



# ***2024 Strategic Fire Plan***



**Updated April 2024**

## **UNIT STRATEGIC FIRE PLAN AMENDMENTS**

<b><u>Date</u></b>	<b><u>Section Updated</u></b>	<b><u>Page Numbers Updated</u></b>	<b><u>Description of Update</u></b>	<b><u>Updated By</u></b>
5/08/24	Level of Service	8	Added Crew Info, Updated Resource Spreadsheet	BP
5/08/24	Section V	26	PMC update	EK
5/08/24	Pre-Fire Strategies	14-16	Program change	EK
5/01/24	Pre-Fire Tactics	22-29	Updated Info for Multiple Projects	EK
5/01/24	Table of Contents	All	Formatted	BP
5/01/24	All	All	ADA compliance	BP
4/17/24	Executive Summary	2-3	Update	BP
4/17/24	Unit Overview	4-7	Updated Fuel Models/Information	BP
4/17/24	Pre-Fire Tactics	29	Completed Fuels Projects Updated	BP
4/17/24	Defensible Space Inspections	N/A	Removed Mailer info	BP
4/15/24	Drought Mortality Update	31-33	Updated Information, added graphics	EK/BP
4/15/24	Summary	51-52	Update	BP
4/5/24	Report of Unit Accomplishments	53	Formatted & Updated	BP
4/08/24	Grants	33	Updated Grants	EK
5/31/23	Appendix D	46	Updated Ignition maps	EK
5/31/23	Appendix C	38	Updated Unit Map	EK
4/15/22	Appendix A	34	Project Matrix updated	AK
4/15/22	Pre-Fire plans	17	Program added to Esri	AK
4/15/22	Defensible Space Inspections	15	Mailer updated	AK
4/15/22	Fire Safe Council	10	Ongoing Council projects	AK

**Table of Contents:**

UNIT STRATEGIC FIRE PLAN AMENDMENTS .....ii  
Signature Page ..... 1  
EXECUTIVE SUMMARY ..... 2  
Applications of the Fire Plan Framework: ..... 2  
SECTION I: UNIT OVERVIEW ..... 4  
    UNIT DESCRIPTION ..... 4  
    Battalion 1 - Tehachapi ..... 4  
    Battalion 2 - Western Kern ..... 5  
    Battalion 3 - North Kern ..... 5  
    Battalion 5 - Mt. Pinos Communities ..... 6  
    Battalions 4&6 - Valley/ Foothill ..... 6  
    Battalion 7 - Kern River Valley ..... 6  
    Battalion 8 - Kern Desert ..... 6  
UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES..... 8  
    Level of Service ..... 8  
SECTION II: COLLABORATION ..... 9  
COMMUNITY / AGENCIES / FIRE SAFE COUNCILS..... 9  
    Plan Development Team:..... 9  
    Firewise Communities Program ..... 10  
    Community Emergency Response Teams (CERT) ..... 10  
    Fire Safe Councils..... 11  
SECTION III: VALUES ..... 12  
    A: VALUES..... 12  
    B: COMMUNITIES..... 13  
SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES ..... 14  
    A: FIRE PREVENTION ..... 14  
    B: ENGINEERING & STRUCTURE IGNITABILITY ..... 15  
    C: INFORMATION AND EDUCATION..... 16  
    D. VEGETATION MANAGEMENT ..... 17  
SECTION V: PRE- FIRE MANAGEMENT TACTICS ..... 22  
DIVISION / BATTALION / PROGRAM PLANS ..... 22  
    Battalion 1 Tehachapi ..... 22  
    Battalion 2 Western Kern..... 25  
    Battalion 3 North Kern..... 25

Battalion 4 & 6 Valley/ Foothill .....	25
Battalion 5 Mt. Pinos Communities.....	25
Battalion 7 Kern River Valley .....	28
Fuel Break Maintenance Grant:.....	30
2024 KERN COUNTY DROUGHT MORTALITY UPDATE.....	31
Battalion 1 (Tehachapi area).....	31
Battalion 5 (Frazier Park and Mt. Pinos area) .....	32
Battalion 7 (Mountains surrounding Lake Isabella) .....	32
GRANTS .....	34
2023.....	34
2022.....	34
2021.....	34
2020.....	34
2019.....	34
2018.....	34
2017.....	34
2016/17: .....	34
2015/16: .....	35
APPENDIX A: PRE- FIRE PROJECTS .....	36
APPENDIX B: UNIT GOALS AND OBJECTIVES .....	37
The values which we strive to fulfill include:.....	37
GOAL: Improve Core Capabilities .....	37
GOAL: Enhance Internal Operations.....	37
GOAL: Ensure Health and Safety of Employees .....	37
GOAL: Build an Engaged, Motivated, and Innovative Workforce .....	37
APPENDIX C: MAPS .....	38
Figure A: Unit Map .....	38
Figure B: Battalion Maps .....	39
Battalion 1 .....	39
Battalion 2.....	40
Battalion 3.....	41
Battalion 4.....	42
APPENDIX D: IGNITIONS .....	47
GREATER BAKERSFIELD AREA .....	47
GREATER TEHACHAPI AREA .....	48

LAKE ISABELLA .....	49
TEJON RANCH / I5 CORRIDOR.....	50
WEST SIDE / TEBLORS .....	51
Summary.....	51
Report of Unit Accomplishments – .....	53
2024.....	53
2023.....	53

## Signature Page

Unit Strategic Fire Plan developed for the Kern County Fire Department:

This Plan:


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



### Unit Chief

Aaron Duncan, Fire Chief

Kern County Fire Department



### Date



### Chief Deputy

Dionisio Mitchell, Command 2

Kern County Fire Department



### Date



### Division Chief

Andrew Kennison, Division 4 Air and Wildland

Kern County Fire Department



### Date

## **EXECUTIVE SUMMARY**

Kern County Fire Department Mission:

- The Kern County Fire Department is dedicated to protecting life and property by providing effective public education, fire prevention, and emergency services. We are committed to proudly serve our community in the safest, most professional and efficient manner.

The Annual Strategic Fire plan accomplishes the mission of the Kern County Fire Department (KCFD) by collecting and sharing information related to wildfire risk and response. This helps safeguard people, protect property, infrastructure, cultural heritage, and resources of Kern County.

The Kern County Fire Department Strategic Fire Plan documents the assessment of the wildland fire situation throughout the State Responsibility Area (SRA) within the county. It includes stakeholder contributions and priorities and identifies strategic targets for pre-fire solutions as defined by the people who live and work with the local wildfire problem.

The goal of the plan is to reduce costs and losses from wildfire by protecting assets at risk through focused pre-fire management prescriptions and increasing initial attack success.

Utilization of computer-based data and Geographic Information Systems (GIS) provides for a comprehensive analysis of fire hazards, assets at risk, and level of service to be included in the Wildland Fire Management Plan. In short, the KCFD Strategic Fire Plan will systematically assess the existing levels of wildland protection services and identify high-risk and high-value areas that are potential locations for costly and damaging wildfires. The Plan then ranks the areas in terms of priority needs and prescribes what can be done to reduce the risk of future costs and losses from wildfire.

### ***Applications of the Fire Plan Framework:***

- Identify areas and/or assets at high risk from wildfire for local, state, and federal officials, tribal representatives, and members of the public.
- Allow the KCFD to maintain and improve the efficiency of our wildland fire protection program, focused on meaningful solutions for identified problem areas.
- Give citizens a route to contribute to the design and implementation of wildfire prevention projects that protect public and private assets within the county.
- Prior to wildfire ignition, identify areas where the most cost-effective fire management investments can be implemented.
- Encourage communication and information sharing between government agencies to help support public/private approaches to reducing costs and losses from wildfire.
- Enable policy makers and the public to focus on what can be done to reduce future costs and losses from wildfire.
- Implement and maintain the countywide Community Wildfire Preparedness Plan (CWPP).

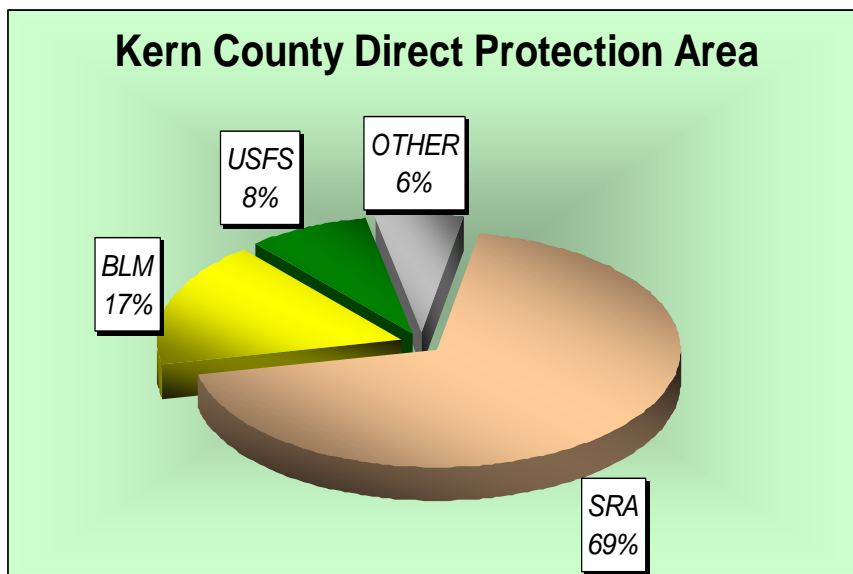
The objective of the Kern County Fire Department Strategic Fire Plan is to document the findings of the wildland fire assessment and communicate the intent of KCFD management and Kern County stakeholders toward reducing the impact of the wildfire problem within the County. The fire plan will be shared with adjacent Cal Fire units and Contract Counties with the intent of creating locally and regionally focused projects with support from multiple agencies. The plan will be especially helpful when explaining funding requests to control agencies, i.e., the Board of Supervisors and committees, and explaining the Kern County Fire Department's activities to the general public.

The fire plan aids citizen advisory groups and appointed and elected officials in preparing long-range plans that reflect local community desires for public safety, public health, public welfare, and environmental protection and sustainability. The fire plan seeks to combine the interests already expressed in many existing, localized plans within Kern County. Wildland fire issues, Community Wildfire Resilience, and county land use zoning and development will be considered in the Strategic Fire Plan.

The intent of this document is to have a simple, easy to understand report that informs the public and helps implement wildland fire prevention projects. At a minimum, annual monitoring will be completed as elements of the Strategic Fire Plan are implemented. This will help determine the effectiveness of the projects in reducing costs and losses to the public as a result of the hazards of wildland fire. Monitoring will compare pre-project conditions with end-state conditions with regard to wildfire resiliency. We will use these findings to determine priority of new project implementation, maintenance of existing projects, and overall project design factors.

The Kern County Fire Department Strategic Fire Plan is intended to be a dynamic document that will continue to develop and evolve over time.

**The Table below represents the Land Ownership within Kern County:**

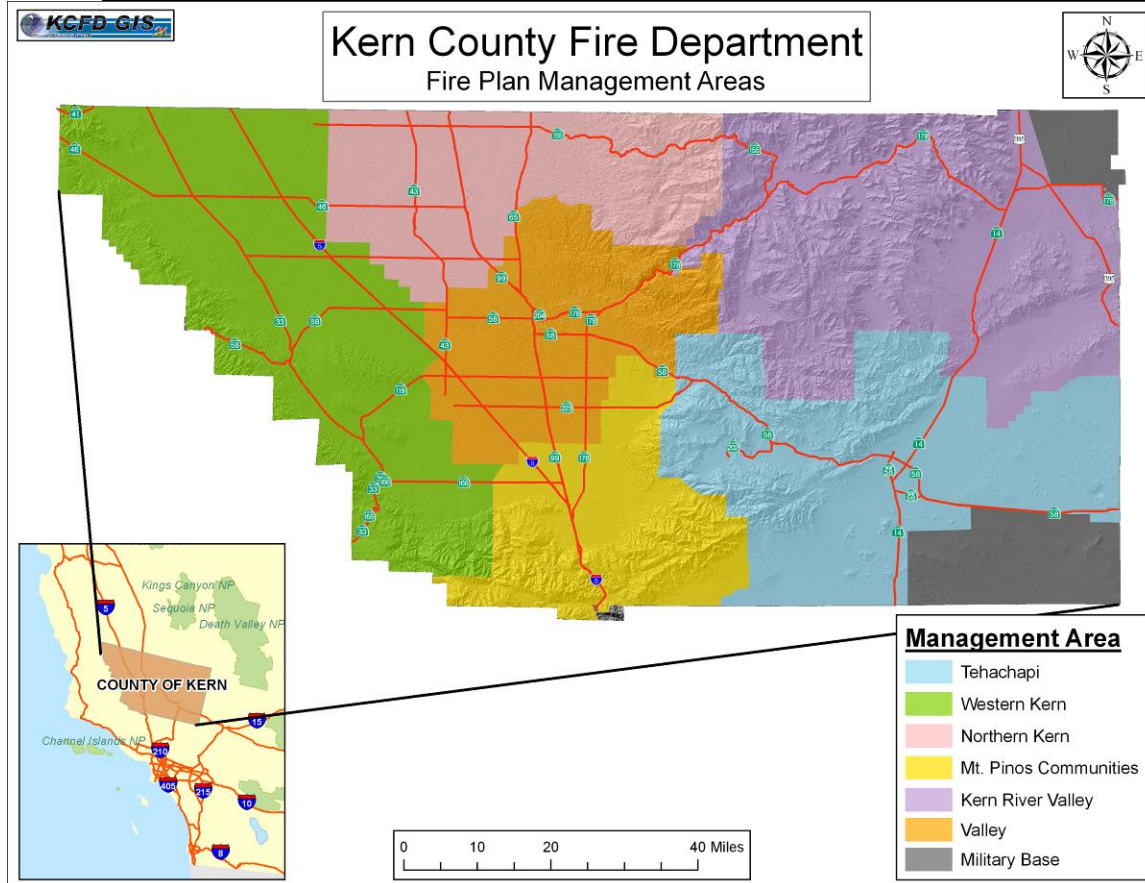




## SECTION I: UNIT OVERVIEW

### UNIT DESCRIPTION

The County has been broken into 6 different Fuel Management Areas:



### Battalion 1 - Tehachapi

#### OVERVIEW

Battalion 1 includes the southeastern portion of Kern County. It is divided by State Highway 58 that runs east/west and by State Highway 14 that runs north/south. The California Aqueduct, running north and south, establishes the eastern edge of the State Responsibility Area (SRA) in Battalion 1. The western edge of the SRA in Battalion 1 is defined by the toe of the slope along the southeastern edge of the San Joaquin Valley. The total acreage in Battalion 1 is 951,6000 of which 351,276 acres is SRA lands. There are two incorporated cities within Battalion 1; Tehachapi is surrounded by SRA and Arvin has SRA to the south and east. The town of Rosamond has SRA to the west. There is also a substantial amount of Bureau of Land Management (BLM) Direct Protection Area (DPA) to the north and west of Battalion 1.

The fuel models that predominate are grass (FM 1 and 2), brush (FM 4 and 6), and some areas of timber in the higher elevations (FM 8). Many of the timber stands have experienced a reduction in stand density due to a substantial amount of bug kill in the Tehachapi, Alpine and Bear Valley Springs areas. Many of the historical, large fires in the County have originated in this area. However, an influx of residential development has reduced the number of large fires in recent years. The reduction in the number of fires is a positive aspect; however, the negative side of this growth is that any fires that

become established in this area will immediately threaten high value/high risk exposures and be more resistant to control due to higher fuel loading of the landscape. The Countywide CWPP covers implementation of Fuel Reduction projects within Battalion 1.

## **Battalion 2 - Western Kern**

### ***OVERVIEW***

Battalion 2 comprises most of the west side of the County of Kern. West of State Highway 33 and most of what is adjacent to State Highway 166 is either SRA or Federal Responsibility Area (FRA). The FRA is predominantly Bureau of Land Management, a small portion of Los Padres National Forest, and some Fish and Wildlife Service area in the Bitter Creek Wildlife Refuge. There are no large, incorporated cities within Battalion 2 that impact the SRA; however, a large portion of the area is oil installations. The total acreage is 1,100,147 with SRA acreage of 455,293 acres.

The fuel model that covers most of the west side of the battalion is grass (FM1) with a component of short brush (1-3 feet) and scattered oak overstory. As the elevation increases in the southern and western end of the battalion sage and pine (FM2) become notable fuel model components.

