments within each of the Battalions and Bureaus is included detailing the objectives that are worked on or completed.

## **SECTION I: UNIT OVERVIEW**

### **UNIT DESCRIPTION**

The Fresno-Kings Unit of the California Department of Forestry and Fire Protection (CAL FIRE) has primary responsibility for over 1,543,481 acres of Direct Protection Area (DPA) lands. CAL FIRE DPA lands are State Responsibility Area (SRA) and some intermingled Federal lands which are protected by CAL FIRE. CAL FIRE protects Federal lands in the State DPA under an agreement with Federal Forest agencies (Bureau of Land Management and US Forest Service) which is the California Cooperative Wildland Fire Management and Stafford Act Response Agreement (CFMA). There are over 951,832 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 fiscal 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 an additional 1,527,022 acres of Local Responsibility Area (LRA) lands ranging from rural to urban use.

The Unit is divided basically in half by the San Joaquin Valley. This 70-mile east to west 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 better facilitate pre-fire management and fire suppression efforts, 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) primary lake based 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 along Highway 168 and the Yokuts Valley - Dunlap area along Highway 180. Both population centers have a steadily increasing growth pattern of new permanent residences. The fire hazards associated with the Wildland Urban Interface (WUI) is a real and current concern in these areas.

The Western Division is made up of the lands from the eastern slope of the Coastal Mountain Range down to the Central Valley. Primary vegetation types consist of seasonal grasslands, deciduous and evergreen oak woodlands, and dense brushlands. There is a high seasonal recreational use of Bureau of Land Management (BLM) holdings, within the Division mainly off road vehicle use and hunting. Residential impact in the area is light, with little indication of increased growth. Industrial use, which is primarily oil extraction is concentrated in some rural areas, and changes annually depending on the current economics associated with the petroleum industry.

## **FIRE HISTORY**

Over the past 50 years the Fresno-Kings Unit has had a history of large, damaging fires with a low frequency of occurrence. The fire occurrences and size of fire is often associated with prolonged drought conditions and with isolated extreme weather conditions. In reviewing the large fire occurrences in the Unit, they can be grouped into the two different geographic areas, the Eastern Division, and the Western Division. Some of the largest fires in the Unit have occurred with in the Eastern Division. The largest fires in the Western Division were the 2017 Garza Fire at 48,886 acres and the 2020 Mineral Fire at 29,666 acres. The largest fires in the Eastern Division were the 2015 Rough Fire at 151,546 acres and the 2020 Creek fire at 379,842 acres.

## **UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES**

### **Fresno-Kings Unit Facilities**

- Nine (9) CAL FIRE Stations
- Fifteen (15) Staffed Fire District Stations
- Seven (7) Paid Call Firefighter (PCF) Fire District Stations
- Miramonte Conservation Camp
- Tollhouse Fire Center
- Mid Valley Crew 1
- Fire Prevention/Protection/Planning Bureau
- Training Bureau
- Emergency Command Center

### **Initial Attack Resources during Peak Fire Season Staffing**

- Thirteen (13) CAL FIRE Schedule "B" Engines
- Fourteen (14) Schedule "A" Engines
- Seven (7) PCF Engines
- Two (2) CAL FIRE Bulldozers
- One (1) Fresno County Bulldozer
- One (1) CCC Type 1 Hand Crew
- Up to four (4) inmate Type 1 Hand Crews
- Four (4) California National Guard Type 1 Hand Crews
- One (1) Air Attack Lead Plane

### **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
- Pleasant Valley Prison Fire Department
- Orange Cove Fire Department
- Fresno City Fire Department
- Clovis City Fire Department
- North Central Fire Department
- Shaver Lake Volunteer Fire Department
- Huntington Lake Volunteer Fire Department
- Bald Mountain Volunteer Fire Department

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

- Fresno County Fire Protection District
- Orange Cove Fire District
- Coalinga Fire Department
- 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
- Selma City Fire Department
- City of Reedley Volunteer Fire Department
- Hume Lake Fire & Rescue Department
- Kingsburg City Fire Department

## SECTION II: COLLABORATION

### 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:

<b><u>Organization</u></b>	<b><u>Title</u></b>
• Highway 168 Fire Safe Council	Director
• Oak to Timberline Fire Safe Council	Director
• Sierra National Forest	Fuels Specialist
• Sequoia National Forest	District Fire Management Officer
• Pacific Gas and Electric	Forester
• California State Parks	Lieutenant
• Army Corps of Engineers	Supervisor
• Department of Reclamation	Maintenance Supervisor
• Bureau of Land Management	Field Manager
• Department of Fish and Wildlife	Biologist
• Department of Public Works and Planning	Senior Planner
• Southern California Edison	Fire Ecologist
• Sierra Resource Conservation District	Director

## SECTION III: VALUES

### VALUES AT RISK

Assets susceptible to fire impacts are identified in the Fire Plan as air quality, rangelands, recreation, agriculture, structures, timber, water and watersheds, wildlife and habitat, and other resources (cultural, historical, and scenic). The focus of this plan and relative importance of each asset has been determined by reviewing input from local stakeholders and CAL FIRE managers. The Fresno-Kings Unit Fire Plan has been designed with to protect these assets at risk.

The priority resources at risk in the Unit are rangelands, forests, agriculture, and watershed. Cattle ranches encompass hundreds of thousands of acres of rangelands in the Unit while most of the floor of the San Joaquin Valley is in various crops or solar farms. Productive and healthy forests remain valued assets and are critical to the social and environmental well-being of the Unit. Agriculture is an important and large industry within the Unit primarily located on the valley floor. The agriculture businesses that support the farming community are also critical to the economic engine that drives the local economy.

There are several major watersheds in the Unit that provide significant water resources for domestic and agriculture purposes. Impacts to these water resources can be consequential to the local economy. The San Joaquin and Kings Rivers and the many tributaries to these rivers include numerous hydroelectric facilities that provide power to the State grid. Large and damaging fires near in the San Joaquin and Kings River watershed can cause deleterious effects on the quality and quantity of water available for drinking supply, agriculture use and use by hydroelectric facilities.

### COMMUNITIES

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, which 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, Dunlap, Piedra, Avenal\*\*, Friant\*\*, Pinehurst, Big Creek\*, Hume\*, Prather, Big Sandy, Lakeshore\*, Shaver Lake, Dinkey Creek, Meadow Lake, Miramonte, Yokuts Valley, 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 proposals for wildfire protection requesting information about Communities at Risk in the proposed project to help rank the proposal.

## **SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES**

### **FIRE PREVENTION**

The Fresno-Kings Fire Prevention Bureau works to protect lives, property, and natural resources from unwanted fires by proactively investigating all Wildland fires and utilizing appropriate criminal, code enforcement, civil and procedures to deter activities that lead to unwanted human caused fires. The Fire Prevention Bureau also coordinates law enforcement activities through public education and information activities to educate the public. Additionally, we educate local public safety agencies, about specific activities that can increase fire risk and offer preventative measures that can be taken to eliminate or lessen the risk.

The Fresno-Kings Unit on average has 1500 ignitions each year that includes SRA and LRA. The greatest number of ignitions causes on average is from human cause. Playing with fire and undetermined combined as the second most frequent causes. Playing with fire cause class is a priority to prevention staff and is sometimes recorded in error due to Company Officers using the category incorrectly. Therefore, we are working on educating our staff to correct the issue.

### **ENGINEERING & STRUCTUREIGNITABILITY**

#### **Fire Prevention Bureau Goals**

Based on the previous identified information the Fire Prevention Bureau has adopted the following actions to provide efforts for 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.

## **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**

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.

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 manage increased impacts of development. Priorities and Goals:

- **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.
- **Fireworks:** Continue to improve fireworks permitting and use processes to ensure the safety of the public and their properties from fire.

## **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 also continue to be proactive through safety messages, community groups, town hall 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, roadside public education signs, fire prevention education programs, and participation in various community venues has assisted in reducing the overall fire ignitions within the Unit.

## 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 conducted 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 about this time, increasing liability issues, lack of available cooperators and restrictive air quality restrictions combined to in effect bring to an end 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 (VMP) 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 public. The benefits to the 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 Fuel break. The Beal Fuel break is in the Pine Ridge area of Fresno County along Highway 168. The Beal Fuel break is a segment of the historic 650-mile-long Ponderosa Way Fuel break 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, and in 2019 was one of the Governors 45-Day priority projects in FKU. The arson caused 2000 Highway Fire, which burned from August 13-18, , was ignited down-slope of the Beal Fire Road, and eventually burned into the fuel break. The fire was controlled at the fuel break.

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 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." Since 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" undertook 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 using a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report. A new alternative CEQA compliance option is the recently approved 2019 California Vegetation Treatment Program (CalVTP). The CalVTP includes the use of prescribed burning, mechanical treatments, manual treatments, herbicide application, and prescribed herbivory as tools to reduce hazardous vegetation around communities in the Wildland-Urban Interface (WUI), to construct fuel breaks (shaded or non-shaded), and to promote ecological restoration. The CalVTP can be used on timberlands and oak woodlands and conforms to a Programmatic Environmental Impact Report (PEIR). Standard practices used for fuel reduction under the VTP have been assessed in the PEIR Statewide and by following the requirements of the application and environmental checklist the potential impacts are reduced to less than significant or less than significant with mitigation. If the impact of the work is equal or less than the impact identified in the PEIR the CalVTP can be used. This new CEQA process increases the amount of land that can be treated to help alleviate the wildfire crisis in California. The Unit has prepared several VTPs and will be updating the Beal Fire Road VMPs to one VTP in the coming year.

*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. For additional information on the CalVTP Programmatic EIR refer to <https://bof.fire.ca.gov/projects-and-programs/calvtp-homepage-and-storymap/>*



## **Fiscal Framework**

The state funding support of the VMP and VTP programs recognizes the fact that many of the needed CAL FIRE resources to conduct a vegetation management project are in place and funded for fire suppression activities. Thus, there are minimal added expenses to CAL FIRE to conduct projects. 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 acres) range improvement projects. Due to the minimal amount of fire control line work needed versus the number 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 VMP and CalVTP programs are now focusing more on smaller scale, intensive treatment projects adjacent to homes in the WUI. 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. 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 \$7.00 per acre smoke mitigation fee for all non-hazard reduction (PRC 4291) burn projects. This 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 remarkably diverse geographic area. It extends from 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 significantly as the topography, soils, and climate changes across the Unit from west to east.

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 east 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 most 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 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 long-term owners who are truly knowledgeable of their lands and alternatives for land management. A significant percentage of the CAL FIRE DPA in this area consists of public lands managed by BLM. Descending from the Coastal Range on the west side of the Unit

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, from the valley floor up into the lower elevations of the Sierra foothills 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 recently 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 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 tend to have high population concentrations and exceedingly small parcel sizes near the town centers.

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 and recently more CalVTP projects. Many projects have been created in cooperation with the two National Forests. Cressman's Road and Comstock fuel break are examples of two recently completed fuels reduction projects in the eastern portion of the Fresno Kings Unit. Both 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, the Unit's priorities will also be evolving. Vegetation Management Program projects will be responsive to the integrated planning approach of Pre-Fire, 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 from landowners interested in signing up their lands can alter immediate priorities for project development as the Unit seeks to expand the acres

managed under VMPs and CalVTPs. The advantage to these projects in comparison to grant projects is the longer term nature which allows critical maintenance to occur as the vegetation grows back over time. .

## **VMP SCE EDISON**



**OLD BRETZ FUEL BREAK**

**BEFORE TREATMENT**



**AFTER TREATMENT**



## **SECTION V: PRE-FIRE MANAGEMENT TACTICS**

### **Miramonte Conservation Camp**

The Miramonte Conservation Camp (Camp) in partnership with the Department of Corrections and Rehabilitation (CDCR) currently provides two (2) but depending on inmate population up to four (4) inmate hand crews. These crews are organized and supervised by CAL FIRE Captains and CDCR Officers. The hand crews support fire operations, pre-fire activities and projects, and other public agencies and approved non-profit organization for public services. The Camp is located near the community of Miramonte in the South- East portion of Fresno County. When the hand crews are not assigned to emergency incidents, they serve as the key workforce for implementing pre-fire/resource management activities and projects. Typically, the Camp provides approximately three hundred crew days per year toward pre-fire/resource management activities and projects. Nearly all the fuel reduction projects listed in Appendix A are implemented by using Camp Crews. In terms of funding support for Camp Crews, various State and Federal Grants provides reimbursement funds to offset operational cost to support grant funded fuels treatment projects. Fire safe councils may utilize camp crews for community fuels treatment projects. The Camp is instrumental in completing most of the fuel's projects within the Unit and without them it would be difficult to achieve priorities and goals that have been outlined in this plan.

### **Tollhouse Fire Center**

Task Force Rattlesnake moved from the Millerton Fire Station to the Sierra Elementary School in the fall of 2022. This new location is now called the Tollhouse Fire Center and currently houses four (4) National Guard crews led by CalFire Captains and Engineers. Modifications are ongoing to the facility to bring it up to date. When the hand crews are not assigned to emergency incidents, they serve as the key workforce for implementing pre-fire/resource management activities and projects. Typically, Tollhouse crews provide 2-4 crews per day during the year that work on pre-fire/resource management activities and projects. Nearly all the fuel reduction projects listed in Appendix A are implemented by using Tollhouse crews, which are instrumental in completing most of the fuel treatment projects within the Unit, without these hand crews it would be difficult to achieve priorities and goals that have been outlined in this plan.

