

**STATE OF CALIFORNIA
THE NATURAL RESOURCES AGENCY
DEPARTMENT OF FORESTRY and FIRE PROTECTION
MENDOCINO UNIT**



2023 MENDOCINO UNIT FIRE PLAN



UNIT STRATEGIC FIRE PLAN AMENDMENTS

<u>Date</u>	<u>Section Updated</u>	<u>Page Numbers Updated</u>	<u>Description of Update</u>	<u>Updated By</u>
04/25/2013	Table of Contents	iii	Updated TOC	Zimmermaker
05/21/2013	Section III A	13-14	Updated Values language	Zimmermaker
05/21/2013	Section V	36	Camp program	Zimmermaker
04/24/2013	Appendix A	37	Status of pre-fire projects	Zimmermaker
04/24/2013	Appendix B	41	Update of Brooktrails thinning project	Zimmermaker
04/24/2013	Appendix B	42	Update of Pieta VMP	Zimmermaker
04/25/2013	Appendix F	48	Ignition Management Plan	Zimmermaker
04/24/2013	Exhibits	60	Updated large fire history map	Zimmermaker
03/30/2014	Appendix A	37	Status of pre-fire projects	Zimmermaker
03/30/2014	Appendix B	42	Update of Mill Creek VMP	Zimmermaker
03/30/2014	Appendix B	44	Update of Shamrock VMP & Battalion 5 VMP's	Zimmermaker
03/30/2014	Appendix B	45	Addition of Folded Hills VMP	Zimmermaker
03/30/2014	Appendix F	48	Ignition Management Plan	Zimmermaker
03/30/2014	Exhibits	60	Updated large fire history map	Zimmermaker
01/04/2017	Appendix A	37	Pre-Fire Projects	Gunn
01/04/2017	Appendix C	39-50	Battalion Target Areas	Gunn
01/04/2017	Appendix F	53-57	Ignition Management Plan	Gunn
04/02/2015	Exhibits: Maps	63	Fire History Map	Gunn
05/08/2018	Appendix A	38-39	Pre-Fire Projects	Kitchens
05/08/2018	Appendix C	42-49	Battalion Target Areas	Kitchens
01/10/2018	Appendix F	52-57	Ignition Management Plan	Kitchens
05/09/2018	Appendix D	50	Local Fire Safe Councils	Kitchens
04/22/2019	Cover Page	i	Cover Page Updated	Massucco
04/22/2019	Table of Contents	iii	Updated Table of Contents	Massucco
04/22/2019	Executive Summary	2	Update Executive Summary	Massucco
04/24/2019	Unit Overview	3	Minor Revisions & Update	Massucco
04/24/2019	Local Fire Departments	6	New dept. language added	Massucco
04/25/2019	Pre-Fire Management Strategies	16	History of Large Fires Updated	Massucco
04/25/2019	Pre-Fire Management Tactics	21	Battalions/Program language Updated	Massucco
04/25/2019	Appendix A – Pre-Fire Projects	36	Updated for Relevance/Accuracy	Massucco
04/30/2019	Appendix C – Target Areas	38	Updated for Relevance/Accuracy	Massucco



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Unit Strategic Fire Plan developed for Mendocino Unit:

This Plan:

- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and 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.

DocuSigned by:

Luke Kendall

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Luke Kendall
Unit Chief

7/18/2023

Date

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Date



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SECTION I- UNIT OVERVIEW

UNIT GOALS

The overall goal of the Mendocino Fire Plan is to reduce total costs and losses from wildland fires within the Mendocino Unit by protecting assets at risk through focused pre-fire management prescriptions and increased initial attack success. To make the Unit fire plan a success, it must focus on the Goals outlined in the

Strategic Fire Plan for California, which include:

1. Identify and evaluate wildland fire hazards and recognize life, property, and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the collaborative development and sharing of all analyses and data collection across all ownerships for consistency in type and kind.
2. Promote and support local land use planning processes as they relate to: (a) protection of life, property, and natural resources from risks associated with wildland fire, and (b) individual landowner objectives and responsibilities.
3. Support and participate in the collaborative development and implementation of local, county, and regional plans that address fire protection and landowner objectives.
4. The Unit will support and enable the expansion of cultural to introduce beneficial fire across Mendocino County. The Unit will also encourage and effectively leverage private landowner interest in prescribed fire as a land management tool.
5. Increase fire prevention awareness, knowledge and actions implemented by individuals and communities to reduce human loss, property damage and impacts to natural resources from wildland fires.
6. Integrate fire and fuels management practices with landowner/land manager priorities across jurisdictions.



7. Determine the level of resources necessary to effectively identify, plan and implement fire prevention using adaptive management strategies.
8. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
9. Implement post-fire assessments and programs for the protection of life, property, and natural resource recovery.

UNIT DESCRIPTION

Mendocino County is in California's north coast region, bounded by the Pacific Ocean to the west, Sonoma County to the south, Lake County to the southeast and east, Glenn and Tehama Counties to the east and northeast, Trinity County to the north and east, and Humboldt County to the north. The borders with Glenn and Tehama Counties are completely within the Mendocino National Forest in the county's northeastern portion.

The Mendocino Unit entails 2,360,646 acres of land. As of 2021, there are 1,856,728 acres of State Responsibility Area in the Mendocino Unit. Additionally, the CAL FIRE Mendocino Unit has a Direct Protection Area of 2,022,764 acres.¹

TOPOGRAPHY

Within an area of 3,510 square miles, Mendocino County's elevation runs from sea level at the ocean to 6,954 feet atop Anthony Peak, near the Tehama County border. Inland from 129 miles of magnificent coastline, the environment is as varied as the terrain. World-class vineyards thrive in the southern valleys and stands of redwood and Douglas-fir trees tower down from the Pacific Coast Range. Numerous mountain peaks over 6,000 feet grace the northeastern

¹ Figures derived from 2020 CAL FIRE GIS information.



portion of the county and bear snow caps until early summer. Oak woodlands on rolling hills are scattered throughout the county.

The county is characterized by steep slopes, with the main ridges oriented north-northwest to south-southeast. Rivers and streams are abundant, some flowing year-round and others drying up in the summer. The mighty Eel River drains to the north and the Russian River to the south. River's west of the first divide inland from the coast, just west of the Highway 101 corridor, drain basically east to west, to the ocean. These include, from south to north, the Gualala River North Fork, plus the Garcia, Navarro, Albion, Big, Noyo, and Ten Mile Rivers. The Russian River provides water to an estimated 600,000 people in Sonoma and Marin Counties.

The county's mountains and hills are interspersed with nine distinct valleys:

- Potter Valley in the east-central portion
- Round Valley to the northeast, with Covelo in its center
- Leggett Valley in the north, with the communities of Leggett and Piercy
- Long Valley south of Leggett, with Laytonville at its center
- Little Lake Valley in the county's center, surrounding the City of Willits
- Redwood Valley, just north of the Ukiah Valley
- Ukiah Valley in the south-central area, with the City of Ukiah at its center
- Anderson Valley in the central-western portion, including the towns of Yorkville, Boonville, Philo, and Navarro
- Sanel Valley in the south, with the community of Hopland

CLIMATE

Mendocino County enjoys a Mediterranean climate, with dry summers during which typically no rain falls from early June to late October. The weather can vary greatly on the same day in different parts of the county. An average



summer day may find the coastal areas at 60 degrees and inland temperatures at 90 to 105 degrees Fahrenheit. The warmer the Sacramento Valley becomes, the deeper fog intrudes from the ocean up the coastal drainages, and the windier the inland valleys become.

Diverse microclimates benefit from having four seasons and 40 to 100 inches of annual rainfall, depending on the location, elevation, and weather patterns. The declared fire season in Mendocino County typically lasts from early June to mid or late October.

VEGETATION

Vegetative fuel types in the county consist of grass, oak woodlands, brush, mixed chaparral, timber, and to a lesser extent, cut-over slash. Few areas of Mendocino County have not been harvested for timber in the past. Brush is usually composed of chamise on the south and west facing slopes and mixed chaparral on the north and east facing slopes. Mendocino County has seen very few large wildfires in the past several decades, resulting in a massive build-up of wildland fuels ready to burn.

Vegetation typical within the Mendocino Unit



FIRE HISTORY

In 2017, Mendocino County suffered the greatest modern disaster because of a wildland fire which began in Potter Valley and burned into Redwood Valley in record time. Hundreds of structures were consumed by the fire as well several



lives lost, trying to escape the blaze. In 2018, Mendocino had a fire in total burned into four Counties, Lake, Colusa, Glenn in addition to Mendocino. This was the largest fire in California history at the time. The fire consumed nearly 460,000 acres, consumed structures, and a firefighter fatality.

In 2020, the August Complex began because of 38 separate lightning caused fires within the Mendocino National Forest. The August Complex grew to over 1 million acres, spread across seven counties, encompassed hundreds of miles of fire line, and broke several largest historical fire statistics. For comparison, the size of the fire is larger than the State of Rhode Island and District of Columbia combined.

Top 20 Largest California Wildfires

FIRE NAME (CAUSE)	DATE	COUNTY	ACRES	STRUCTURES	DEATHS
1 AUGUST COMPLEX (Lightning)	August 2020	Mendocino, Humboldt, Trinity, Tehama, Glenn, Lake, & Colusa	1,032,648	935	1
2 DIXIE (Powerlines)	July 2021	Butte, Plumas, Lassen, Shasta & Tehama	963,309	1,311	1
3 MENDOCINO COMPLEX (Human Related)	July 2018	Colusa, Lake, Mendocino & Glenn	459,123	280	1
4 SCU LIGHTNING COMPLEX (Lightning)	August 2020	Stanislaus, Santa Clara, Alameda, Contra Costa, & San Joaquin	396,025	225	0
5 CREEK (Undetermined)	September 2020	Fresno & Madera	379,895	858	0
6 LNU LIGHTNING COMPLEX (Lightning/Arson)	August 2020	Napa, Solano, Sonoma, Yolo, Lake, & Colusa	363,220	1,491	6
7 NORTH COMPLEX (Lightning)	August 2020	Butte, Plumas & Yuba	318,935	2,852	15
8 THOMAS (Powerlines)	December 2017	Ventura & Santa Barbara	281,893	1,060	2
9 CEDAR (Human Related)	October 2003	San Diego	273,246	2,820	15
10 RUSH (Lightning)	August 2012	Lassen	271,911 CA / 43,666 NV	0	0
11 RIM (Human Related)	August 2013	Tuolumne	257,314	112	0
12 ZACA (Human Related)	July 2007	Santa Barbara	240,207	1	0
13 CARR (Human Related)	July 2018	Shasta County & Trinity	229,651	1,614	8
14 MONUMENT (Lightning)	July 2021	Trinity	223,124	28	0
15 CALDOR (Human Related)	August 2021	Alpine, Amador, & El Dorado	221,835	1,005	1
16 MATILDA (Undetermined)	September 1932	Ventura	220,000	0	0
17 RIVER COMPLEX (Lightning)	July 2021	Siskiyou & Trinity	199,359	122	0
18 WITCH (Powerlines)	October 2007	San Diego	197,990	1,650	2
19 KLAMATH THEATER COMPLEX (Lightning)	June 2008	Siskiyou	192,038	0	2
20 MARBLE CONE (Lightning)	July 1977	Monterey	177,866	0	0

There is no doubt that there were fires with significant acreage burned in years prior to 1932, but those records are less reliable, and this list is meant to give an overview of the large fires in more recent times. This list does not include fire jurisdiction. These are the Top 20 regardless of whether they were state, federal, or local responsibility.

*Numbers not final.



10/24/2022



Top 20 Deadliest California Wildfires

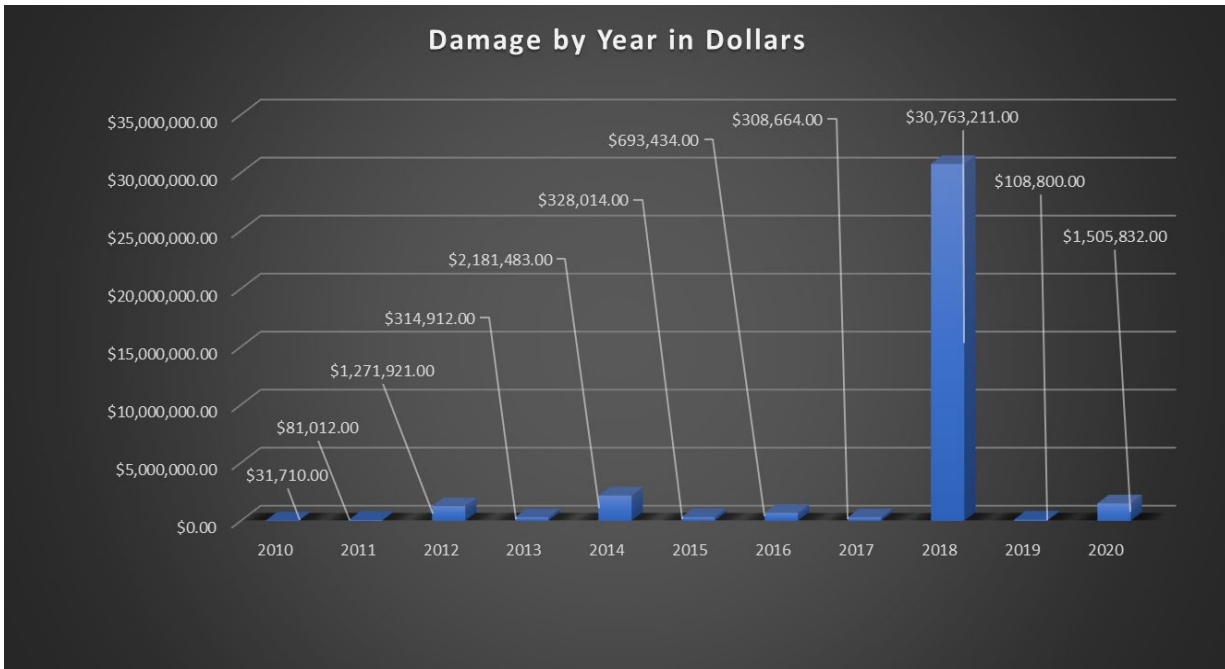
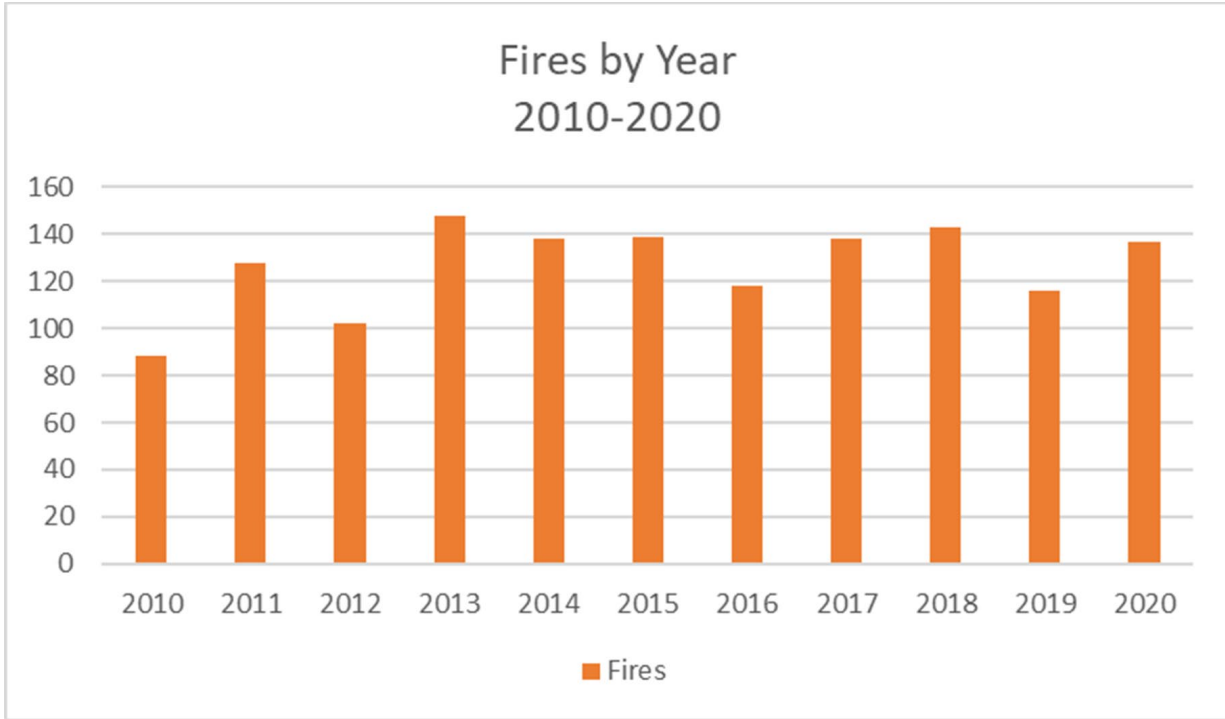
FIRE NAME (CAUSE)	DATE	COUNTY	ACRES	STRUCTURES	DEATHS
1 CAMP FIRE (Powerlines)	November 2018	Butte	153,336	18,804	85
2 GRIFFITH PARK (Unknown)	October 1993	Los Angeles	47	0	29
3 TUNNEL - Oakland Hills (Rekindle)	October 1991	Alameda	1,600	2,900	25
4 TUBBS (Electrical)	October 2017	Napa & Sonoma	36,807	5,636	22
5 NORTH COMPLEX (Lightning)	August 2020	Butte, Plumas, & Yuba	318,935	2,352	15
6 CEDAR (Human Related)	October 2003	San Diego	273,246	2,820	15
7 RATTLESNAKE (Arson)	July 1953	Glenn	1,340	0	15
8 LOOP (Unknown)	November 1966	Los Angeles	2,028	0	12
9 HAUSER CREEK (Human Related)	October 1943	San Diego	13,145	0	11
10 INAJA (Human Related)	November 1956	San Diego	43,904	0	11
11 IRON ALPS COMPLEX (Lightning)	August 2008	Trinity	105,855	10	10
12 REDWOOD VALLEY (Power Lines)	October 2017	Mendocino	36,523	543	9
13 HARRIS (Undetermined)	October 2007	San Diego	90,440	548	8
14 CANYON (Unknown)	August 1968	Los Angeles	22,197	0	8
15 CARR (Human Related)	July 2018	Shasta County, Trinity	229,651	1,614	7
16 LNU Lightning Complex (Lightning/Arson)	August 2020	Napa/Sonoma/Yolo/Stanislaus/ Lake	363,220	1,491	6
17 ATLAS (Powerline)	October 2017	Napa & Solano	51,624	781	6
18 OLD (Human Related)	October 2003	San Bernardino	91,281	1,003	6
19 DECKER (Vehicle)	August 1959	Riverside	1,425	1	6
20 HACIENDA (Unknown)	September 1955	Los Angeles	1,150	0	6