## **Battalion 3 - North Kern**

### ***OVERVIEW***

Battalion 3 includes the north central portion of the county. State Highway 65 is the most important transportation feature regarding this area of SRA. Highway 65 is the western boundary for most of the SRA in Battalion 3. The other main travel route through the area is State Highway 155 that runs east and west from Lake Isabella to Delano. The Sequoia National Forest borders the SRA on the east side. There is a large portion of SRA (193,450 acres) in Station 26's area in the northwest corner of the County. The total SRA acreage for Battalion 3 is 409,566 acres. The fuel model is predominantly grass and scattered oak overstory (FM1), with some pockets of brush. Much of the area is rangeland utilized for cattle grazing, with very little public access.

There are presently no identified projects within the Urban Interface areas of Battalion 3 that would take a higher priority than projects identified in other battalions.

## **Battalion 5 - Mt. Pinos Communities**

### ***OVERVIEW***

Battalion 5 is the extreme south/south-west portion of the County, bordered by Los Angeles County and Ventura County. Most of the mountain areas of Battalion 5 are sparsely populated except for the communities of Lebec, Frazier Park, Lake of the Woods, Pinion Pines, and Pine Mountain Club. These communities are all located adjacent to the Los Padres National Forest. Fires that become established in or immediately adjacent to these areas will threaten lives and property in a short time.

Historically, fires in Battalion 5 which start in the grasslands reach large acreage in a short period of time. However, they are usually controlled in the first 1-2 burning periods unless there is a significant wind component associated with the spread. Fires in the higher elevations are generally much smaller but are much more resistant to control due to the heavy fuels. The Countywide CWPP covers implementation of Fuel Reduction projects within these mountain communities.

## **Battalions 4&6 - Valley/ Foothill**

### ***OVERVIEW***

Battalions 4 and 6 are predominantly Local Responsibility Area (LRA) on the south and east sides of Bakersfield. There is some SRA in the eastern portion of the battalion that adjoins the Sequoia National Forest. There are 96,023 SRA acres in Battalion 4. The main accesses to the State Responsibility Area within Battalion 4 are along State Highway 58, which runs east and west through the battalion, and Breckenridge Road, which runs northeast out of Bakersfield up into the National Forest on top of Breckenridge Mountain. Within the SRA of Battalion 4, there are no towns or cities, incorporated or unincorporated, and only one subdivision of consequence.

## **Battalion 7 - Kern River Valley**

### ***OVERVIEW***

Battalion 7 includes the northeast portion of Kern County. It is a diverse mixture of Direct Protection Areas with Federal Responsibility Areas, both Forest Service and Bureau of Land Management and SRA (253,776 acres). North/south highways include State Highway 178 and the main east/west highway being State Highway 155. There are numerous unincorporated towns within the battalion, including Havilah, Lake Isabella, Bodfish, Wofford Heights, Kernville, and Southlake. All these towns are listed by the California Fire Alliance as being at high risk to wildfire. Battalion 7 has a history of large, damaging wildfires. Included recently are the King (2000), Borel (2002; five residences lost), and the Deer Fire (2002; 47 residences lost), and Erskine (2016; 257 residences lost). The French Fire (2021) multiple structures lost. The Manter (2000) and the McNally (2002) fires burned just north of the Kern County line in this same area. The fuel models include grass (FM1), brush (FM4), timber (FM8), and large areas of pinion/juniper (FM6). The Countywide CWPP covers implementation of Fuel Reduction projects within the Kern River Valley.

## **Battalion 8 - Kern Desert**

### ***OVERVIEW***

Battalion 8 includes the far East portion of Kern County. It contains a collection of Direct Protection Areas with Local Response Areas, Incorporated Cities of Ridgecrest and California City, Federal Response Area under the Bureau of Land Management,

and no SRA responsibility. It has two main north/south state highways: Hwy 395 and Hwy 14. The battalion also interfaces with two Department of Defense bases: China Lake Naval Weapons Station, and Edwards Air Force Base. Unincorporated towns in the area are Inyokern, Randsburg, North Edwards, Boron, and Indian Wells. Cities/Communities that are listed in the California Fire Alliance as being at high risk to wildfire include: Ridgecrest, California City, North Edwards, Randsburg, and Edwards Air Force Base. Battalion 8 experiences wildfires on a lower frequency than the neighboring battalions, however local weather patterns including high winds on a regular basis make those fires potentially be quick moving and damaging. Notable fires include the Indian Fire (2010) and Walker Fire (2007). The fuel model ranges from grass (FM1) and brush (FM4) in the lower elevations, to pinion/juniper (FM6) in the higher elevations.

## **UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES**

### **Level of Service**

Fighting fire in Kern County is truly a cooperative effort. Kern County Fire Department provides fire protection by contract to the cities of Delano, McFarland, Wasco, Shafter, Arvin, Tehachapi, Maricopa, Taft, and Ridgecrest. Kern also cooperates fully with the other incorporated cities within the county: Bakersfield, and California City. Additionally, Kern County Fire Department actively participates in the State Master Mutual Aid system and has operating agreements with the USDA Forest Service Sequoia and Los Padres National Forests, the Bakersfield and Cal Desert Districts of the USDOJ Bureau of Land Management, CAL FIRE, and the Fish and Wildlife Service. The cooperation between all the above-listed agencies comprises the fire protection delivery system within the County of Kern.

Kern County recently received funding from the Cal Fire Greybook to fund two fire crews. These crews respond to the many wildland fires as well as other emergency situations that occur in all areas of the county. This brings the total number of fire crews in the Kern County Fire Department to four. Having four crews in the county during fire season allows us the flexibility to send crews to assist with emergencies elsewhere in the state and maintain a base level of fire protection in the county.

The legislature has charged the California fire service with providing an equal level of fire protection to lands of similar type (PRC 4130). To do this, we must have a system to analyze the level of service being provided to the wildland areas. This rating is expressed as the percentage of fires that are successfully attacked. Success is defined as those fires that are controlled before unacceptable damage or cost is incurred.

Success Rate =

Annual number of fires that were small and extinguished by initial attack

Total number of fires

Multiplied by 100 = the success rate in percent

The result is an initial attack success rate in percentage. **For our purposes, and as defined by CAL FIRE (State Board of Forestry), any fire suppressed at less than 10 acres was considered an initial attack success.**

### **KCFD Available Resources:**

Resource Type	Number
Helicopter Type 2/Hoist & Night Vision Capable	2
Dozer Type 2*	6
Hand Crew Type 1	4
Engine Type 6	45
Engine Type 3	15
Engine Type 2	5
Engine Type 1	36

\*\*Crews and Dozers can be assembled as Strike Teams. Two dozers staffed daily.

**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:

Summary:

Fire knows no boundaries and accordingly, neither should a plan that seeks to reduce the risk from wildland fire. Stakeholders are defined as any person, agency, or organization with a particular interest – a stake – in fire safety and protection of assets from wildfires. The Kern County Fire Department has made a considerable attempt at involving stakeholders and their interests in the development of the KCFD Strategic Fire Plan. The process of identifying stakeholders and their interests is an ongoing process and will be evaluated continuously through the evolution of future fire management plans. It is the goal of the Kern County Fire Department to participate with as many stakeholders as possible and to continually update planning efforts involving stakeholder input.

**Plan Development Team:**

Political Entity	Jurisdiction
Kern County Supervisors	Local Government
Bakersfield Fire Department	City Fire Protection
Ventura County Fire	Local Government/SRA Fire
Los Angeles County Fire	Local Government/SRA Fire
CAL FIRE	State
Santa Barbara County Fire	Local Government/SRA Fire
Kern County Parks Department	Local Government
Kern County Road Department	Local Government
Kern County Sheriff	Local Government
US Forest Service Los Padres	US Government
US Forest Service Sequoia	US Government
Bureau of Land Management (CDD)	US Government
Department of Fish and Game	State
US Fish and Wildlife Service	US Government
California State Parks	State
Local Community Service Districts	Local Government
Local Property Owner Associations	Local Government
Cal Trans	State
Air Pollution Control Districts	State/County
Tejon Ranch Inc.	Private
Kern Fire Safe Council	Private

## Firewise Communities Program

[www.firewise.org](http://www.firewise.org)



## **FIREWISE USA®** Residents reducing wildfire risks

Brush, grass, or forest fires do not have to be disasters. The National Fire Protection Association's (NFPA) Firewise Communities program encourages local solutions for wildfire safety by involving homeowners, community leaders, planners, developers, firefighters, and others in the effort to protect people and property from wildfire starts.

## Community Emergency Response Teams (CERT)

[www.ready.gov/community-emergency-response-team](http://www.ready.gov/community-emergency-response-team)



The Community Emergency Response Team (CERT) program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skill, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help.

CERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community. In 2017 the Kern County Fire Department appointed a permanent CERT coordinator.

## Fire Safe Councils



[www.cafiresafecouncil.org](http://www.cafiresafecouncil.org)

Fire Safe Councils are instrumental in bringing a representative group of stakeholders to “the table.” The councils shed light on many concerns within communities and expose information relating to the effectiveness of the Kern County Fire Department’s fire safe efforts. The department is able to respond and adapt activities to address many of the concerns from the different stakeholders involved with the fire safe councils. Through the councils’ diversity, agencies have been able to develop Community Wildfire Protection Plans (CWPP) that otherwise may never have been developed.



[www.kernfiresafe.org](http://www.kernfiresafe.org)

The Kern Fire Safe Council is established and focused on improving the resilience of Kern County’s communities to wildfire. Currently, the council is working to establish Kern County’s first Fire Wise community with the goal of implementing more in the near future. The Council remains active in implementing the new county-wide CWPP and a variety of public education programs.



### **SECTION III: VALUES**

#### **A: VALUES**

The primary goal of wildland fire protection in Kern County is to preserve the variety of resources found within the county. The resources at risk are both public and private and interplay with one another to provide the quality of life we experience within the county.

These resources include:

- Structures – residential and commercial
- Air Quality – degradation due to smoke from fires
- Rangelands – loss of grazing
- Timber – loss of timber resources
- Scenic – obstruction of viewscapes
- Recreation – loss of recreational facilities or open areas
- Wildlife – loss of critical habitat or game
- Hydroelectric power – damage to watersheds that support power plants
- Cultural – Kern County has a rich history; all physical records should be preserved as much as possible

The value of the assets at risk determines the commitment of resources and the prioritization of program funds and projects.

## B: COMMUNITIES

There are currently 25 communities in Kern County registered as Communities at Risk by the California Fire Alliance. The threat to these communities varies from slight to extreme. Those, such as Arvin, and California City, which have an interface with SRA land in mostly uninhabited areas of the incorporated city, are slightly threatened. Others such as Bear Valley Springs, and Wofford Heights, which have most of their inhabited areas that are interface or intermix with SRA land, have an extreme risk. Other communities such as Pine Mountain Club, which is an intermix community within the Los Padres Forest are at high risk but are not officially on the California Fire Alliance list of communities at risk.

### Ca Fire Alliance Communities at Risk in Kern County:

0	Place Name	County Name	Federal Threat	Federally Regulated	Year
1	Arvin	Kern			2015
2	Bakersfield	Kern		✓	2015
3	Bear Vallev Sprinas	Kern			2015
4	Bodfish	Kern	✓	✓	2015
5	California City	Kern	✓	✓	2015
6	Edwards Air Force Base	Kern	✓	✓	2015
7	Frazier Park	Kern	✓	✓	2015
8	Golden Hills	Kern		✓	2015
9	Keene	Kern			2015
10	Kernville	Kern	✓		2015
11	Lake Isabella	Kern	✓	✓	2015
12	Lebec	Kern			2015
13	Mountain Mesa	Kern	✓	✓	2015
14	North Edwards	Kern	✓	✓	2015
15	Onvx	Kern	✓	✓	2015
16	Randsbura	Kern	✓	✓	2015
17	Ridaecrest	Kern	✓	✓	2015
18	Rosamond	Kern		✓	2015
19	South Lake	Kern	✓	✓	2015
20	South Taft	Kern	✓		2015
21	Taft	Kern	✓		2015
22	Taft Heights	Kern	✓	✓	2015
23	Tehachapi	Kern		✓	2015
24	Weldon	Kern	✓	✓	2015
25	Wofford Heights	Kern	✓	✓	2015

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

### **A: Hazard Reduction**

Kern County has adopted the International Wildland Urban Interface Code and has a robust Hazard Reduction program to educate the public and enforce defensible space requirements according to Public Resource Code 4291 and Kern County Ordinance Code 8.46. Beginning in April, our Public Information Office begins a series of media campaigns through social media and news interviews to remind the public of their responsibility to ensure defensible space on their property. Defensible Space is not solely to protect an individual homeowner's property, but it is designed to protect the community as a whole. In addition to public safety, proper defensible space helps provide our firefighters with a stronger foothold to help battle these fires in our Wildland Urban Interface communities.

June 1<sup>st</sup> is our deadline for all property owners to have their defensible space completed for their properties. Once we hit this date the Kern County Fire Department will send our Fire Engine companies out into the SRA to perform our inspections. There are approximately 40,000 properties that we inspect annually to determine if they meet PRC 4291. We currently inspect Zones 1 and 2 as outlined by CalFIRE in their DSpace requirements. Zone 1 deals with the 30 feet immediately around the structure. This area needs to be thinned and have all vegetation cut back away from any structures. Zone 2 is the 30-100 foot zone moving outward. This area can have more vegetation in it however, this area needs to have brush and trees adequately spaced to help slow the spread of fire.. Propane tanks and firewood piles should be located in Zone 2 with a full 10-foot clearance all the way around each of these. Lastly, we ensure that there is a 10-foot buffer at all property lines that are shared with an adjacent parcel when that adjacent parcel has a structure located 100 feet within that shared property line. Once a property is found to be in violation, they will receive a mailed citation for \$500 and be given 15 days to correct their violations and have their citation removed. If those 15 days pass and we have not had any correspondence from the property owner, we will perform a 2<sup>nd</sup> inspection that will follow the same process as the 1<sup>st</sup> citation with the only difference being that this fine is for \$1000.

Our future goals with our Hazard Reduction program are as follows:

- Begin to implement data gathering in accordance with California Chapter 7A. Home hardening is a great way to make the homes in our community more resilient to wildfires.
- We are awaiting the full approval of Zone 0. Our plan is to begin the education process this calendar year, so that for next year our citizens will have had time to prepare their homes for this new level of enforcement.
- A broader scale goal is to help our Kern Fire Safe Council begin to bring into the County, Firewise Communities. These are large scale, individualized projects that take specific communities and help bring the entire area closer to goal of 7A or home hardening.

**B: ENGINEERING & STRUCTURE IGNITABILITY**

Kern County Fire Prevention inspectors play a lead role in ensuring that all new construction is built in compliance with applicable laws including Title 19 and Title 24, including Chapter 7A requirements, PRC 4290, PRC 4291, and the International Wildland Urban Interface Code. All new development goes through the EIR process and then specific plans are reviewed and inspected prior to approval. Work is then inspected during the building process to ensure that it is in compliance before final approval is given.