### **Mid Valley Fire Crew**

Cal Fire and the CCC (California Conservation Core) are partnered and provide one (1) fire crew, Mid Valley 1. The station for now is at the Mid Valley Training Center in Del Rey. When the hand crews are not assigned to emergency incidents, they serve as a key workforce for implementing pre-fire/resource management activities and projects. Mid Valley provides one (1) Crew per day during the year that work on pre-fire/resource management activities and projects. Mid Valley 1 is instrumental in completing many of the fuel treatment projects within the Unit and without them it would be difficult to achieve priorities and goals that have been outlined in this plan.

## **Battalion 11 - Millerton Battalion**

The Battalion is situated on the eastern foothill edge of the San Joaquin Valley with elevations ranging from 300 feet to 2,800 feet. The pre-dominant 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 is the basalt lava table topped mountains. The vernal pools on the tabletops contain sensitive plant and animal species, requiring modified fire suppression tactics when possible. Most of the tabletop mountains are owned by the Sierra Foothill Nature Conservancy.

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/farmlands and suburban type subdivisions. The communities of Friant, Prather, and Auberry contain some light commercial and retail occupancy. 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 considerable 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.

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.

## **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 acres range each year. Most of the lands at the upper elevations have experienced fire within the past fifty years. Fires at the lower elevations generally do not offer fuel reduction benefits in following year(s) due to re-growth of annual grasses.

## **Priorities and Goals**

### **1. Defensible Space Inspections**

CAL FIRE personnel enforce Public Resources Code (PRC) 4291 by conducting defensible space inspections (LE-100). Engine crews and inspectors (when funded) conduct inspections for the purpose of educating property owners/tenants about fire safety and enforcing the 100 foot defensible space law. There are an estimated 2,500 structures in the Battalion and the goal each year is to inspect 90% of them.

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 foot 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.

### **2. San Joaquin River Drainage**

The San Joaquin River is the boundary line between Fresno and Madera counties. 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. 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.

CAL FIRE is using Federal grant funds to construct a fuel break, known as the “Comstock Fuel break,” to help protect assets near the San Joaquin River Drainage. Construction of the fuel break started in 2011 and will help 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 fuel break will also protect the

communities of Meadow Lakes and Shaver Lake from fires originating in the Auberry area. The 400 foot wide fuel break is approximately 3 miles long and covers approximately 160 acres.

### **3. 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 Fire safe Regulations were implemented. Steep slopes, a brush fuel component, and inadequate private road systems pose significant challenges for fire perimeter control, structure defense, and civilian evacuation. Structure defense is an immediate priority due to the population density.

To protect the assets in the Morgan Canyon area, CAL FIRE personnel conduct defensible space inspections. Personnel conduct inspections for the purpose of educating property owners/tenants about fire safety and enforcing the 100 foot defensible space law. Defensible space inspections are conducted throughout the Battalion.

### **4. Sky Harbor Subdivision**

The Sky Harbor Subdivision is located at the upper end of Millerton Lake. The subdivision has approximately 40 houses tightly arranged mid-slope on steep terrain in a stand of grey pines. Property owners are not able to achieve 100 feet defensible space due to small lot sizes. There is a significant potential for wildland fire ignitions from recreationists and residents. Structure defense is an immediate concern during a fire situation.

The Sky Harbor Subdivision is concurrently within the SRA and the Fresno County Fire Protection District. The Fresno County Fire Protection District has a Weed Abatement Ordinance which is enforced on vacant and inhabited parcels within the subdivision to reduce the flammable vegetation that poses a threat to houses. CAL FIRE maintains a pre-suppression fire line along Sky Harbor Road for approximately two miles. This fire line helps to slow the spread of fires originating along the roadside near the Sky Harbor Subdivision.

### **5. Millerton Lake State Recreational Area**

The Millerton Lake State Recreational Area provides day use camping areas and boating access which is used during the summer months. The recreational area attracts thousands of people and poses a significant potential for wildland fire ignitions.

CAL FIRE coordinates with State Parks personnel to prevent unwanted fires. CAL FIRE personnel conduct high visibility patrols and public education during the recreation area 'speak use times. CAL FIRE maintains roadside fire prevention signs along the main roadways to/from the recreational area.



## **6. Friant Dam**

The United States Bureau of Reclamation operates the Friant Dam at Millerton Lake. The dam is a homeland security concern as there are many assets below the dam that would be destroyed if a failure were to occur. CAL FIRE and the Fresno County Fire Protection District provide confined space rescue response to the dam facility. CAL FIRE and the Fresno County Fire Protection District participate in disaster planning exercises.

## **7. 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.

### **Collaborators with the Millerton Battalion:**

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

## **Battalion 12 – Shaver Lake Battalion**

The Shaver Lake Battalion of the CAL FIRE Fresno-Kings Unit is 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 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 two (2) fire roads which incorporate 11 miles of access that must be maintained annually. 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 many 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, the Creek Fire, occurred in 2020 and burnt 379,895 acres. 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.

### **Priorities and Goals:**

#### **1. Defensible Space Inspection program (PRC4291)**

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. Approximately 2000 inspections are completed in the Battalion each year.

## **2. The Beal Fire Road**

The Beal Fire Road has been in place for many years. It is a joint venture with CAL FIRE, USFS, local homeowners and the Highway 168 Fire Safe Council. The road extends from Highway 168 at the 4 Lanes to Auberry Road below Meadow Lakes. 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. This fuel break is the first defense for fires starting on the lower Highway 168 corridor. 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. 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 will be combined into one VTP project this year to update the CEQA analysis which will also cover herbicide treatment of resprouting brush. The Highway 168 Fire Safe Council is conducting maintenance with the use of grant funding and continued maintenance is ongoing.

## **3. Meadow Lake / Meadow Lake North**

The Bald Mountain ridge top is a significant fire hazard area. There is immense 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 Radio Lane. The second phase of line is computed and runs from the North end of Radio Lane to Auberry Rd. and the South end of the Acorn/ Sugarloaf Fuel break. The first phase was completed by the Highway 168 Fire Safe Council using grant funding. The second phase was completed by CAL FIRE using USFS grant funding.

## **4. Cressman's**

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.

Cressman's fuel break was completed by the Highway 168 Fire Council which was started in 2000 to reduce the fuel loading along the single lane main road in the 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 and maintenance is ongoing dependent on funding.

## **5. Bald Mt. Subdivision**

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. The Meadow Lakes North and the Acorn/Sugarloaf Fuel Breaks are in position to help protect the communities around the Bald Mountain Area. This project is being done by CAL FIRE, Highway 168 Fire Safe Council and by the USFS on Federal lands.

## **6. Peterson Mill Road**

This project 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 (Fuel Model 4), 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 on a single lane road 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.

## **7. Linson Lane and Shaver Springs**

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. The Lower Beal fuel break when it is completed would serve to reduce or prevent the spread of wildfires originating in the Tollhouse area upslope into the Linson Lane subdivision. The Highway 168 Fire Safe Council is working on the project.

## **8. 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 line is to prevent the spread of fires started from material dislodged from hot brake shoes. This is an annual project supported by CAL FIRE Crews.

## **9. 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.

**Collaborators with the Shaver Lake 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
- Fresno County Roads
- National Forest Foundation

## **Battalion 13 – Squaw Valley Battalion**

The Squaw Valley Battalion of the CAL FIRE Fresno-Kings Unit is in the 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 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.

During the years of 2014-2017 the Bark Beetle infestation devastated conifers and specifically Ponderosa Pine above 3000' elevation. The conifer tree mortality due to the infestation ranged from 46% to 90% within the Battalion and Unit. Over the next decades there will be an increased fuel loading on the forest floor due to the mortality which will create more BTUs when there is a fire within the tree mortality areas.

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. The Rough Fire in 2015 burned up to the Battalion edge and was the last major fire near the Battalion. The last significant event in the Battalion since the 1950's occurred in 2015 and burned 151,623 acres. 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 defendable 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.

## **Priorities and Goals:**

- 1. Sequoia Lake VMP**
- 2. White Deer VMP**
- 3. Bear Mountain Road Clearance**
- 4. Brookside Fuel Break-Fire Safe Council**
- 5. Pinehurst-Miramonte Ingres/Egress Roadside Fuel Break- Fire Safe Council**
- 6. Miramonte Fuel Break-Fire Safe Council**
- 7. Pre-Fire Lines (Rat Trailing)**

Utilize the Fire Crews to construct hand lines along high prone ignition road roadways to slow and contain potential fire spread.

- Highway 180
- Hills Valley Road
- Sand Creek Road

## **8. Fire Control Road Maintenance**

- Work with property owners and other agencies to repair White Deer Fire Control Road.
- Brush along the sides of Greeley Fire Control Road and chip or burn the piles.
- Grade Fish Creek Fire Control Road
- Grade Cleveland Fire Control Road

## **Collaborators with the Squaw Valley Battalion:**

- Sierra National Forest
- Sequoia National Forest
- Sequoia & Kings Canyon 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
- Sierra Nevada Conservancy
- Great Basin Institute
- Fresno County Roads

## **Battalion 14 – Coalinga Battalion**

The Coalinga Battalion of the CAL FIRE Fresno-Kings Unit is 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 eastern SRA border to the highest point of 5,000 on the western border. Interstate 5 runs 80 miles along the Eastern SRA boundary of the Battalion. This provides remarkably 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) primary fire roads which incorporate 42 miles of access that has historically been maintained annually by the Unit. There are many ranch roads which provide access to the Battalion. There are several oils 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 mid-slope 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. Predominately, the Battalion is cattle ranches with large land ownership. The Battalion's WUI 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's 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.



## **Priorities and Goals:**

### **1. Defensible Space Inspection program (PRC4291)**

CAL FIRE personnel enforce Public Resources Code (PRC) 4291 by conducting defensible space inspections (LE-100). Engine crews and inspectors (when funded) conduct inspections for the purpose of educating property owners/tenants about fire safety and enforcing the 100 foot defensible space law. Approximately 200 inspections are completed in the Battalion each year. With the large geographical area within the Battalion, it is hard to complete defensible space inspections on all inhabited structures each year.

- Inspection priorities will be the Los Gatos and Warthan Canyon areas due to the higher concentration of inhabitable structures.
- We will continue to track inspections utilizing GPS coordinates to help provide better tracking and improvement of the GIS layer in CAD and Toughbook's.

### **2. Fire Control Roads - Tar Canyon, Juniper Ridge, Mud Run**

Although these roads are in entirely different locals, they are important to the philosophy of keeping fires small which will keep 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.

- 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.
- 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.
- 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.

### **3. Los Gatos Canyon**

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 longtime 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 exceptionally low maintenance regarding 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. This asset is protected by LE-100 inspections, fire control roads, roadside prevention signs and VMP Burns.

#### **4. Warthan Canyon**

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 limited with most causes being equipment oriented mostly off the highway. This asset is protected by LE-100 inspections, fire control roads, roadside prevention signs and VMP Burns.

#### **5. Oil fields**

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 ongoing 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. This asset is protected by meeting with company owners and educating them on clearances around their lines.

#### **6. Kings County SRA**

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 resources do not have a positive effect regarding suppression. Fire causes are generally a result of coming off the Highway 33. Support and interface with the cooperative agencies tend 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 in the south, in and around the junction of the Kings, Fresno, and Monterey County lines.

## **7. Vegetation Management Program Burns**

In the last 5 years the Unit has been able to put about 5,000 acres under VMP. This past year alone the Unit was successful in completing 2000 acres of broadcast burning and 300 acres of pile burning. The Battalion is continuing to work with the larger property owners to put acres under VMP or VTP project. The Unit is also beginning discussions with BLM to plan and assist on prescribed burns and containment lines next to the VMP projects, which will allow for more effective projects covering more area.

## **8. 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.

## **9. Fire Prevention Displays: Horn Toad Derby and Coalinga Fest**

Each year the City of Coalinga has two (2) major events, the Horned Toad Derby, and Coalinga Fest. Both are considerable in size and attended by a vast majority of the residents, as well as visitors to the area. The parade provides 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.

## **10. Roadside Fire Prevention Signs**

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.

### **Collaborators with the Coalinga Battalion 14:**

- Bureau of Land Management
- Hollister Fresno County Fire Protection
- District City of Coalinga
- County of Kings Fire Department
- California Department of Fish and Game
- California Department of Corrections

## **Battalion 91 (Fresno County Fire Protection District)**

Battalion 91 is 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 Battalion15.

The elevation with-in the Battalion ranges from 150 in the valley and 600 feet 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 91.

Primary fuels for Battalion 91 are Fuel Model 1, annual grasses. This fuel is present along roadways, canals, fallow fields, with-in the housing areas and cities in Battalion 91. The fuel models along the various rivers edges within the Battalion are Fuel Model 2, 5. Fuel Models in the Wildlife Refuge are 1, 3 and5.

### **Priorities and Goals:**

#### **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, 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.

- Weed Abatement and Public Education will help reduce the number of nuisance fires.

## **2. Pre-Plans**

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.

- Priority of preplans: Schools, Skilled Nursing Facilities, Target Hazards, and Industrial Businesses with large workforces.
- Engine Companies continue to update existing preplans and preplan new businesses in the battalion.
- Continue to work with and support Department IT personnel on development of a server-based application to make the preplans available to CAD and Toughbook's.

## **3. Weed Abatement**

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

- Work with communities within the battalion to gain compliance in the program.

## **4. Public Education**

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

- Stations and Engine Companies participate in Parades, carnivals, station tours.
- Continue school programs and outreaches.
- Continue involvement with community leaders to promote fire prevention education within their communities through established monthly mailers.