** Fires with the same death count are listed by most recent. Several fires have had 4 fatalities, but only the most recent are listed
 ***This list does not include fire jurisdiction. These are the Top 20 regardless of whether they were state, federal, or local responsibility.
 *Numbers not final
 10/24/2022

Top 20 Most Destructive California Wildfires

FIRE NAME (CAUSE)	DATE	COUNTY	ACRES	STRUCTURES	DEATHS
1 CAMP (Powerlines)	November 2018	Butte	153,336	18,804	85
2 TUBBS (Electrical)	October 2017	Napa & Sonoma	36,807	5,636	22
3 TUNNEL - Oakland Hills (Rekindle)	October 1991	Alameda	1,600	2,900	25
4 CEDAR (Human Related)	October 2003	San Diego	273,246	2,820	15
5 NORTH COMPLEX (Lightning)	August, 2020	Butte, Plumas, & Yuba	318,935	2,352	15
6 VALLEY (Electrical)	September 2015	Lake, Napa & Sonoma	76,067	1,958	4
7 WITCH (Powerlines)	October 2007	San Diego	197,990	1,650	2
8 WOOLSEY (Electrical)	November 2018	Ventura	96,949	1,643	3
9 CARR (Human Related)	July 2018	Shasta County, Trinity	229,651	1,614	8
10 GLASS (Undetermined)	September 2020	Napa & Sonoma	67,484	1,520	0
11 LNU LIGHTNING COMPLEX (Lightning/Arson)	August 2020	Napa, Solano, Sonoma, Yolo, Lake, & Colusa	363,220	1,491	6
12 CZU LIGHTNING COMPLEX (Lightning)	August 2020	Santa Cruz, San Mateo	86,509	1,490	1
13 NUNS (Powerline)	October 2017	Sonoma	44,573	1,355	3
14 DIXIE (Under Investigation)*	July 2021	Butte, Plumas, Lassen, & Tehama	963,309	1,311	1
15 THOMAS (Powerline)	December 2017	Ventura & Santa Barbara	281,893	1,063	2
16 CALDOR (Human Related)	September 2021	Alpine, Amador, & El Dorado	221,835	1,005	1
17 OLD (Human Related)	October 2003	San Bernardino	91,281	1,003	6
18 BUTTE (Powerlines)	September 2015	Amador & Calaveras	70,868	965	2
19 JONES (Undetermined)	October 1999	Shasta	26,200	954	1
20 AUGUST COMPLEX (Lightning)	August 2020	Mendocino, Humboldt, Trinity, Tehama, Glenn, Lake, & Colusa	1,032,648	935	1

"Structures" include homes, outbuildings (barns, garages, sheds, etc) and commercial properties destroyed.
 This list does not include fire jurisdiction. These are the Top 20 regardless of whether they were state, federal, or local responsibility.
 *Numbers not final
 10/24/2022





IGNITION HISTORY

In 2022, MEU responded to 71 wildland fires within its Direct Protection Area (DPA). These fires burned approximately 277 acres. This is a decrease from the previous two years, with 2021 having 139 wildland fires for a total of 437 acres burned, and 2020 with 151 wildland fires and 142,000 acres burned.

The five largest SRA fires within the Unit for 2022 were:

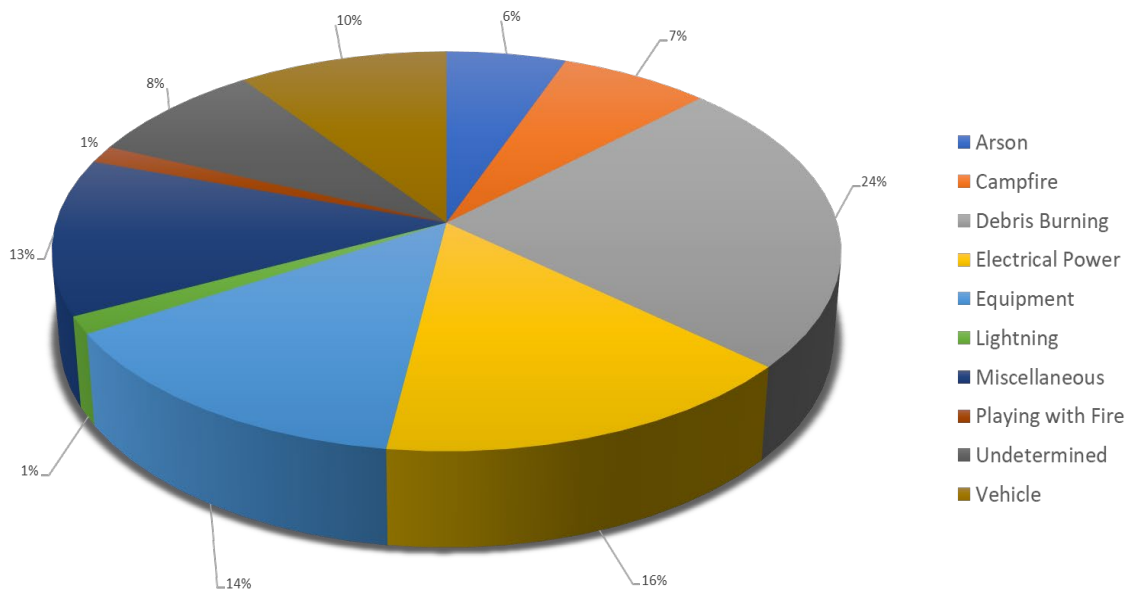
1. **22CAMEU0010062- WALKER** - 124 acres, caused by a Vehicle.
2. **22CAMEU0008035- BELL** - 42.9 acres, Miscellaneous Cause – Metal Grinding.
3. **22CAMEU0005469- OWENS** - 36.2 acres, Electrical cause.
4. **22CAMEU0007558- NOME** - 17 acres, Electrical cause.
5. **22CAMEU0008119- MEADOW** - 18 acres, Equipment cause.

The following three fire cause classes were responsible for most of the vegetation fires within the Mendocino Unit in 2022:

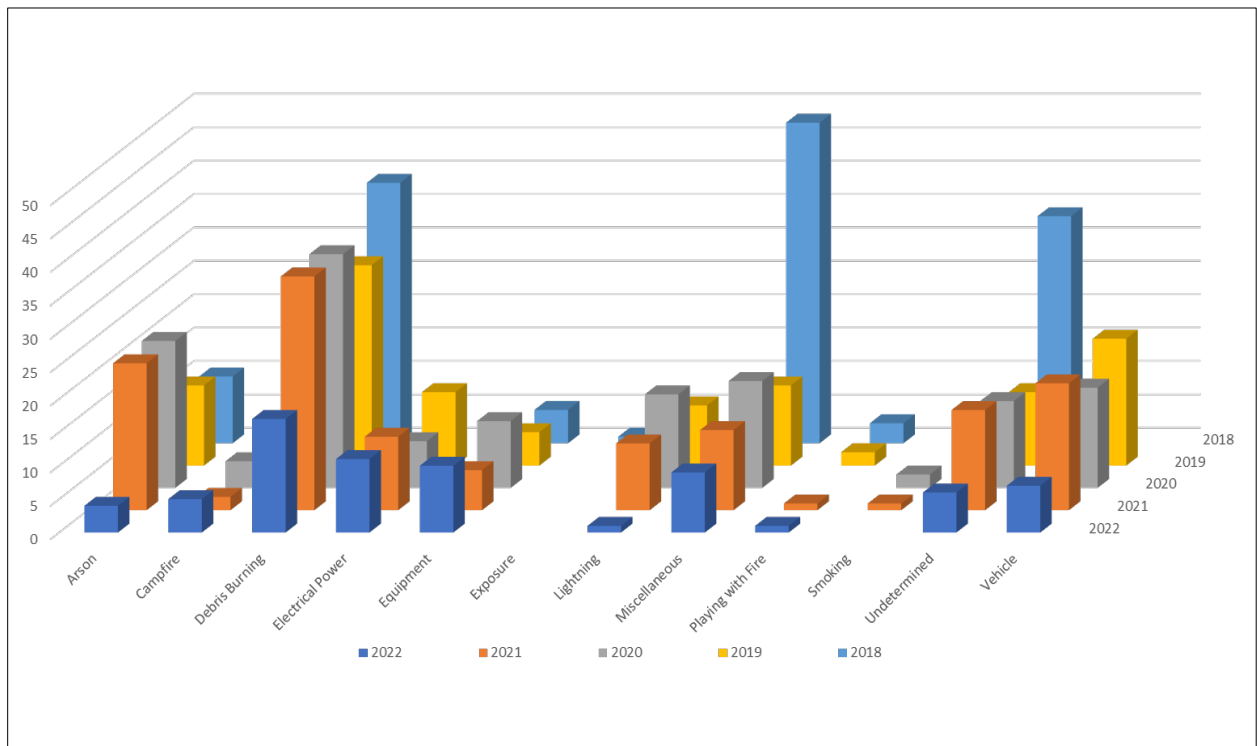
1. **Debris Burning** (17 fires for 24% of the total)
2. **Electrical** (11 fires for 16% of the total)
3. **Equipment** (10 fires for 14% of the total)



2022 FIRE IGNITIONS BY CAUSE



2018 – 2022 FIRE IGNITION BY TYPE





2021 IGNITIONS

In 2021, MEU responded to 139 wildland fires within its Direct Protection Area (DPA). These fires burned approximately 437 acres. The five largest SRA fires within the Unit for 2021 were:

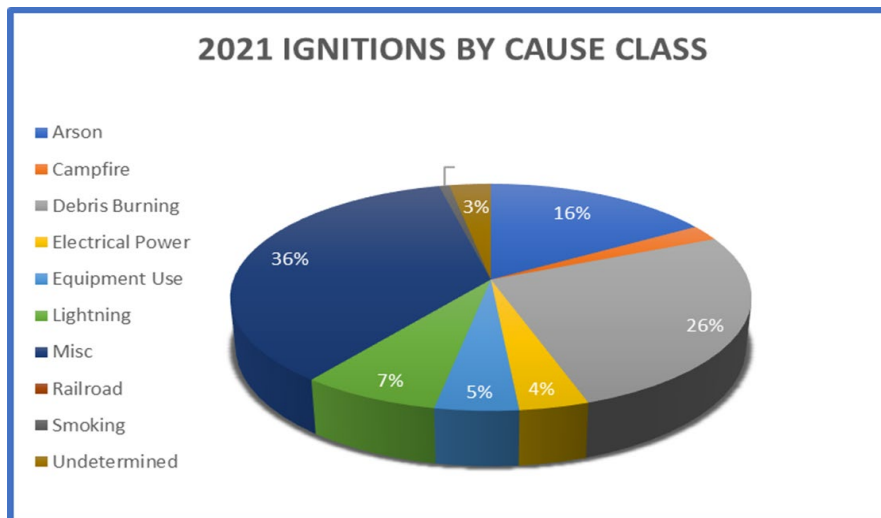
1. 21CAMEU0004952- **TURNOUT**, 200 acres, caused by debris burning.
2. 21CAMEU0010482- **BELL**, 50 acres, undetermined cause.
3. 21CAMEU0007806- **KIRK**, 23 acres, miscellaneous cause.
4. 21CAMEU003966 **CIRCLE**, 20 acres, caused by debris burning.
5. 21CAMEU0006427- **TOMKI**, 18 acres, undetermined cause.

In addition, the following significant fires burned within the Local Responsibility Area (LRA) of the Mendocino Unit:

1. 21CAMEU011886- **HOPKINS**, 257 Acres (Calpella)
2. 21CAMEU008559- **BROILER**, 79.5 Acres (Redwood Valley)

The following three fire cause classes were responsible for most of the vegetation fires within the Mendocino Unit in 2021:

1. **Other/Miscellaneous** (48 fires for 36% of the total)
2. **Debris Burning** (35 fires for 26% of the total)
3. **Arson** (22 fires for 16% of the total)

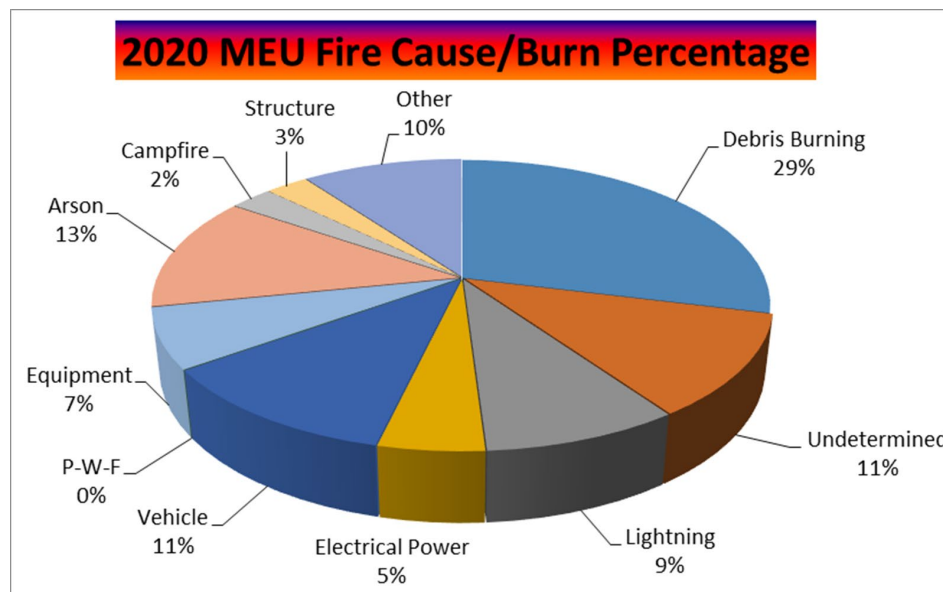




2020 IGNITIONS

In 2020, MEU responded to 151 wildland fires within its Direct Protection Area (DPA). These fires burned approximately 142,000 acres. The five largest fires within the Unit for 2020 were: 21CAMEU0004952- **TURNOUT**, 200 acres, caused by debris burning.

1. The **August Complex West Zone** 1,032,648 acres, caused by lightning.
2. The **Oak Fire** at 1,100 acres, caused by structure fire into vegetation (miscellaneous).
3. The **Creek Fire** at 820 acres caused by vehicle.
4. The **Mina Fire** at 170 acres caused by campfire.
5. The **Vineyard Fire** at 150 acres caused by equipment.



The following ARE THE TOP 5 fire cause classes for of the vegetation fires within the Mendocino Unit in 2020:

1. **Debris Burning** (43 fires for 29% of the total)
2. **Arson** (19 fires for 13% of the total)
3. **Vehicle** (18 fires for 12% of the total)
4. **Undetermined** (17 fires for 11% of the total)
5. **Other/Miscellaneous** (15 fires for 10% of the total)



POPULATION

The population of Mendocino County is currently estimated at approximately 89,783, with an overall density of approximately 26 persons per square mile.² A slight increase in population occurs during the cannabis cultivation period. These seasonal workers come to Mendocino County from all over the world, lured by making money in the local cannabis industry.

Most residents live in and around the valleys along Highway 101, which winds through the county from south-southeast to the north-northwest for 106 miles. Other population centers include the dozen or so communities along Highway 1, which travels the coast from the county's south end until it turns inland about 30 miles north of Fort Bragg and joins Highway 101 at Leggett. These towns are, from south to north, Gualala, Anchor Bay, Point Arena, Manchester, Irish Beach, Elk, Albion, Little River, Mendocino, Caspar, Fort Bragg, Cleone, Westport, and Rockport.

The county includes only four incorporated cities: Ukiah, Willits, Fort Bragg, and Point Arena. The rest of the county's local governments are special districts of various kinds, including community service districts, fire districts, water districts, and others established to provide specific services.

Wildland subdivisions and continuous areas of Wildland Urban Interface (WUI) are predominant around the population centers, and these are likely to increase in size and number. Recent and upcoming improvements on Highway 101 make Mendocino County more and more attractive to persons desiring a

² United States Census Bureau. (2022, July 1). Quick Facts- Mendocino County. Retrieved from United States Census Bureau: <https://www.census.gov/quickfacts/fact/table/mendocinocountycalifornia/POP060210#POP060210>.



rural lifestyle while commuting to work in Santa Rosa and even the San Francisco Bay Area.

One of the county's largest employers is agriculture, especially considering the trickle-down effect on other businesses dependent on agriculture. Commercial fishing is important to the coastal communities, especially Fort Bragg. Cottage industries, tourism, and recreation, along with the timber industry, round out the commercial character of the county.

Light and heavy industry is in place, but inroads have been slow due to space, transportation, and environmental concerns. Governmental and nonprofit organizations are also large employers. Ukiah, the county seat, offers hundreds of jobs relative to government and public services, contains the county's largest concentration of medical and legal services, and hosts an ever-increasing number of large retail stores, motels and hotels, and restaurants.

Land use in Mendocino County includes agriculture (predominantly wine grapes and pears), timber production (Douglas-fir, coast redwood, ponderosa pine, sugar pine, and hardwoods), livestock production, and recreation. Cultivation of marijuana, either illegally or now legally (due to the compassionate use proposition Prop 215 and SB420), is prevalent throughout the county and contributes to the local economy. It at times presents a hindrance to fire safety efforts, due to the growers' desires to conceal their locations.

UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

The Unit is geographically divided into six battalions. Suppression resources during fire season include approximately 190 career personnel and approximately another 179 seasonal personnel, up to 214 with augmented



staffing, on duty around the clock, staffing 10 fire stations, 16 engines, 5 bulldozers, and other equipment.

A typical engine company consists of one Captain or Fire Apparatus Engineer and two or three firefighters. In addition, two 15-man California Department of Corrections and Rehabilitation crews, housed at Parlin Fork Conservation Camp, and two 12-man minimum Fire Fighter Hand Crews housed at Chamberlain Creek.