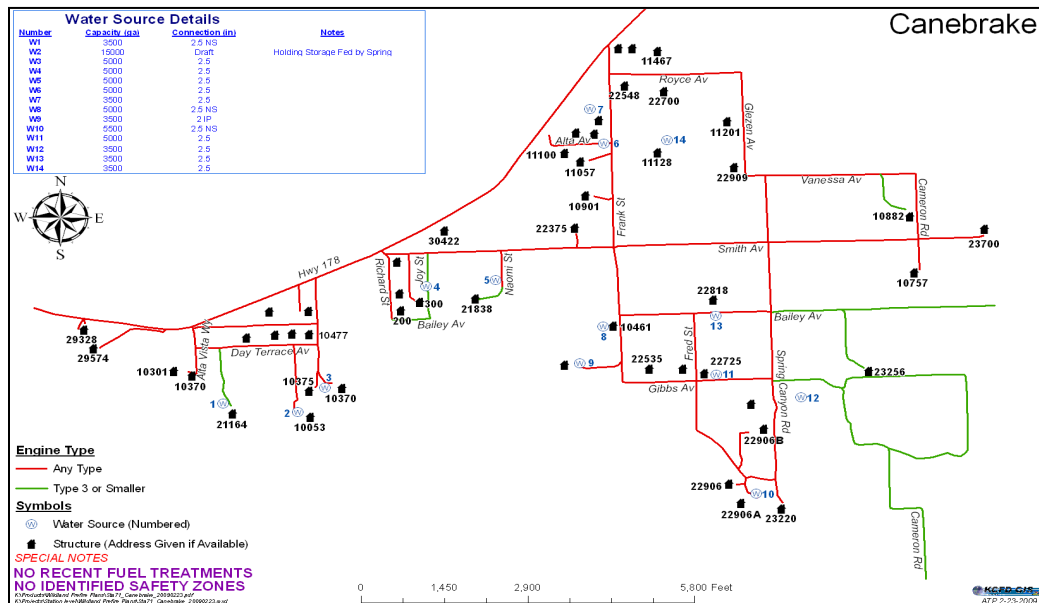
## C: INFORMATION AND EDUCATION

### Pre-Fire Planning

KCFD has prepared Pre-Fire Plans for each of the wildland-urban interface communities with a detailed structure protection plan. Each Community Pre-Fire Plan has evacuation instructions, a medical plan, a communication plan, and a detailed map. KCFD GIS has placed all wildfire pre-fire plan maps on the Field Maps app allowing personnel in the field to access and update the maps in real time. Utilizing Field Maps allows assisting agencies to view these maps allowing for a better Common Operating Picture on Initial Attack.

The information included on our Pre-Fire Plans:

1. Roads and driveways - Color Code for roads:
  - Red = any type of engine
  - Green = type 3 engine or smaller
  - Yellow = type 4 engine
  - Dotted Orange = mostly impassable or 4x4 only
2. Road names
3. Locked gates
4. Bridges, load limits
5. Heliports & Dip sites
6. Safety zones
7. Special hazards
8. Staging areas
9. Addresses
10. Water sources



**RAWS**

Since 2005 we have been updating our fire weather collection stations. We have been able to install 8 Remote Area Weather Stations (RAWS) throughout the county. We continue working towards certifying our daily RAWS observations and standardizing our WIMS data.

Station Name	Location
KRN01	Battalion 7
KRN02	Battalion 1
KRN03	Battalion 7
Lynch Canyon	Battalion 7
Twisselman	Battalion 2
Grapevine Peak	Battalion 5
Hart Flat	Battalion 1
Woody	Battalion 3

**D. VEGETATION MANAGEMENT**

Proper management of vegetation is critical to a successful Fire Plan and Pre-Fire Management. The Kern County Fire Department has been able to complete thousands of acres of fuels reduction work in and around communities at risk. These projects include shaded fuel breaks to aid with fire suppression activities, projects for safe access and egress of public and emergency equipment during emergency incidents, and community chipper events to assist homeowners with disposing of cuttings resulting from clearing their defensible space. It is the goal of the KCFD Fuels Management Office to continue to maintain and expand this management strategy throughout the county.





KCFD fire crew removing Hazard Trees from a previous fire in Battalion 7.





Crew 11 working on road brushing a public safety egress corridor in Battalion 1.



Portable RAWS installation in preparation for a prescribed fire in Battalion 1





KCFD fire crew performing clean-up of fallen snag (dead tree).



Fuels crew utilizing brush mower on hillside to remove sage along fuel break in Battalion 7.





White Wolf Public Safety Burn conducted along Highway 223.

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

### **DIVISION / BATTALION / PROGRAM PLANS**

#### **Battalion 1 Tehachapi**

##### ***Alpine Forest Park***

This community consists of a series of steep, windy roads with scattered housing. The predominant fuel model is grass and sage with some conifers and oaks. Sage is the main wildfire concern relative to fire spread and intensity. A pilot Vegetation Management Partnership Program with this community was implemented in 2011. This partnership has allowed for a cost sharing arrangement between the fire department and the homeowner's association to maintain fuel breaks in the community. A sanitation-salvage timber harvest was conducted several years ago, so standing tree mortality is markedly improved compared to other timber stands elsewhere in the Tehachapi's. However, this has contributed to an above average fuel loading of the ground fuels. SRAFPP money was used recently to brush the main ingress/egress roads for the community. This work was done by KCFD hand crews. Additional roads will be treated with the Kern Fuel Break Maintenance Grant (received in FY 23/24).

##### ***West Ranch/Blackburn Canyon***

This area is located southeast of the City of Tehachapi. Recent fire history shows several large fires have burned in and around the area. There are approximately 65 homes in the area that are served by narrow, twisting dirt roads with entrance/exit to the community made through two locations, one to the north and the other to the east. The most significant fire threat feature of this area is the volume and condition of the vegetation. The fuel models range from continuous grass and brush to heavy concentrations of trees (oaks, pinions, gray pine, and others). There is substantial tree mortality in this area due to a combination of fires, bug kill, and dwarf mistletoe. There is a significant volume of fuel reduction work that needs to be done in this area. The residents that live in the area on a full-time basis are making progress toward reducing the total fuel volume; however, there are large numbers of absentee landowners that are not as committed to the fuel reduction. The number one priority for this area would be improving ingress/egress in the Oak Creek Road area. Secondly, reducing the number of dead and down trees that constitute a major portion of the existing fuel load. Additionally, establishing a system of shaded fuel breaks would allow aggressive firefighting tactics in and around the community by reducing the intensity and spread rate of any fire that became established.

##### ***Hart Flat***

On an annual basis, the community receives some pre-suppression protection through the maintenance of two fuel breaks. The first fuel break runs along the south side of Highway 58. This break inhibits fires that start on the freeway from spreading uphill into the Hart Flat community. The second break is a Right of Way (ROW) prescribed fire that connects to the Highway 58 fuel break and extends it down Highway 223 for approximately seven miles. This provides protection on the north and east sides of the community. This year, the KCFD assisted the Kern Fire Safe Council with putting a

project together that would establish another fuel break across the south and west sides of the community, nearly connecting to the existing fuel breaks and protecting. We look forward to assisting with implementing this project that will help surround the community with a protective measure from wildland fire. Lastly, we periodically complete road brushing within the community along ingress/egress routes. A Community Chipper Days grant was completed last year, but the KCFD is committed to providing the service into the future. The community of Hart Flat has been very supportive of Fire suppression, and with their own resources, they have provided three helicopter water dip tanks.

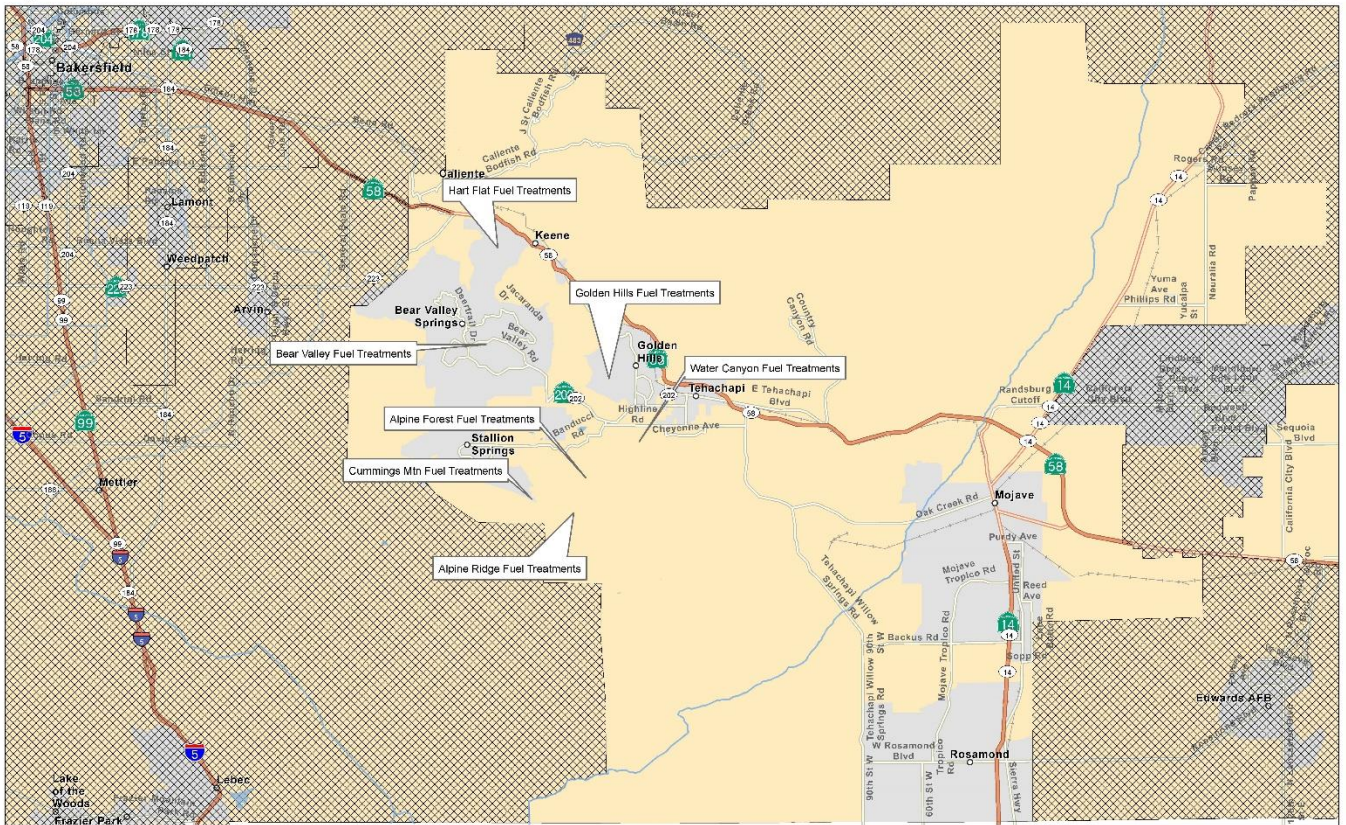
### ***Bear Valley***

Bear Valley Springs has been the hardest hit area in Kern County in regard to tree mortality. Approximately 1,000 acres of the upper reaches of the community have been hit by bark beetles, resulting in very high mortality rates in several areas. Several SRA Fire Prevention Fund projects have been completed in the area to remove dead/hazard trees along ingress/egress routes and within reach of homes. However, many more dead trees remain, and the community is grappling with the ability to remove these trees. The Community Services District (CSD) has received CCISRAFP grants that have been tremendously helpful with fuel reduction efforts related to tree mortality. This year the CSD applied for a Forest Health Grant to fund a project that will complete further removal of dead and downed trees as well as replant trees in the areas hardest hit by beetle kill and tree mortality. KCFD hand crews brushed a main ingress/egress road in 2019 and 2020 using SRAFPP funds. Additional roads will be treated as with the Kern Fuel Break Maintenance Grant awarded FY23/24. There is still a substantial volume of work that could be accomplished in the Sycamore Canyon area and other areas identified in the Bear Valley Springs Fire Safety Plan.

### ***Completed Fuels Management Projects in Battalion 1 include:***

- Deer Trail Fuel Reduction Project
- Bear Valley Springs Home Protection Project
- Skyline Fuel Break
- Golden Hills Phase 1&2 Fuel Breaks
- Alpine Forest Park Road Clearance
- Water Canyon Escape Route
- Stallion Alpine Fuel Break
- Old West Ranch Escape Route
- Wild horse Ridgeline Fuel break
- Tehachapi Mountain Park Defensible Space
- Hart Flat Escape Route
- Community Chipper Events
- Bear Valley Road Brushing

KERN COUNTY FIRE DEPT  
BATTALION 1 FUEL TREATMENTS MAP



## **Battalion 2 Western Kern**

### ***Completed Fuels Management Projects for the area include:***

- Maintained Fire Roads
- Dozer Disc Breaks

## **Battalion 3 North Kern**

### ***Completed Fuels Management Projects for the area include:***

- Maintained Fire Roads
- Dozer Disc Breaks

## **Battalion 4 & 6 Valley/ Foothill**

### ***Breckenridge Subdivision***

The Breckenridge subdivision is entirely within the boundaries of the Sequoia National Forest and is covered under the Federal DPA. It is comprised of approximately 40 cabins, and very few are full-time residents. The fuels are a timber model (FM8) with heavy concentrations of dead, downed fuel resulting from recent heavy tree mortality. Access to the subdivision is an issue because the paved portion is single-lane, paved forest road with dirt roads within the subdivision itself. The priority project for this area would be a general reduction of the accumulated dead and down material throughout the subdivision. The private properties within the subdivision are intermixed with USFS land. The issue is that the private lands have had some clearing done but the adjacent USFS property has had no recent treatment. The KCFD is currently collaborating with the SQF on a project to reduce the fuel loading in and around the subdivision. Additionally, a general widening of the roads within the subdivision would provide better access to the cabins and the water tanks. CDAA and LTM grants removed the dead and dying trees along Breckenridge Road in 2019.

### ***Completed Fuels Management Projects for the area include:***

- Maintained Fire Roads
- Dozer Disc Breaks
- Hazard tree removal

## **Battalion 5 Mt. Pinos Communities**

### ***Digier Canyon***

Digier Canyon is a predominantly residential area north of Lebec on the west side of Interstate 5. The subdivision is partially within the Los Padres National Forest, with Fort Tejon State Park on the south and Wind Wolves Preserve on the west. The only access/egress is on Digier Rd. The subdivision is comprised of approximately 30 structures, both commercial and residential. The fuel model is predominantly grass and oak overstory (FM1) with occasional scattered brush. The main fire concern with Digier Canyon is egress issues and the proximity of the community to fires started along the I-5 corridor. The priority project for this area would be to maintain the fuels along the ingress/egress route and to explore options for secondary egress or the development of a community safety zone.



### ***Frazier Park (south side)\****

Frazier Park is a series of narrow roads and streets that largely do not line up with each other. Many of the dirt roads have brush intruding into the right-of-way and little maintenance has been done. The fuel types range from grass and light brush mixed with a light conifer overstory (FM1) to continuous, heavy brush (FM4). The wildland fuels on the south side of the subdivision are predominantly brush with scattered pines, juniper, and some oak. In 2017, an SRA Fire Prevention Fund grant was used to construct a shaded fuel break around the south side tying into Frazier Mountain Park Road on the east and west sides. This break is approximately 100' wide, providing a buffer for the subdivision from a fire approaching out of the Forest. The Frazier Park South Fuel Break works in concert with a Los Padres NF break on the north side of Frazier Mountain Park Road to establish fuel breaks surrounding the community. The South Frazier fuel break project continues to be maintained and extended and maintained using a fuel break maintenance grant with SRA FPP funds.

### ***Pine Mountain Club\****

Pine Mountain Club is a planned community surrounded by the Los Padres National Forest. It has approximately 3,000 parcels. Approximately 2,000 of these parcels have been developed. For the past five years, the Kern County Fire Department has been performing hazard reduction inspections in Pine Mountain Club. The fuel loading is heavy, dominated by live oak, sage, and pine. KCFD and LPF personnel and the Property Owners Association have made great efforts, but the sheer volume of material has made for slow progress with completing fuel reduction projects in the area. The KCFD received a grant from the USFS in early 2017 to treat hazardous fuels in this area. CDAA and LTM grants were used to remove dead and dying trees along county access roads in 2018. Removing dead and dying trees and improving ingress/egress continue to be priorities. We are currently working with the Los Padres National Forest to connect a "Peak to Peak" fuel break near Camp Condor. This interagency collaboration to protect the community of Pine Mountain Club at the landscape level has been met with a great deal of support from the community and both agencies.