## **5. 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.

### **Collaborators within Battalion 91:**

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

## **Battalion 71-Fresno County Fire Protection District**

The Metropolitan Area of the Fresno County Fire Protection District is identified as Battalion 71 of the CAL FIRE Fresno-Kings Unit (FKU). It is 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 250-400 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 the Battalions within the Fresno- Kings Unit. The population density coupled with the high traffic transportation corridors provides for an increase's potential for wildland fire ignition.

The mission of the Battalion 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.

### **Priorities and Goals:**

#### **1. 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.

- Goal of completing or updating 25% of preplans each year.
- Priority of preplans: Schools, Skilled Nursing Facilities, Target Hazards, and Industrial Businesses with large workforces.
- Specific Target Hazards: Hazardous material distribution facilities, fireworks storage facilities, large petroleum and propane facilities and Mega Commercial Warehouses

#### **2. Addresses**

A frequent 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 viable solutions would be to:

- Send out fliers explaining the importance of posting legible addresses.
- Enlisting the help from schools, either as a school project or after school activity.
- 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, perhaps the PCF Companies can make these to sell.

### **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.

#### **Collaborators within Battalion 71:**

- Clovis Fire Department
- Fresno Fire Department
- California Air National Guard Fire Department
- North Central Fire Protection District

## **Battalion 81-Fresno County Fire Protection District**

The mission of Battalion 81 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. Battalion 81 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. Most of the land in the Battalion is in agricultural production.

### **Priorities and Goals:**

#### **1. 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 updated contact numbers or special circumstances pertaining to that business or school.

- Continue to 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 storages.
- Industrial businesses with large work forces. Schools (concurrent with inspections)
- Continue to work with and support Department IT personnel on development of a server-based application to make the preplans available to CAD and Toughbook's.

#### **2. School Programs**

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.

- Continue to contact schools and the Fire District Public Information Officer to



coordinate programs. This will be in conjunction with the annual school inspection program.

### **3. 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 many 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.

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. 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. Coordinate with Reedley City Fire Department and the Fresno County Sheriff's Office to update and distribute the plan.

#### **Collaborators within Battalion 81**

- Sanger Fire Department
- Selma Fire Department
- Fowler Fire Department
- Kingsburg Fire Department
- Reedley Fire Department
- Orange Cove Fire Department
- North Central Fire Protection District

# APPENDIX A: PRE-FIRE PROJECTS



## APPENDIX A - PRE-FIRE PROJECTS Fresno-Kings Unit (FKU)

01/01/2023 thru 12/31/2023

### Fresno-Kings Unit (FKU)

PROGRAM	PROJECT NAME	Project Status	Treatment Footprint Acres	Treatment Footprint Miles	
Fire Plan	<b>Auberry Road and Peterson Road Fuel Breaks</b>	Active	<b>155.01</b>		FK
Fire Plan	<b>Beal Fuel Break</b>	Complete in Maint	<b>426.08</b>		FK
Fire Plan	<b>Bear Mountain Access</b>	Active	<b>50.61</b>		FK
Fire Plan	<b>Big Sandy Rancheria Hazard Fuels Reduction</b>	Active	<b>14.42</b>		FK
Fire Plan	<b>Black Mountain</b>	Active	<b>65.21</b>	<b>0.86</b>	FK
Fire Plan	<b>Blue Rush Fuel Break</b>	Complete in Maint	<b>112.11</b>		FK
Fire Plan	<b>Brookside Fuel Break</b>	Active	<b>636.79</b>		FK
CFIP	<b>Bushell CFIP 2023</b>	Active	<b>60.52</b>		FK
CFIP	<b>Castlewood CFIP 2021</b>	Active	<b>69.05</b>		FK
CFIP	<b>Cates CFIP 2022</b>	Active			FK
Fire Plan	<b>Cressman Fuel Break Expansion</b>	Complete in Maint	<b>236.51</b>		FK
VMP	<b>Danell VMP</b>	Active	<b>353.36</b>	<b>6.66</b>	FK
CFIP	<b>Dotta CFIP 2022</b>	Active	<b>58.62</b>		FK
Fire Plan	<b>Eastern Fresno County Hazardous Fuels and T</b>	Active	<b>668.97</b>		FK
VMP	<b>Edison VMP</b>	Active	<b>1,817.63</b>		FK
Fire Plan	<b>Elwood Kencade Fire Control Road</b>	Complete in Maint		<b>4.92</b>	FK
Forest Heal	<b>Eshom Ecological Restoration Project Phase I</b>	Active	<b>3,811.00</b>		FK
Fire Plan	<b>Fire Escape Roads</b>	Complete in Maint	<b>14.81</b>		FK
CFIP	<b>Forked Meadow CFIP 2013</b>	Complete	<b>80.42</b>		FK
CFIP	<b>Frank CFIP 2022</b>	Active	<b>270.47</b>		FK
CFIP	<b>Garton CFIP 2021</b>	Complete	<b>533.43</b>		FK
CFIP	<b>Goodman CFIP 2021</b>	Active	<b>41.49</b>		FK
Fire Plan	<b>Greeley Fire Control Road</b>	Complete in Maint	<b>127.32</b>	<b>5.13</b>	FK
CFIP	<b>Hall CFIP 2021</b>	Active	<b>112.41</b>		FK
CFIP	<b>Herrick CFIP 2013</b>	Complete	<b>49.71</b>		FK
CFIP	<b>Herrick CFIP 2022</b>	Active	<b>79.67</b>		FK

Fire Plan	<b>High Sierra Front Country Fuel Breaks Project</b>	Complete in Maint	<b>1,008.40</b>		FK
Fire Plan	<b>Highway 168 Pre Suppression Line</b>	Complete in Maint		<b>0.78</b>	FK
Fire Plan	<b>Highway 180 Pre Suppression Line</b>	Complete in Maint	<b>3.90</b>	<b>5.40</b>	FK
Fire Plan	<b>HSRD SHAVER SPRINGS FUEL REDUCTION Johnson VMP</b>	Complete	<b>31.35</b>		FK
VMP		Active	<b>2,251.85</b>		FK
Forest Heal	<b>Jose Basin Fuels Reduction</b>	Active	<b>8,740.38</b>		FK
Fire Plan	<b>Juniper Ridge Fire Control Road</b>	Complete in Maint	<b>39.50</b>	<b>75.61</b>	FK
CFIP	<b>Laclergue CFIP 2019</b>	Complete	<b>62.00</b>		FK
CFIP	<b>Marriott CFIP 2022</b>	Active	<b>38.46</b>		FK
CFIP	<b>Mathias 2022</b>	Complete	<b>99.51</b>		FK
VMP	<b>McKenzie VMP</b>	Planned			FK
CFIP	<b>McMahan CFIP 2021</b>	Complete	<b>58.18</b>		FK
CFIP	<b>McNeill CFIP 2020</b>	Complete	<b>212.10</b>		FK
Fire Plan	<b>Meadow Lakes North</b>	Complete in Maint	<b>108.63</b>		FK
CFIP	<b>Melba Mathias CFIP 2020</b>	Complete	<b>147.66</b>		FK
CFIP	<b>Messer CFIP FKU 2019</b>	Active	<b>1,969.61</b>		FK
CFIP	<b>Michaels CFIP 2021</b>	Active	<b>21.89</b>		FK
Fire Plan	<b>Miramonte Emergency Ingress and Egress</b>	Cancelled			FK
CFIP	<b>Mitchell CFIP 2020</b>	Complete	<b>36.57</b>		FK
Fire Plan	<b>Musick Fuel Break</b>	Complete in Maint	<b>441.92</b>		FK
Fire Plan	<b>Old Bretz</b>	Active	<b>72.20</b>		FK
CFIP	<b>Old Pine Ridge CFIP 2021</b>	Active	<b>409.37</b>		FK
CFIP	<b>Parr CFIP 2021</b>	Active	<b>88.05</b>		FK
CFIP	<b>Perron CFIP 2019</b>	Complete	<b>42.56</b>		FK
Fire Plan	<b>Pinehurst Community Fuel Break</b>	Active	<b>88.11</b>		FK
Fire Plan	<b>Pinehurst Community Fuel Break (Local Unit)</b>	Active	<b>76.90</b>		FK
CFIP	<b>Rock Haven CFIP 2020</b>	Complete	<b>327.05</b>		FK
Fire Plan	<b>Sandcreek Pre Suppression Line</b>	Complete in Maint	<b>1.56</b>		FK
CFIP	<b>Shaver Ranch II CFIP 2019</b>	Complete	<b>424.59</b>		FK
CFIP	<b>Shaver Ranch III CFIP 2021</b>	Complete	<b>173.22</b>		FK
CFIP	<b>Shaver Ranch IV CFIP 2023</b>	Active	<b>753.51</b>		FK
VMP	<b>Shaver South 2020 VMP</b>	Active	<b>897.76</b>		FK
Fire Plan	<b>Shaver Springs Fuel Break</b>	Complete in Maint	<b>151.91</b>		FK
Fire Plan	<b>Sky Harbor Pre Suppression Line</b>	Complete in Maint		<b>5.64</b>	FK
CFIP	<b>Stucky CFIP 2020</b>	Complete	<b>106.56</b>		FK
CFIP	<b>The Cedars CFIP 2014</b>	Complete	<b>121.41</b>		FK

Fire Plan	<b>Tollhouse Fire Center Reduction Project</b>	Active	<b>11.81</b>		FK
CFIP	<b>Verduzco CFIP 2023</b>	Active	<b>85.24</b>		FK
VMP	<b>VMP Comstock</b>	Complete in Maint	<b>236.82</b>		FK
VMP	<b>VMP SCE Shaver Lake</b>	Active	<b>831.55</b>	<b>5.53</b>	FK
VMP	<b>VMP White Deer</b>	Active	<b>369.97</b>		FK
Cal VTP	<b>VTP Sequoia Lake</b>	Active	<b>93.11</b>		FK
Cal VTP	<b>VTP Shaver Ranch</b>	Active	<b>24.82</b>		FK
CFIP	<b>White CFIP 2022</b>	Active	<b>64.05</b>		FK
Fire Plan	<b>White Deer Fuel Break</b>	Complete in Maint	<b>227.34</b>		FK
CFIP	<b>Wintersteen CFIP 2021</b>	Active	<b>46.01</b>		FK
<b>Totals</b>			<b>30,843.01</b>	<b>110.53</b>	