Chamberlain Creek was one of eight of the state's 43 conservation camps that was part of Governor Newsom's 2020-21 state budget, which called for the camps to be consolidated by the end of December 2020. These Fire Crews provide hand line construction, mop-up, post-fire patrols, and assist with fire line suppression repair. Due to a California court mandate the total number of fire crews available was reduced in recent years. This reduction brought the Mendocino Unit from 10 fire crews, down to 4. This reduction has had a major impact on our available resources to successfully staff fires within the unit, as well as send fire crews out to assist the rest of the state.

The Helitack Base located at Howard Forest is the home of the Sikorsky S70i Black Hawk helicopter, a recent transition from the Bell UH-1H "Super Huey" which serves multiple purposes, primarily initial attack on wildfires. For years the copter assigned to MEU has gone by Copter 101 but because of the current transition, the call sign is now Howard Forest Helitack, and the helicopter will be identified by whichever helicopter is in rotation due to statewide maintenance scheduling.



The Black Hawk has 1 full time mechanic, carries 1 pilot, 2 Captains, 1 Fire Apparatus Engineer, 5-6 firefighters, a 1000-gallon fixed tank and a fixed hoist which drops the responses time for hoisting operations down significantly.

Full deployment of the helicopter involves dropping off one captain and the firefighters at the fire scene, then the helicopter transitions to water operations and due to the fixed tank has the ability to drop water in varying coverage levels not unlike our Air Tankers, assists ground firefighting resources by slowing and/or extinguishing the advancing fire spread.

The Unit is home to the Ukiah Air Attack Base which provides 7-day coverage during the daylight hours of fire season. Tankers 90 and 91 are Grumman S2T turboprop air tankers, each with a capacity of 1,200 gallons of fire retardant.

Air Attack 110, the Unit's North American Rockwell turboprop OV-10 Bronco command plane, carries a pilot and the Air Tactical Group Supervisor (ATGS) who is responsible for air space coordination and aerial fire suppression activities from an orbit above the fire. The base, located inland in the hot and dry Ukiah Valley, has the advantage of rarely being impacted by fog, unlike its neighboring bases in Rohnerville and Santa Rosa, which are quite subject to coastal weather influences.

All Unit aircraft provide rapid initial attack and are especially valuable in the county's remote areas where steep terrain and narrow, winding roads greatly increase ground response times. In such situations, aircraft are often at scene and applying water or retardant before engines and dozers arrive, cooling the fire and giving ground resources a needed boost.



Aircraft also provide “eyes in the sky” for those on the ground, noting spot fires and giving other direction from their vantage point. Additional eyes are provided by the Mendocino County Cooperative Aerial Fire Patrol during fire season. Since 1950, the COOP Air Patrol has supplied a small aircraft to fly over the county to look for undetected fires by spotting smokes.

CAL FIRE works very closely with the Patrol and provides direction to its pilot. CAL FIRE dispatch levels during fire season are affected primarily by weather conditions. During a period of high dispatch, any fire in, or threatening, wildland vegetation causes immediate dispatch of two Battalion Chiefs, the command aircraft, both air tankers, one helicopter, five engines, two dozers, and two hand crews. Local Fire Department resources respond according to their locations, frequently assisting each other across district boundaries.

MENDOCINO UNIT OPERATIONAL FACILITIES

Mendocino Unit Operational Facilities	
Schedule B Fire Stations	10
Air Attack Base	1
Helitack Base	1
Conservation Camp	1
Fire Center	1
Mendocino Unit Operational Equipment	
CAL FIRE Type III Engines- Frontline	16
CAL FIRE Type III Engines- Reserve	4
CAL FIRE Type III Engines- Camp	2
CAL FIRE Bulldozers	5
CAL FIRE OV-10 Air Attack Aircraft	1
CAL FIRE S-2 Air Tankers	2
CAL FIRE UH-1 Helicopter	1
CAL FIRE CDCR Hand crews	2
CAL FIRE CCC Hand crews	1
CAL FIRE Firefighter Hand crews	4



MENDOCINO UNIT BATTALIONS

Battalion I	B1111	Battalion II	B1112
Covelo Station	E1151	Howard Forest Station	E1152
	E1161		E1172
	T1141		T1142
	D1141		D1142
Battalion III	B1113	Battalion IV	B1114
Ukiah Station	E1153	Laytonville Station	E1154
	E1183		E1184
	T1143	Leggett Station	E1164
	D1143		E1174
Hopland Station	E1173		
Battalion V	B1115	Battalion V	B1115
Boonville Station	E1155	Boonville Station	E1155
	E1165		E1165
	T1145		T1145
	D1145		D1145
Point Arena Station	E1175	Point Arena Station	E1175



MENDOCINO UNIT PROGRAMS

TRAINING

The Mendocino Unit Training Battalion provides training, education, and certification of Mendocino Unit personnel. The Training Battalion is focused on providing and maintaining the highest quality of emergency service training available to best serve the citizens of California.

The priority of the Mendocino Training Staff is to provide training for Mendocino Unit employees through instructional programs that target operational efficiency with an emphasis on safe operating procedures in all aspects of fire and emergency operations. The Training Battalion facilitates and ensures coordination for the unit-wide training plan, match training courses with approved employee training requests, and maintains a central location for current training records of all employees.

The Training Battalion staff is comprised of a Battalion Chief and two Fire Captains. During non- peak staffing, additional employees may be assigned to the Training Battalion. The staff continually strives to provide creative, cost effective, innovative training. The goal of the Training Battalion is to provide effective all-hazard training with an emphasis on employee safety. The seven day a week state-funded operations listed below are divided into seventeen separate program areas.

- Administrative and Office staff
- Battalion Chiefs
- Company Officers
- Firefighters
- Forestry Technicians
- Training
- Emergency Command Center



- Howard Forest Helitack
- Fire Prevention
- Automotive Fleet Maintenance
- Pre-fire Engineering
- Joint Apprenticeship Committee (JAC) Program
- Vegetation Management
- Emergency Medical Services
- Hazardous Materials Responses
- Fire Safe Councils
- Joint-Agency Operations

EMERGENCY COMMAND CENTER

Fire and Emergency Medical Services (EMS) dispatching is provided to those Fire Departments and ambulance providers of Mendocino County who are signatory to the Operational Memorandum of Understanding (MOU) of November 1994. Coastal Valley Emergency Medical Services has designated the ECC as Mendocino County's air ambulance coordination center. The CAL FIRE Howard Forest ECC a secondary Public Safety Answering Point (PSAP) for Mendocino County. The CAL FIRE Expanded Dispatch is the OES Fire Rescue Coordination Center for Mendocino County.

CAL FIRE provides Emergency Medical Dispatching (EMD). EMD provides for a caller to respond to a standardized questioning format to help determine the type of resources required to appropriately assist the caller. EMD also directs the dispatcher to provide pre-arrival instructions to assist the patient once the emergency response has been dispatched.

To assist in achieving the goal of a 60 second dispatch time frame of receipt of call to dispatch of resources, the Mendocino Unit has installed Automatic Vehicle Locating (AVL) system in the emergency response equipment and is has integrated AVL with Ukiah Fire and Medstar Ambulance. AVL reduces the time



dispatchers need to find the appropriate resource, in turn decreasing response times and ensuring the closest appropriate resource is responding.

All emergency, non-emergency and administrative calls for service are logged into the Altaris Computer Aided Dispatch (CAD) program. All key entries are automatically time stamped by the CAD program for accuracy. All entries that require a field response of any type are logged as incidents and administrative functions such as Fire Department announcements are logged in as events and do not generate an incident number.

All CAD data is available on a web-based password protected program called Crystal reports, it is available to any agency or cooperator who does business with the dispatch center. All users of this service will be restricted to access records that originate in the Mendocino Unit. This program has pre-built reports that the user can access. Any new reports must be requested through the Dispatch Center Manager with specifics of the information requested.

Staffing

CAL FIRE is staffed to provide 24 hours per day, seven days a week dispatching service. Staffing levels for the ECC are a minimum of 1 fully qualified Fire Captain and 2 fully qualified Communications Operators or a combination of each totaling 3 employees per day. During fire season, when the CAL FIRE fixed wing aircraft are on Contract (normally, 6/15 through 10/15), the ECC is staffed with a minimum of 2 qualified Fire Captain and 2 qualified Communications Operators or a combination of each totaling 4 employees per day. The State funds 1 Battalion Chief, 5 Fire Captains, 1 Communications Supervisor and 2 Communications Operator positions, and the 2 dispatching contracts fund 7 Communications Operator positions.



The ECC Manager is a CAL FIRE Battalion Chief. This person is responsible for all ECC operations and personnel and coordination with Mendocino County Dispatch contract. The Battalion Chief is the primary contact for the Coastal Valley EMS coordinator for any changes in EMS dispatch policy or procedures.

Facilities

The CALFIRE MEU ECC infrastructure consists of two buildings that house the dispatch center and the expanded dispatch/dorms along with all the radio and telephone equipment. These two buildings together allow handling of the normal daily activities and, if necessary, open an expanded dispatch to manage larger incidents. A 100 KW generator is also on site to automatically provide emergency power if necessary.

The ECC can provide all dispatching services on multiple frequencies. Fire and EMS are simultaneously dispatched using the Mendocino County dispatching frequencies. In the event we need to evacuate the ECC, CALFIRE has Altaris CAD and the Vesta 911 phone system available on a laptop computer and cell phones that can be used remotely along with a mobile radio for a short duration operation. CAL FIRE has access to a Mobile Communications Center for a backup Emergency Command Center, if needed for a long duration event, which is generally available within four hours.

Local Agencies Dispatched Pursuant to this Contract:

- Albion Fire
- Anderson Valley Fire
- Brooktrails Fire
- Comptche Fire
- Covelo Fire and Ambulance
- Elk Fire and Ambulance
- Fort Bragg Fire
- Hopland Fire
- Laytonville Fire and Ambulance



- Leggett Valley Fire
- Little Lake Fire Protection District
- Mendocino Fire
- Piercy Fire
- Potter Valley Fire
- Redwood Coast Fire
- Redwood Valley Fire
- Ridgewood Ranch Fire
- South Coast Fire
- Ukiah Valley Fire
- Westport Fire

Additionally, the following agencies are dispatched by Howard Forest:

- Anderson Valley Ambulance
- Fort Bragg Ambulance
- MEDSTAR Ambulance
- Redwood Empire Hazardous Materials Response Team (REHIT).

AIR OPERATIONS

The CAL FIRE Mendocino Unit Aviation Program consists of the Ukiah Air Attack Base, which was established in 1958, and the Howard Forest Helitack Base which was established in 1982. The MEU Aviation Program serves the communities of Mendocino, Lake, Sonoma, and Trinity counties. The Mendocino National Forests is also served by the Aviation Program as they are in the direct Initial Attack zone of influence. These aircraft and personnel also serve California, and its citizens, when emergencies expand and require additional resources.

The Ukiah Air Attack base is in the community of Ukiah at the Ukiah Municipal Airport (UKI). The base has three firefighting aircraft assigned from June 1st thru October 31. The aircraft assigned are an OV-10 Bronco (Air Attack 110) and two Grumman S- 2T Air Tankers (Tankers 90 and 91). The OV-10 is utilized as an aerial platform to transport an Air Tactical Group Supervisor (Battalion Chief or Fire Captain) whose duties are to safely control the airspace above wildland



incidents and direct firefighting aircraft in fire suppression. The S-2T carries 1200 gallons of fire retardant, when dropped from the belly of the aircraft, assists ground firefighting resources by slowing and/or extinguishing the advancing fire spread.

The Howard Forest Helitack Base is in the community of Willits on the compound of the Mendocino Unit Headquarters, at the top of the Ridgewood Summit and home of the Sikorsky S70i Black Hawk helicopter, a recent transition from the Bell UH-1H "Super Huey". The new helicopter is equipped with a 1000-gallon fixed tank and fixed hoist. For years the copter assigned to MEU has gone by Copter 101 but because of the current transition, the call sign is now Howard Forest Helitack, and the helicopter will be identified by whichever helicopter is in rotation due to statewide maintenance scheduling. The primary use of the Copter is for initial attack to suppress new wildland fires. During fire season Copter 101 is staffed with one pilot, two Fire Captains, and five Firefighters daily. The Copter is also used for medical, rescue emergencies, and other fire suppression support missions.

The use of these aircraft, on emergency incidents, allows for a quick initial attack response to areas that can take hours for ground resources to make access, such as rural and little to no access areas. Additionally, these aircraft play an extremely vital role in supporting CAL FIRE's goal to keep 95% of California wildland fires to 10 acres or less.

CAL FIRE and the Mendocino Unit's Aviation Program has made a positive financial contribution to the County and local businesses. The City of Ukiah and Ukiah Airport directly benefit with landing and fuel flow fees that can range from 15 to 30 thousand dollars per year. The associated expenses that are incurred by



the bases are numerous for their continuous operation. Local businesses and vendors are utilized for services and supplies.

CHAMBERLAIN CREEK FIRE CENTER

Chamberlain Creek Fire Center is in Jackson Demonstration State Forest 17 miles east of Fort Bragg in Mendocino County. In October 2020, CAL FIRE and California Department of Corrections and Rehabilitation announced the depopulation of inmates at eight of the state's 43 conservation camps, Chamberlain Creek Conservation Camp being one of them.

The consolidation was part of Governor Newsom's 2020-21 state budget, which called for the camps to be consolidated by the end of December 2020. CAL FIRE repurposed the camp into a fire center in 2021 and currently operates 2 fire crews. Each fire crew has a Fire Captain, a Fire Apparatus Engineer, and a minimum of 12 Firefighter I's. The Firefighter 1 fire crews are typically staffed from Mid-March through Mid-December and provide frontline fire response to the State of California, as well as fire prevention projects in Mendocino County.

The fire crews are engaged in federal, state, and local community projects which include hazard fuel reduction, vegetation management burns, reforestation and other projects supporting the public good.

In 2022 Chamberlain Creek fire crews responded to 76 wildland fires, 1 structure fire, 21 other type fires, 4 medicals, and 19 public assists statewide for a total of 121 incidents.



PARLIN FORK CONSERVATION CAMP

Parlin Fork Conservation Camp was established on August 8th, 1949.¹ It is the second oldest Conservation Camp in California, and the oldest Camp in the Northern Region. Parlin Fork is located on State Highway 20, approximately 7 miles east of Fort Bragg. The camp is situated within the boundaries of Jackson Demonstration State Forest.

The camp is operated jointly by CAL FIRE and the California Department of Corrections and Rehabilitation (CDCR). During the early 1970's, the camp was operated by the Federal Bureau of Prisons before returning to a joint agency operation with CDCR. Originally, the camp was designed to hold 80 inmates, and staff 4 Fire Crews.

During its peak, Parlin Fork had the capacity to house 100 inmates and operate 5 Fire Crews. Currently, the camp population fluctuates between 40 to 50 inmates, and there are 2 operational Fire Crews staffed.

Parlin Fork Fire Crews respond to wildland fires, as well as other emergencies, such as floods and rescues. When not engaged in emergency work, the Parlin Fork Fire Crews work on community-based projects for non-profit entities such as Fire Safe Councils, local government entities, or cooperating State agencies. Typical project work includes vegetation management, fuel breaks and trail improvements. Other projects include construction, painting, and general clean-up.

Acres treated vary by project and stakeholder needs and desires. As recognized by the fire plan, inmate labor for fuel reduction projects provides good training for firefighting crews and defensible space around valuable assets and infrastructure at a reasonable cost to the taxpayer.



Typical Fire Crew staffing consists of one Fire Captain (Range B), and between 12 to 17 inmate firefighters.

In 2022 Parlin Fork Conservation Camp responded to 35 wildland fires, 3 structure fires, 6 other type fires, 3 HAZMAT incidents and 7 public assists for a total of 54 calls for an approximate total of 975 incident hours.

CALIFORNIA CONSERVATION CORPS

CAL FIRE has recognized that with a declining inmate population, there would be a significant reduction in available inmate fire fighters statewide. This personnel shortage translated in a reduction of available Fire Crews for fire and other emergency responses, as well as community-based fire prevention projects. To offset the fire crew shortages resulting from a declining inmate population, other means to staff crews were needed.

As part of Governor Newsom's FY 2021-22 budget, \$142,800,000, with an additional \$124,000,000, was allocated to the General Fund for the California Conservation Corps (CCC) and CAL FIRE to create 30 new Fire Crews.³ Of the 30 Fire Crews, 16 would consist of CAL FIRE seasonal Firefighter-I's and the remaining 14 crews would be comprised of CCC members.⁴

For the period of July 1, 2021, thru June 30, 2024, there will be total of 18 year-round CAL FIRE/ CCC Fire Crews, with an additional 6 crews being seasonal.⁵

³ Department of Finance. 2021. "Emergency Response." May 2021. Accessed March 18, 2022. <https://www.ebudget.ca.gov/2021-22/pdf/Enacted/BudgetSummary/EmergencyResponse.pdf>.

⁴ Ibid.

⁵ State of California. 2021. Standard Agreement- 7CA05410. Contract, Sacramento: Department of General Services.



Currently, the Mendocino Unit has one seasonal CAL FIRE/CCC Fire Crew that is based out of Ukiah.

In FY 2022-23, the Mendocino Unit will staff 2 year-round CAL FIRE/CCC Fire Crews that will be operational and be based out of the Chamberlain Creek Fire Center.

The CAL FIRE/CCC Fire Crews are comprised of one CAL FIRE Fire Captain, one CCC Conservation Conservationist 1, and a minimum of 12, and no more than 17 CCC Corps Members.⁶

CAL FIRE/CCC Fire crews assigned to the Mendocino Unit, when not on emergency incidents, will be assigned to various work projects within the Unit. These projects will focus on fuels reduction, forest health, prescribed fire, and other community related work.⁷

In 2021, the CAL FIRE/CCC Fire Crew was housed at the CCC facility in the City of Ukiah. There are plans for a new CCC facility near the town off Willits.

CALIFORNIA NATIONAL GUARD CREW

Starting in July of 2021, the California Army National Guard began to form Fire Crews to assist CAL FIRE with fire suppression activities throughout the state. These crews are comprised of 345 California Army National Guard soldiers, forming a total thirteen additional crews. These crews will be trained at a minimum to a NWCG Type II Fire Crew standard. The Mendocino Unit currently

⁶ State of California. 2021. Standard Agreement- 7CA05410. Contract, Sacramento: Department of General Services.

⁷ Ibid., 4



has one California Army National Guard crew. A typical crew consists of one CAL FIRE Fire Captain, and between 15 to 24 Guard soldiers. These crews are available 7 days a week to respond to emergencies.