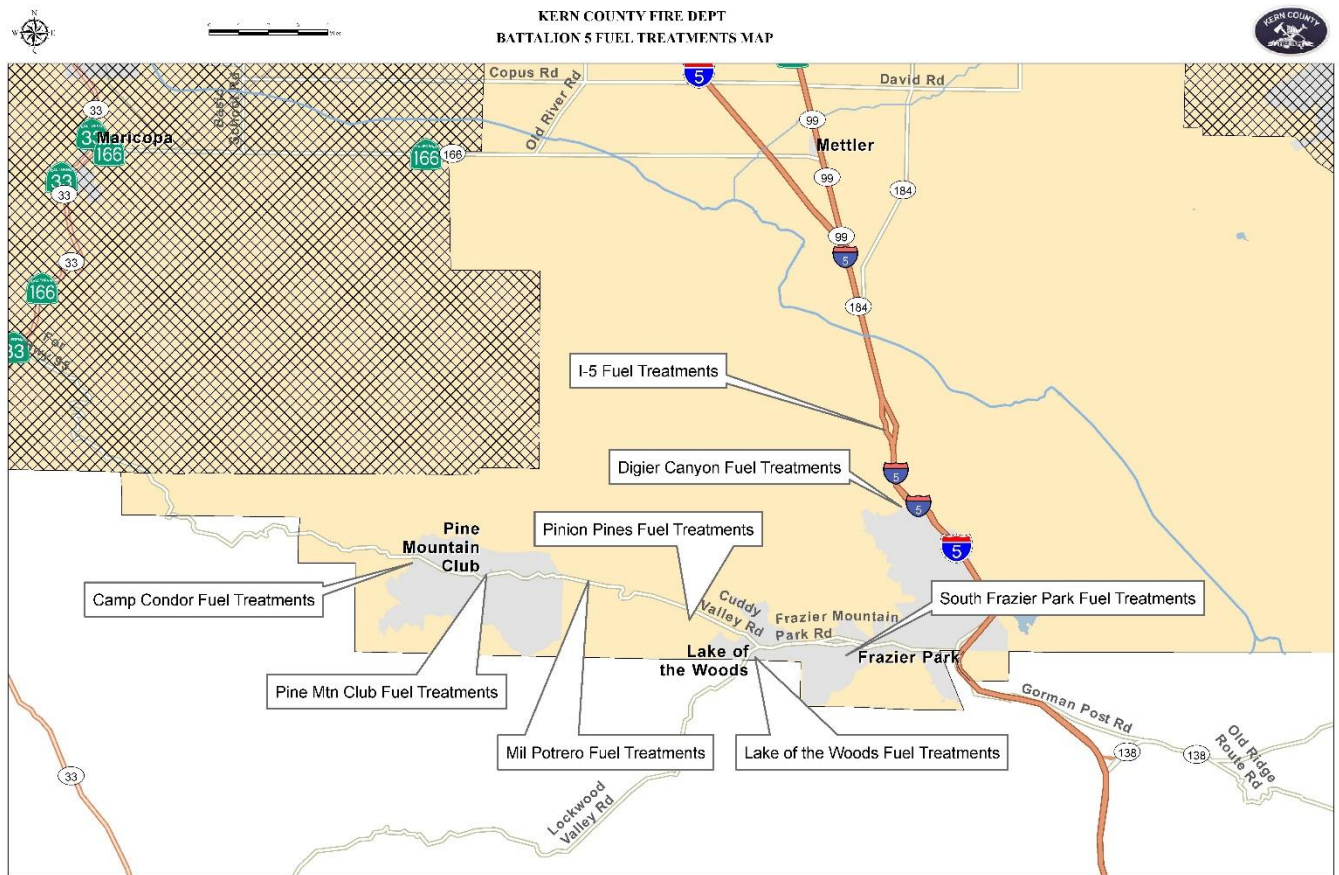
### ***Pinion Pines\****

Pinion Pines is a small community between Frazier Park and Pine Mountain Club, surrounded by Los Padres National Forest. In 2006, a wildland fire destroyed one home and damaged another. This incident raised local awareness to the dangers of current fuel conditions. Residents have been fairly active in projects around their homes. A shaded fuel break was constructed and has been maintained around the community of Pinion Pines, most recently with an SRA FPP grant and SRAFPF funding. Annual Chipper days are coordinated with the community and carried out by Kern County Fire Crews.

\*Asterisks on the previous three communities denote SRA within LPF DPA – USFS has wildland fire protection responsibility; KCFD has fire protection responsibility for structures and improvements.

**Completed Fuels Management Projects for the area include:**

- Hazard tree removal along all county roads and in Camp Condor (2018 CDAA and LTM)
- Frazier Park Community Fuel Break
- Lake of the Woods Community Fuel Break
- Pinion Pines Community Fuel Break
- Camp Condor Escape Route
- Pine Mtn. Club open space Fuels Reduction
- Pine Mtn. Club Ridgeline Fuel Break (west end)
- Digier Canyon Escape Route
- Mt. Pinos Phase II Fuel Reduction Project
  
- Tecuya Ridge Early Action Funds Shaded Fuel Break





## **Battalion 7 Kern River Valley**

### ***Alta Sierra – SRA within SQF DPA***

Alta Sierra is within the boundaries of the Sequoia National Forest. Tree mortality has been heavy, especially on the USFS lands. On the private parcels, the utility companies have removed many of the dead trees. An SRA FPF grant was used to remove more of the dead trees in 2018. The County Park was salvaged logged in 2017 and the resulting slash was treated by KCFD crews with the help of CCC crews. In September 2015, KCFD hand crews completed a federally funded 9.5 acre fuel reduction project around Camp Yenis Hante which borders the community of Alta Sierra. Several CDAA and LTM grants were used to remove dead and dying trees on all County roads in the area in 2019.

In August 2021, the French Fire burned around the community of Alta Sierra, devastating the timber stand surrounding the community. Because of more than a decade of fuel reduction treatment in the community, only one structure and a few auxiliary structures were lost during the firefight. The KCFD is working with SQF on a CCISRAFP project to remove dead snags resulting from the fire on private land and federal land. This crew also maintains fuel breaks and helps residents chip brush in the immediate area.

### ***Isabella Highlands***

This area is west of Lake Isabella at the top of a narrow, steep, twisting one-lane road. It has been a victim of wildfire on a number of occasions, most recently August 2021 during the French fire. The area previously burned in June 2003, and resulted in the loss of five homes. The roads within the subdivision are narrow and encroached by vegetation throughout the area. Improving and maintaining ingress/egress is a priority. There are additional needs within the community. Street signs, house numbers, and water source identification are among the current needs.

### ***Frontier Homes/Rogers Road***

This area is west and immediately adjacent to Kernville. Rogers Road serves about a dozen homes and leads up to the Frontier Homes subdivision. Frontier Homes has a north side and a south side. A single-lane, dead-end road serves each side. The fuel load is mainly grass with scattered California Gray Pine. Some pockets of brush exist in the drainage bottoms and/or on north aspects. The main threat to this subdivision is not from the fuel within the subdivision, but from the neighborhoods below. The Rogers Road area presents one of the hazards to the Frontier Homes area. Fuel breaks surrounding the community were improved in early 2019 with funding from a CCISRAFP grant.

### ***Upper Bodfish/Meyers Canyon***

The upper Bodfish/Meyers Canyon area has a history of frequent fires, some of which have become quite large. The “Bodfish” fire in 1984 grew to greater than 35,000 acres. The fuel models in the area vary from grass to heavy brush to trees depending on the aspect and elevation. The property owners have done a great deal of work; however,

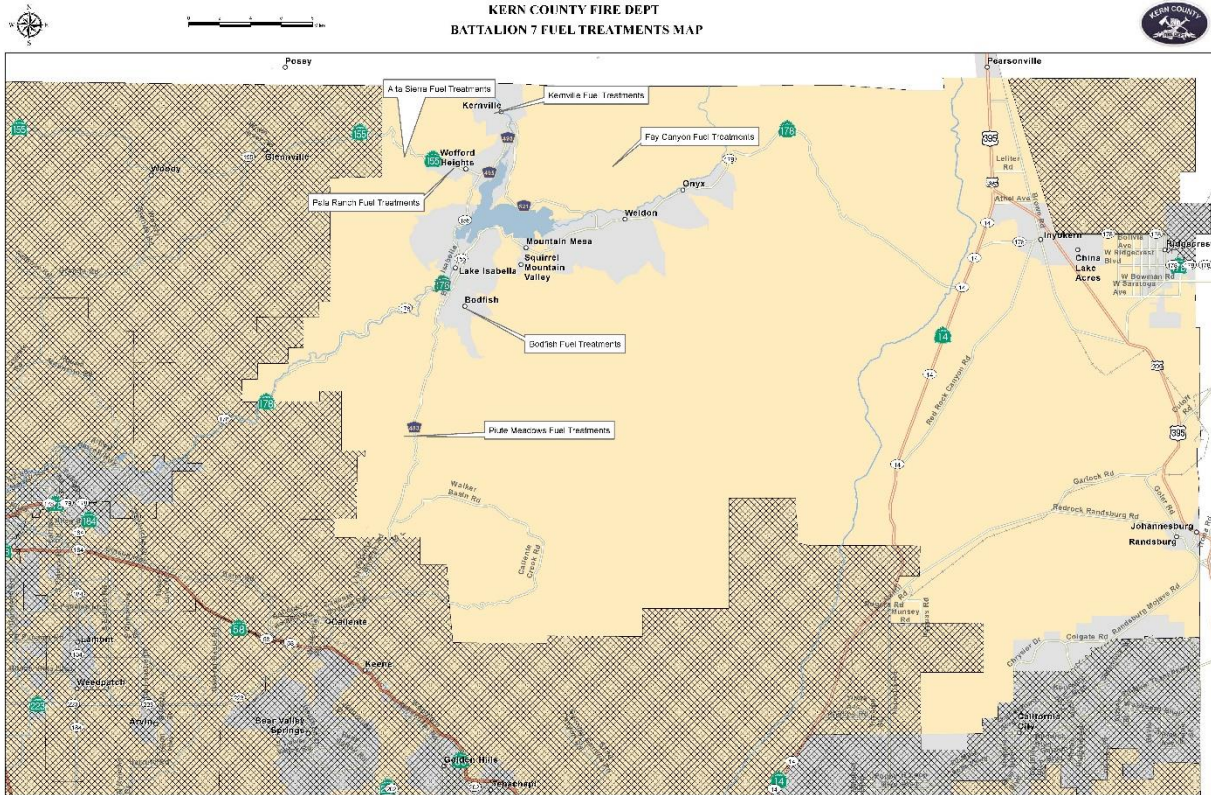
there are a large number of parcels that are owned by out-of-area owners. These properties represent a large fire hazard and it has been difficult to achieve successful hazard reduction code compliance. Fuel breaks surrounding the community were improved in early 2019 with funding from a CCISRAFP grant. More work is expected in this area with this grant, including an extension of the Bodfish fuel breaks up towards the Piute Mountains.

### ***Fay Canyon/Weldon/Kelso Valley***

There are numerous homes located in several small communities in the area. Vegetation types range from grasslands, chaparral, oak woodlands, and riparian habitat, with conifer forest to the north and south. Many homes have only one road for ingress and egress. Creating fuel breaks and improving ingress/egress will be the priorities in this area.

### ***Completed Fuels Management Projects for the area include:***

- Bodfish Phase 1, 2, and 3 fuel breaks
- Bodfish Canyon Escape Route Phase 1-3
- Kernville Community Fuel Breaks
- Hungry Gulch/Isabella Highlands Defensible Space
- Alta Sierra Defense Zone/ Timber Harvest/ Escape Route
- Piute Meadows Escape Route
- Pala Ranches Community Fuel Break
- Squirrel Valley Fuel Break
- HWY 155 Fuels Reduction Project
- Frontier fuel break

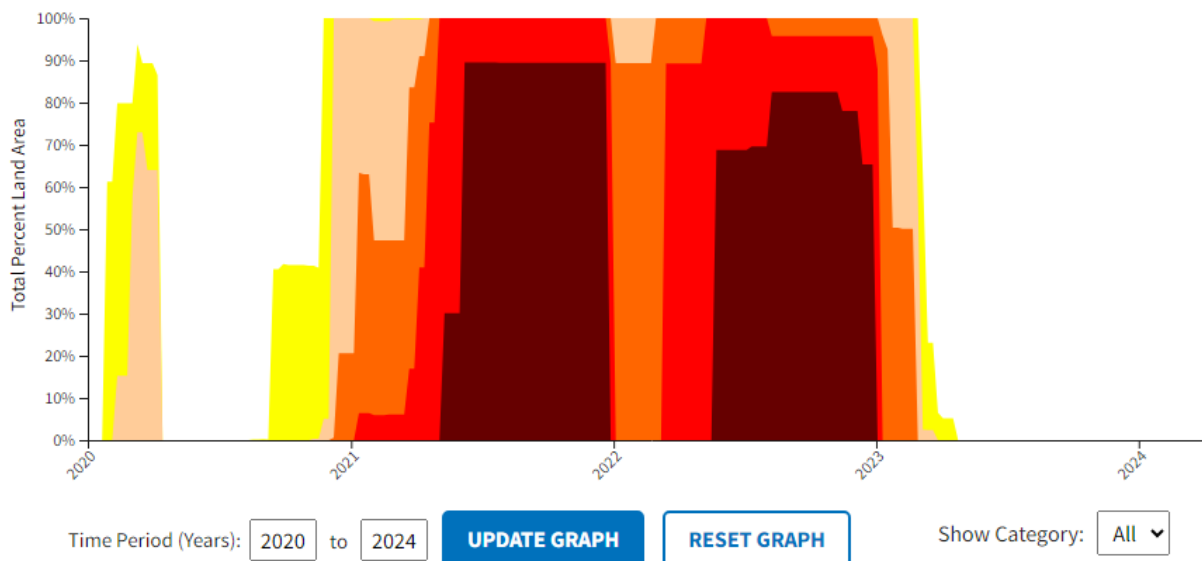


**Fuel Break Maintenance Grant:**

Our Kern Fuel Break Maintenance Grant that we were awarded in 2022 proved to be an enormous success. We have a large archive of established fuel breaks around Kern County making maintenance of those breaks vital to the protection of our communities. Our crew leaders have worked in their respective geographical locations for a number of years, so they are well acquainted with the breaks and needs of those breaks in the Battalions that they are stationed. We completed this 3-year grant in the 1<sup>st</sup> year we received it. During the 2023 grant solicitation season, we applied for and received a larger fuel break maintenance grant and continue to complete this important work.

## 2024 KERN COUNTY DROUGHT MORTALITY UPDATE

Tree mortality has returned to normal rates throughout Kern County, but many dead trees remain in our mountain areas. Kern County has a long road ahead of us to return the timber stands within the county to a healthy state. The graph below shows what conditions have been from 2020-2024.



### Battalion 1 (Tehachapi area)

The area most heavily impacted and of greatest concern within Kern County is the upper portion of the Bear Valley Springs community, located on the southeast flank of Bear Mountain, west of Tehachapi. Over 1,000 acres of pine forest, consisting of 1 to 80 acre private parcels, have been affected. Small patches of trees infected with dwarf mistletoe and black pine leaf scale began dying in the spring of 2015. Bark beetles spread rapidly from these areas into the overstocked stands of pine throughout the remainder of 2015 and into 2016. Mortality approached 100% over much of the area. Numerous homes valued up to \$1,000,000 are located throughout the affected area. The utility companies have removed hundreds of trees that threatened their lines. Using SRA FPF funding, a Licensed Timber Operator began work in mid-May 2015 removing larger trees along the main ingress/egress road. KCFD hand crews followed, removing the smaller trees and treating the slash. Work on another SRA FPF grant in 2017 removed trees from within 300 feet of homes. Although mortality has returned to normal rates, thousands of dead trees remain. The Bear Valley Springs Community Service District (BVS CSD) was recently awarded a CCISRAFP grant to help with this problem. Work was scheduled to begin in 2021. They have since completed two phases of this project to

remove hazard trees. The BVS CSD just this year was awarded a Wildfire Prevention Grant to begin phase 3 of this tree removal process. On top of the WP Grant they also received a Forest Health Grant to aid in snag clean up and to begin a community wide reforestation project. An SRA FPF grant was used to remove dead trees, treat fuels, and create a shaded fuel break on the ridge above Alpine Forest Park, utilizing the KCFD masticator and hand crews. The KCFD Crew 10 and USFS crew have worked on thinning and removing dead and down trees in areas that place our communities at a higher risk for fire danger.

The rest of the Tehachapi range shows varying degrees of dead and dying trees. Scattered mortality is evident in the white fir on the north-facing slopes. Pockets of dead pine up to 20 acres in size are present on the Tejon Ranch. Smaller patches of dead and dying pine, many related to pockets of dwarf mistletoe and/or low sites, can be found throughout the region.