## APPENDIX B: UNIT GOALS AND OBJECTIVES

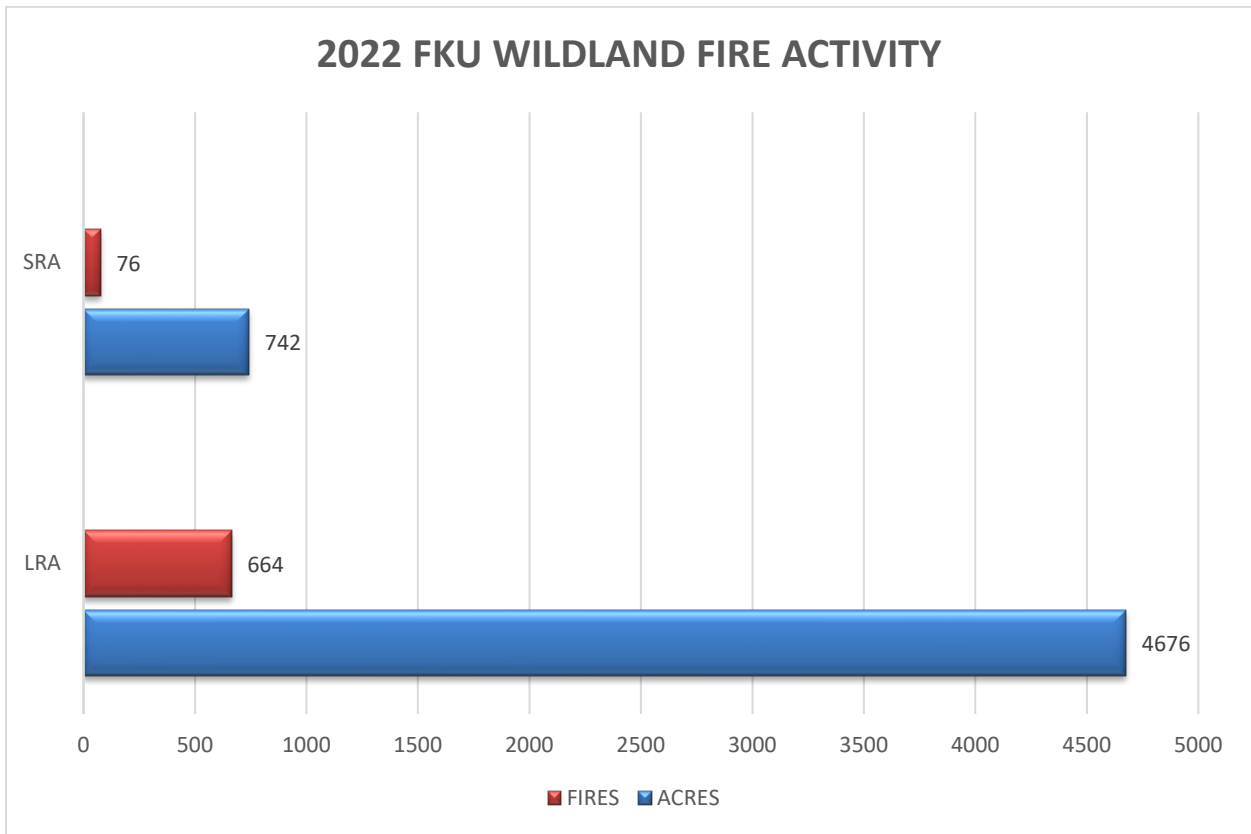
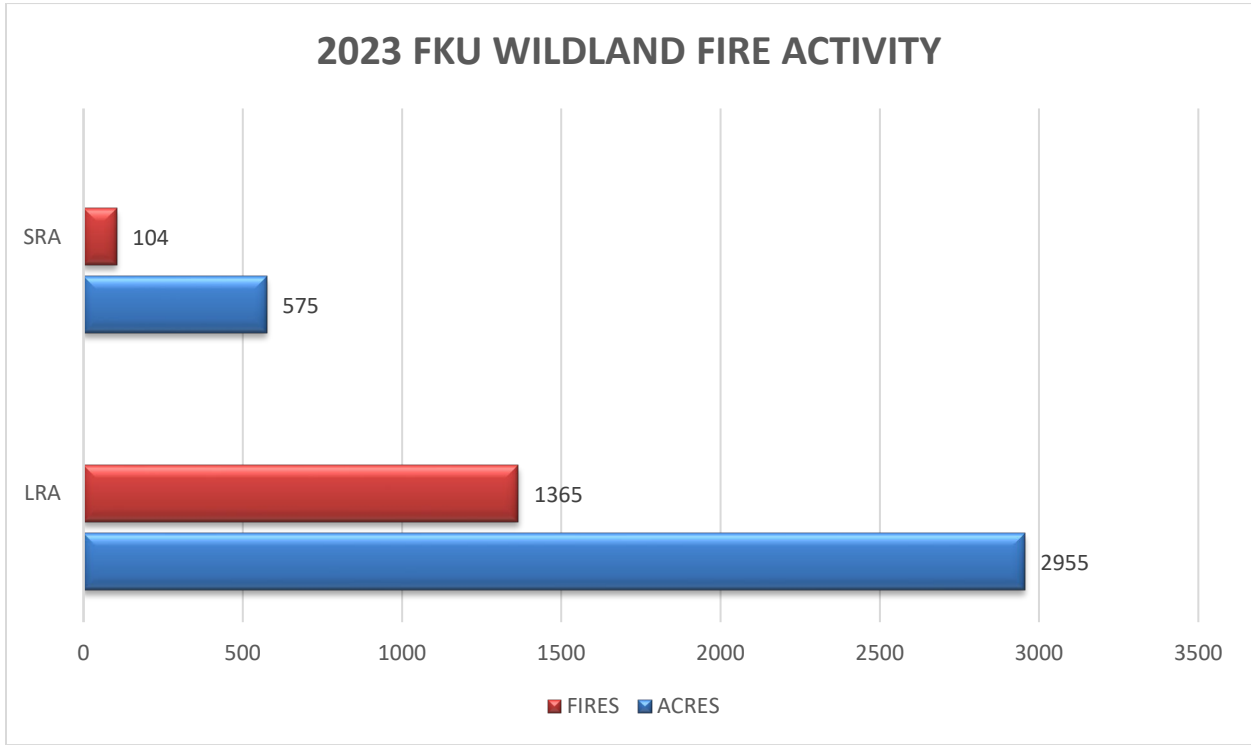
### The Fresno-Kings Unit Key Objectives from the California Strategic Fire Plan:

- Analyze trends in fire cause and focus prevention and education efforts to modify behavior and effect change.
- 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.
- 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, fire lines, water sources) developed during a fire suppression effort, taking into consideration those identified in previous planning efforts.

The Fresno-Kings Unit management intends to support the Fire Plan and make it successful. With the limited availability of funds, creative ways to accomplish fuel reduction projects will remain a top priority. Work with grant writers and stakeholders to secure funds to implement projects. The Unit will also focus on the maintenance of completed projects; this step will allow us to have the strategic benefits of the projects for years to come. Fire Control Road maintenance will be prioritized, and a rotation schedule developed. We will continue to collect, analyze, and prepare data to assess communities at risk for those in need of fuel reduction or other projects. Continue our participation with the local fire safe councils. The Fresno-Kings Unit strives to educate the public on fire prevention and incorporating fire resistant landscaping and construction to their property, as well as hazardous fuel reduction to keep their lives, homes, property, and natural resources safe from catastrophic wildfires.

We intend to build on our commitment to pre-plan for emergency situations and to enhance our critical infrastructure protection plan in high-risk areas by creating and producing pre-attack plans.

# APPENDIX C: IGNITIONS DATA



## 2023 SRA WILDLAND IGNITIONS

Row Labels	Count of INCIDENT_TYPE
Arson	3
Debris and Open Burning	8
Equipment	17
Flame/torch used for lighting	1
Heat from an undetermined smoking material	1
Heat from operating equipment, other	1
Heat spread from another fire, other	1
Hot ember or ash	1
Hot or smoldering object, other	3
Lighter: cigarette lighter, cigar lighter	2
Misuse of Fire by a Minor	1
Natural	2
Other	24
Power Generation/Transmission/Distribution	8
Radiated heat from another fire	2
Recreation and Ceremony	1
Spark, ember, or flame from operating equipment	1
Undetermined	17
Vehicle	10
<b>Grand Total</b>	<b>104</b>

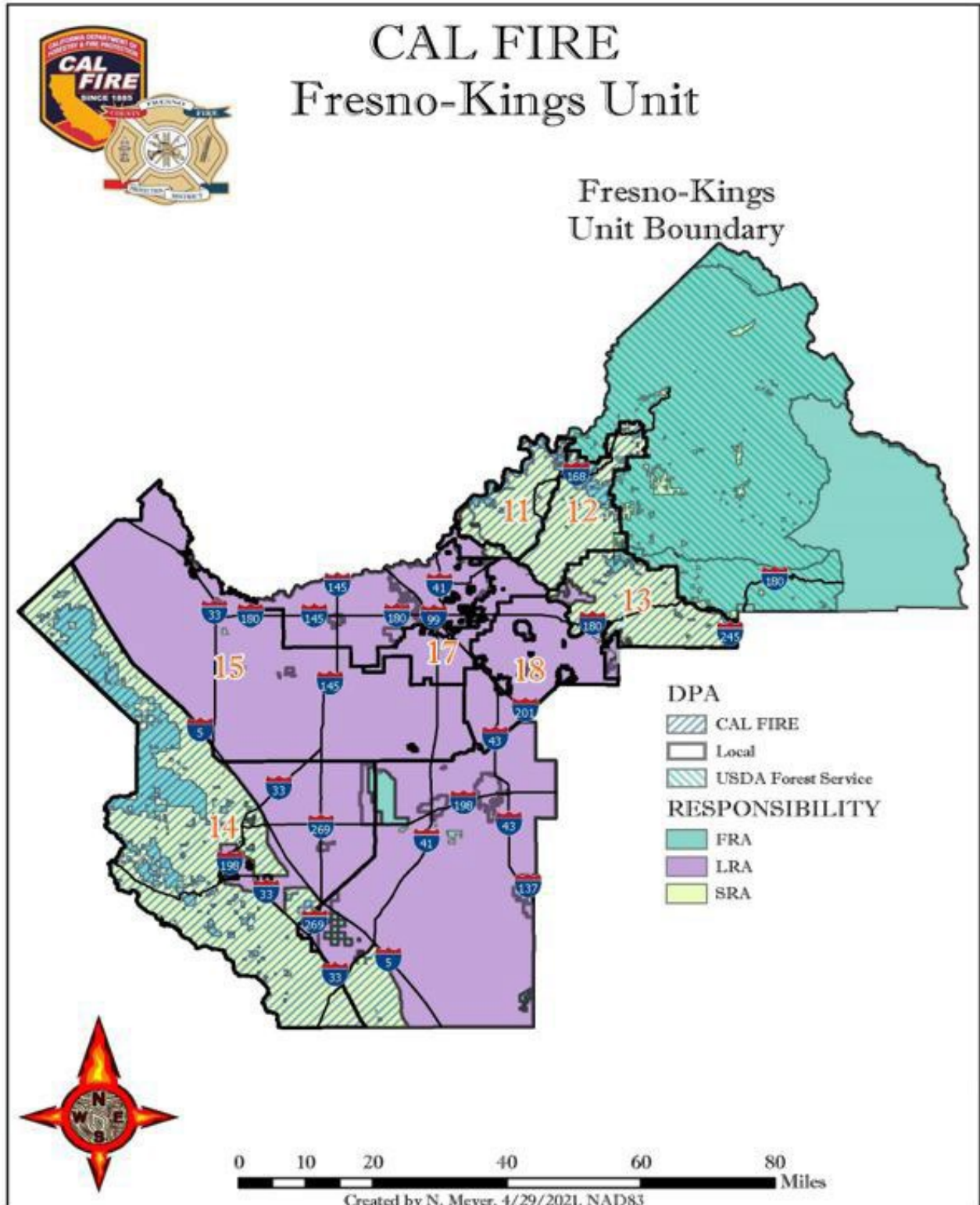
## 2023 LRA WILDLAND IGNITIONS

Row Labels	Count of INCIDENT_TYPE
Arson	70
Backfire from internal combustion engine	1
Chemical, natural heat sources, other	1
Conducted heat from another fire	1
Debris and Open Burning	45
Electrical arcing	56
Equipment	43
Explosive, fireworks, other	1
Fireworks	1
Flame/torch used for lighting	6
Flying brand, ember, spark	2
Heat from an undetermined smoking material	3
Heat from direct flame, convection currents spreading from another fire	12
Heat from open flame or smoking materials, other	11
Heat from operating equipment, other	30
Heat spread from another fire, other	14

## 2023 LRA WILDLAND IGNITIONS CONTINUED

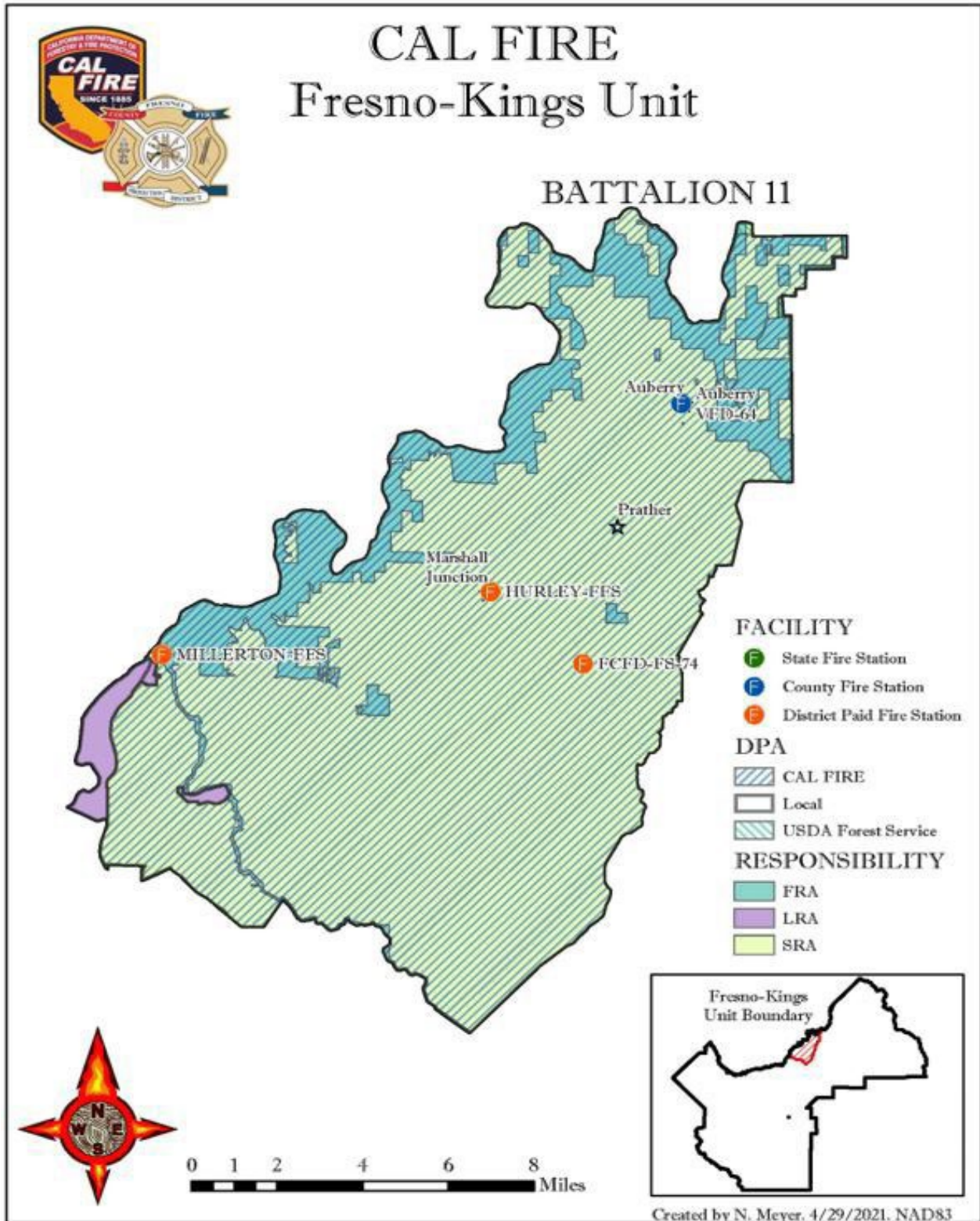
Row Labels	Count of INCIDENT_TYPE
Heat, spark from friction. Includes overheated tires	19
Hot ember or ash	3
Hot or smoldering object, other	27
Incendiary device	4
Lighter: cigarette lighter, cigar lighter	18
Match	6
Misuse of Fire by a Minor	4
Molten, hot material	3
Multiple heat sources, including multiple ignitions	6
Natural	8
Other	58
Power Generation/Transmission/Distribution	12
Radiated heat from another fire	15
Radiated of conducted heat from operating equipment	17
Recreation and Ceremony	1
Smoking	2
Spark, ember, or flame from operating equipment	14
Spontaneous combustion, chemical reaction	7
Undetermined	342
Vehicle	41
(blank)	461
<b>Grand Total</b>	<b>1365</b>