HOWARD FOREST FUELS REDUCTION CREW

In Fiscal Year 2018, California Natural Resources Agency (CNRA) submitted a Budget Change Proposal (BCP) titled "Forest Carbon Plan Implementation." In this BCP, CAL FIRE was provided 26.8 million dollars for seventy-eight positions. These positions would be used to form six Region Fuels Reduction Crews (FRC) that would be dedicated to prescribed fire and fuels reduction management. Three of these crews were allocated to the Northern Region.

In January 2019, it was determined that an additional four crews would be added statewide for a total of ten crews and one hundred and thirty positions. The crews were originally designated as Region resources. In the first year, the crews collaborated directly with the personnel of the hosting Unit on designated Fuels Reduction Projects. The way they reduce the fuel loading in the project areas include prescribed burning, hand and mechanical fuel reduction, fire planning and fire prevention education, with an emphasis on improving public health and safety while reducing wildfire potential to California communities and forests.

In January 2020, the Region Fuels Reduction Crew assigned to the Howard Forest Station was transferred administratively to the Mendocino Unit.

At the core, the Fuels Reduction Crew is comprised of a Fire Captain (Range A), Fire Apparatus Engineer, Forestry Assistant II, Equipment Operator II, and nine



Forestry Technicians. Crews consist of seasoned firefighters looking to diversify their experience, and newly hired personnel looking to enter the Department.

The Fire Captain is the crew supervisor and in charge of the daily management of the crew. During absences of the Fire Captain, the Forestry Assistant II or the Fire Apparatus Engineer will be the acting crew supervisor.

The Equipment Operator II is responsible for operation and maintenance of the heavy equipment and chippers assigned to each crew. Forestry Technicians do the actual fuels reduction operations, and are responsible for all tool maintenance, facility maintenance, and operate support vehicles to support fuels reduction projects.

In 2022 the Fuels Crew was committed to the Bridges, Howard Forest Compound, and various Jackson Demonstration State Forest VMP's. Fuel reduction was focused on the access road of the Golden Rule Church, Cahto Peak Road, and the Laughlin Repeater Access Road.

CEQA is complete for the Brushy Mountain VTP and Hopland Research Education Center (HREC). West and East Hills Ukiah VTP will be outsourced to Mendocino Fire Safe Council via grant funding allowing CAL FIRE to continue to maintain the project. Brooktrails Fire and REDI have identified areas of Brooktrails and Sherwood Road for fuel reduction and access/egress that CAL FIRE will be assisting. Having a dedicated resource focused solely on fuel reduction, has aided our Unit in being successful in reducing hazardous fuels and improving life safety for the citizens of Mendocino County. It is essential for all citizens to work together to mitigate hazardous fuels, but the Fuels Reduction Crew resources are just the start of a needed precedent for CAL FIRE's future.



RESOURCE MANAGEMENT

Environmental Review

The California Environmental Quality Act (CEQA) requires public agencies to consider actions on projects that may directly or indirectly result in a physical change in the environment. When CAL FIRE funds, approves, permits, facilitates, or carries out a project as lead agency it is obligated to ensure that the appropriate steps are taken to comply with CEQA by preparing a thorough environmental review. This review is conducted by a Resource Management representative in the Forester classification or Environmental Scientist assigned as the Unit Environmental Coordinator.

Review conducted by the Environmental Coordinator ensures that the statutory responsibilities of MEU are addressed in the project planning phase. Examples of CAL FIRE projects in MEU include building & structure construction, repairs, replacement, acquisition, maintenance & fire hazard clearance, fuel reduction projects such as shaded fuel breaks, prescribed burns & timber felling for the purpose of firefighter training.

The unit level review may include but is not necessarily limited to:

- Prepare a project description for project size/extent, magnitude, treatment type, equipment uses, & impact potential.
- Review the environmental setting and identify sensitive areas such as wetlands, watercourses, riparian zones, old growth wildlife trees, public use & aesthetics.



- Conduct database searches of the California Natural Diversity Database (CNDDDB), Archaeological Information Centers, unit & statewide fire plans, applicable Timber Harvest Plans (THPs) and VMPs.
- Contact & review project with CAL FIRE specialists who may include an archaeologist, hydrologist, geologist, soil specialist, and/or forest pathologist as necessary.
- Inspect project site (to include appropriate surveys).
- Discuss project proposals with landowners, neighbors, Native Americans, & private/agency professionals familiar with the site, resource, or treatment.

Once the review is completed, the necessary documents are filed with Sacramento Environmental Protection staff. The minimum unit review includes a CNDDDB run, archaeological review with a CAL FIRE archaeologist, and on-site evaluation of landscape-level impacts. For projects that fall into a CEQA exempt category, a Notice of Exemption (NOE) and Environmental Review Report Form (ERRF) are submitted for review, approval and filing at the State Clearing house for a 35-day notice period.

For projects that do not fall into a CEQA exempt category, a Negative Declaration or Mitigated Negative Declaration and Notice of Completion are submitted if there are no significant impacts or if potential impacts are mitigated to a level of less than significant.

An initial study/environmental checklist is added to the review process. These projects are submitted for review & filing at the State Clearinghouse for a 30-day comment period. Following the end of the comment period, public comment is reviewed, and appropriate additional mitigation measures may be incorporated into the project. A Notice of Determination is filed with the State Clearinghouse along with appropriate fees.



Fire Suppression Repair (FSR)

CAL FIRE has authority to conduct fire suppression repairs during emergency incidents on State Responsibility Areas (SRA) under the Public Resources Code (PRC) Sections 4675 & 4676. Repair work may be necessary in locations where fire suppression damage has occurred. Fire suppression damage includes impacts to resources and property caused by firefighting efforts, including but not limited to potential erosion from dozer & hand-constructed lines, road opening and watercourse crossings.

The primary objective of fire suppression repair is to mitigate fire suppression-caused damage to as close to pre-fire conditions as is reasonably possible. This is done by minimizing sediment delivery to watercourses, mitigating slope conditions to pre-fire drainage patterns, removing fire suppression-related debris, restoring berms, barriers, repairing gates & fence lines removed for fire control access, and implementing appropriate mitigation measures (in consultation with a CAL FIRE archaeologist) to protect cultural and/or historic resource sites.

MEU personnel, including Forestry Assistant and Forester classifications, serve as Fire Suppression Repair Technical Specialists (RESP) assigned to wildfire incidents. They assess FSR needs through field identification, mapping, and site description, developing a task list that includes equipment needs & equipment time commitments keyed to a map. FSR needs are reported to the Plans Section for inclusion in the Incident Action Plan. For complex repairs, the RESP will request assistance from cooperators, including property owners and timberland company representatives. For additional input, they may also consult with environmental specialists, such as the California Geological Survey (CGS) engineering geologists.



California Geological Survey Participation in Post-Fire Assessment

At the request and with the funding from emergency response agencies (CAL FIRE and CALEMA), the California Geological Survey (CGS) can perform site-specific post-fire assessment of geologic conditions and slope stability that may affect public safety and high-value features (for example homes, roads, public buildings, transmission lines). CGS can also provide support as directed to post-fire watershed rehabilitation where geologic expertise is needed.

Wildfires adversely impact slope stability by removing the mechanical support of hillslope materials provided by vegetation and increase the potential for runoff by removing vegetation that would otherwise intercept rainfall. Structures down slope of burned watersheds may be in positions affected by significant in-channel floods, hyper concentrated floods, debris torrents, and debris flows initiated by rain events following wildfires.

The California Geological Survey inspections can be used to assist in identifying high-value sites within and down slope from burn areas that may be at risk from post-fire debris flows and other geologic hazards. Sites determined to have a potential risk to lives or property are ranked as high, moderate, or low, and possible mitigation measures are identified where appropriate. The resultant information is tabulated, keyed to a base map, and provided to Federal, State, and local emergency response agencies to be used to develop post-fire emergency response plans.

CAL FIRE Archaeology

Archaeological sites in Mendocino County include prehistoric Indian village sites, petroglyphs, midden deposits, human burial grounds, hunting blinds, and bedrock milling sites. Historic sites include buildings and structures of historical



significance as well as wagon roads, trails, and cemeteries. CAL FIRE archaeologists are assigned to fires primarily when Incident Command Teams are assigned, but also on smaller fires on, or adjacent to, tribal lands, on fires where archaeological sites may be impacted, or when the Unit requires archaeological expertise in dealing with cultural resource issues. They identify and mitigate the protection of fragile, non-renewable archaeological, historical, and other types of cultural resources whenever feasible.

Having an archaeologist assigned to a fire enables CAL FIRE to get site information disseminated to those in the Plans Section and out on the lines to protect sites. This may include providing detailed site information to fire protection personnel or flagging areas on the ground for equipment exclusion. In this manner, site protection measures may be incorporated into the incident action plan without hindering or delaying emergency response operations.

JACKSON DEMONSTRATION STATE FOREST

Jackson Demonstration State Forest (JDSF) is a 48,652-acre redwood forest which straddles Highway 20 between Fort Bragg and Willits. The City of Fort Bragg, where the JDSF headquarters facility is located, is 2 miles north of the western property boundary. The town of Mendocino is located 2 miles west of the southwest corner of JDSF.

The town of Willits and the community of Brooktrails are located approximately 7 miles to the east. Wildland Urban Intermix (WUI) communities are scattered along the western JDSF boundary. JDSF's neighbors include large industrial timberland owners, California State Parks, several private inholdings, and many small private landowners.



JDSF is owned and managed by CAL FIRE for the purpose of demonstrating sustainable forest management as directed by statute and Board of Forestry policy. Management objectives include production of forest products, conducting research and demonstrations, and maintaining quality of recreation, watersheds, wildlife and their habitat, fisheries, and aesthetics. JDSF is open to the public for recreation activities including day use, camping, hunting, mountain biking, hiking, mushroom gathering, and horseback riding.

Facilities on JDSF include the Woodlands CAL FIRE station, Parlin Fork Conservation Camp, Chamberlain Fire Center, residences at Whiskey Springs, the historic Little Red School House, various research infrastructure in the Caspar Experimental Watershed, and the Forest Learning Center located along Highway 20.

Among other projects, the conservation camp crew conducts road brushing on JDSF roads to maintain administrative, public, and emergency access throughout the forest. Projects include vegetation removal to reduce fuel loading adjacent to high use and strategic roads, and around the structures mentioned above.

JDSF has a Mediterranean climate, characterized by a pattern of low-intensity rainfall in the winter and cool, dry summers. Fog is a dominant climatic feature during the summer months. Air temperature is strongly influenced by the extent of the coastal fog belt, which extends inland up to 20 miles or more during summer nights, generally burning off back towards the coast by afternoon.

In general, the landscape is characterized by moderate to high relief. Slopes are less steep in the western watersheds within the Forest and are steeper to the



east in the watersheds nearer the crest of the Mendocino Coast Range. Elevations range from less than 100 feet within stream valleys along the western edge of JDSF, to a maximum of 2,092 feet in the southeast corner. The dominant tree species are redwood and Douglas-fir. Grand fir, western hemlock, tanoak, madrone, and bay laurel are common species in these stands. Other vegetation types are hardwood, pygmy forest, closed-cone (Bishop) pine/cypress, and alder. Grassland/bare ground and brush vegetation types together make up less than 1 percent of JDSF.

The coastal redwood forest ecosystem is adapted to regular lightning fires. The primary risk of human caused fire comes from the urban intermix to the west, public use of the Forest including Highway 20 traffic, campfires, firearms, collection of firewood, and fireworks. Other potential ignition sources include logging equipment and the 60 kV PG&E transmission line roughly paralleling Highway 20 between Willits and Fort Bragg.

JDSF has developed a Fire Protection and Pre-Attack Plan. The Fire Protection Plan establishes a strategic network of shaded fuel breaks and provides guidance for prescribed burning. The plan includes up to 87 miles of shaded fuel breaks on mainline ridges, which may also coincide with other facilities such as Forest roads, property lines, highways, and utility transmission right-of-way. These fuel reduction projects (e.g., slash removal or reduction in continuity and/or density/height) are intended to limit the size and severity of wildfires and protect neighboring WUI areas.

Prescribed fire and fuel treatments will be utilized to address fuel build up associated with timber management and may be used in conjunction with potential research projects. Slash from timber operations will be treated as required for hazard reduction adjacent to JDSF roads and facilities. Routine



roadside vegetation management will be used to maintain 35 miles of critical ingress/egress roads for initial attack fire suppression access and evacuation throughout the network of Forest roads.

The Pre-Attack Plan is intended as a reference for initial attack responders in the event of a wildfire. The plan covers communication, access to JDSF, locations for helicopter landing zones, water resources, population concentrations, and evacuation routes. The included map book is also available as a georeferenced pdf.

Currently, JDSF has five shaded fuel break projects and one emergency ingress/egress road project with completed CEQA and permitting. Two additional projects are in review or planned for submission in 2021.

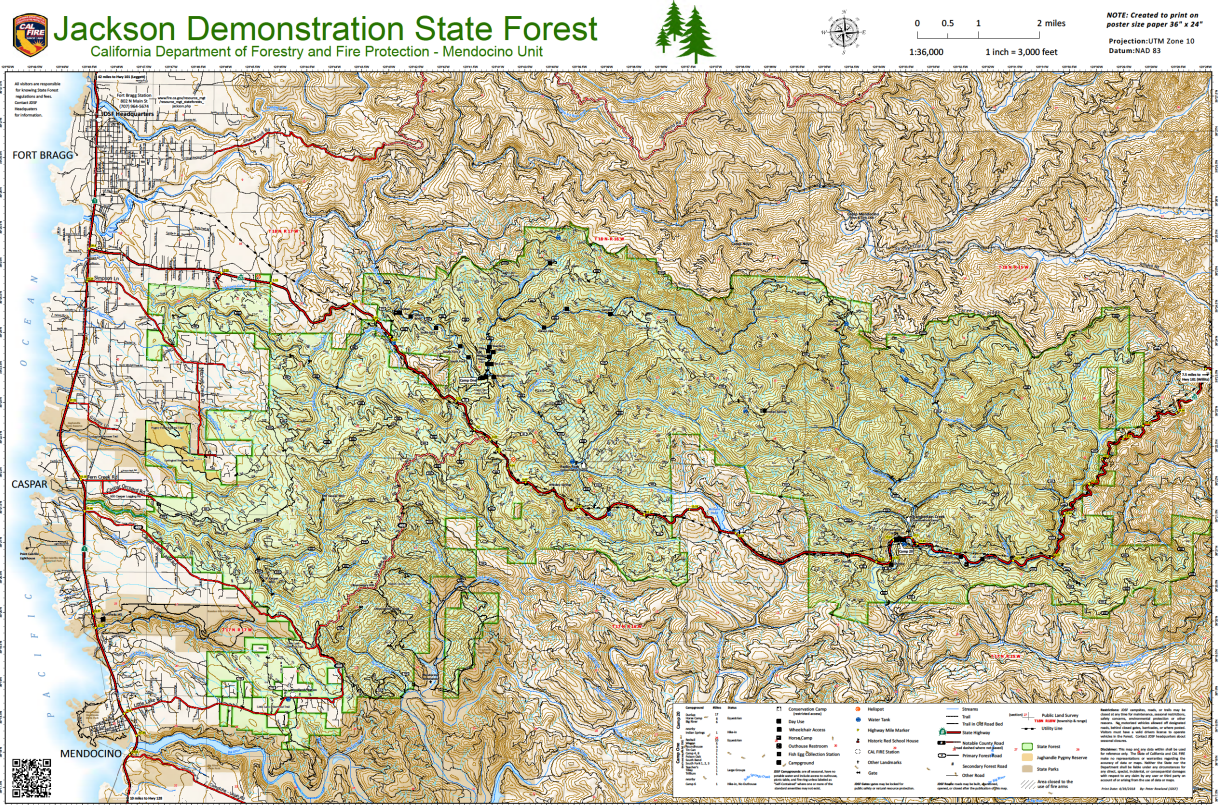
- The Three Chop Ridge Shaded Fuel Break Project is located on the northern property line along Road 1000 between JDSF, Mendocino Redwood Company, LLC., and a couple of small landowners. This project covers approximately 6 miles and 320 acres. Implementation of this project is pending availability of HFEOs and hand crews or other funding.
- To the west and connecting with the Three Chop Project, the approved Chamberlain Confluence Timber Harvest Plan (THP) has included 18 acres of shaded fuel break along 0.9 miles of Road 1000. This timber sale and project is scheduled to be implemented during the 2021-2022 logging seasons.
- The James Creek THP includes 91 acres of shaded fuel break over 1.75 miles on Road 230, connecting with Road 1000. This timber sale and project is scheduled for the 2022-23 logging seasons.



- Along the PG&E transmission right-of-way, a Utility Exemption to remove danger trees is being proposed across the Forest. Logging slash from this project will be chipped, and incompatible vegetation will be removed. Outside the danger tree removal project between Bunker Gulch and James Creek, the width of fuel reduction will be increased for a total project area of 228 acres. This project was delayed in 2020 and scheduled to start in summer 2021.
- The Parlin 17 THP includes 200 acres of shaded fuel break. The fuel break runs along Road 330 for 3.6 miles from the intersection at Road 300 to the north and east to the intersection of Road 336. This plan includes areas of prescribed burning to reduce slash and brush in the logging units. Work will be completed during the 2021 logging season. The southern portion is included in the Parlin Timber Sale Agreement, and the northern portion will be conducted pending a separate contract funded through Region.
- The Caspar 500 THP includes approximately 26 acres of shaded fuel break that is between 100-200 feet wide and on the south side Road 500. This timber sale and project is under contract and scheduled for implementation during the 2021-2022 logging season.
- The Mitchell Creek THP, in review during winter 2020-2021, includes 109 acres of shaded fuel break. The Jughandle THP will be submitted in 2021 and includes 19 acres of fuel break. Both projects connect with the Caspar 500 THP fuel break, which is a part of a larger planned fuel break connecting the west end of the Forest in Caspar along Road 500 towards County Road 408 and Highway 20.



- The JDSF Road 540 ingress/egress project was completed in 2020. Minor cleanup will be conducted in 2021. This road improvement and vegetation management project is intended to maintain an emergency route connecting the residential community of Simpson Lane/Mitchell Creek to Gibney Lane and Highway 1 on the coast.
- Future THPs will assess and include language for site preparation and broadcast burning.