#### **Battalion 5 (Frazier Park and Mt. Pinos area)**

Recent tree mortality in this area is not as heavy as the other forested portions of Kern County. KCFD Crew 10 and USFS crew have worked on thinning and removing dead and down trees in areas that place our communities at a higher risk for fire danger. A CDAA/LTM project removed all hazard trees threatening county infrastructure in 2018. The KCFD received Early Action Funds to connect a fuel break that was proposed by the Los Padres National Forest. This shaded fuel break is located at the Northern end of the Frazier Mountain Park community on the top of Tecuya Ridge that overlooks Frazier Mountain Park and Lake of the Woods. Timber cutters and masticating were used to remove dead trees along the peak to aid in a lower fuel load from dead and down trees.

#### **Battalion 7 (Mountains surrounding Lake Isabella)**

Tree mortality rates in this region are highest in the Greenhorn Mountain range. Large numbers of dead Ponderosa pine, sugar pine, and incense cedar, and to a lesser extent white fir, are distributed throughout the range, with mortality approaching 90% in many spots. The majority of the area affected is US Forest Service land, including several tracts of summer homes. The community of Alta Sierra and the Greenhorn Mountain Park campground are SRA lands also threatened by the massive die off. Also of concern are dead trees along the ingress/egress routes, both USFS and County roads, and State Highway 155. Cal Trans removed trees along Highway 155 in 2017-18. An SRA FPF grant was used

to remove dead trees within 300 feet of homes and roads within the Alta Sierra subdivision. The County Park was salvage logged in 2017. CDAA and LTM grants were used to remove trees along all County infrastructure during 2019. The KCFD completed the Alta Sierra Fuel Modification Project in 2022 which was instrumental in saving this community when the French Fire burned through it. The removal of dead and dying and dead and down trees proved invaluable. Once the fire burned through the area was again left with a large number of fire weakened trees that would soon be dead. The KCFD was awarded a Fire Prevention grant, French Fire Fuel Modification project, to begin a large scale cleanup of the area.

Breckenridge Mountain also has a large number of dead and dying trees, again primarily on USFS land. There is a small community and some SRA land located northwest of the lookout. Removal of trees in and around the structures and along the USFS access roads are the priorities. There is a great deal of pine mortality south and east of the lookout above Walker Basin. Although some of these trees are on SRA lands, treatment would be very difficult due to limited access and steep slopes. CDAA and LTM grants were used to remove dead trees along Breckenridge Road in 2019.

There is a great deal of pinion pine mortality on federal lands in the vicinity of Walker Pass.

There is scattered mortality on USFS lands in the Piute Mountains and in that portion of the Kern Plateau located within Kern County. Dead trees along County Roads were removed in 2019 with CDAA and LTM grants.

## **GRANTS**

The KCFD has ongoing work on the following Grant Funded Projects:

### **2023**

- USDA Community Wildfire Defense Grant
- Kern Fuel Break Maintenance 23/24

### **2022**

CCISRAFPP:

- French Fire Fuel Modification Project
- Kern Direct Award Discing

The Kern County Fire Department has completed the following SRA FPF grant projects and SRAFPP funded projects:

### **2021**

- Alta Sierra Fuel modification Project complete.
- Kern River Valley Community Protection Project complete.
- Kern MND
- Kern Wheeled Chipper
- Kern Skid Steer
- Kern County Chipper Days
- Fuels crew supplies
- Kern Fuel Break Maintenance

### **2020**

- SRAFPP funding was used to complete the Bear Valley Road Brushing Project.
- SRAFPP funding was also used to improve and maintain the South Frazier Fuel Break.
- SRAFPP funding was also used to fund Winter 2020 burning projects.

### **2019**

-SRAFPP funding was used to brush roads in Bear Valley Springs and to complete the fuel break in Pinion Pines. This funding was also used to extend crew members to help with more pile burning. An ASV was obtained with a CCISRAFP grant and was immediately put to work.

### **2018**

-SRAFPP funding was used to improve ingress/egress in the Alpine Forest Park subdivision and to reduce a huge backlog of pile burning throughout the County

### **2017**

-SRAFPP funding was used to create the Water Canyon Emergency Escape Route above Tehachapi

### **2016/17:**

- Purchase of a tracked chipper
- Bear Valley Springs Home Protection Project
- Alta Sierra Hazard Tree Project

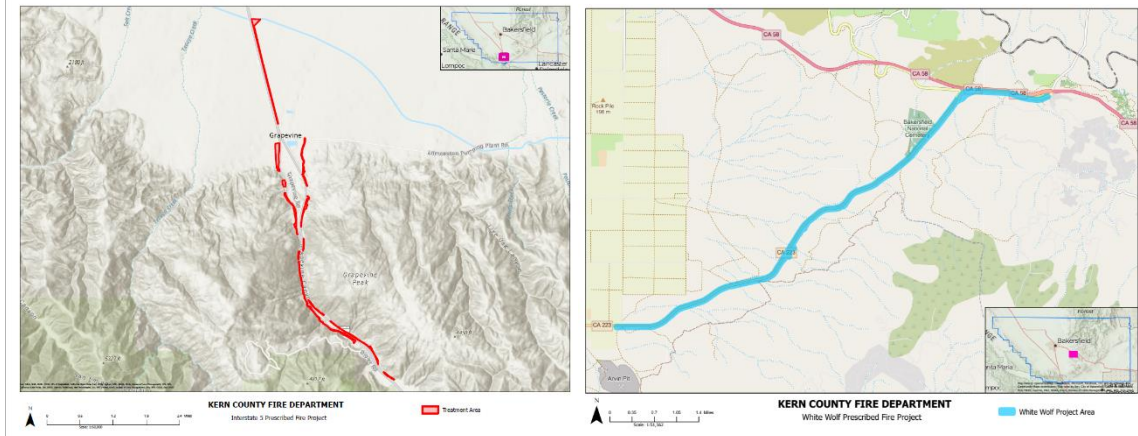
**2015/16:**

- Deer Trail Fuels Reduction Project
- Alpine Ridge Fuels Reduction Project
- Battalion 5 Communities Fuel Reduction Project



## APPENDIX A: PRE- FIRE PROJECTS

- Maintain and improve ingress/egress throughout our rural areas. (O) (M)
- Create new fuel breaks and maintain existing ones throughout the county. (O) (M)
- Partnered with the Sequoia National Forest to work on a project to clean up areas that the French Fire impacted in Alta Sierra. (A)
- Work with the Los Padres National Forest to continue fuel break maintenance projects adjacent to National Forest lands. (O)
- Continue work on CCISRAFP grants maintaining our fuel breaks that are county wide. (M+)



- Take advantage of options to treat the I-5 corridor between the Grapevine and Fort Tejon and the Hwy 223 (White Wolf) area. (A)
- Overcome obstacles (staffing, funding, weather, air quality, etc.) and increase the use of prescribed fire in the County. (P)
- Increase collaboration with stake holders through the Kern Fire Safe Council, Resources Conservation Districts, Conservancies, etc. (O)

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

## **APPENDIX B: UNIT GOALS AND OBJECTIVES**

The overriding mission of the Kern County Fire Department is to safeguard the people and protect the property and resources of Kern County. This is accomplished by being the leader in providing fire protection, fire prevention, other emergency services, and working to enhance our natural resource systems.

### ***The values which we strive to fulfill include:***

- Service: The safety and well-being of the public and our employees are paramount.
- Cooperation: Make every effort to build collaborative relationships with the public, other agencies, and other stakeholders.
- Protection: Always promote integration of prevention and protection.
- Organizational excellence: Strive to produce excellence in all our endeavors.
- Innovation: In all departments, at all levels.
- Communication: With the public, our employees, and other agencies.
- Optimal performance: In the face of emergencies and disasters of any scale.

### **GOAL: Improve Core Capabilities**

Objectives:

- Analyze and integrate core operations
- Evaluate and improve emergency response capabilities

### **GOAL: Enhance Internal Operations**

Objectives:

- Streamline to maximize effectiveness
- Improve internal and external communications
- Improve operational efficiencies
- Manage fiscal challenges to ensure adequate funding for critical programs

### **GOAL: Ensure Health and Safety of Employees**

Objectives:

- Promote mental and physical fitness
- Continue to promote safety of employees and members of the public

### **GOAL: Build an Engaged, Motivated, and Innovative Workforce**

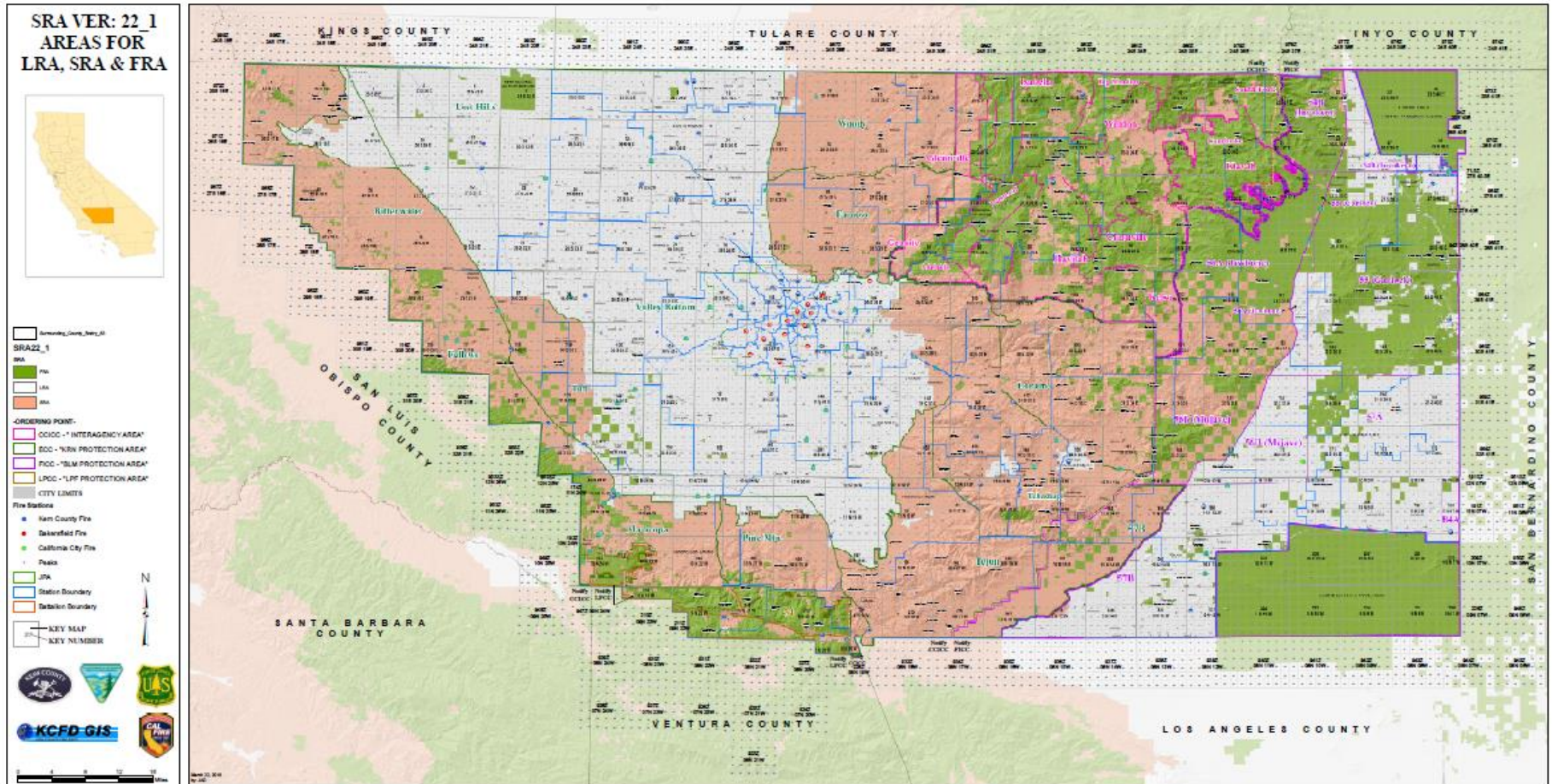
Objectives:

- Recruit, train, and retain employees of the highest quality

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

# APPENDIX C: MAPS

## Figure A: Unit Map



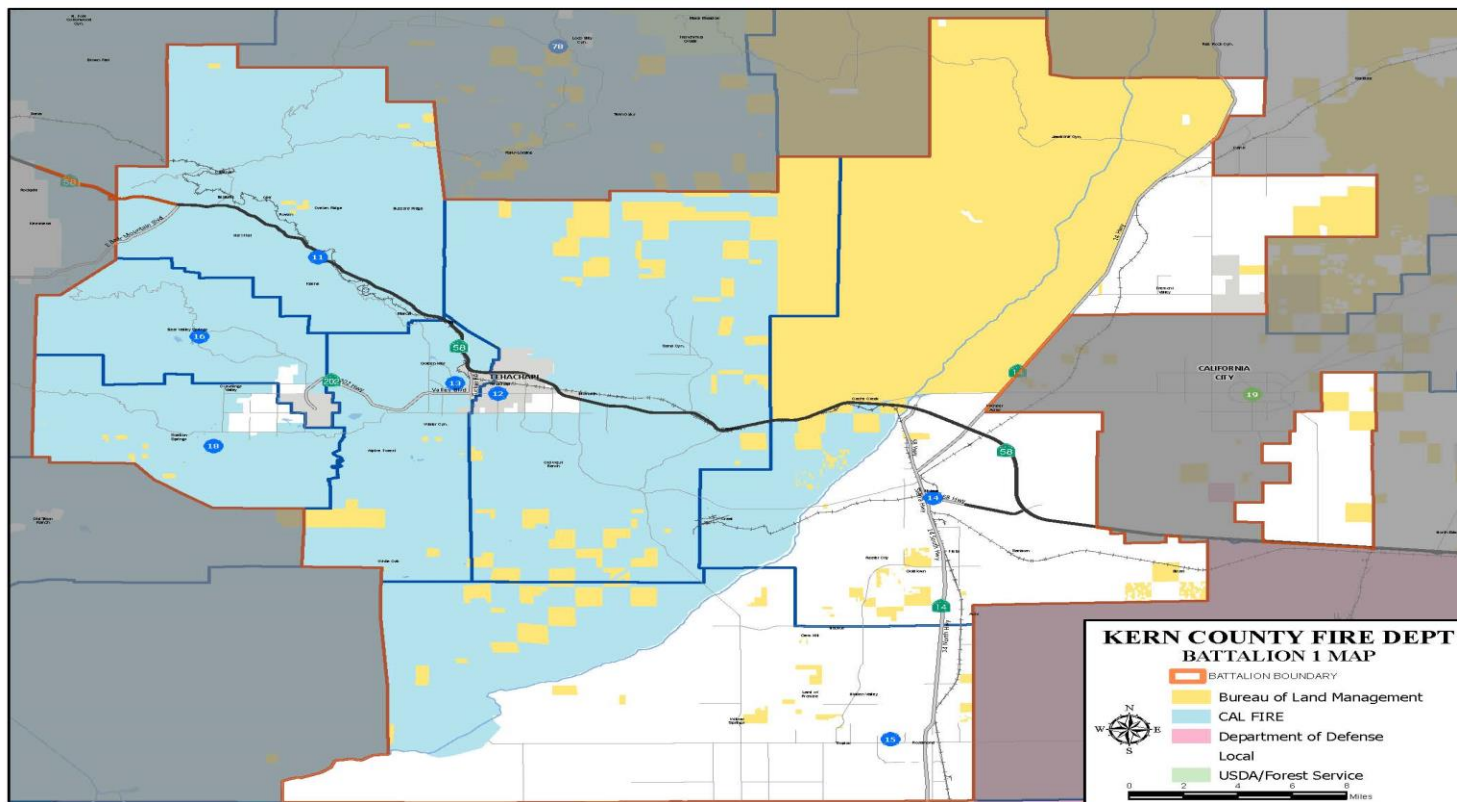
In 2023, the Kern County Fire Department has restructured our Stations and Battalions to better fit the needs of the public of Kern County. We renumbered a few stations in Battalion 4. The Arvin station that was formerly in Battalion 5 has now been incorporated into Battalion 4 as Station 48. Response times for