EXHIBITS: MAPS: Figure A: Unit Maps

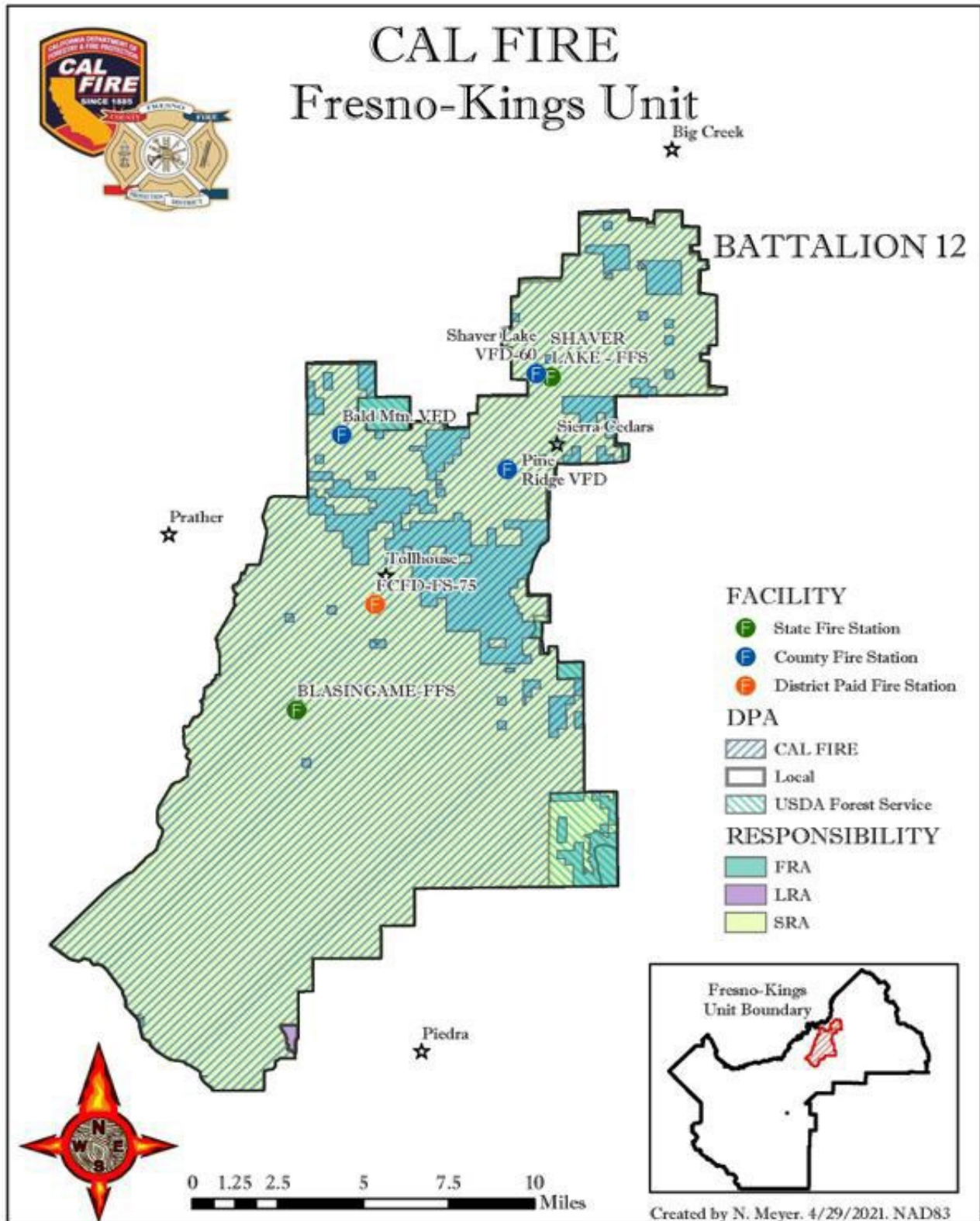




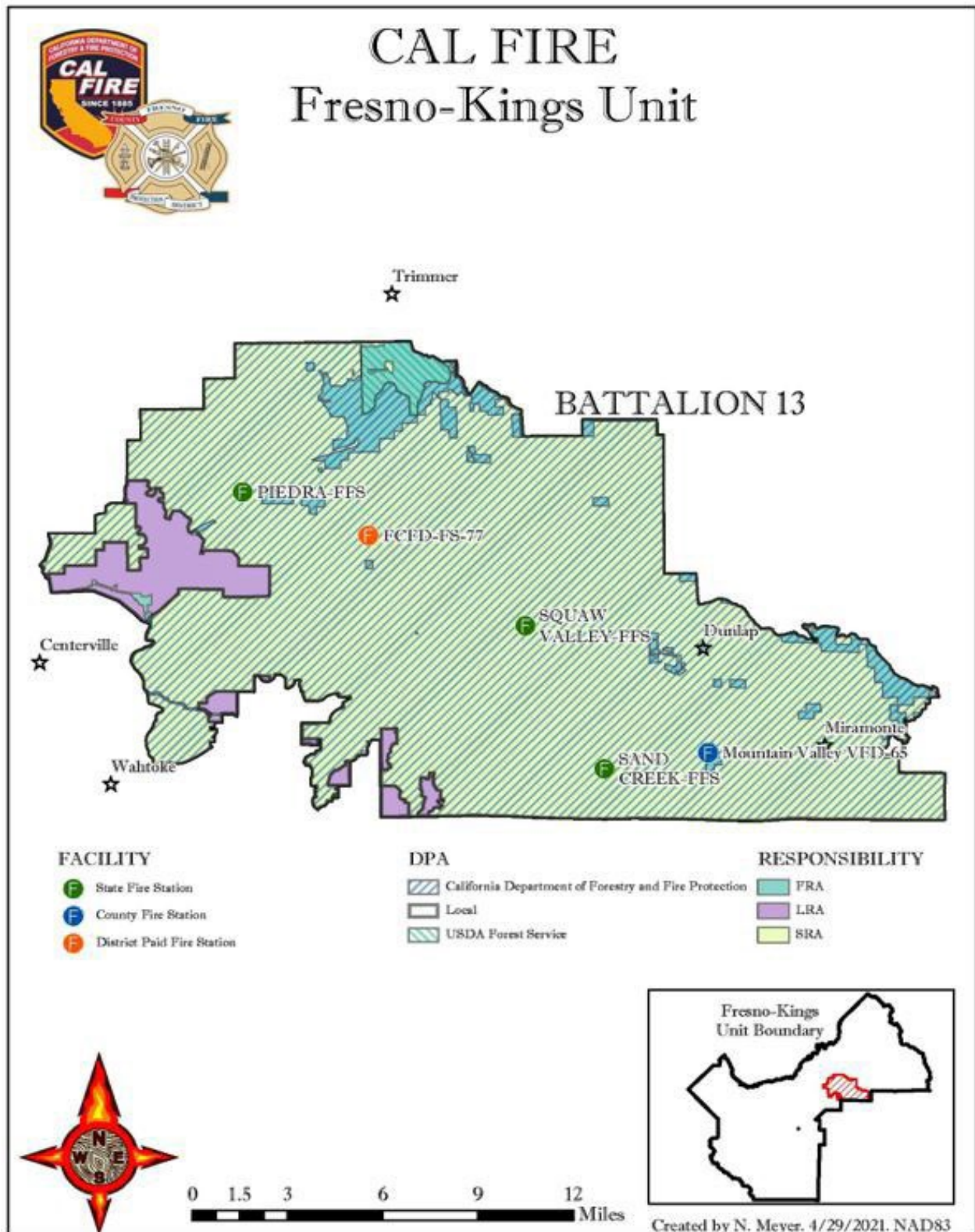
Battalion 11



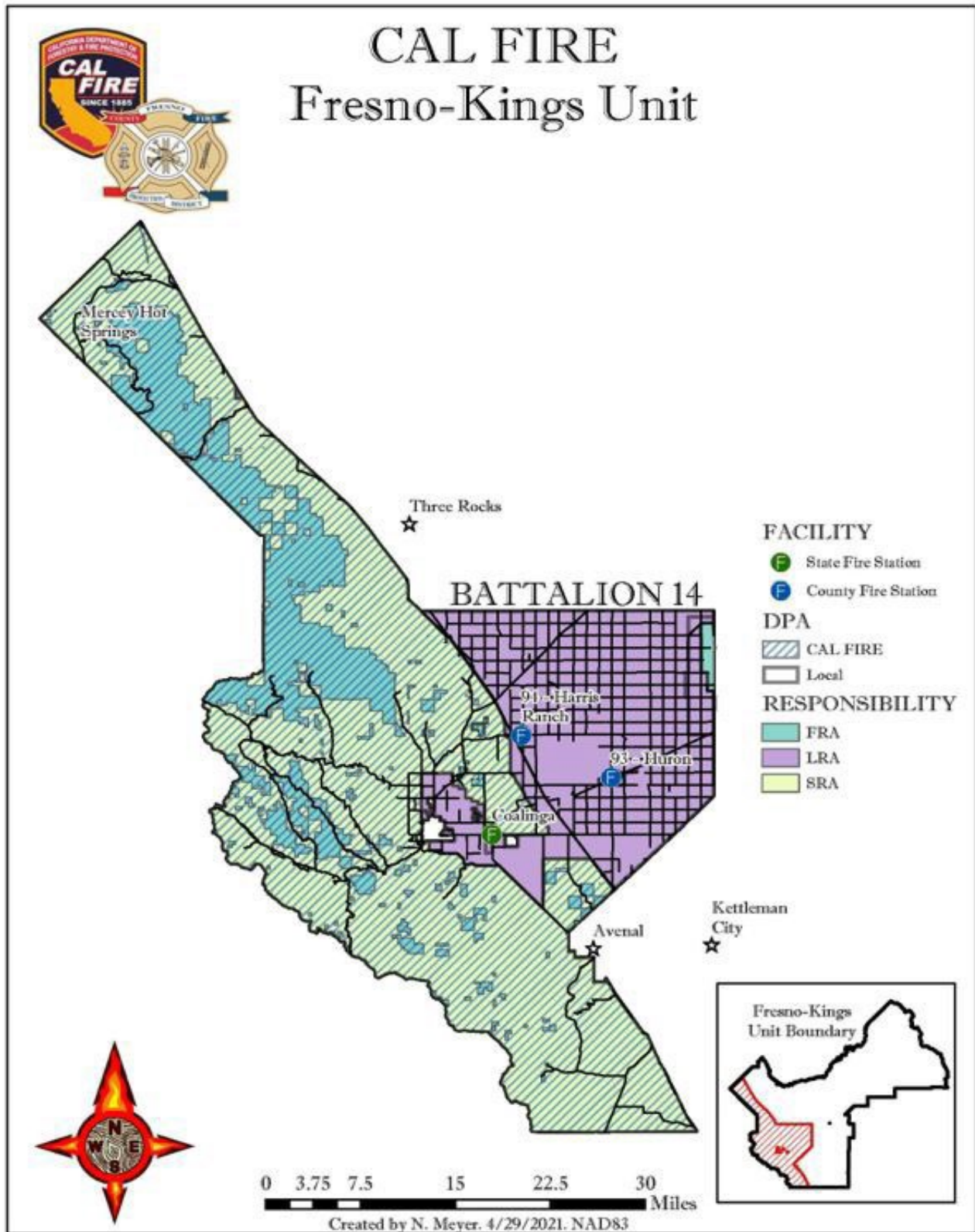
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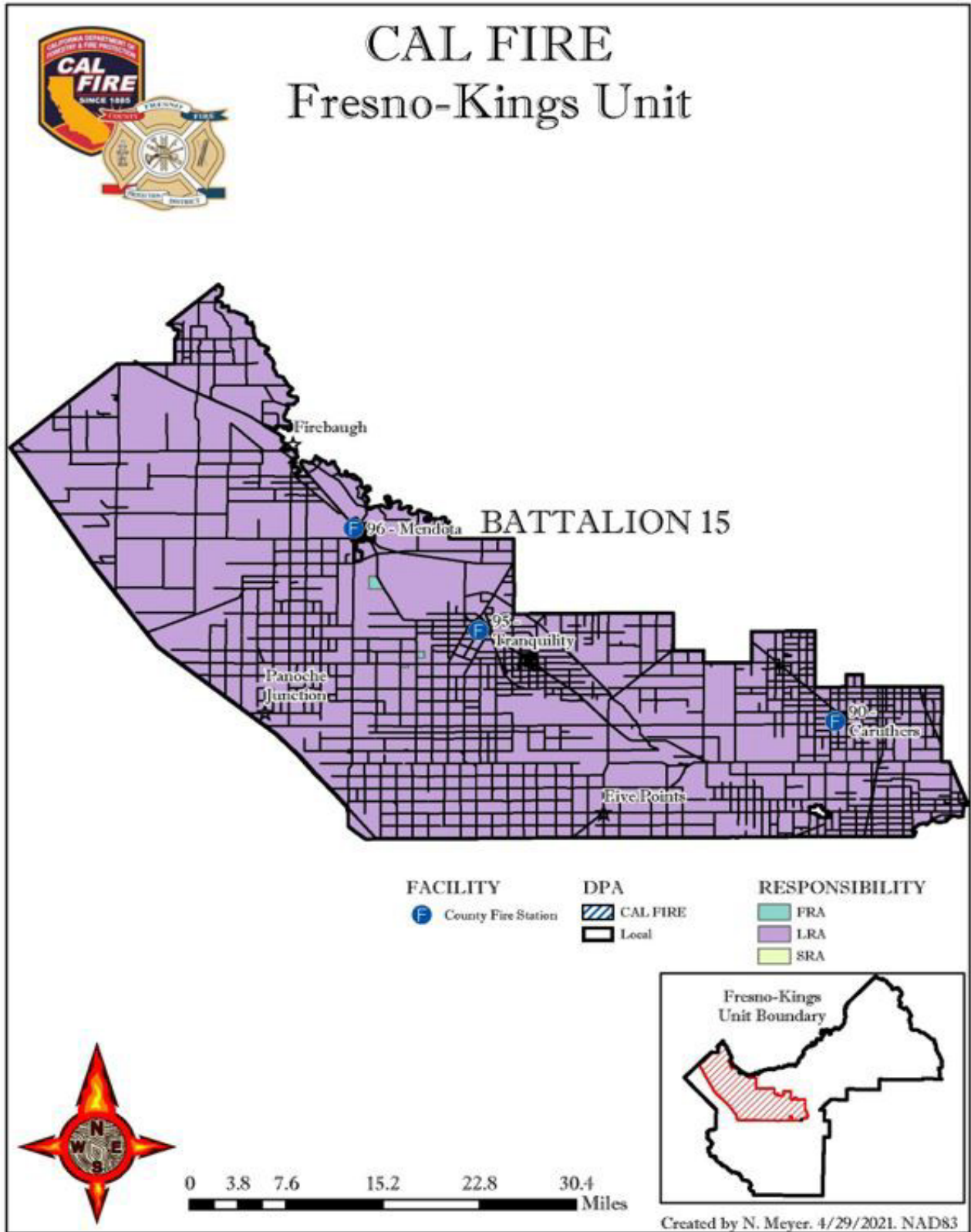