SECTION II: COLLABORATION

LOCAL FIRE DEPARTMENTS

Mendocino County owes very much to its Local Fire agencies, many of which are staffed completely by volunteers and whose personnel are often the first to arrive at wildland fires and other emergencies. Most of these agencies are in Fire Protection Districts (FPDs) or Community Services Districts (CSDs) which are governed by elected boards of directors and have authority to levy taxes to support their work.

The Local Departments Map (located within the Exhibits Section) shows the locations and boundaries of these districts. Areas adjacent to a district but not included in it are referred to as the agency's "sphere of influence."

Although they pay no taxes or fees, people in these areas still receive services, because the county's emergency responders never refuse to help someone in need. However, such situations can become very frustrating to cash-strapped departments and can be a source of irritation to those who pay their share for emergency services. Most departments supplement their tax base income with at least one major fundraiser a year – usually barbeques with live music, which are well-supported, extremely popular social events.

Fires in wildlands, structures, vehicles, dumpsters, and similar situations account for only 10% to 20% of the calls to which local agencies respond. Medical aid calls are by far the majority – an average of 80% for most departments – followed by traffic accidents and other rescue situations. Consequently, county firefighters undergo training in medical response, extricating patients from vehicles, responding to hazardous materials ("hazmat") incidents, and a variety



of other emergency skills – thus the common term “Fire-Rescue.” A high percentage of volunteers are First Responders or Emergency Medical Technicians (EMTs), both of which require significant training.

Fire departments on the coast are often called to assist in cliff rescues and other water-related emergencies and have equipment and volunteers to meet that need.

Firefighter training or “drill” in most of the county’s departments involves one night a week plus additional trainings on weekends. Firefighters often train with other departments, especially on training burns, in which abandoned buildings or wildland fields are burned for training purposes. Some firefighters travel out of county to obtain training and certification in specialized fields. In addition, trainings are brought into the county. Mendocino County has an extraordinarily strong and effective mutual aid system, among all agencies and for all types of emergency response.

Local Fire Departments are quick to assist each other and CAL FIRE, and vice versa, most often within the Mutual Aid Zones, but beyond those as needed.

On wildfires, CAL FIRE and Local Firefighters, paid and volunteer, work side by side as equals, all in yellow Nomex fire resistant clothing and barely distinguishable from each other in appearance and skill. On medical aid calls, Local Fire Departments, local ambulance services, CAL FIRE, and CALSTAR or REACH emergency transport helicopters all work as one team.



MENDOCINO COUNTY FIRE SAFE COUNCIL

CAL FIRE and the Mendocino County Fire Safe Council (MCFSC) aim to expand their already significant collaboration over the coming years. MCFSC's base programs to increase local wildfire mitigation efforts include:

- Free community chipper days,
- Free defensible space assistance for income-eligible seniors and persons with disabilities,
- Free comprehensive home hardening and defensible space inspections, training on how to create neighborhood first responder maps,
- Access to automated local phone tree systems, making reflective address signs, and
- Providing a wide spectrum of community education including a video series on home hardening available at their (<https://firesafemendocino.org/homehardening/>) and a six-step guide to preparing for wildfire (<https://firesafemendocino.org/preparing-for-wildfire/>)

MCFSC has also managed a series of road clearing/fuel break creation projects aimed at corridors on which ingress and egress may be particularly critical in a wildfire situation. Starting in 2020-21 substantial projects were managed by the MCFSC on both the eastern and western ends of the Ukiah Valley and in Brooktrails. In 2022 MCFSC managed projects in Brooktrails and in a portion of Orr Springs Road. In 2023-2024 MCFSC will be providing road clearing in parts of Yorkville, Willits, and Cherry Creek.

MCFSC is also managing projects to obtain CEQA clearance so that a wide range of other projects will be "shovel ready" when resources become available. CAL FIRE and the MCFSC intend to continue identifying key



ingress/egress routes throughout the county that would benefit from CAL FIRE and MCFSC collaboration in implementing treatment.

Several projects are called out in the individual Battalion work plans.

- Sherwood Road exit corridor through Brooktrails Township
- Brooktrails Community Greenbelt
- Ridgewood Road - Pine Mountain Subdivision - east of Willits
- Williams Ranch Road - Black Bart Subdivision south of Willits
- Pepperwood Springs Road - Piercy
- Red Mountain Road - Piercy
- Bell Springs Road - Piercy
- Mill Creek Road - Talmage
- Ukiah Valley Fire Fuels Reduction Project
- Orr Spring Road (Ukiah)
- Greenfield Ranch
- A Greenwood Ridge fuel break (Elk area)
- Access roads in Anderson Valley
- The South Fort Bragg Simpson Lane/Mitchel Creek Areas.

In addition, we will look for opportunities to develop key projects throughout Mendocino County. Ideally, we will collaboratively find resources to help update the Mendocino County Wildfire Protection Plan, which will provide an opportunity to document and prioritize vital county-wide mitigation projects. CAL FIRE, MCFSC and other agencies are also collaborating to identify, and map completed, in process, and needed wildfire mitigation projects throughout Mendocino County. The MCFSC is developing a comprehensive map of Mendocino County wildfire mitigation efforts that can be accessed at <https://firesafemendocino.org/mendocino-county-project-tracker-map/>



Perhaps most important of all, MCFSC is helping organize neighborhoods county-wide to do their own volunteer work to increase local wildfire readiness through the creation of Neighborhood Fire Safe Councils (NFSCs). NFSCs have grown substantially in recent years from 18 prior to 2020 to more than 60 in 2023. A map of existing NFSCs is at <https://firesafemendocino.org/neighborhood-fire-safe-councils-of-mendocino-county/>. NFSCs and local fire districts can also participate in MCFSC's unique micro grant program which funded 10 wildfire mitigation projects through the county in 2022 and is expected to accomplish even more in 2023. See <https://storymaps.arcgis.com/stories/ead5690f80dd41e69a6b04cc8c508f84> for a report on 2022's accomplishments.

Finally, as has always been the case in the past, CAL FIRE and MCFSC will continue to collaborate on the effort to provide widespread community education and communication throughout Mendocino County focusing on home hardening, the creation of defensible space, and CAL FIRE's Ready, Set, Go information. A great example of this was CAL FIRE's participation in the MCFSC Radio Program which is available at <https://firesafemendocino.org/mcfsc-radio-hour/>.

DSI Zones





SECTION III: VALUES AT RISK

UNIT VALUES

Mendocino Unit has a wide range of both natural and man-made assets at risk to wildfires. Fires threaten the natural environment as well as commercial and residential property. It is difficult to prioritize or rank these assets, but citizen and firefighter safety, homes, infrastructure including water and power supply, rivers and watersheds, air quality, soil, wildlife and associated habitat, recreation areas including tourist attractions, scenic beauty, historical buildings, cultural unique areas, timber, and rangeland all rank high in this Unit. The Unit is dedicated to protecting these assets from the devastating effects of wildfires and other disasters.

Population dynamics in California has resulted in rapid development in the outlying fringe of metropolitan areas and in rural areas with attractive recreational and aesthetic amenities, especially forests. This demographic change is increasing the size of the wildland-urban interface (WUI), defined as the area where structures and other human development meet or intermingle with undeveloped wildland. The WUI is where wildfire poses the biggest risk to human lives and structures. The expansion of the WUI in recent decades has significant implications for wildfire management and impact. The WUI creates an environment in which fire can move readily between structures and vegetation fuels. Its expansion has increased the likelihood that wildfires will threaten structures and people. The increase in fire activity correlates with population increase in the wildland areas.

Over the past decade, marijuana has become a lucrative asset to many in Mendocino County. The plant is still federally illegal but has drawn large



numbers of people from all over the world to Mendocino County. This population growth has primarily been in the Wildland Urban Interface. Not only does the increased rural population present dangers, but many of the “hi-tech” growing operations are conducted indoors, increasing the fire danger to structures throughout the county. Both indoor and outdoor growing operations present safety concerns to firefighters and a tactical challenge to fire suppression efforts.

Environmentally, marijuana comes with substantial social costs due to the need to cultivate covertly, rather than openly. Grow operations in state parks, national forest, and private landholdings, are a significant issue that infringes upon public safety, in addition to creating environmental concerns. In state and national parks and private holdings, growers' clear native vegetation, use illegal pesticides and chemicals, leave garbage behind at their illicit operations, divert precious water from streams and often kill bears, deer, and other large and small animals that threaten their operation. Diesel spills associated with use of generators to provide light to grow operations often leak into precious water supplies. These growing operations pollute local ecosystems on an industrial scale most of which require the parks, national forests, or private entities to pay for the cleanup. The secrecy around the illegal product means diesel spills go unreported, spikes in electricity overlooked, wildlife slaughtered, and gallons of toxic pesticides wash into rivers and creeks. Without tax revenue from marijuana, state agencies struggle to find funds for cleanup and prevention. Meanwhile, these public and private areas become dangerous places for residents, tourists, and public safety personnel due to the militant defense of grow operations worth millions of dollars.

For example, during the summer of 2011, a two-week operation to purge the Mendocino National Forest (MNF) of illicit pot gardens uprooted 460,000 pot



plants and led to more than 100 arrests. Additionally, approximately 1,500 pounds of processed marijuana, 27 guns and 11 vehicles were seized. The MNF is a 900,000-acre forest spanning six counties including Mendocino County.

Law enforcement officers raided more than 50 gardens teeming with trash, irrigation pipes and chemicals that damage forestland and waterways. After the raids were conducted the California National Guard troops, Forest Service workers and volunteers removed 46,000 pounds of trash, 120 propane tanks, 116,000 feet of irrigation pipe, 13 manmade dams, 57 pounds of pesticide and tons of fertilizer from the 50-plus raided grow sites in the Mendocino National Forest.

During raids, like the ones conducted in the summer of 2011, law enforcement operations to eradicate illegal marijuana grows periodically end in violence. This violence has resulted in multiple law enforcement shootings, including several in which deaths occurred. Illegal growers go to extreme lengths to keep their grows hidden, often setting traps to detour unwanted visitors.

Much of marijuana's environmental impact stems from the enormous amount of light needed to grow marijuana. Grower plants plant marijuana indoors so that they can thrive year-round and remain somewhat hidden from law enforcement. Some indoor growers power their "grow lights" with electricity from the grid. But those in more rural locations use large diesel generators for power. The diesel is often stored in substandard or homemade containers and not suited for diesel fuel storage, which become huge risks for fires and toxic spills. In typical outdoor grows utilizing generators, extension cords often traverse through the vegetation from the generator to the growing structure. Extension cords not properly rated for exposure to the nature's elements become stressed



leading to an increase chance of failure potentially resulting in a wildland fire, especially as the weather turns warmer and the vegetation becomes drier.

On-grid grows carry another set of problems. In a recent report conducted by Humboldt State University, it was estimated that Humboldt County marijuana growers use 90 million kilowatt hours per year, enough to power 13,000 typical homes. The extra electricity pumps an estimated 20,000 metric tons of carbon dioxide into the atmosphere each year, and that's just in one county. There is also the risk of fire since indoor cultivation can require substantial modifications to electrical systems to power grow lights and fans, particularly in whole-structure conversions.

These modifications are rarely performed to code and can involve overloaded circuits, modified circuit panels, exposed wiring, extension cords, powerful grow lights, fans and exhaust systems. These modifications result in skyrocketing energy usage and serious increases for house fires. Fire doesn't just pose a risk to the homes themselves, but also to neighboring structures and the wildland. In addition to the increased fire risk, firefighting and law enforcement safety can also be put in jeopardy when electrical wiring deviates from the norm.

Water consumption is also an issue when it comes to the environmental impacts of marijuana growth. Each marijuana plant can use between 3 and 5 gallons of water per day to grow to fruition. As the size and number of illegal grows increases, the stress to the water resources within drought prone California also increases. Not only does this pose a risk to environmental values and resources, but it can also create for logistical problems during fire suppression efforts.



COMMUNITIES AT RISK

To help protect people and their property from potential catastrophic wildfire, the National Fire Plan directs funding to be provided for projects designed to reduce the fire risks to communities. A fundamental step in achieving this goal was the identification of communities that are at high risk of damage from wildfire. These high-risk communities identified within the wildland-urban interface, the area where homes and wildlands intermix, were published in the Federal Register in 2001.

At the request of Congress, the Federal Register notice only listed those communities neighboring federal lands. The list represented the collaborative work of the 50 states and five federal agencies using a standardized process, whereby states were asked to submit all communities within their borders that met the criteria of a structure at high risk from wildfire.

The following Communities at Risk are within the CAL FIRE Mendocino Unit's boundaries:

-
- Albion
- Anchor Bay
- Boonville
- Brooktrails
- Calpella
- Camp Rest
- Caspar
- Cleone
- Comptche
- Covelo
- Coyote Valley Indian Reservation
- Cummings
- Dos Rios
- El Roble
- Elk (Greenwood)
- Fort Bragg
- Gualala



- Hopland
- Inglenook
- Laytonville
- Leggett
- Little River
- Longvale
- Manchester
- Manchester Rancheria (Iverson Indian Rancheria)
- Mendocino
- Navarro
- Northspur
- Philo
- Piercy
- Point Arena
- Pomo
- Potter Valley
- Redwood Valley
- Regina Heights
- Talmage
- The Forks
- Ukiah
- Vichy Springs
- Westport
- Willits



SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

OVERVIEW

The Wildland Urban Interface presents major concerns for fire prevention. Many homes are in hazardous locations either in ignorance of, or in disregard for, fire prevention practices. Strict enforcement of California Public Resources Codes 4290 and 4291 will be necessary to correct the errors of past residential and commercial developments. Fire loss reductions must be gained through better fire safe planning, with participation by all political bodies and stakeholders.

The Fire Prevention Program of the CAL FIRE Mendocino Unit, including the Fire Prevention Bureau and Pre-Fire Planning, attempts to address the actual problems encountered and to plan for anticipated changes. Unit prevention efforts include fair exhibits, burn and 4290 permit procedures, fire patrols, news media releases, public service announcements and outreach, school programs, structure and dooryard premises inspections, and membership in the Mendocino County Fire Safe Council. Fire prevention programs are coordinated to the greatest extent possible with Local Fire Departments.

Each area of the Mendocino Unit, to a greater or lesser extent, will need to adapt to the ever-increasing population moving into and recreating in the wildland areas of the County, posing greater risks of fires and even greater expectations for all CAL FIRE response services. Through development, implementation, and ongoing reassessment of this Plan's priorities, the Mendocino Unit will be ready and steadfast in its ability to provide leadership in pre-fire management planning and in protecting the citizens of Mendocino County from destructive wildfires.



FIRE PREVENTION

MEU's Fire Prevention Bureau staffs active law enforcement personnel to enforce state fire and forest laws.

CAL FIRE Law Enforcement officers are trained and certified in accordance with the California Commission on Peace Officer Standards and Training (POST). MEU's officers are busy year-round investigating fire causes, interviewing witnesses, issuing citations, and patrolling the largest state forest (Jackson Demonstration State Forest) in the state of California. Additionally, law enforcement staff aid when requested by Local Fire and Law Enforcement Agencies in arson, bomb, fireworks investigations, and disposal of explosives. The Mendocino Unit's investigators have a very successful conviction rate.

PRE-FIRE ENGINEERING

In the early 1980's, the California legislature adopted "Fire Safe" regulations in response to devastating fires on California's wildlands. California, because of its unique combination of vegetation, topography, climate, and population, has one of the most severe wildfire problems in the world. Rugged terrain and highly flammable vegetation make the foothills and mountains of California especially unsafe for residential development unless adequate fire safety measures are taken. A fire hazard severity classification system based on fire weather, fuel loading, and slope has been developed as a basis for identifying fire hazard in the State Responsibility Areas (SRA) where CAL FIRE has the primary responsibility for wildfire protection. To help aid in successful protection CAL FIRE plays an active role in the development of Fire Safe regulations. These regulations provide direction and set standards for construction of adequate ingress and egress routes, water systems, land use planning and zoning to help guide development within the SRA.



The intent of the Fire Safe program is to minimize the loss of lives, structures, and resources due to uncontrolled wildfires. The Fire Safe program places some of the responsibility of fire protection on the homeowner and/or builder/developer. The responsibility is the concept of defensible space planning and incorporating basic fire protection measures into the home or development as it is built. Each home, subdivision, and development constructed in the SRA should have adequate emergency equipment access, building, street, and address identification, and a reasonable water supply for suppression needs built into their designs. Residents and planners within the SRA should understand the importance of planning for fire protection, the need for ongoing and proper clearance of flammable vegetation around structure (PRC 4291), and the benefits of greenbelts, fuel breaks, and controlled burns in and around structures and developments.

PRE-FIRE PLANNING

The Mendocino Unit Pre-Fire Planning Division is an extension of the Unit's Fire Prevention Bureau. As of Spring 2022, the Mendocino Unit's Pre-Fire Planning Division focuses on five main components:

1. Public Resources Code 4290- SRA/VHFHSZ Fire Safe Regulation Plan Reviews & Inspections
2. Public Resources Code 4290.5- Existing Subdivision Reviews
3. Public Resources Code 4291- Defensible Space Inspections
4. Assembly Bill 38 Inspections/Real Estate Inspections
5. Public Resources Code 4292 & 4293- Powerline Inspections



History

The Pre-Fire Planning Division was created in FY 20/21 in response to the increasing amount of construction that was taking place within the State Responsibility Area of Mendocino County. With the allocation of an additional Fire Captain (Range A) position, the Unit established a position whose focus was that of reviewing building permit plans and conducting inspections on completed construction projects to ensure conformance to all applicable state fire and forestry laws. Prior to this, all Public Resources Code 4290/ SRA-VHFHSZ Fire Safe Regulation plan reviews and inspections were undertaken by the Unit's Pre-Fire Engineer.

Public Resources Code 4290 & the SRA/VHFHSZ Fire Safe Regulations

Enacted by legislation passed 1987, Public Resources Code 4290 established the framework for developing fire safe construction within the State Responsibility Areas (SRA) of California. This framework identified the categories of roadways, addresses and road signage, emergency water supplies and defensible space as being a critical part of fire resiliency within the Wildland/Urban Interface environment.

In 2019, legislation was passed to amend Public Resources Code 4290 with the intent of preserving undeveloped ridgelines to reduce fire risks and improve fire protection.

Public Resources Code 4290 also mandated the California Board of Forestry and Fire Protection to establish specific regulations and criteria for each of the above-mentioned categories.