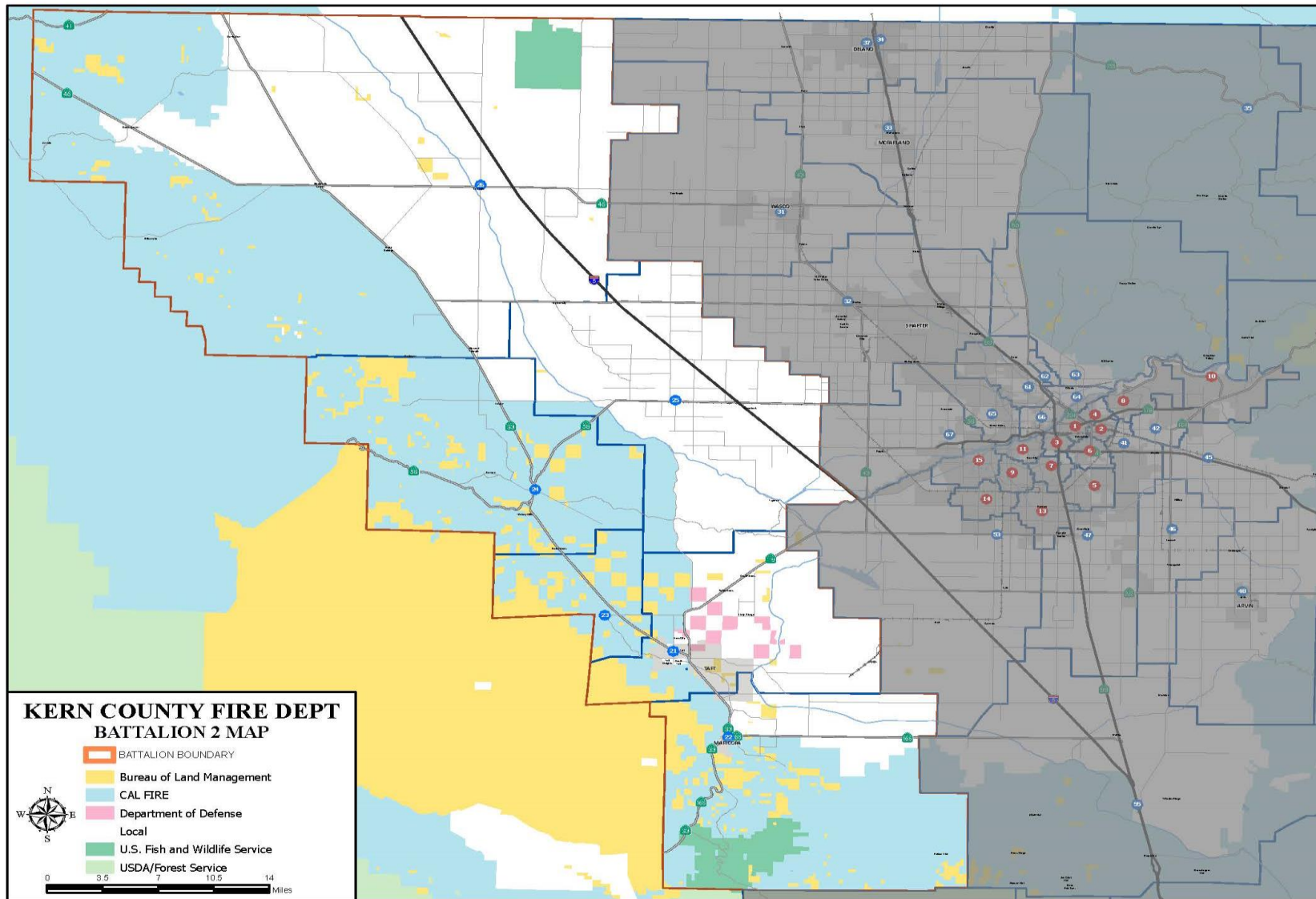
incoming chiefs and second in resources dictated this change. The most impactful change was to Battalion 7. Due to the large geographical size of this battalion, the decision was made to split it into two separate battalions. Battalion 7 now consists of stations in Lake Isabella, Southlake, Kernville, Piute, and Glennville (which was absorbed from Battalion 3). Battalion 8 is our newly created Battalion which includes Inyokern, Ridgecrest, Ridgecrest Heights Randsburg, and Boron (which was absorbed from Battalion 1). In Battalion 8, there is a Battalion Chief stationed at the Ridgecrest Heights Station 81. The creation of Battalion 8 allows for Battalion Chiefs to be housed in the Lake area and Desert area, eliminating the hour-long responses for major incidents.