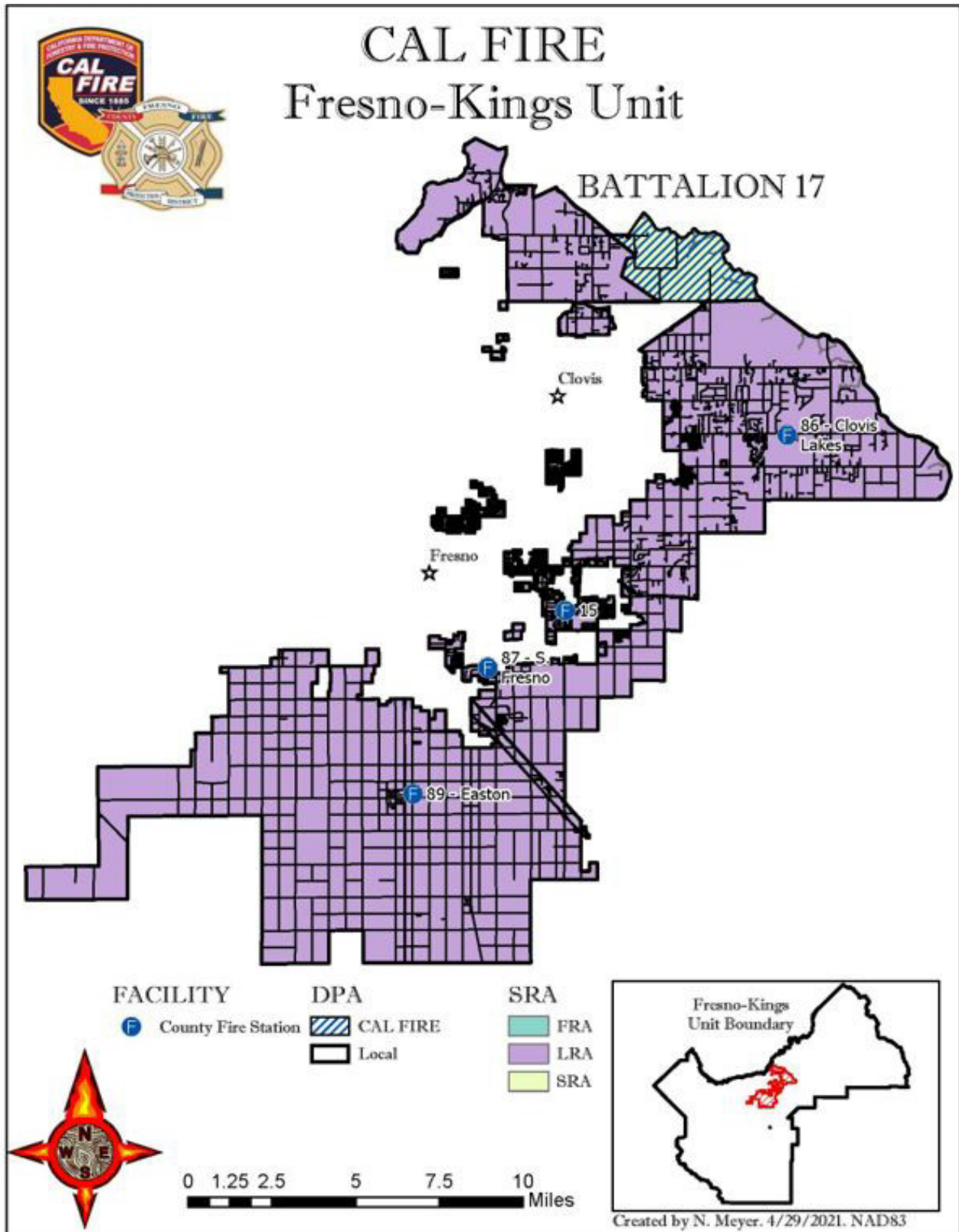
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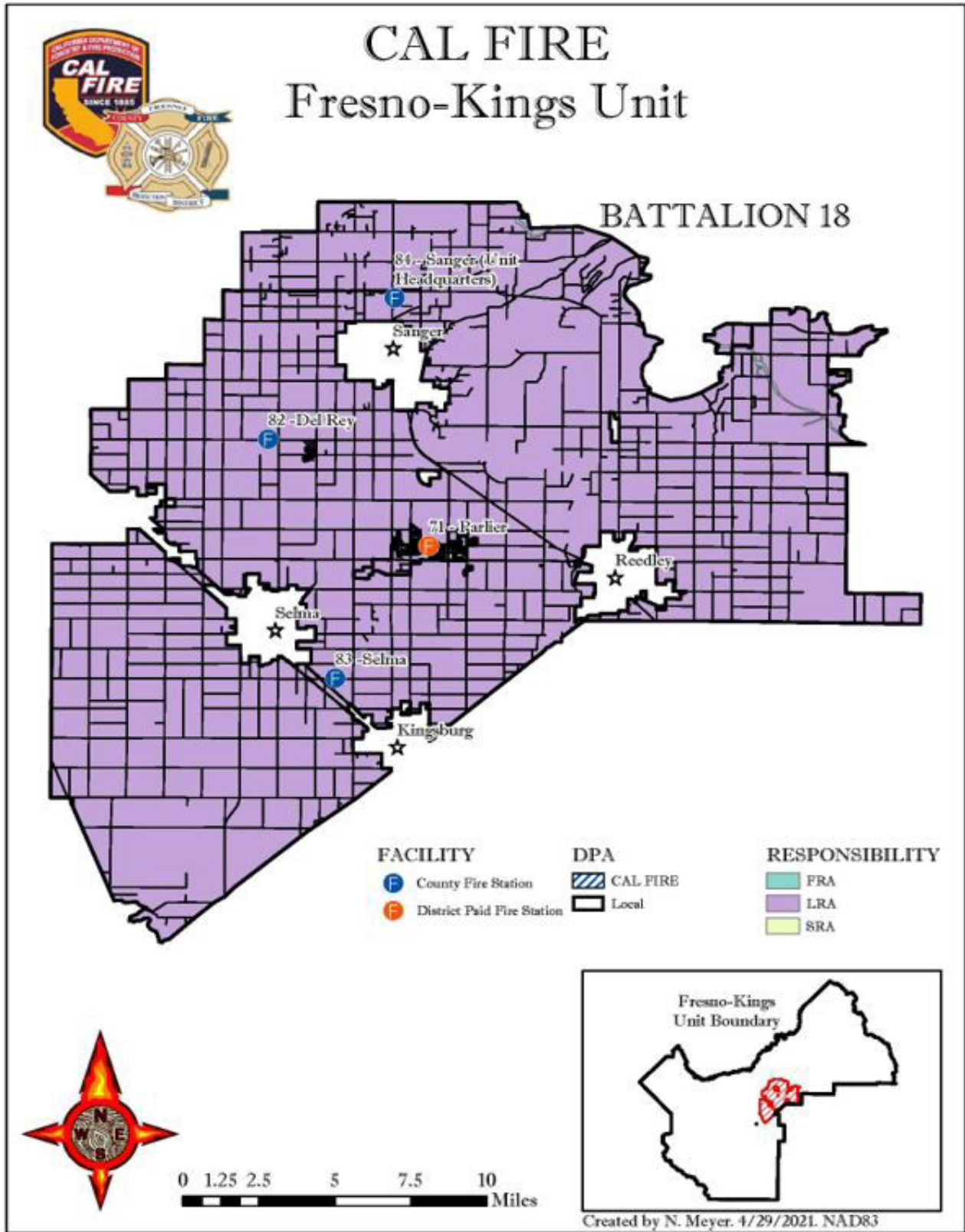


Battalion 14

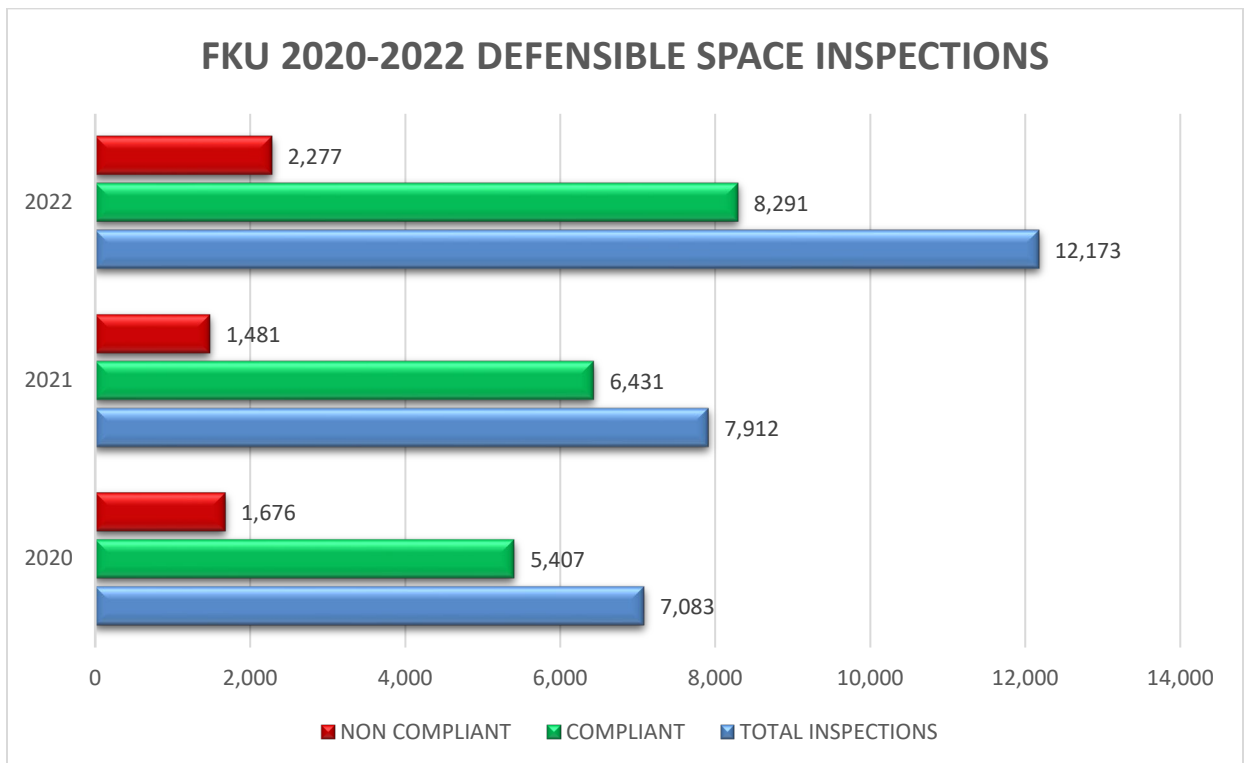
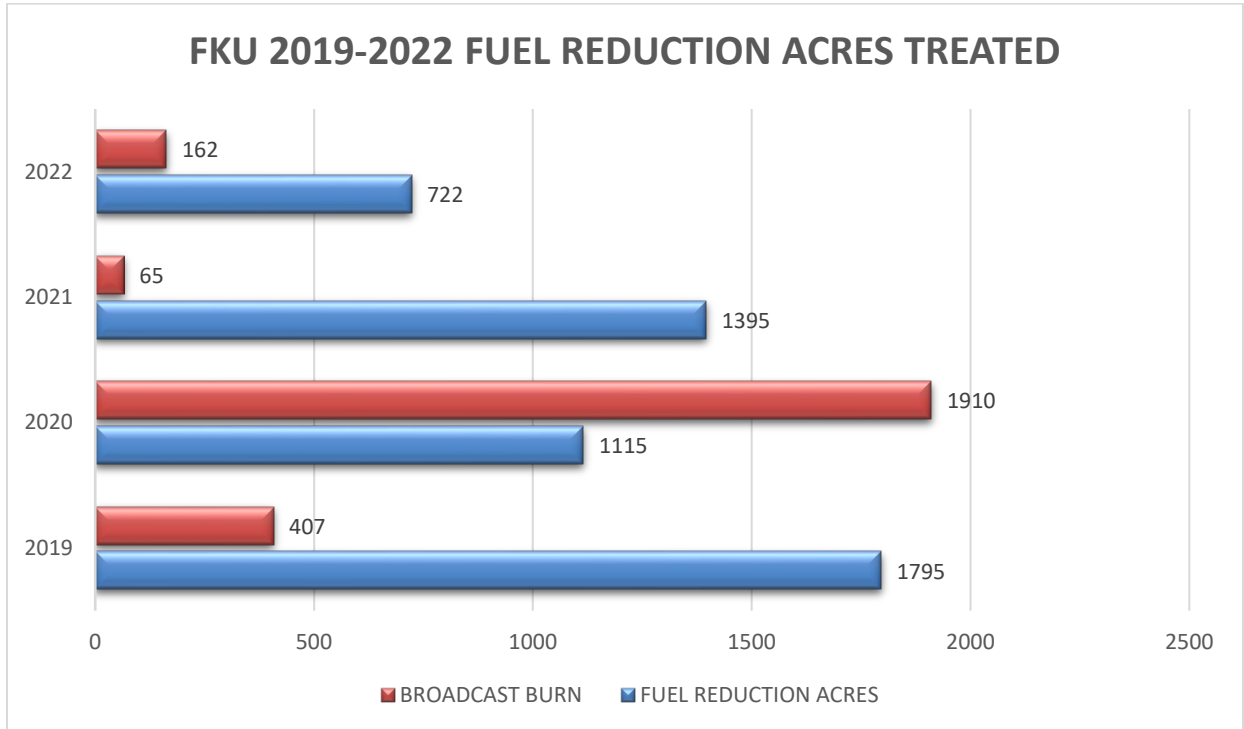