Public Resources Code 4291



Public Resources Code 4291 requires that any person who owns, leases, controls, operates or maintains a building in, on, or adjacent to any mountainous areas, as well as brush, forest, shrub covered lands, maintains an area of defensible space. The defensible space area is typically a minimum of 100' around all sides of buildings.

Defensible Space Zones

Zones 1 and 2 currently make up the 100 feet of defensible space required by law. Assembly Bill 3074, passed into law in 2020, requires a third zone for defensible space. This law requires the Board of Forestry and Fire Protection to develop the regulation for a new ember-resistant zone (Zone 0) within 0 to 5 feet of the home by January 1, 2023.

The intensity of wildfire fuel management varies within the 100-foot perimeter of the home, with more intense fuels' reduction occurring closer to your home. Start at the home and work your way out to 100 feet or to your property line, whichever is closer.

Defensible Space Inspections

The CAL FIRE Mendocino Unit was allocated four (4) Defensible Space Inspectors for FY 22/23. Due to the Units location, recruitment for these positions can be difficult. In FY 22/23, the Mendocino Unit was able to hire one Forestry Aide-Defensible Space Inspector.

LE-100a Form used for Defensible Space Inspections



State of California
Department of Forestry and Fire Protection
CAL FIRE
LE-100 (3/17)

Date: _____

NOTICE OF DEFENSIBLE SPACE INSPECTION

A fire department representative has inspected your property for fire hazards. You are hereby notified to correct the violation(s) indicated below. Failure to correct these violations may result in a citation and fine.

Owner/Tenant:			Inspection Address:		
Inspection No.	1	2	3	Inspector Name:	Contact Number:
					No Violations Observed <input type="checkbox"/>

CHECKED BOXES INDICATE VIOLATIONS

Zone 1 / Within 30 of all structures or to the property line (Refer to illustration below):

- A. Remove all branches within 10 feet of any chimney or stovepipe outlet, pursuant to PRC § 4291 (a)(4) and 14 CCR § 1299.03(a)(2).
- B. Remove leaves, needles or other vegetation on roofs, gutters, decks, porches, stairways, etc. pursuant to PRC § 4291 (a)(6) and 14 CCR § 1299.03(a)(1).
- C. Remove all dead and dying trees, branches and shrubs or other plants adjacent to or overhanging buildings, pursuant to PRC § 4291 (a)(5) and 14 CCR § 1299.03(a)(2).
- D. Remove all dead and dying grass, plants, shrubs, trees, branches, leaves, weeds and needles, pursuant to 14 CCR § 1299.03(a)(1).
- E. Remove or separate live flammable ground cover and shrubs, pursuant to PRC § 4291 (a)(1) and BOF General Guidelines item 1.
- F. Remove flammable vegetation and items that could catch fire which are adjacent to or below combustible decks, balconies, and stairs, pursuant to 14 CCR § 1299.03(a)(4).
- G. Relocate exposed wood piles outside of Zone 1 unless completely covered in a fire resistive material, pursuant to 14 CCR § 1299.03(b)(3).

Zone 2 / Within 30-100 feet of all structures or to the property line (Refer to illustration below):

- H. Cut annual grasses and forbs to a maximum of 4 inches in height, pursuant to 14 CCR § 1299.03(b)(2)(B).
- I. Remove fuels in accordance with the Fuel Separation or Continuous Tree Canopy guidelines (see back), pursuant to BOF General Guidelines item 4.
- J. All exposed woodpiles must have a minimum of ten feet (10 feet) clearance, down to bare mineral soil, in all directions, pursuant to 14 CCR § 1299.03(b)(2)(C).
- K. Dead and dying woody surface fuels and aerial fuels shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a maximum depth of three inches (3 in.), pursuant to 14 CCR § 1299.03(b)(2)(A).

Defensible and Reduced Fuel Zone / Within 100 feet of all structures or to the property line (Refer to illustration below):

- L. Logs or stumps embedded in the soil must be removed or isolated from other vegetation, pursuant to BOF General Guidelines item 3.

Other Requirements:

- M. Outbuildings and Liquid Propane Gas (LPG) storage tanks shall have ten feet (10 ft.) of clearance to bare mineral soil and no flammable vegetation for an additional ten feet (10 ft.) around their exterior, pursuant to 14 CCR § 1299.03(c)(1).
- N. Address numbers shall be displayed in contrasting colors (4" min. size) and readable from the street or access road, pursuant to 2013 CFC § 505.1.
- O. Equip chimney or stovepipe openings with a metal screen having openings between 3/8 inch and 1/2 inch, pursuant to 2013 CBC § 2113.9.2.

COMMENTS:

IMPORTANT

All violations marked must be addressed by the owner/tenant within 30 days of the inspection date. A reinspection of the property will occur after the 30-day compliance timeframe.



KNOW THE LAW BE FIRE SMART

100 FEET OF DEFENSIBLE SPACE IS REQUIRED UNDER THE PUBLIC RESOURCES CODE (PRC) 4291. CALIFORNIA BUILDING CODE CHAPTER 7A REQUIRES CERTAIN CONSTRUCTION MATERIALS AND METHODS FOR HOMES IN WILDLAND AREAS. BE SURE TO CONTACT YOUR LOCAL FIRE DEPARTMENT FOR ADDITIONAL REQUIREMENTS TO ENSURE YOUR HOME IS COMPLIANT WITH THE LAW.

READYFORWILDFIRE.ORG/THELAW

Assembly Bill 38 Inspections (Real Estate Inspections)



Assembly Bill 38 (AB 38), which Governor Newsom signed into law in 2019, went into effect on July 1st, 2021. AB 38 mandated CAL FIRE conduct defensible space compliance inspections upon request for the sale of real property in the State Responsibility Area, as well as High and Very High Fire Hazard Severity Zones. AB 38 provided the Unit with funding for one Forestry Technician to conduct these inspections within Mendocino County.

2022 Inspection Totals

In 2022, the Pre-Fire Planning Division reviewed approximately 167 SRA/VHFHSZ State Fire Safe Regulation applications for projects in Mendocino County. In addition to these plan reviews, roughly 164 final inspections were conducted by Pre-Fire Planning staff.

The Mendocino Unit also conducted 3,523 Defensible Space Inspections in 2022. Of these inspections, 2,794 were found to comply with Public Resources Code 4291 requirements, while 595 were non-compliant. From January 1st, 2022, to December 31st, 2022, the CAL FIRE Mendocino Unit processed and conducted 95 AB 38 inspections.

Public Resources Code 4290.5

Beginning on January 1, 2020, all existing subdivisions without a secondary means of egress that are located within the State Responsibility Area, or a Very High Fire Hazard Severity Zone were to be identified and have recommendations made to make them more fire resistive. In 2021, the Mendocino Unit Pre-Fire Engineering and Planning sections, working with the Mendocino County GIS office, were able to establish that there are 76 existing subdivisions in Mendocino County. Most of these subdivisions fall under the criteria set in Public Resources Code 4290.5.



INFORMATION & EDUCATION

CAL FIRE's MEU Fire Safety Education Programs are conveyed through school programs, fair exhibits, posters, flyers, road signs, and thousands of other printed materials, radio and television spots, community meetings, one-on-one contacts with wildland homeowners, social media, and in recent years, the Internet. This information and education are provided to people of all ages.

Captain Cal and Smokey Bear are utilized at numerous events throughout the County with the goals of teaching fire safety at home and in the forest. Captain Cal and Smokey Bear are used in both the classroom setting and at public events, such as the Mendocino County Fair. While Captain Cal and Smokey Bear are used primarily for teaching young children, the MEU Fire Prevention Specialist also provides other informational and educational materials geared specifically to teachers and educators.

The objective of the Volunteers In Prevention (VIP) Program is to involve and utilize citizens along with public service groups in non-salaried positions to reduce human-caused fires. VIPs educate thousands of children and their parents about fire prevention by participating in fairs, parades, fuels reduction projects, staffing displays and assist CAL FIRE's efforts during wildland fires and other emergencies by providing information to the media and public.



SECTION V: PRE-FIRE MANAGEMENT TACTICS

BATTALION I- COVELO

CAL FIRE's Mendocino Unit Battalion 1 is in the northeast corner of Mendocino County. Within the Battalion is the town of Covelo, centered in Round Valley. The Round Valley floor is predominantly Local Responsibility Area (LRA), and fire protection is the responsibility of the Covelo Fire Protection District (CFPD), although CAL FIRE responds to all calls in the district through an automatic mutual aid agreement.

The economy is mainly supported by cattle ranchers, small timber harvest projects, and a great deal of marijuana. The climate is Mediterranean in type, and vegetation is oak woodlands changing to conifer timberlands in the higher elevations.

The USFS, CAL FIRE, CFPD, and the Fire Safe Council have determined that the entire Covelo battalion is an at-risk WUI area, with several specific areas having greater hazards. To address the fire problem in the Covelo Battalion without looking at the LRA fire causes would not produce a true evaluation. More than 70 percent of the fires in the Battalion occur within one square mile on the Round Valley Indian Housing tract within the LRA.

Arson is the leading cause of fire in the Battalion. The County Sheriff's Office and CAL FIRE work cooperatively to investigate and incarcerate arsonists. Local, state, and federal fire cooperators as well as the Sheriff's Office continue to educate in the schools and community in hopes of reducing arson and accidentally caused fires.



The "Fire Defense Plan" prepared for the RVIT by CAL FIRE in May 1992 is intended to be an integral part of land management planning on the Indian Tribe lands. It identifies several fuel breaks and VIP projects that can mitigate hazards and risks impacting the Battalion and the Covelo community. With the increasing likelihood of wildfires on the west side of the valley, it is imperative that a maintained fuel break exists on the ridge west of the Round Valley Indian Housing Tract.

As was noted above, CAL FIRE constructed a fuel break there, known as the Little Valley fuel break. This break is an extension of one completed by the RVIT crews and provides direct protection to the 100 homes below it. Continuing northwest from Little Valley, another fuel break, known by the name "Pink," was developed in the plan. This break will minimize the risk of uncontrolled fires becoming large and damaging on both the west side of Round Valley and the eastside of Poonkinney Ridge.

Battalion 1 Target areas

Lunardi

Located east of Kelly Canyon Creek and south of Covelo in the Middle Fork Eel River watershed the Lunardi VMP is a cost sharing project with local landowners that will utilize prescribed fire, and some mechanical means, to address wildland fire fuel hazards and other resource management issues on State Responsibility Area lands. This Vegetation Management Project has the potential to help reduce the number and intensity of large damaging fires, increase public safety, increase and maintain water quality and quantity in a managed watershed, protect and improve soil productivity, establish and maintain desired plant communities, improve air quality over the long term, improve forage and browse for livestock, and provide training for personnel in incident organization, operations, fire behavior, firing methods, and effects of weather influences.



Carley

Located south of Covelo in the Middle Fork Eel River watershed the Carley VMP is a cost sharing project with local landowners that will utilize prescribed fire, and some mechanical means, to address wildland fire fuel hazards and other resource management issues on State Responsibility Area lands. This Vegetation Management Project has the potential to help reduce the number and intensity of large damaging fires, increase public safety, increase and maintain water quality and quantity in a managed watershed, protect and improve soil productivity, establish and maintain desired plant communities, improve air quality over the long term, improve forage and browse for livestock, and provide training for personnel in incident organization, operations, fire behavior, firing methods, and effects of weather influences.

BATTALION II- WILLITS

State Highway 101 bisects CAL FIRE's Mendocino Unit Battalion 2, with predominately Redwood and Douglas-Fir Forest to the west and mixed pine forest, brush, and grassland to the east. Highway 20 goes west from Willits to Fort Bragg for approximately 13 miles within the Battalion. The eastern border of the Battalion is the Mendocino National Forest's Covelo and Upper Lake Districts.

One CAL FIRE Station, Howard Forest, co-located with the Mendocino Unit Headquarters, provides the initial ground attack fire protection for Battalion 2. Howard Forest Helitack Base is located at this facility and is administered by the Battalion Chief assigned to Ukiah Air Attack.

The Brooktrails Township is an unincorporated community located immediately northwest of the City of Willits and its subdivisions are some of the densest



wildland/urban interface developments in Mendocino County. The limited access, steep slopes, roads, and dwellings interspersed with undeveloped, overgrown parcels surrounded by a natural greenbelt environment, offer the potential for expensive and large losses to wildland fire.

The unincorporated community is subject to Public Resources Code 4290 requirements for new development. This steep and wooded area was noted as being the first community in the United States to blend a four-square mile redwood and mixed growth forest Conservation Park with a fully improved residential subdivision. The conservation park is now called the Brooktrails Redwood Park and is locally referred to as the "Greenbelt." The park covers 2,300 acres that border a large portion of the lots in the subdivision. The Brooktrails Township is comprised of multiple subdivisions. Three main areas, Brooktrails, Sylvandale, and Spring Creek, are the most heavily populated.

In the event of a large fire in or threatening the Brooktrails subdivisions, the residents and responding agencies could face many problems. Residents evacuating down steep and narrow roads could impede responding fire apparatus, causing road blockage and long response times for fire personnel. Evacuation concerns are compounded by the fact that the narrow, winding Sherwood Road is the only paved major access road and escape route from Brooktrails, Sylvandale, and Spring Creek.

The Little Lake Valley is a grassy oak woodlands landscape that transitions into brush towards the east, then to timber at the higher elevations. There are many structures intermixed in the area and especially in the Pine Mountain Subdivision. It has similar features outlined in the Brooktrails scenario, steep winding roads that provide adequate access during normal conditions but would be hard



pressed to accommodate residents evacuating and fire resources entering the area, especially the transport/dozer units responding.

The Battalion overlays Willits, the only incorporated city, several unincorporated communities of various sizes, two high schools, and five grade schools. Miles of overhead power lines, a continuing source of vegetation fire starts, accompany ongoing building in the wildland.

Area logging is decreasing due to the economy, environmental concerns, and changes in ownership/management goals and strategies. Current harvest plans are mixed between small and large acreage. With fewer logging operations, the cumulative fire hazard from logging slash buildup increases only slightly annually in comparison to the buildup created during past boom logging eras.

However, multiple small and large landowners use an herbicide to reduce the population of small Oak trees within their ownership. This process is termed "Hack and Squirt". Over a 5–10-year period the Oak trees breakdown thereby increasing fire loading on the forest floor while opening the forest canopy.

Due to strong regulation and enforcement, threat of fire starts in the remote backcountry from logging operations is reduced. However, a dramatic increase in legal and clandestine marijuana production does increase the fire potential in the remote areas.

The saving grace for the area inland of California's north coastal strip is the seasonal onshore marine push which usually keeps overnight relative humidity high during normal patterns. Interior high pressure regularly develops over Mendocino County and creates critical burning conditions. When interior high-pressure conditions develop, producing hot, dry north/northeast offshore winds,



there is abundant potential for severe fires in the Willits area. These critical weather patterns typically develop four to five times each fire season. Each pattern usually builds and dissipates within several days.

Fire is widely recognized as a natural part of the California environment. Ecologically, studies have demonstrated wildlife's dependence on, and rapid recovery from, vegetation fires without funds being expended for regeneration. Much of the Willits Battalion would benefit from prescribed burning. Prescribed fires are far less costly than an uncontrolled fire burning through a developed community that will be costly to rebuild. The efficient burning of wildland tracts would provide an effective reduction of fuel loading in high, very high, and extreme fire hazard severity zones.

MEU Battalion 2 has multiple, active Fire Safe Councils; the Pine Mountain FSC, Sylvandale FSC, Brooktrails FSC, String Creek/TarTar Canyon FSC, and Ridgewood FSC. There are several more beginning to operate. These councils operate under the umbrella of the Mendocino County Fire Safe Council.

There have been several grant projects in Battalion 2, the three major projects have been: the Brooktrails Shaded Fuel Break, the Firco Road project (which serves as an access road starting at the old mill site north of Willits and ending in Brooktrails near the Airport that provides access for fire-fighting equipment) and the Pine Mountain Brush Chipping Project. These operations are managed by the Mendocino Fire Safe Council and CAL FIRE.



Battalion 2 Target Areas

Fuels

Brushy Mountain VMP

Located south of Dos Rios and east of Willits in both the Middle Fork Eel River and Eel River watersheds, the Brushy Mountain VMP is a cost sharing project with local landowners that will utilize prescribed fire, and some mechanical means, to address wildland fire fuel hazards and other resource management issues on State Responsibility Area lands. This Vegetation Management Project has the potential to help reduce the number and intensity of large damaging fires, increase public safety, increase and maintain water quality and quantity in a managed watershed, protect and improve soil productivity, establish and maintain desired plant communities, improve air quality over the long term, improve forage and browse for livestock, and provide training for personnel in incident organization, operations, fire behavior, firing methods, and effects of weather influences.

Willits Fuel Reduction

This densely populated area is a Wildland Urban Interface area with narrow roads and difficult ingress/egress. Currently Brooktrails only has one road in and out of the community. The area consists of steep terrain covered in a mix of grasslands, conifer, mature brush and timberlands. The fire hazard reduction will be accomplished by removing understory fuels, brush, small trees along both sides of various roads, and VMP prescribed burns where appropriate. This will open a crucial secondary access for this densely populated urban interface area in the County. The primary goal of the project will be to improve roadways for safe evacuation routes. A second goal is to create primary, secondary, and tertiary control lines in the event of a major wildfire coming from the community



of Brooktrails or from Highway 101. This project has a direct impact to the communities of Brooktrails, Pine Mountain, and the Willits Valley.

Brooktrails Fuels Reduction

The Brooktrails Township Community Services District is a general law, multi-purpose community services special district formed in 1975. Brooktrails maintains a Golf Course and 2300-acre greenbelt. Brooktrails Township, in cooperation with CAL FIRE, is currently thinning various strategic areas throughout the district to reduce the threat of large, damaging fires and promote forest health. The 8.2-mile-long roadside fuel reduction project starting at Timber Rd. and progressing all the way down to Willits has been completed. This will serve as a valuable shaded fuel break and an area for suppression forces to anchor into should a fire come from the west. Fuels reduction work around the 1st, 2nd, 3rd gate, and Middle Road is in the planning stages.