**Figure B: Battalion Maps**

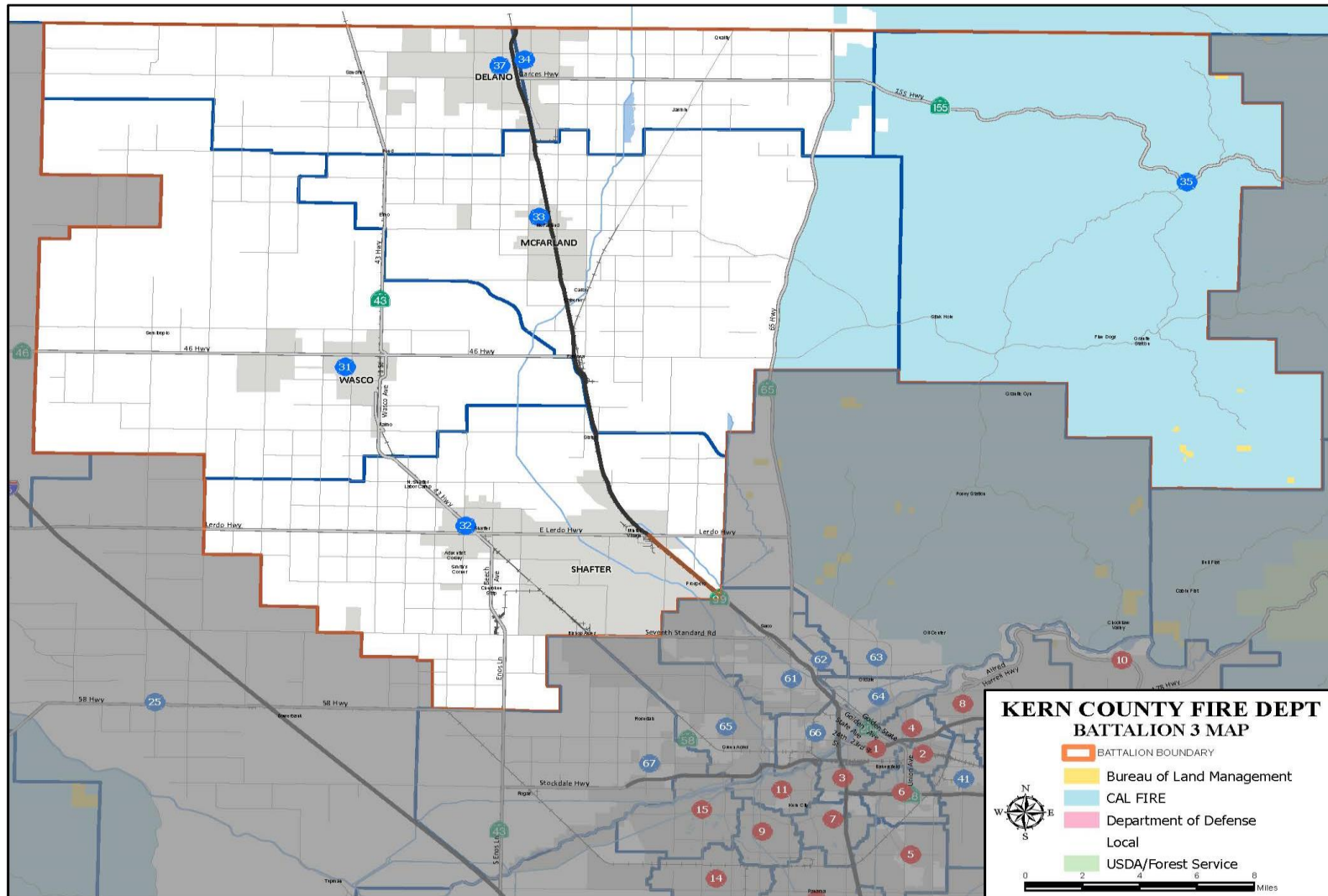
**Battalion 1**



# Battalion 2

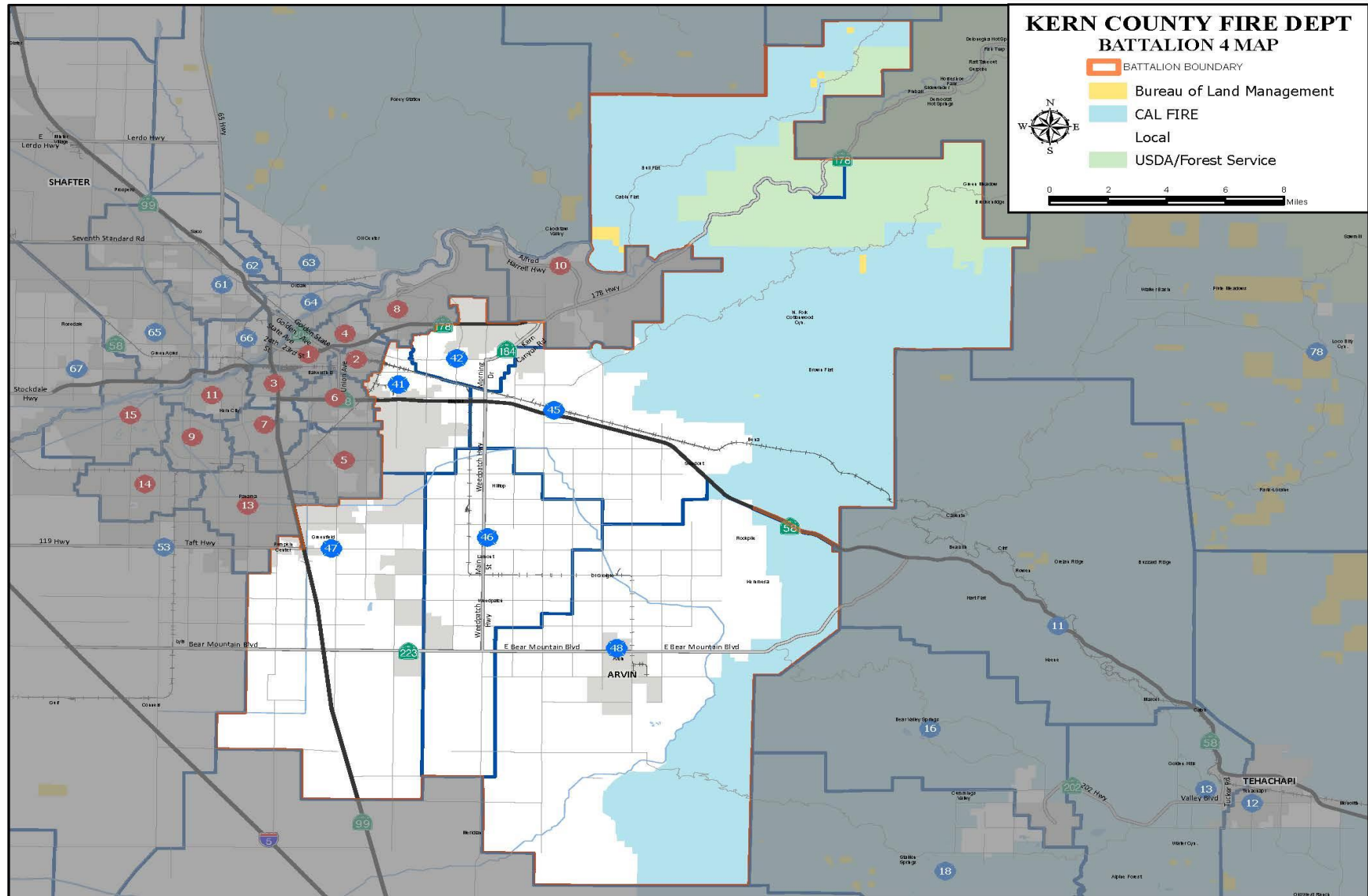


# Battalion 3



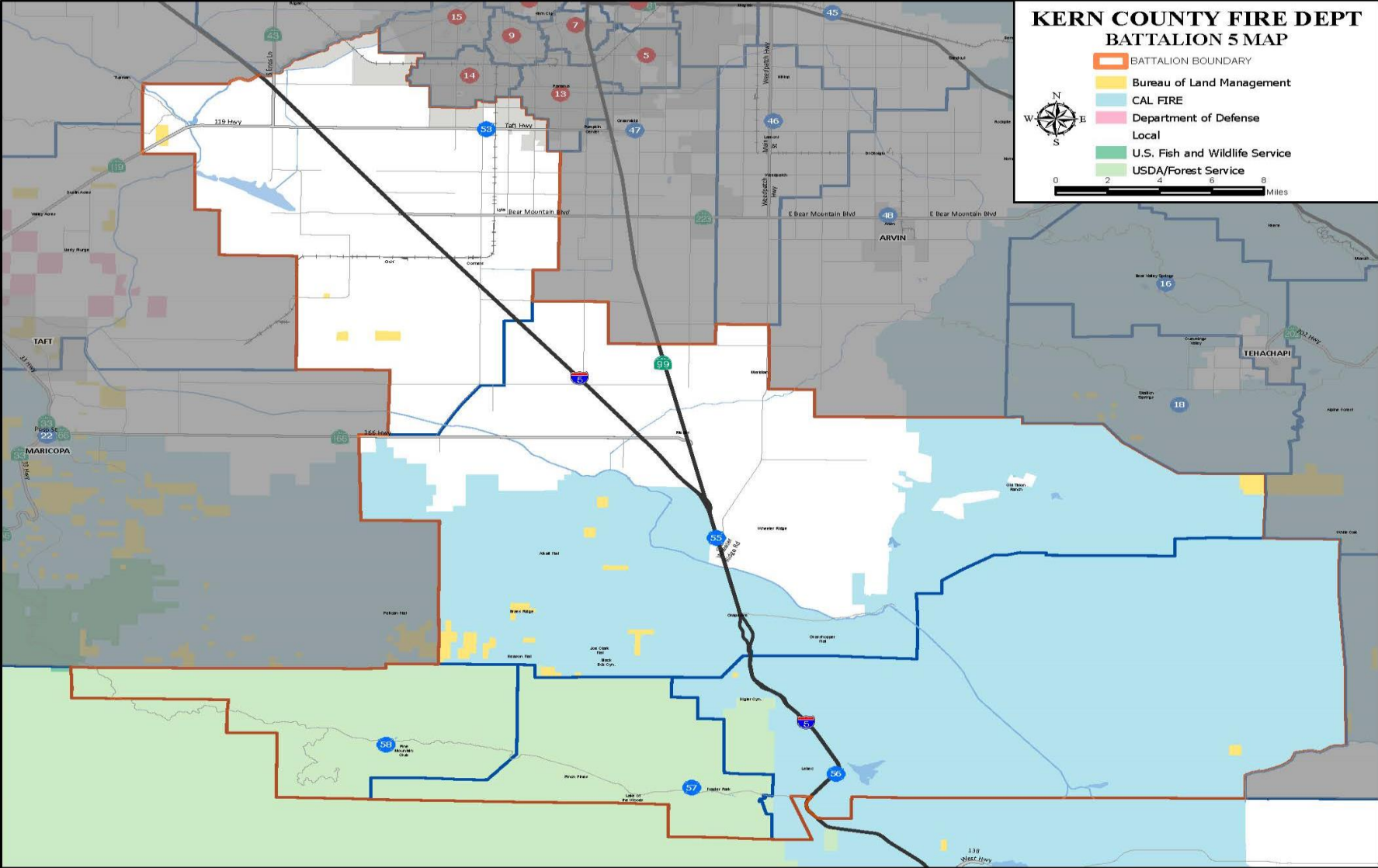
Battalion 3

# Battalion 4



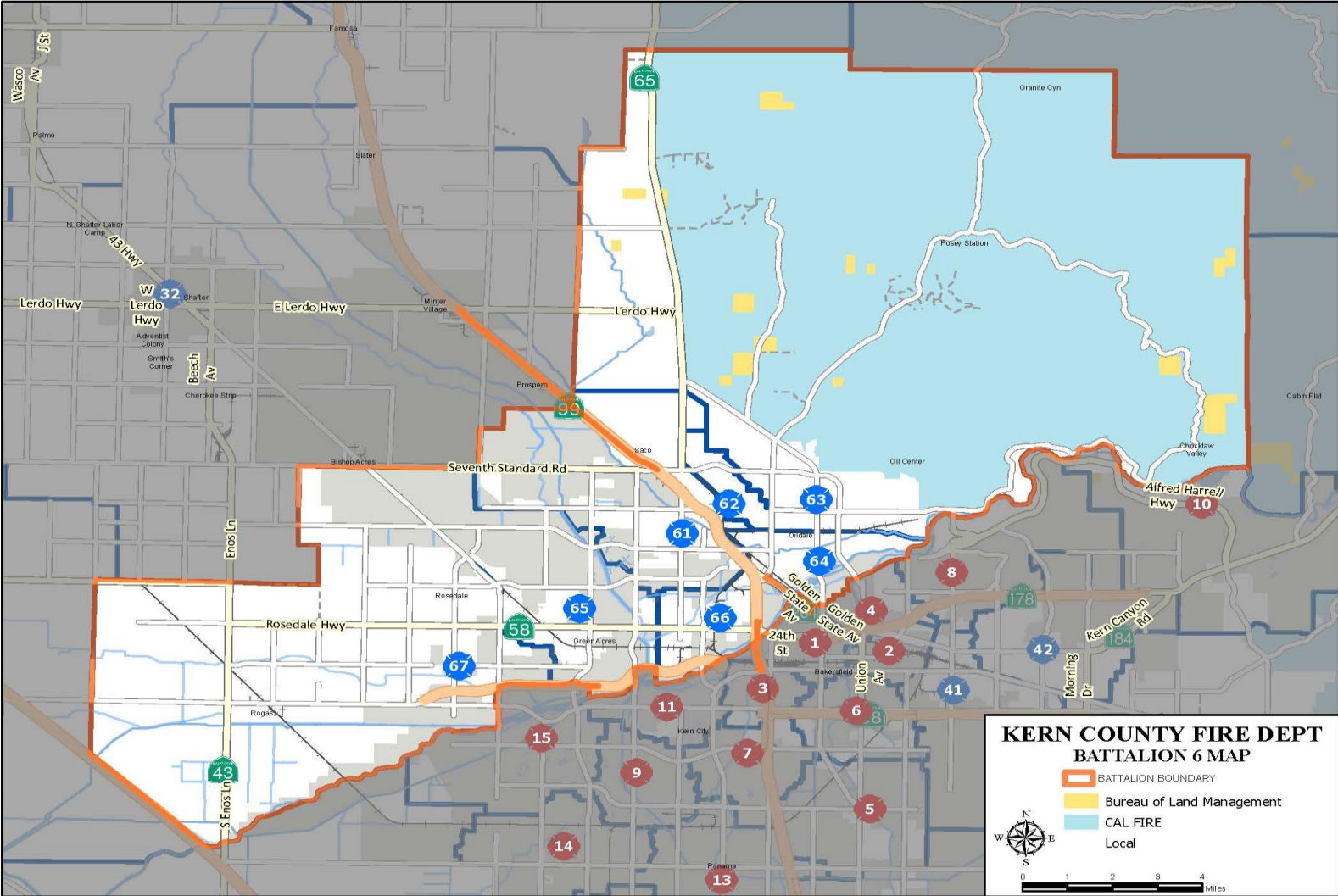


**Battalion 5**

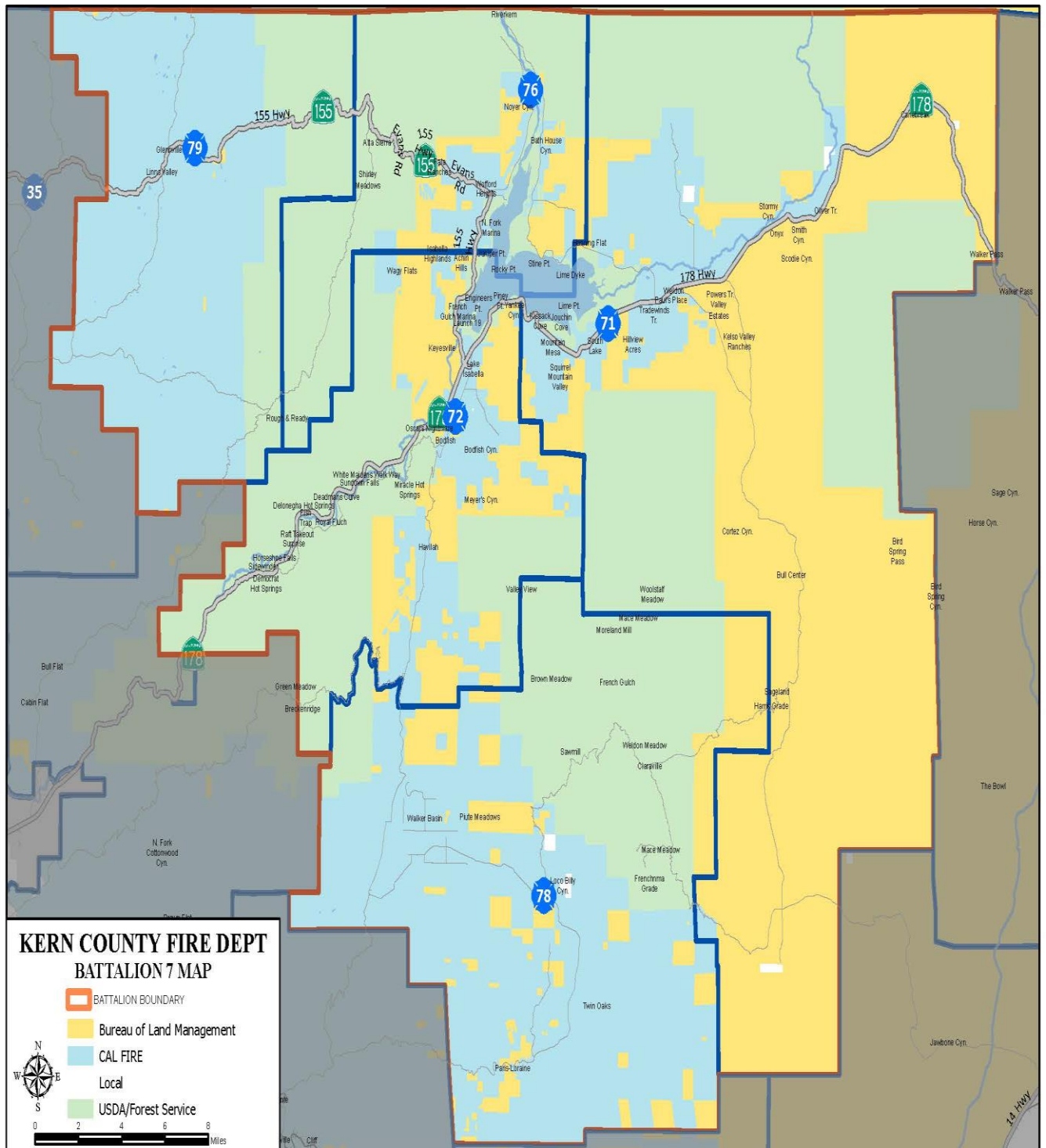




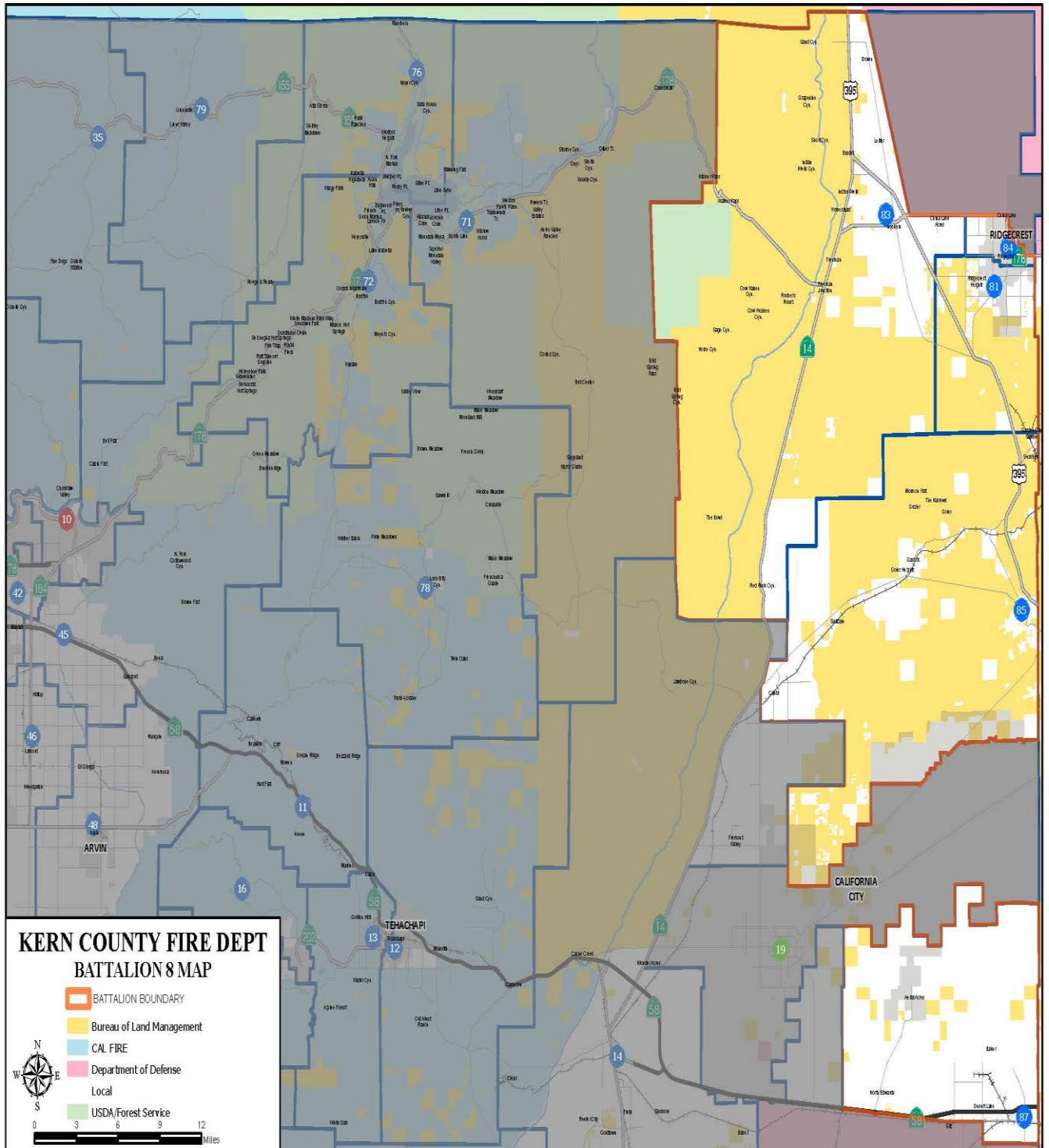
**Battalion 6**



# Battalion 7



# Battalion 8

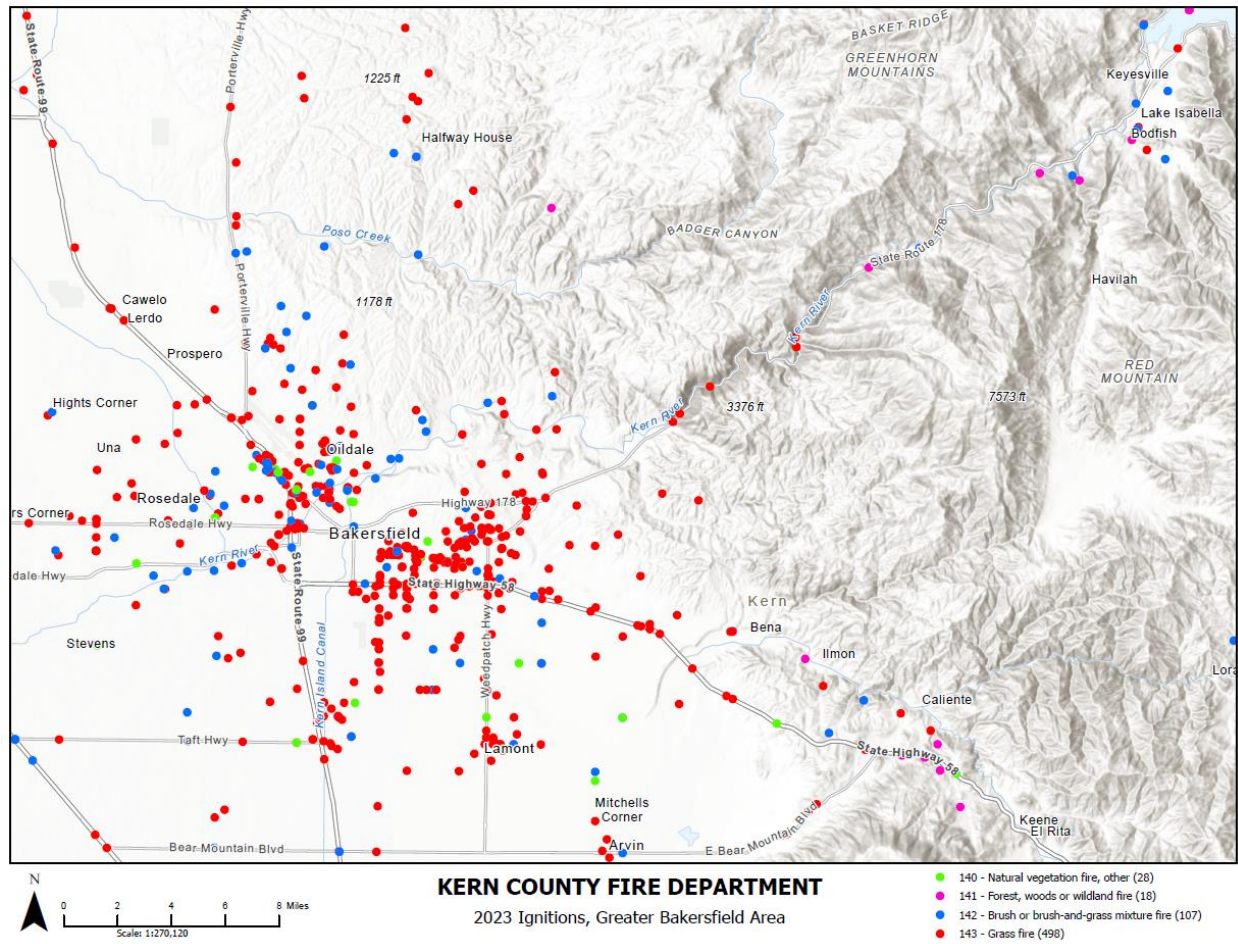




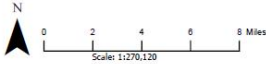
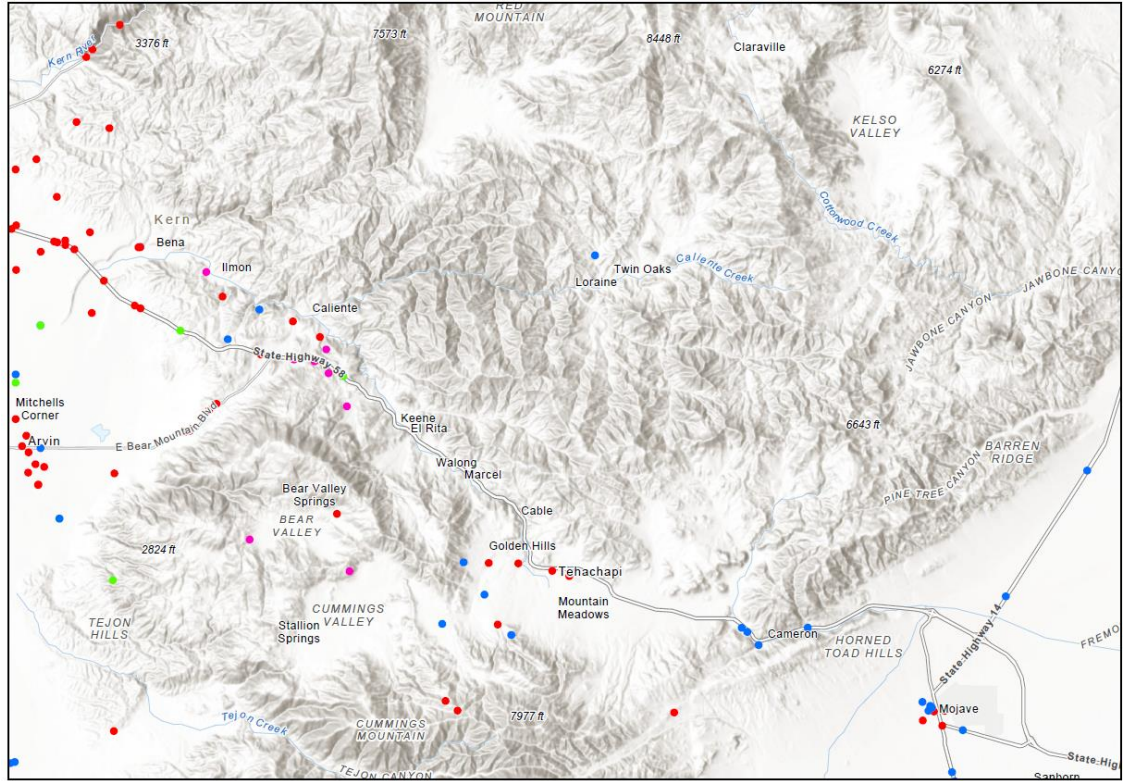
## APPENDIX D: IGNITIONS

From 1/1/23 to 1/1/24 The Kern County Fire Department recorded 1079 confirmed fire starts which more than doubled the number of starts last year of 511. The following maps show the impacted areas over the last calendar year.