## 2019-2022 ANNUAL ACCOMPLISHMENT REPORTING





# **ANNUAL ACCOMPLISHMENTS REPORTING (2023)**

## **Fire Planning**

During the 2023 season, the Fresno-Kings Unit continued its dedication to fuel reduction by pile burning, broadcast burning, mastication, manual thinning, tree felling, biomass removal, and piling current projects. The location and prioritization of 2023 FKU fuels projects remained focused on Very High Fire Hazard Severity Zones (VHFSZ), Unit VMP's, VTP's and assisting our Federal (USFS) and private (SCE) partners on fuel reduction work in the Shaver Lake community and Pinehurst community. Working at this capacity takes a coordinated effort by multiple agencies as well as the full support from the Unit Executive Staff and unit resources.

Work was completed by CAL FIRE fuels crews, crews from Task Force Rattlesnake, Miramonte CDCR crews, CCC crews, CAL FIRE engines and HFEO's operating tree mortality equipment and private contractors. In 2022 the Unit moved Task Force Rattlesnake crews from the Millerton Fire Station to the Sierra Elementary School in Tollhouse – now named the Tollhouse Fire Center. Efforts continue to provide barracks, training rooms and be a full Fire Center at this location. The Tollhouse Fire Center currently is home to four Task Force Rattlesnake crews. Having that kind of workforce available to the Unit for Fuels reduction again proved to be highly beneficial.

The Fresno County Wildfire Prevention and Recovery Coordination Groups, formally known as the Fresno County Tree Mortality Task Force (FCTMTF), continued to make great strides in completing projects and reducing the impacts of tree mortality in 2023. In 2023 the County of Fresno, 168 Fire Safe Council, Sierra RCD, and the Oak to Timberline Fire Safe Council received California Climate Investment Grants for Fuels Reduction projects to reduce the impacts of tree mortality and create safer communities.

Fresno-Kings Unit continues looking for new larger VMP/VTP's, maintaining our established fuel breaks while actively searching for opportunities to implement new fuel breaks. The Unit is committed to implementing the goals of the 2018 Strategic Fire Plan for California. The drought and subsequent tree mortality highlight the need for us to have a natural environment that is more fire resilient; buildings and infrastructure that are more fire-resistant; and a society that is more aware of and responsive to the benefits and threats of wildland fire; all achieved through local, state, federal, tribal, and private partnership.

## **Investigations and Enforcement**

In 2023 the Fresno-Kings Prevention Bureau responded to approximately 392 calls for service ranging from fire and law enforcement responses, to assisting other law enforcement agencies within the State Responsibility Area and the Fresno County Fire Protection District. Of those total 361 calls, 225 of them officers investigated 93 structure fires, 92 wildland fires, 9 vehicle fires, 22 refuge fires, 2 AG products, and 7 other agencies assist. Officers responded to approximately 136 calls related to law enforcement, 20 citations were issued, 9 total arrests: 6 arson arrests and 2 arrests were

related to other crimes or warrants.

## **Wildland Fire Prevention Engineering**

The Public Resource Code 4291 (LE-100) Inspection Program continues to make great progress; in the number of inspections; and educating the public on how to create their defensible space in hopes of reducing homeowner risk and damage of an advancing wildfire. The unit has maintained a high goal of inspections for the past several years. The program was staffed with four defensible space inspectors which created a coordinated inspection program with the support of field personnel (station personnel and Battalion Chiefs). Personnel completed 12,059 LE-100 inspections, which includes second inspections. More than 165 Public Resources Code 4290/County Ordinance 15.60, inspections took place in the Unit. During these inspections, such items as roadway length and width, fuel modification, maintenance of defensible space, and water tanks were inspected to confirm compliance with the regulations by the field Battalion Chiefs. The Fire District Protection and Planning office monitors new construction and strives to maintain the safety of the public and their property. The services involved the preparation of 71 conditioning letters to the Fresno County Building Department, held 65 consultation meetings; Protection and Planning staff conducted 325 plan reviews and our Field Inspectors conducted a total of 925 inspections related to new construction of both residential and commercial projects, underground systems, new business inspections, local jail, and court inspections, and 60 retail fireworks stands.

The fire inspectors continue to maintain an aggressive weed abatement program in the Local Responsibility Areas, where station personnel conduct the initial inspections of all parcels and additional work to gain compliance by the public is conducted by this office. Within the Fire District, we conducted 2602 inspections, and approximately 975 violation notices were issued.

## **Cost Recovery**

During the 2023 calendar year, the Fresno Kings Unit submitted 2 reports to Civil Cost Recovery for fires within the SRA. The cause of these fires was a result of negligence and or a violation of law, therefore the responsible party was issued a letter of demand related to extinguishment and investigation of the fires.

## **Education and Information**

In 2023 , the Public Education and information team attended over 92 in person events providing educational information on tire and life safety. These events Included, but not limited to, several parades, National Night Outs, Fresno Home and Garden Show, The Big Fresno Fair, multiple trunk or treats as well as a many career days. At these events we handed out fire prevention materials and presented safety education information all to help eliminate risk. We also delivered 23 in person elementary school programs reaching 2,573 school children. These schools included Mendota Elementary, Raisin City Elementary, and Fairmont Elementary. We also have installed 25 smoke alarms and 15 carbon monoxide detectors to homeowners in need. We continue to use the F.I.S.E.

(Firefighter's in Safety Education) program which is associated with California's Common Core Curriculum along with the Alisa Ann Ruch Burn Foundation.

The Fresno-Kings Unit did report 4,508 fire prevention hours that were dedicated to prevention and education. These efforts will continue to be proactive in providing information and education to residents that resid, work, or travel through the wildland urban interface, as well as the communities throughout the County of Fresno.

The Fresno-Kings Unit continues to partner with Safe Kids, Central Valley Buen Coalition, Central Valley Burn Center, Valley Children's hospital, Fresno Fire, Clovis Fire, Selma Fire, and the USFS. We utilized our Fire Prevention trailer this year at the Big Fresno Fair in which we reached over 4,000 children from all over the Central Valley.

We are currently utilizing 3 social media platforms, X, Facebook, and Instagram. During 2023, social media continued to expand while striving to instantaneously communicate with the people that we serve or that may be impacted by our operations. The Public Information Bureau currently has over 16,000 Facebook followers, 12, 700 Twitter followers, and 8,126 Instagram followers.

Safety messages, fire prevention tips, local emergencies, evacuations, recommendations, and other information is sent over the above social media sites and is displayed at [www.fresnocountyfire.org](http://www.fresnocountyfire.org).

## **Vegetation Management**

The 2023 Fuel reduction season was very productive as usual. Vegetation Management Program (VMP), California Vegetation Treatment Program (CalVTP), and CEQA Notice of Exemption (NOE) were all utilized in 2023 and encompassed a diverse set of projects developed for rangeland improvement, fuels reduction, training, Roadside brushing for safe ingress and egress, tree mortality mitigation, and environmental protection. All Fresno-Kings fuels reduction projects are consistent with the priorities described in this plan.

Fuel reduction efforts have been successful on many projects in the Unit ranging from Roadside brushing and pile burning on the Black Mountain Repeater Road to large scale broadcast burning on the Johnson VMP, Danell VMP, Edison VMP, and Sequoia Lake VTP. Mechanical thinning, hand thinning, and pile burning have occurred on many other projects in the unit including Comstock VMP, White Deer VMP, Shaver ranch VTP, Bear Mountain Repeater Road, Musick NOE, Old Bretz NOE, and the Tollhouse Fire Center NOE.

In addition to all the hard work by the California Nation Guard Crews, Fuels Crew 4349, CCC crews, and the CDCR Crews who all combined efforts into the overall successes mentioned above, we had contractor crews assist on a few projects in the unit as well. Our contractor working on the White Deer VMP made great progress in the installation of control lines needed prior to our planned Broadcast burn. Another contractor made great progress in the reduction of dead trees in our projects ravaged by the 2020 Creek Fire on the Highway 168 side of the Unit. Multiple prescribed burns are planned in the 2024 and

2025 season. A priority spring burn is planned on the new Gun VMP in Battalion 11. Additionally, the Unit plans new prescribed burn entries on the Sequoia Lake VTP, White Deer VMP, Edison VMP, Danell VMP, and Johnson VMP. We were able to burn 2,190 acres this year in preparation for an approximately 3000 acres burn this Fall/Winter.

### **PILE BURNING ON SEQUOIA LAKE VTP**



### **PILE BURNING ON THE SCE VMP**



## Volunteerism

The Fresno-Kings Unit Volunteers in Prevention (VIP's) program currently has four volunteers that did assist with school programs, career days, and the Fresno Home & Garden show, and the Big Fresno Fair.

## SCHOOL EVENTS



## Fire Hazard Severity Mapping and Mitigation

The Fresno-Kings Unit continues to collaborate with CAL FIRE's Fire and Resource Assessment Program (FRAP), local cooperators, and various CAL FIRE programs to assist with data collection techniques, information presentation and dissemination, landscape mortality assessment, and site-specific fuel reduction mitigations. The unit's ground mitigation response that began in 2015 and increased in pace and scale in 2019, continued in 2023. Each fuel break was strategically created to reduce fuel loading in and around communities at risk of fire danger. The fuel breaks are constructed in a manner which makes access and egress much safer during an emergency. In the winter and spring of 2023, the unit made it a priority to get the piles on the fuel breaks burnt and ready for the upcoming fire season. With the addition of the Environmental Specialist position in the unit we have begun designing a fuel's monitoring program. This will include evaluating existing fuel's treatments, planned treatments, and monitoring the effects of prescribed fire. The Unit implemented these techniques on a VMP in Shaver Lake with our partners at Edison. Pre and post treatment monitoring by FKU Environmental Specialist showed that the prescribed fire treatments on this VMP effectively changed the Fuel type from a Fuel Model 13 (Heavy Logging Slash) to a Fuel Model 2 (Timber grass and understory) which dramatically reduced the potential fire behavior.

These pre and post treatment monitoring results were identified throughout our fuel reduction projects within the timber fuel type in 2022. In addition to the projects in the timber, our oak woodland fuel reduction projects had similar results. We converted oak woodland fuel types from Fuel Model 5 (Brush) to a Fuel Model 1 (short grass) which dramatically reduces fire behavior in this type of plant community. An additional finding was that fuel treatments in oak woodland habitats significantly reduced the abundance of the invasive grasses and thick thatch allowing for native botanicals to flourish.

Like past years, the unit supported an all-hands-on deck approach to get the remaining piles burned and the fuel breaks fully operational. Three state engines, four California National Guard crews, Fresno's fuels crew 4349, Mid Valley 1 (CCC crew), two HFEO's running excavators and skid steers to bone pile (push in) large log deck piles, as well as Miramonte crews, all had a part in ensuring this goal was met. Several of our fuel breaks which were created through the Good Neighbor Authority Agreement with the U.S.F.S. and spanned across SRA and FRA were burnt in a joint effort between the two agencies. The unit continued its partnership with Southern California Edison (SCE) and facilitated several broadcast burns on one of our VMP projects, with many more planned for the future. The unit is proud of the continued healthy working relationship between the two agencies which allows to provide a higher level of protection for the citizens who work, travel through, and live in the communities at risk within the County of Fresno.