Howard Forest / Golden Gate / Green Gate Fuel Reduction

The Howard Forest Fuels Reduction project(s) located south of Willits at the Mendocino CAL FIRE Headquarters, is an ongoing shaded fuel break and fuels reduction project on roughly 129 acres that is strategically located to prevent damage to critical infrastructure, establish alternate escape routes for employees, remove hazard trees from the acquired property, and provide training opportunities for CAL FIRE employees and their cooperators.

Mendocino Railway / Skunk Train Fuel Reduction

This fuels reduction project parallels the Skunk Train Railroad west of Willits. This has been an aggressive project creating a shaded fuel break and removal of fuels near the railroad right of way. There were several fires along the railroad in 2018. Track maintenance personnel have been aggressive with their fuels maintenance as we have not had a significant fire on the tracks since 2018.



Golden Rule Roadside Fuel Reduction

The Golden Rule FRP reduced the fuel loading along the only entrance and exit to the Golden Rule Trailer Park and Golden Rule Church Association. It was completed in the Spring of 2022 and is now in maintenance status.

Infrastructure

Laughlin Peak FRP

The Laughlin Peak FRP is also in maintenance status and is worked on occasionally as the need arises.

Wildfire Prevention Grants

Ridgewood Road Roadside Fuel Reduction

This FRP serves to reduce the fuel loading along the length of Ridgewood Road and will tie into the Pine Mountain Fuel Break.

Sherwood Valley Tribe Prevention Plan

The grant money allows the Sherwood Valley Tribe to prepare a Fire Prevention Plan for their tribal land that sits just west of Willits and is in the State Responsibility area.

Sherwood Rancheria/Ranch Roadside Fuel Reduction

This FRP serves to reduce the fuel loading on the west side of the Rancheria where it puts up against a timber fuel model and roadside fuel reduction within the tribal areas.



Sherwood Corridor Ingress/Egress Roadside Fuel Reduction

Phase I consists of fuels reduction work along Timberline Road and Blue Lake Road.

Phase II consists of fuels reduction work along Sherwood Road, Spring Creek, Primrose, and Ridge Roads.

Mendocino County Fire Safe Council / CAL FIRE Cooperative Projects

Pine Mountain Fuel Break

This is a joint venture to conduct maintenance on the fire break along the powerlines behind the Willits watershed that were put in during the Mendocino Complex in 2017, maintenance on the Pine Mountain Shaded Fuel Break from 2019, and extending the shaded fuel break all the way to Tomki Road to create another ingress/egress route for civilians and first responders.

Shafer Ranch Road FRP

This is a joint venture to reduce fuel loading around the approximate 7 miles in the Shafer Ranch Road Association using crews, fallers, and chippers.

Pre-Fire Plans and Fire Inspections

Pre-fire plans are in the development stage for the Brooktrails/Sylvandale/Spring Creek, Ridgewood, Pine Mountain, and String Creek/TarTar Canyon areas.

Battalion 2 personnel will be working closely and diligently with our GIS Specialists, Brooktrails and Little Lake Fire Departments, and the Fire Safe Councils that have influence in the areas, to complete these in 2023 and 2024.

CAL FIRE employees will be out in the community conducting LE- 100 (clearance) inspections per Public Resource Code 4291. We will strive to



complete 50 inspections per week. This year our priority areas will be Pine Mountain, Blackbart/Blackhawk area, and Shimmins Ridge.

BATTALION III- UKIAH

Battalion III is a very diverse portion of Mendocino County. It encompasses various vegetative fuel types consisting primarily of oak woodlands, brush, and mixed conifer stands. The Ukiah Valley, in Battalion III, contains the densest population centers in Mendocino County, including the City of Ukiah and surrounding communities. A significant portion of the Battalion 3 population lives in the rural communities, considered in the urban-interface zone, outside formal service districts.

The Battalion borders Sonoma County to the south and Lake County to the east. It extends west almost to the community of Comptche and north past the community of Redwood Valley. The Battalion has multiple state highways located within the boundaries that are major thoroughfares in the county. Highway 101 travels north/south through the entire battalion and connects Mendocino County with Sonoma County. Highway 20 travels east/west and connects Potter Valley and portions of Redwood Valley with the Ukiah Valley. Highway 20 also connects Mendocino County with Lake County. Highway 175 travels east/west and links the southern part of the battalion to Lake County in the community of Hopland. Highway 253 connects the Ukiah Valley with Anderson Valley to the west.

Two Schedule B Fire Stations provide fire protection for the SRA in Battalion 3. Hopland Fire Station covers the southern half of the Battalion, which consists of



one fire engine staffed with a three-person crew. The station is located on Highway 101, approximately two miles north of Hopland. Ukiah Fire Station is staffed with two fire engines staffed with a three-person crew each and one bulldozer, covering the northern half of the battalion.

The station is at the corner of North State Street and Hensley Creek Road. Along with equipment from the surrounding Battalions, Howard Forest Helitack is situated to the north, just south of the community of Willits, is a new S70i "Firehawk" helicopter staffed with an eight-person crew and can provide 800 gallons of water per drop from a fixed tank. Ukiah Air Attack Base is located at Ukiah Airport and consists of 1 Air Attack Supervision Plane (OV-10 Bronco) and two S-2T's capable of deriving 800 gallons of retardant per S-2T.

CAL FIRE provides cooperative emergency services through various aid agreements to many fire departments or districts in Battalion 3. Local and federal governments that provide fire and medical services within Battalion 3: Ukiah Valley Fire Authority, Hopland Volunteer Fire Department, Potter Valley Volunteer Fire Department, Redwood Valley/Calpella Fire District, and the U.S.D.A.

Forest Service. Battalion 3 works cooperatively with other public service agencies, including California Highway Patrol, Mendocino County Sheriff's Office, Ukiah Police Department, Ukiah Ambulance Service, Redwood Empire Hazardous Incident Team (REHIT), Tribal police agencies, Caltrans, Bureau of Land Management, and U.S. Army Corps of Engineers.

Several popular recreation and tourist locations within Battalion 3 attract visitors to the Ukiah valley. These include Lake Mendocino, Cow Mountain Recreation Area, Montgomery Woods State Park, the Russian River, Eel River, numerous



wineries, and the Mendocino National Forest. CAL FIRE provides direct protection to the U.S. Army Corps of Engineers Lake Mendocino Recreation Area, BLM's Cow Mountain and Red Mountain Recreation Areas.

Battalion 3 emphasizes building/maintaining cooperative relationships to benefit the public and fire prevention education/activities. The scope of prevention activities in Battalion 3 includes participation in school programs emphasizing home and fire safety, actively working with the Local Fire Safe Councils, public education and safety programs, and defensible space compliance inspections.

Battalion 3 Target Areas:

Ukiah Valley Fuels Reduction Project

In response to the Governor's demand for fuel reduction, the CAL FIRE Mendocino Unit submitted this project due to its significant impact to a major community. This project is community-based with multiple components. Success on this project relies on private landowners adhering to PRC4291, increasing defensible space around their homes, and participating in the community fuel reduction mission. In addition to community involvement, fuel breaks along the wildland-urban interface, fire breaks along ridgetops, and prescribed burns.

The Ukiah Fuels Reduction Project will remove understory fuels, brush, small trees along both sides of various roads, create ridgetop fire breaks, and conduct VMP prescribed burns where appropriate. This project has the potential to reduce the number and intensity of large damaging fires while increasing public safety. Fire control lines constructed with crews and dozers will be established on ridgelines. Shaded fuel breaks will be built at the base of Cow Mountain, where numerous significant first have occurred historically. A helitorch and hand drip-torches will



be used to create fuel breaks along ridge tops and mosaic burns on the south and west-facing slopes.

*This project has been completed and is currently in the CEQA process for the maintenance aspect of the project.

Ukiah Valley Westside Fuel Reduction Project

The Westside Project is a comprehensive plan to protect the community of Ukiah Valley from a catastrophic fire on the west side of the community of Ukiah from Highway 253 to Mendocino College.

The primary goals are to create or maintain shaded fuel breaks along existing roads to aid in fire control, improve ingress of firefighters and egress or evacuation of the public, create and maintain fire breaks in advantageous locations along the west hills to provide access and assist in fire control, reduce the hazardous fuel load with controlled burning managed through a vegetation management program (VMP), create and maintain a shaded fuel break along the western hill of Ukiah Valley in the urban-wildland interface, conduct fire safety planning and public education outreach to bring attention to the inherent risk and threat of fires to the community, conduct inspections, provide direction and prioritize hazard mitigation efforts.

Fire control lines constructed with crews and dozers will be established on ridgelines. A helitorch and hand drip-torches will be used to create fuel breaks along ridge tops and mosaic burns on the south and west-facing slopes.

*This project has been completed and is currently in the CEQA process for the maintenance aspect of the project.



Highway 101 Fuels Reduction Project

The primary objective of this VMP is to reduce fuels immediately adjacent to the highway that increase the risks of roadside starts. This project has the potential to reduce the number and intensity of large damaging fires while increasing public safety. This project also can reduce the risk of a destructive fire to approximately 500 structures, several thousands of acres of valuable rangeland, timber, and vineyards.

A fire control line will be constructed starting at North State Street and Highway 101 in Redwood Valley with crews and will end at the top of Ridgewood Grade at the CALFIRE Mendocino Unit Headquarters. The control will be established within the Caltrans right of way (ROW) along the fence line on the east side of the highway, and Caltrans is scheduled soon to begin a shaded fuel break between the edge of the road and fence line.

In addition to the control line, burning would occur from Nelson Ranch Road in the center median (until it terminates at North State St. in Redwood Valley) and on both sides of the highway with a maximum distance of forty feet off the edge of the road. Burning would terminate at the top of Ridgewood Grade at the CALFIRE Mendocino Unit Headquarters. It would not occur along the flat portions or the downhill side of the road unless it were of strategic value.

United States Army Corp. of Engineers (USACOE)

There are two primary objectives with this VMP. The first objective is to burn all vegetative material from the face of the Coyote Dam. The dam must be void of all vegetative matter to conduct the annual geological survey and required earthquake inspection of the dam structure. The second objective is to re-establish the control lines on the east and south side of the USACOE property. The goal is to re-establish a control line along existing roads, create and



maintain shaded fuel breaks along existing roads to aid in fire control, and improve the ingress/egress of firefighters along those sides of the lake. This project will also allow us to create fire breaks in advantageous locations along the east side of the lake in the event of a wildfire threatening the eastside of the Ukiah Valley and allowing control lines to prevent the unwanted spread of fire from entering or leaving USACOE property.

Mill Creek Fuels Reduction Project

The primary objectives of this VMP have been to reduce fuel loading and improve wildlife habitat on chamise and mixed-chaparral slopes. A helitorch and hand drip-torches have been used to create fuel breaks along ridge tops and mosaic burns on the south and west-facing slopes. Several units of this VMP have been successfully burned North Cow Located east of Ukiah Valley and part of the northern Russian River watershed. This VMP will now focus on a mechanical clearing along the road to address wildland fire fuel hazards on State, and Federal Responsibility Area lands to help reduce large damaging fires. The primary goal is to create and maintain a shaded fuel break along the existing road to aid in fire control, improve ingress of firefighters, and egress or evacuation of the public. This VMP will go along with focused defensible space inspections and other fuels reduction projects adjoining this project.

Vista Del Lago Fuels Reduction Project

The primary goal of this VMP is to create and maintain a shaded fuel break along the Vista Del Lago and King Ranch Road system to aid in fire control, improve ingress of firefighters, and egress or evacuation of the public. This VMP will go along with focused defensible space inspections and other fuels reduction projects adjoining this project.

Greenfield Ranch Fuels Reduction Project



The primary goal of this VMP is to create and maintain a shaded fuel break along the Greenfield Ranch Road system to aid in fire control, improve ingress of firefighters, and egress or evacuation of the public. This VMP will go along with focused defensible space inspections and other fuels reduction projects adjoining this project.

El Dorado Fuels Reduction Project

This is a fuels reduction project in El Dorado Estates east of Ukiah. The fire hazard reduction has been accomplished by creating a shaded fuel break from Redemeyer Road to Fawnwood Drive along the south side of the community. The shaded fuel break included vegetation thinning, understory reduction, and removal of the ladder fuels. The area consists of steep terrain covered in grasslands, conifer, and mature brush.

*This project has been completed and is currently in the CEQA process for the maintenance aspect of the project.

HREC Fuels Reduction Project

Located east of Hopland and part of the Russian River watershed, the HREC VMP is a project with the University of California Extension Office that will utilize prescribed fire and some mechanical means, to address wildland fire fuel hazards and other resource management issues on State and Federal Responsibility Area lands.

This Vegetation Management Project has the potential to help reduce the number and intensity of large damaging fires, increase public safety, expand and maintain water quality and quantity in a managed watershed, protect and improve soil productivity, establish and maintain desired plant communities, improve air quality over the long term, improve forage and browse for livestock,



and provide training for personnel in the incident organization, operations, fire behavior, firing methods, and effects of weather influences.

Redwood Valley Fuels Reduction Projects

Identify fuels reduction projects in and around the community of Redwood Valley. Projects identified will accomplish this by removing understory fuels, brush, small trees along both sides of various roads, constructing and maintaining fire breaks, and conducting VMP prescribed burns where appropriate. Projects will potentially reduce the number and intensity of large damaging fires while increasing public safety. The fire hazard reduction will include a shaded fuel break along roads to improve the ingress of emergency responders and egress of residents.

Fire control lines constructed with crews and dozers will be established on ridges around Redwood Valley. The shaded fuel break included vegetation thinning, understory reduction, and removal of the ladder fuels. The area consists of steep terrain covered in grasslands, conifer, and mature brush.

Hopland Fuels Reduction Projects

Identify fuels reduction projects in and around the community of Hopland. Projects identified will accomplish this by removing understory fuels, brush, small trees along both sides of various roads, creating fire breaks, and conducting VMP prescribed burns where appropriate. Projects have the potential to reduce the number and intensity of large damaging fires while increasing public safety. The fire hazard reduction will include a shaded fuel break along roads to improve the ingress of emergency responders and egress of residents. Fire control lines constructed with crews and dozers will be established on ridges around Hopland. The shaded fuel break included vegetation thinning,



understory reduction, and removal of the ladder fuels. The area consists of steep terrain covered in grasslands, conifer, and mature brush.

Potter Valley Fuels Reduction Projects

Identify fuels reduction projects in and around the community of Potter Valley. Projects identified will accomplish this by removing understory fuels, brush, small trees along both sides of various roads, constructing and maintaining fire breaks, and conducting VMP prescribed burns where appropriate. Projects have the potential to reduce the number and intensity of large damaging fires while increasing public safety.

The fire hazard reduction will include a shaded fuel break along roads to improve the ingress of emergency responders and egress of residents. Fire control lines constructed with crews and dozers will be established on ridges around Potter Valley. The shaded fuel break included vegetation thinning, understory reduction, and removal of the ladder fuels. The area consists of steep terrain covered in grasslands, conifer, and mature brush.

BATTALION IV- LAYTONVILLE

CAL FIRE's Mendocino Unit Battalion IV encompasses the northwest portion of Mendocino County. The Battalion has two major highway corridors: State Highway 1 runs through the northwest corner of the Battalion, where it intersects U.S. Highway 101; and Highway 101 runs the entire length of the Battalion, a distance of 42 miles.

CAL FIRE operates two fire stations within the Battalion, at Laytonville and Leggett. Year-round fire protection in the Battalion is provided by four volunteer departments: Long Valley (Laytonville), Leggett Valley, Piercy, and Whale



Gulch. The Whale Gulch Fire Department is located within Mendocino County but is dispatched by the CAL FIRE Humboldt-Del Norte Unit because the road to its location is in Humboldt County.

The Battalion includes eight communities of various sizes. Several private camps are occupied primarily during the summer months. The State Parks System operates two campground facilities, one of which is classified as a wilderness park, plus three other day use areas. The Nature Conservancy has a large holding known as the Coast Range Preserve in the Branscomb area. There are several BLM holdings in the Battalion, most of which require modified suppression action plans.

The western portion of the battalion consists of some large timber company holdings that encompass approximately 75,000 acres. With the reduction of active logging and the decline of broadcast burning, the fuel loading has increased in the area due to the natural forest succession. Roads on the timber company lands have been abandoned and/or decommissioned which can lead to access difficulties. Although logging is decreasing, the fire threat relative to logging remains, due to the buildup of logging slash and the lack of access to the slash-covered areas due to road closures. In 2008, there were approximately 22 lightning caused fires in Battalion 4, the road closures on logging company properties created access issues for fire suppression resources.

Causes of the fires within Battalion 4 range from accidental equipment use to arson. Fires caused by debris burning are a significant problem in Battalion 4. An increased effort by Battalion personnel to inform the public of debris burning regulations will be used to reduce these fires. Fires caused by equipment use are also a problem. Battalion personnel conduct public education on this subject, but such fires will probably continue due to the large amount of outdoor



equipment use in the Battalion. Fires caused by the railroad have ceased because the railroad is not operating due to winter storm damage several years ago. If the railroad is again put in service, a fire prevention and inspection program will need to be implemented. An additional concern in the battalion is the number of marijuana growing operations which are accounting for a large number of the fires in the battalion.

The outlook for Battalion 4 is for increased tourist traffic and more rural subdivisions. As these subdivisions expand, they bring with them the increased population in the rural areas creating an increase in wildland, structure, vehicle, and debris fires, requiring greater public awareness of fire hazards. The larger WUI areas within the Battalion include Bear Pen subdivision, Cooks Valley, Pepperwood Springs subdivision, Ebert Lane, Camp Saint Michael, Bell Springs Road, Cherry Creek subdivision, Twin Pines Ranch, Black Oak Ranch, Spy Rock Road area, Wilderness Lodge, Ten Mile Creek, Fox Rock Road, and Mulligan Lane.

Currently each Local Fire Department and CAL FIRE station's personnel conduct separate and joint fire prevention education programs at local schools, road association meetings, and community events. During these education programs, strong emphasis will now be placed on the identified target areas. Funding is needed for local and state fire departments to provide up-to-date educational materials to the public.

In cooperation with the Mendocino Fire Safe Council, several WUI areas have identified the need for fire road access clearance and fuel reduction/shaded fuel breaks. In each of these locations, overgrown brush and young saplings cause a safety hazard for both fire crews trying to enter the area and residents trying to leave in a wildfire emergency. For each evacuation route listed here,



projects need to be instituted to create shaded fuel breaks extending 50 feet on both sides of the roads, by removing understory brush and trimming up trees to remove ladder fuels.