### GREATER BAKERSFIELD AREA



# GREATER TEHACHAPI AREA

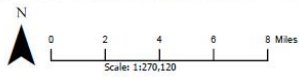
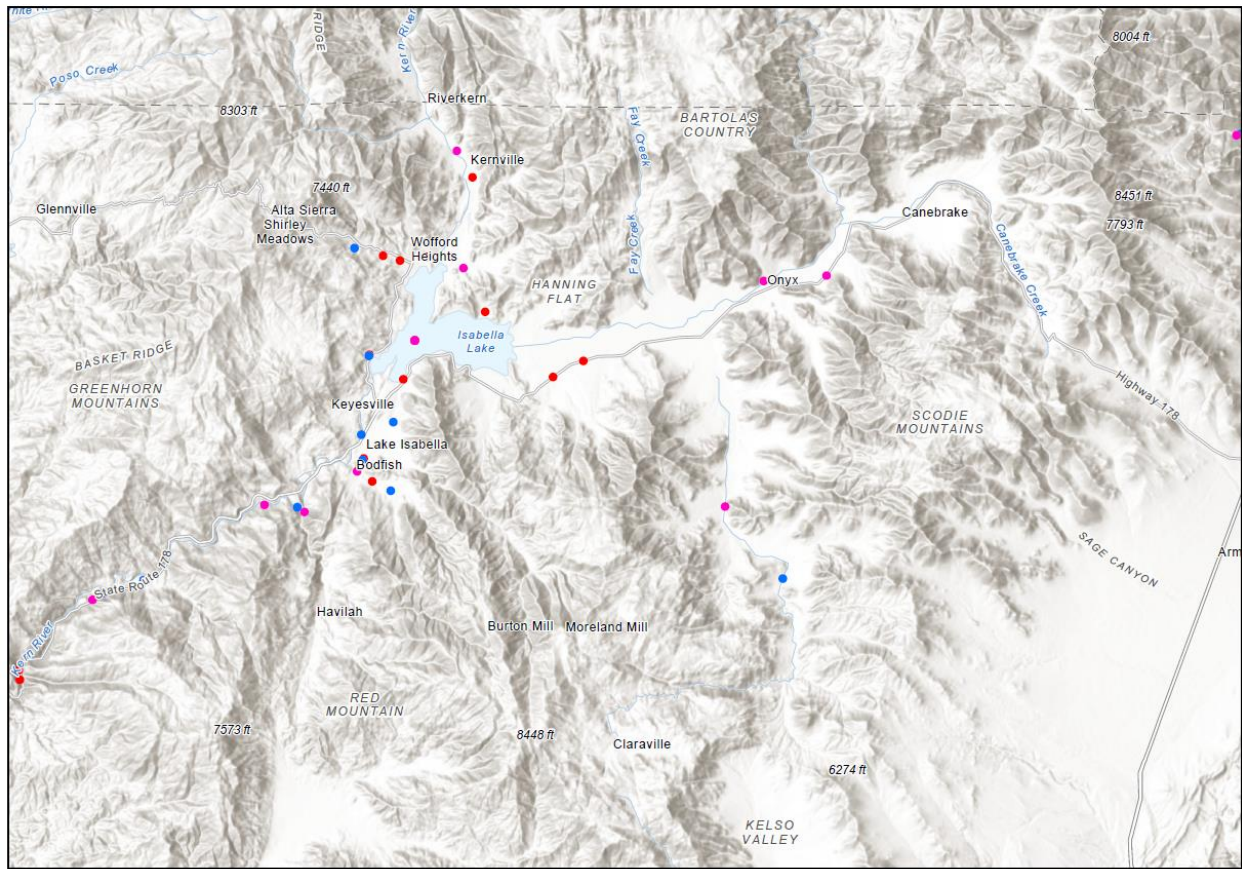


**KERN COUNTY FIRE DEPARTMENT**  
 2023 Ignitions, Greater Tehachapi Area

- 140 - Natural vegetation fire, other (6)
- 141 - Forest, woods or wildland fire (8)
- 142 - Brush or brush-and-grass mixture fire (27)
- 143 - Grass fire (56)



# LAKE ISABELLA

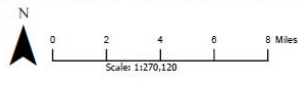
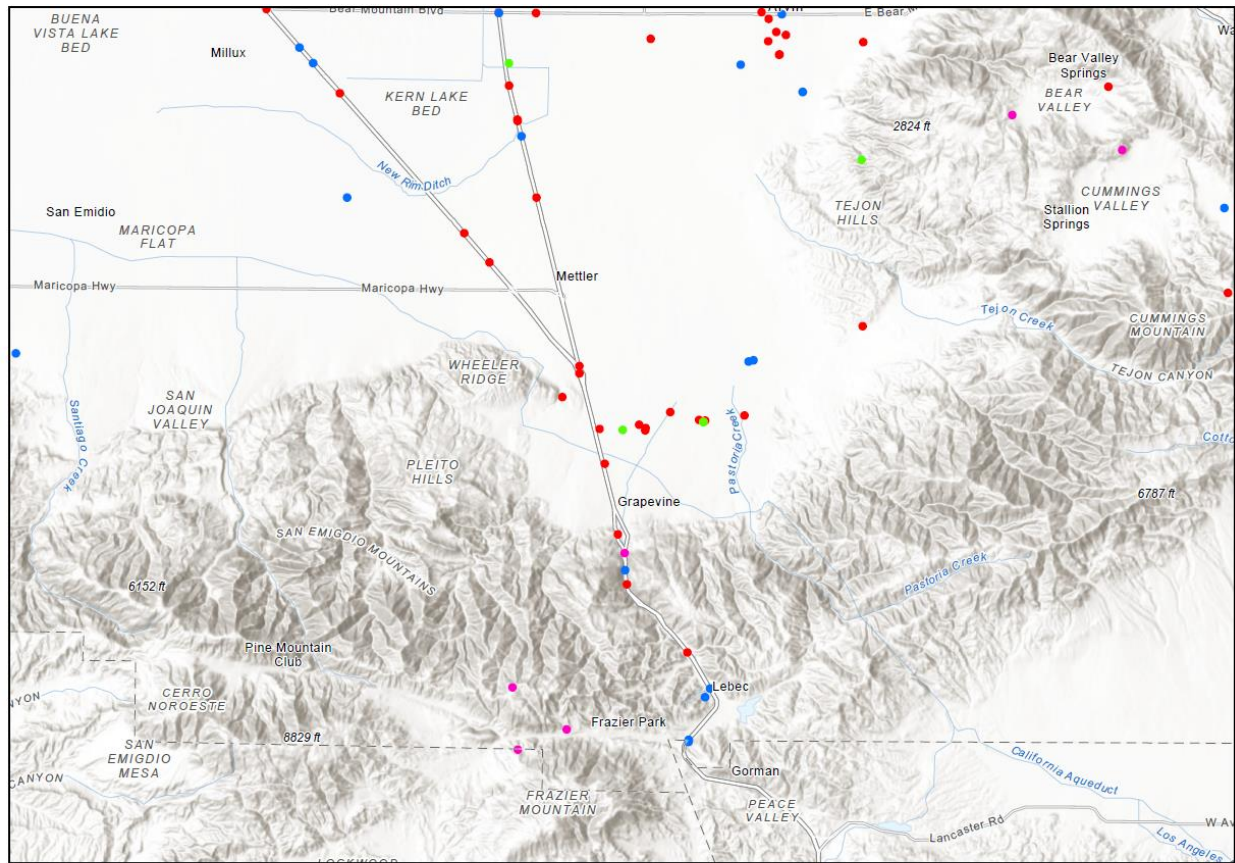


## KERN COUNTY FIRE DEPARTMENT

2023 Ignitions, Lake Isabella

- 140 - Natural vegetation fire, other (1)
- 141 - Forest, woods or wildland fire (17)
- 142 - Brush or brush-and-grass mixture fire (15)
- 143 - Grass fire (13)

# TEJON RANCH / I5 CORRIDOR

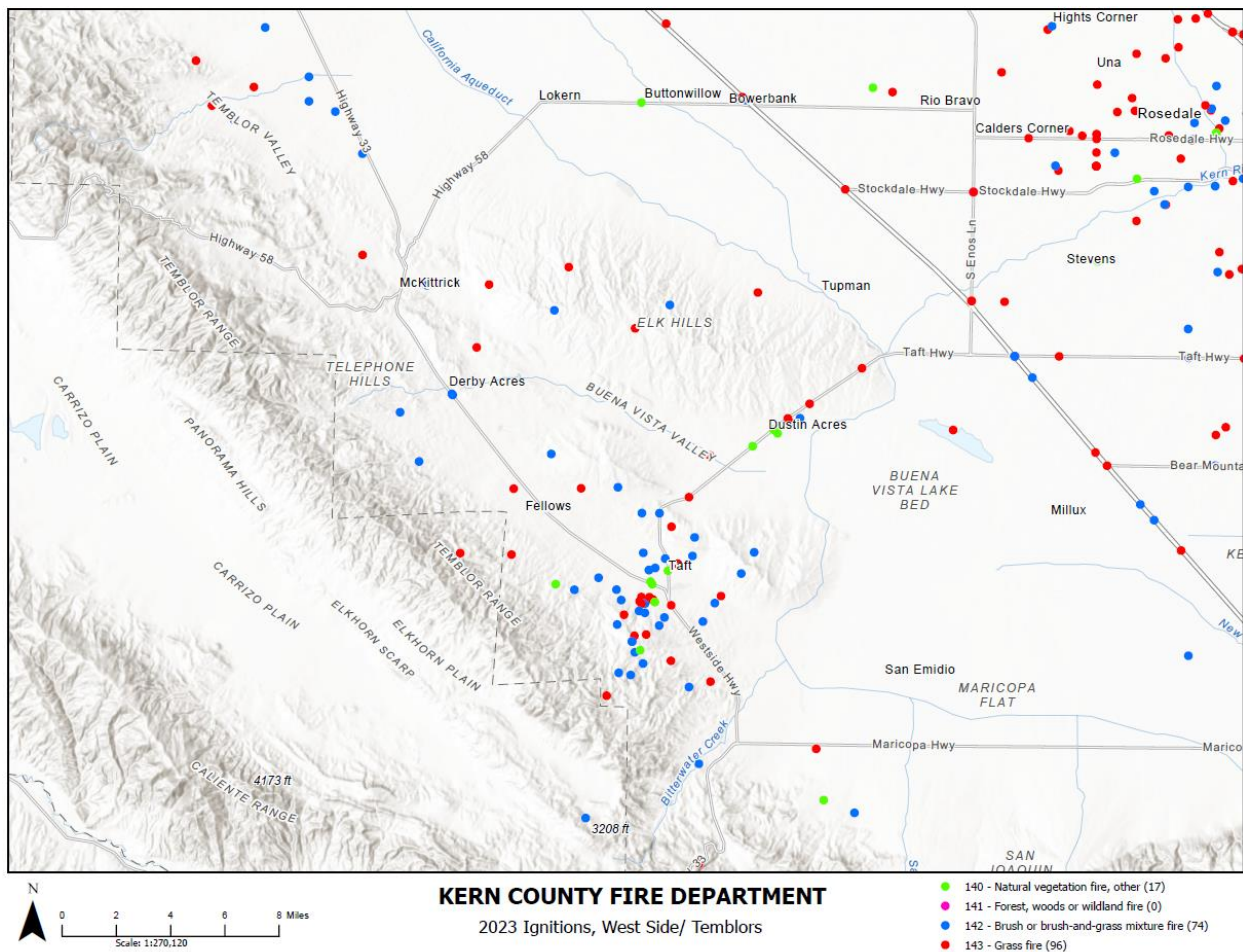


**KERN COUNTY FIRE DEPARTMENT**  
2023 Ignitions, Tejon Ranch/I5 Corridor

- 140 - Natural vegetation fire, other (5)
- 141 - Forest, woods or wildland fire (6)
- 142 - Brush or brush-and-grass mixture fire (20)
- 143 - Grass fire (37)



## WEST SIDE / TEMPLORS



### Summary

Kern County Fire Department has a unique and large wildland fire protection area serving numerous communities. The Kern County Fire Department is continually working with our wildfire hazard communities to locate and develop efficient and meaningful fuel breaks.

We have established and maintained thousands of acres of fuel reduction projects in and around communities prone to wildland fires. These fuel breaks are maintained by our hand crews and Fire Heavy Equipment yard. These projects include chipper days, our public safety burns, fuel break maintenance, disc breaks, road grading, and public education events. Working with these communities is beneficial to our fire department, keeping us connected with the unique concerns of each area.

Annually, we treat the right of way along two highly travelled highways within the county. The White Wolf Public Safety Burn treats the right of way along Highway 223 and protects the communities of Hart Flat, Bear Valley Springs, and Stallion Springs and totals approximately 91 acres.

The Grapevine Public Safety burn along Interstate 5 has been treated for the last two years. The traffic along the interstate and the terrain prove challenging for implementing the project. We have been working jointly with CalFire, Caltrans, and Tejon Ranch to establish this burn stretching over 6 miles of highway and treats portions of the East and West sides of the



interstate. This burn protects numerous communities along the I-5 corridor, helps maintain the statewide travel and commerce along the interstate corridor, and keeps first responders and firefighters from having to fight fire in this dangerous terrain.

These projects and community outreach are performed by the fire crews that have been strategically placed around Kern County to best serve our communities and protect the land within the county. With 1.2 million acres of SRA land to protect within almost 8,100 square miles, we placed these crews where we felt they would benefit the county most. Crew 10 is stationed in Battalion 5. Their base is located in Lebec at Station 56, adjacent to Interstate 5. This proximity to the interstate gives them a direct route into the heart of Kern County. Crews 11 and 12 are stationed in Battalion 1 in two different locations along Highway 58 to ensure a speedy response to the rest of the county. Crew 11's facility is located in Tehachapi. Crew 12's base is at Station 11 in Keene. Crew 79 is located in the Kern River Valley (KRV). All across the county, our fire fighters work side by side with our neighboring federal agencies the United States Forest Service and Bureau of Land Management.

Starting in FY 23/24, the Kern County Air and Wildland Division has been funding two wildland firefighting crews with Greybook funds, Crews 12 and 79. They are county-wide resources for fuel reduction work and fire response.

Our goal is to continue our emphasis on pre fire planning and continue our involvement with the public through fire safe councils, community events, and hazard reduction education. We will also continue aggressively treating fuels throughout the county with our crews and equipment.

## **SUPPLEMENT**

### ***Report of Unit Accomplishments –***

#### **2024**

- Purchased excavator with masticator head through CCI grant funds for use on Fuel Break Maintenance work.

#### **2023**

- Submitted CalVTP Report for the Tecuya Ridge shaded break
- Completion of Kern County Fuel Break Maintenance Grant
- Purchase of a Wheeled Chipper for fuels reduction work
- Purchase of a grant funded skid steer tractor for fuels reduction work
- Completed “Kern Fuels Crew Supplies” Grant
- Completed “Community Chipper Days” Grant
- Added of Crew 12
- Completed Public Safety Burn along Interstate 5 and Hwy 223