**SLASH AND THICK FUEL ON SEQUOIA LAKE VTP**



**PILING ON THE SEQUOIA LAKE VTP**



**PILING ON THE COMSTOCK VMP**



**COMSTOCK VMP AFTER MANUAL PILING AND PILE BURNING**





**JOHNSON VMP**



**JOHNSON VMP**



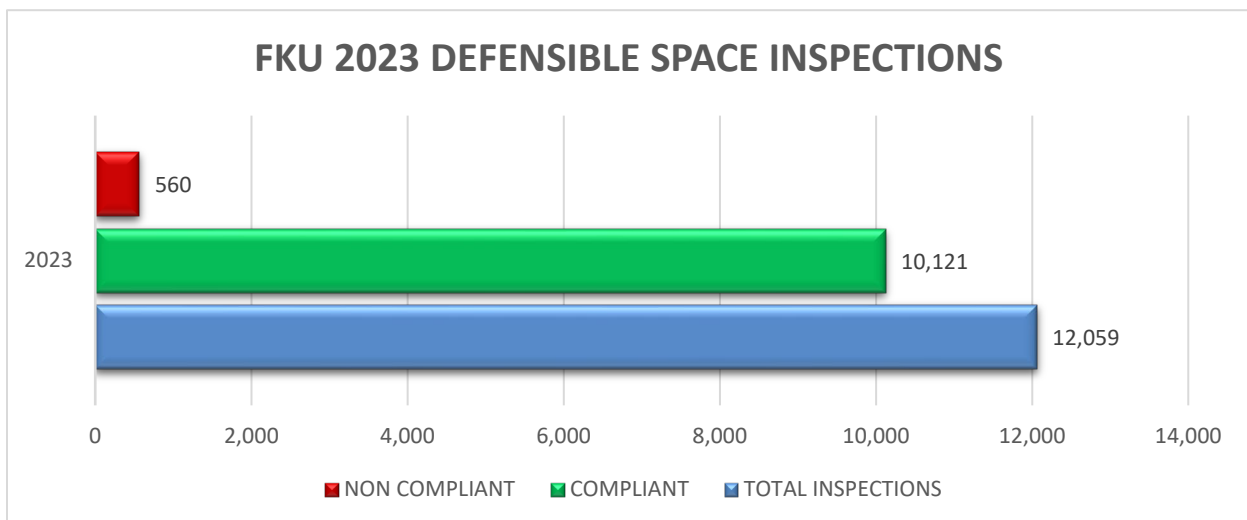
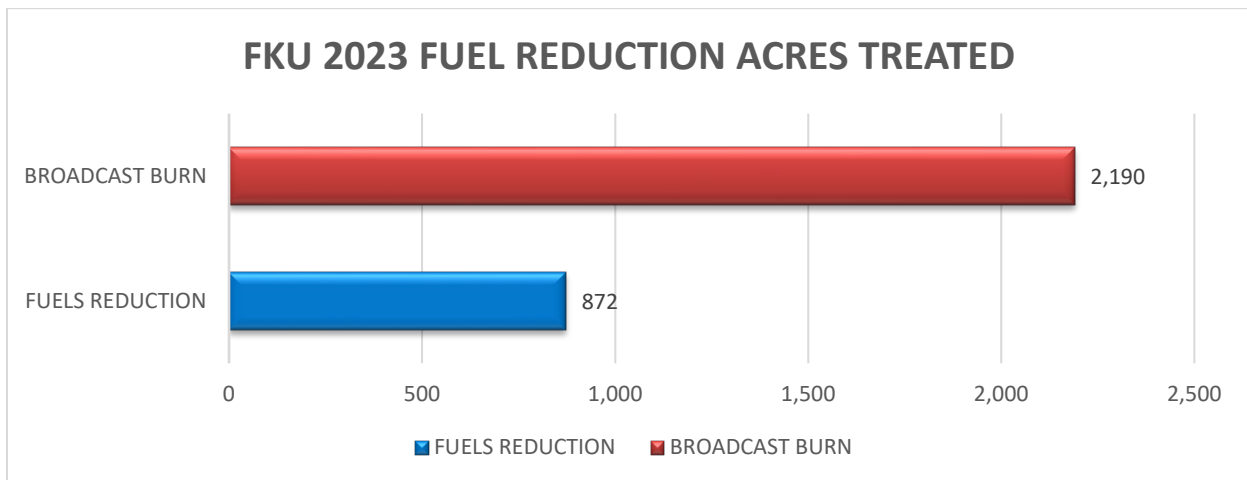
**JOHNSON VMP**



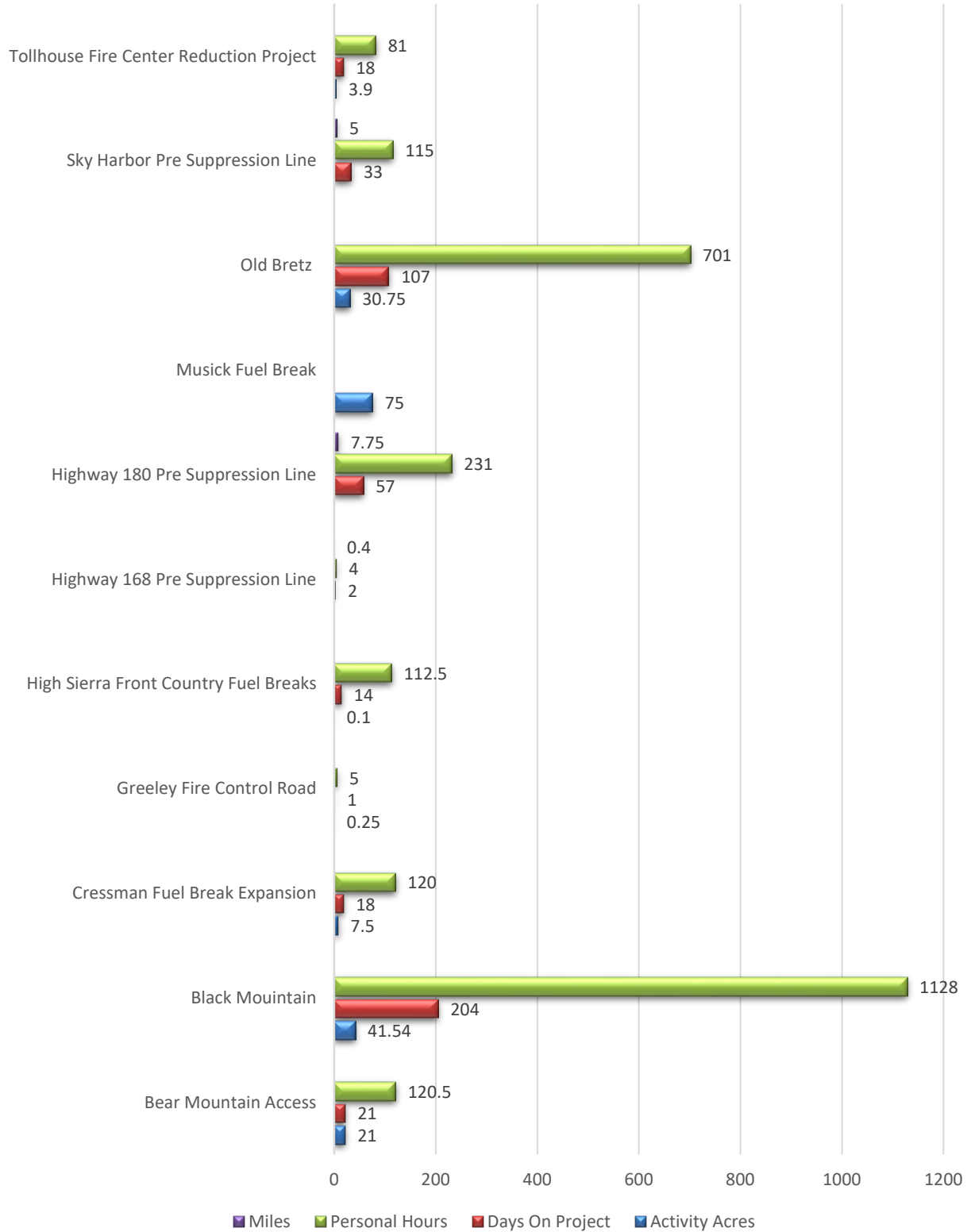
Additional fuel breaks have been identified and are through the planning process and ready for implementation. In addition to Fuel Breaks, the Unit has several VMP/VTP's shovel ready and will start prep work in 2024. Some of these VMP/VTP's are the Auberry Gun Range VMP, and the Shaver Ranch VTP. Assessment and planning efforts continue for long term fuel reduction needs. A critical component of the unit's total response includes close collaboration with our cooperators. The unit works with the U.S.F.S., local Fire Safe Councils, Utility Companies like SCE, and Fresno County to prioritize tree removal and fuels reduction work and the utilization of our collective resources directly adjacent to communities, ingress and egress routes and infrastructure.

The following graphs and charts represent fuel reduction efforts and activities completed by the Fresno-Kings Unit in 2023. These totals are pulled from Cal Mapper and represent all project efforts. The following is list of the specific projects that the Fresno-Kings Unit focused on in 2023.

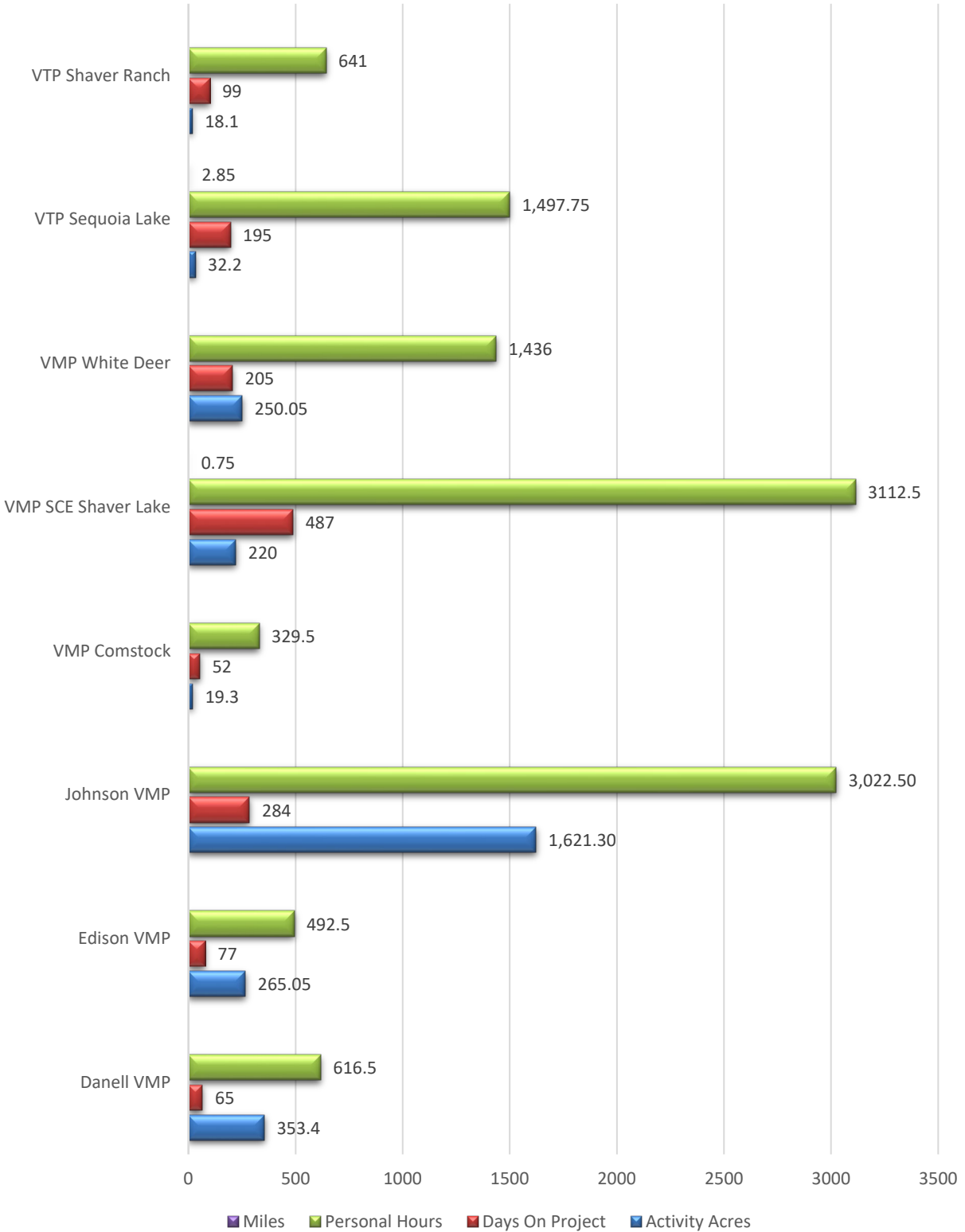
### 2023 FUEL REDUCTION EFFORTS BY PROJECT



# FKU 2023 Fuel Reduction Activity Report



## FKU 2023 VMP/VTP Fuel Reduction Activity Report



DANELL VMP



DANELL VMP



DANELL VMP