- Spy Rock Road (including Registered Guest Road, Iron Peak Road, and Blue Rock Road) is inhabited by approximately 2,000 people living in various types of homes.
- Ten Mile Creek has approximately 200 residents.
- Bear Pen subdivision contains 18 homes.
- Ebert Lane is a narrow road accessing 11 homes; its vegetation includes not only brush and saplings but also timber.
- Pepperwood Springs subdivision has approximately 20 homes.
- Cherry Creek subdivision, which currently contains about 30 homes.
- Mulligan Lane contains areas of brush that need to be removed.
- Bell Springs Road, a major artery, has many heavily overgrown areas on the lower portion of the road.

The lack of home addresses and road signage is a huge problem throughout Battalion 4. This is due in part to the vast amount of marijuana cultivation by persons who wish their addresses to be unknown. During public education programs, the benefits of proper addressing and road signage for both fire and medical emergencies will be strongly emphasized. Battalion personnel conducted an extensive PRC 4291 inspection campaign to try to gain compliance and acceptance to fire safe planning.

Two sets of fire prevention signs remind the public of their fire prevention obligation and burning regulations. Each time a burn permit is issued, a fire prevention message is presented. Battalion personnel will continue Public Resources Code section 4291 and 4492 inspections of structures and power lines in each community.



Battalion 4 Target Areas

Shamrock

This was a historic VMP that is in the process of being reinstated. The project is southeast of Laytonville, the Shamrock VMP is a cost sharing project with local landowners that will utilize prescribed fire, and some mechanical means, to address wildland fire fuel hazards and other resource management issues on State and Federal Responsibility Area lands.

This Vegetation Management Project has the potential to help reduce the number and intensity of large damaging fires, increase public safety, increase and maintain water quality and quantity in a managed watershed, protect and improve soil productivity, establish and maintain desired plant communities, improve air quality over the long term, improve forage and browse for livestock, and provide training for personnel in incident organization, operations, fire behavior, firing methods, and effects of weather influences.

Cahto Reservation Fuel Break

This fuels reduction project will reduce the amount of vegetation and increase defensible space with in and around the perimeter of the reservation. Most of the work to be done will mastication. Areas with difficult access will require the use of hand crews, pile burning and chippers.

Branscomb Road

This fuels reduction right of way clearance is a project with the county of Mendocino Road Department. The project is ongoing every couple of years to reduce fuel loading along the roadway. Branscomb road is a main artery road in northern Mendocino connecting the town of Laytonville to Hwy 1 on the



coast. The ongoing fuels reduction of this project proved useful in providing unimpeded access to the north side of the Lodge Fire in 2014.

County OES Grant Projects

There are two fuels reduction roadside clearance projects funded through Mendocino County OES. The Dos Rios project will be for the full length of the road running from Highway 101 in Laytonville to Highway 162 in Dos Rios. The second is the Bell Springs project. This project will start at the intersection of Hwy 101 and Bell Springs and continue three miles up Bell Spring Road. This section of Bell Spring has the steepest terrain and heaviest fuel loading.

The North Mendocino Forest Health Collaborative

There are two fuels reduction roadside clearance projects funded through The North Mendocino Forest Health Collaborative. The North Coast Resource Conservation Project is funded for roadside clearance project that runs along Highway 1 from Leggett to Hails Grove. The project will increase and add to the existing right of way clearance that is in place from Cal Trans. The second is the Red Mountain fuels reduction Project. This project is primarily on BLM land. This project will establish fuel breaks in the area of Red Mountain and improve access to the area.

BATTALION V- BOONVILLE

Battalion 5 is the 10th largest Battalion statewide, according to 1964 Fire Plan data. Two major highways within the Battalion bring tourist traffic from the Bay Area to the north coast: State Highway 128 forms the northern boundary of the Battalion, and State Highway 1 defines the western boundary. Vegetation within the Battalion varies from dense redwood/Douglas-fir forests to grassy oak woodlands.



The Battalion includes one city, Point Arena, and nine communities of various sizes: Gualala, Anchor Bay, Irish Beach, Manchester, Elk, Yorkville, Boonville, Philo, and Navarro. Battalion 5 fire protection for the Battalion is provided by two Stations: Boonville and Point Arena. Additionally, four local government departments -- South Coast Fire Protection District, Redwood Coast Fire Department, Anderson Valley Fire Department, and Elk Volunteer Fire Department -- provide structure protection for their communities, as well as mutual aid to CAL FIRE for wildland fire protection. Redwood Coast Fire Department provides protection for the City of Point Arena and the communities of Manchester and Irish Beach.

The Battalion has one lookout, Cold Springs, which was closed in 1994 but has been intermittently reopened during periods of high fire danger and lightning storms. Cold Springs Lookout is listed in the National Historic Lookout Registry and has been identified in CAL FIRE's Management Plan for Historic Preservation.

The outlook is for increased tourist traffic and rural housing in single increments and small subdivisions. As the minor subdivisions expand, an increasing fire problem will exist in both the prevention and suppression of fires. Logging, which formerly provided the area's major economic resource, has been decreasing. However, future fire control problems remain a concern, as areas that are logged have an increase in logging slash and possibly a lack of access due to road closures. Areas where logging is not occurring may have a higher density of live and/or dead vegetation as well as an increase in poor or limited access. The Battalion's overall fire hazard potential will likely increase due to increases in tourism, traffic, off-road recreation, camping, and rural subdivision development in the Wildland Urban Interface (WUI). Vineyard conversions are still occurring, primarily within the oak woodlands. These conversions create greenbelts (fire



fuel breaks) on the valley floor, along the lower slopes surrounding the valley, and now reaching the upper ridges.

Battalion 5 fire prevention activities include:

- Display and information booth at the Mendocino County Fair and Apple Show
- Participate in the Mendocino County Fair parade.
- Participate in school programs with Smokey Bear emphasizing fire and home safety.
- LE-100 inspections of residences and inspections of power lines
- Roadside Fire Prevention signs
- Burn permits issued in person with awareness and safety training given to permittees.
- Joint educational outreach efforts with Fire Safe Council

Battalion 5 target Areas

Folded Hills

This completed VMP, located south of Yorkville in the upper Navarro River watershed, was a cost sharing project with local landowners that utilized prescribed fire, and some mechanical means to address wildland fire hazards and other resource management issues on State Responsibility Area lands. This Vegetation Management Project was projected to help reduce the number and intensity of large damaging fires, increase and maintain water quality and quantity in a managed watershed, protect and improve soil productivity, establish and maintain desired plant communities, improve air quality over the long term, improve forage and browse for livestock, and provide training for personnel in incident organization, operations, fire behavior, firing methods, and



effects of weather influences. Much of this project has been completed and continues to be in the maintenance phase.

Bridges Ranch

This VMP located south of Yorkville in the upper Navarro River watershed is a cost sharing project with local landowners that utilized prescribed fire, and some mechanical means to address wildland fire hazards and other resource management issues on State Responsibility Area lands. This Vegetation Management Project has the potential to help reduce the number and intensity of large damaging fires, increase and maintain water quality and quantity in a managed watershed, protect and improve soil productivity, establish and maintain desired plant communities, improve air quality over the long term, improve forage and browse for livestock, and provide training for personnel in incident organization, operations, fire behavior, firing methods, and effects of weather influences. While still active, most of the units identified on this VMP were burned in the springs of 2021 and 2022. It is currently in the maintenance phase.

Rancho Navarro Subdivision

CAL FIRE in cooperation with the Rancho Navarro Road Association participated in a fire hazard reduction project in the Rancho Navarro Subdivision. The project location is accessed from both Flynn Creek Road to the Northwest and from Masonite Road to the Southeast. This densely populated area is a Wildland Urban Interface (WUI) area with narrow roads and difficult ingress/egress.

The area consists of steep terrain covered in a mix of grasslands, conifer, and mature brush. The fire hazard reduction was accomplished by removing understory fuels, brush, and small trees along both sides of various roadways



servicing the subdivision. The primary goal of the project was to improve roadways for use as safe evacuation routes. A second goal was to create primary or secondary control lines in the event of a major wildfire. Much of this project has been completed and continues to be in the maintenance phase.

Holmes Ranch Subdivision

CAL FIRE in cooperation with the Holmes Ranch Road Association has finished over 2 miles of fuels reduction along Holmes Ranch and Smith Hills Roads in the Holmes Ranch Subdivision. This densely populated area is a Wildland Urban Interface (WUI) area and has narrow roads with difficult ingress/egress. The area consists of steep terrain covered in a mix of grasslands, conifer, and mature brush. The fuels reduction was accomplished by removing understory fuels, brush, and small trees along both sides of Smith Hills Road and Holmes Ranch Road. The method of treatment consisted of roadside thinning with chainsaws, chipping and/or burning of the hazardous debris and mechanical mastication with machinery. The primary goal of the project has been to provide safer access and egress in the event of a wildfire. A second goal was to create primary or secondary control lines in the event of a major wildfire. This project remains in the maintenance phase.

Cold Springs

Tree-thinning project immediately surrounding the Cold Springs Lookout. The primary objective is the removal of hazardous trees directly impacting 2 miles of energized power lines which supply critical communication infrastructure. A secondary benefit is the reduction of forest fire fuels. This will be done by creating a shaded fuel break that will include vegetation thinning, understory reduction and removal of the ladder fuels. The area consists of steep terrain covered in a mix of conifer and mature brush. This project would reduce the threat of fire spread in and around power line infrastructure as well as reduce



the potential fire impacts to adjoining properties. The project is located west of the community of Philo and accessed off Signal Ridge Road.

Nash Mill Road

CAL FIRE in cooperation with the Nash Mill Road Association is actively participating in a fire hazard/ fuels reduction project in the Nash Mill Road Subdivision. The project location is accessed from Highway 128 between the communities of Philo and Navarro. This densely populated area, which encompasses approximately 13 miles of road infrastructure, is a Wildland Urban Interface (WUI) area with narrow and difficult ingress/egress. The area consists of steep terrain covered in a mix of grasslands, conifer, and mature brush. The fire hazard reduction will be accomplished by removing understory fuels, brush, and small trees along both sides of various roadways serving the subdivision. The primary goal of the project will be to improve roadways for use as safe evacuation routes. A second goal is to create primary or secondary control lines in the event of a major wildfire.

Elkhorn Road

CAL FIRE in cooperation with the County of Mendocino is actively planning a fire hazard reduction project on the Elkhorn Road. The project location is accessed from Highway 128 just east of the town of Yorkville. This densely populated area is a Wildland Urban Interface (WUI) area with narrow roads and difficult ingress/egress. The area consists of moderate to steep terrain covered in a mix of conifer forest and mature brush. The fire hazard/ fuels reduction will focus on removing understory fuels, brush, and small trees along both sides of the main roadway serving multiple property owners. This will be accomplished using chainsaws, roadside chipping, pile burning and mechanical mastication. The primary goal of the project will be to improve the roadway for use as a safe evacuation route. A second goal is to create primary or secondary control lines



in the event of a major wildfire. Due to commitment times of state resources on existing projects, this project will likely be accomplished by private contractors through a grant process through the Mendocino County Fire Safe Council.

Yorkville Ranch Road

CAL FIRE in cooperation with the Yorkville Ranch Road Association is actively planning a fire hazard reduction project on the Yorkville Ranch Road. The project location is accessed from Highway 128 just West of the town of Yorkville. This densely populated area is a Wildland Urban Interface (WUI) area with narrow roads and difficult ingress/egress. The area consists of moderate to steep terrain covered in a mix of grasslands, conifer forest and mature brush. The fire hazard/ fuels reduction will focus on removing understory fuels, brush, and small trees along both sides of the main roadway serving multiple property owners. This will be accomplished using chainsaws, roadside chipping, pile burning and mechanical mastication. The primary goal of the project will be to improve the roadway for use as a safe evacuation route. A second goal is to create primary or secondary control lines in the event of a major wildfire.

Philo/ Greenwood Road

CAL FIRE in cooperation with the County of Mendocino and Elk CSD planned a fire hazard reduction project on the Philo/ Greenwood Road. The project location is accessed from Highway 128 just West of the town of Philo as well as Highway One just South of the town of Elk. The county road is a well-travelled road and serves as a main connecting route between the coast and Anderson Valley. This densely populated area is a Wildland Urban Interface (WUI) area with narrow roads and difficult ingress/egress. The project also included portions of Signal Ridge Rd, which is accessed from Philo/ Greenwood Road, and portions of Cameron Road, which connects Philo/ Greenwood Road to State Highway 1. The area consists of moderate to steep terrain covered in a mix of



conifer forest, hardwoods, and mature brush. The fire hazard/ fuels reduction will focus on removing understory fuels, brush, and small trees along both sides of the main roadway serving multiple property owners. This was accomplished using chainsaws, roadside chipping, pile burning and mechanical mastication. The primary goal of the project was to improve the roadway for use as a safe evacuation route. A second goal was to create primary or secondary control lines in the event of a major wildfire.

Residential Chipping Program

This program serves all communities and residential areas within Battalion 5. The program encourages landowners to participate in fuels reduction projects, create defensible space, and help minimize the threat of wildfire on private property. Residents are educated and given guidelines on how to integrate into the chipping program while removing hazardous vegetative material safely and efficiently from their property. Once hazardous material is assembled, chipping arrangements are made upon request by individual or multiple homeowners.

BATTALION VI- FORT BRAGG

Battalion 6 has two major highways which bring tourist traffic to the north coast. State Highway 1 spans the entire west section of the battalion along the coast and intersects with State Highway 20, then continues north and intersects with US Highway 101 at Leggett. Highway 20 connects Highway 1 to Highway 101 and links the cities of Fort Bragg and Willits.

Geographically, the battalion boundaries are as follows: starting at the northwest corner from the Pacific Ocean near the town of Rockport, it runs south along the coast to the Navarro River at Highway 1 and Highway 128. It then runs east along the river and Highway 128 about 10 miles to Flynn Creek Road, then



northeast to State Highway 20, then north to Sherwood Peak. It follows Sherwood Ridge about six miles continuing northwest, following mostly along ridgelines to the Pacific Ocean. It finally intersects at a point just south of the town of Rockport, about 25 miles, forming the northeastern boundary.

Battalion 6 includes two CAL FIRE Stations: The Fort Bragg Station (Jackson Demonstration State Forest (JDSF) and Battalion Headquarters) and the Woodlands Station, east of the town of Mendocino. Mendocino Coast Hospital provides ground ambulance service, and CALSTAR (Ukiah) and REACH (Willits) provide helicopter emergency medical services (EMS). The California State Parks provides EMS and water rescue service up and down the coast with 1 – 3 Lifeguards on duty daily. The U.S. Coast Guard provides EMS and water rescue service from the Noyo Harbor in Fort Bragg and can provide additional helicopter support to local agencies apparatus from Eureka.

Included in the battalion is JDSF, purchased in 1947 from the Caspar Lumber Company and is the largest State Forest in California. JDSF is a public use area excluding motorized vehicles and includes campsites and day use areas. The forest is a popular area for hiking, biking, hunting, horseback riding, swimming, and picnicking, and is visited by over 40,000 people annually.

The California State Parks and Recreation Department's Mendocino District is headquartered within the battalion at Russian Gulch State Park. Seven campground facilities and numerous state beaches and recreation areas are in the battalion. This includes the Mendocino Woodlands Campground which is contracted to private management with occupancies of up to 500 per day.

The outlook for the Battalion is for increased tourist traffic and more residents in additional rural homes and subdivisions. Logging continues to remain steady



within the battalion with more timber harvest plans being reviewed. Projected fire hazards and at-risk assets will continue to grow due to the changing demographics of the area. As rural development continues and subdivisions expand, an increasing fire problem will exist in both preventing and suppressing fires. The points below identify some issues that will increase the complexity of the future fire environment.

Response times outside developed communities can be quite extended, and resources are limited. The topography of the battalion, in conjunction with the winding, slow, and limited road system, is a contributing factor to response times. Developed water resources are sparse with limited availability and accessibility in outlying areas. The increased population in rural areas will have an impact on and strain the already limited resources in the area. This will potentially result in increased fire starts as well as medical aid and rescue response requests.

Increased public land use including off-road recreation and camping will result in additional potential for fire as well as medical aids. Property addressing and access continue to be marginal and inconsistent throughout Mendocino County, resulting in increased dispatch and response times. Population growth will increase equipment use and debris burns, increasing the potential for fire starts and control burn escapes. Lack of awareness and education regarding fire safe planning by persons moving from city to rural environments regarding fire safe planning manifests itself through poor preparation and ultimately increased risks.

Battalion personnel continue to participate and interact with the local schools to promote fire prevention and education programs. This focuses on youth education and prevention as well as providing a conduit to parents for



prevention information and fire safe planning. The program has been successful to date and has been well received by the community.

Battalion personnel regularly participate in community events including parades, fairs, and barbeques utilizing Smokey Bear, fire apparatus, and booths to distribute prevention and education materials including fire safe pamphlets. The events also provide opportunities for personal public “one on one” contact for adults and youth alike relating to prevention, education, career, and general CAL FIRE information.

Fire Safe inspections continue in the various communities with LE-100 inspections of residences and power lines. The annual issuance of Burn Permits including LE-63 (campfire), LE-62a (dooryard), and LE-5 (project burn) are used as opportunities to increase public awareness and conduct training in the proper and safe use of fire.

The battalion continues to participate in public outreach meetings sponsored by the Fire Safe Council, to assist in education, and to identify public concerns regarding prevention or future community projects. CAL FIRE Battalion 6 is committed to working cooperatively with the Mendocino County Fire Safe Council, Fort Bragg Fire Safe Council, communities, and local government fire jurisdictions to assist in addressing specific concerns, by technical assistance or facilitation through administrative services.

The Battalion co-sponsors, with timber stakeholders, the annual timber “industry meeting” to update and exchange contact information, identify available resources, and identify logging operations or major projects occurring within timber holdings.



Battalion 6 Target Areas

State Parks Fuel Reduction

Cooperatively working with DPR to remove hazard trees and to reduce fuels in multiple State Parks and Public Use areas by prescribed fire or mechanical means. This reduces the fire danger within the park boundaries, to visitors and to neighbors. It also gets rid of the unwanted non-native species of plants to the area and helps the ecosystem of some native species that need fire.

Mitchell Creek Emergency Access Roads

Cooperatively working with JDSF and DPR to create an emergency access/egress road between Mitchell Creek Road and Gibney Lane. This will provide a secondary route in the event of a disaster in the area for the several hundred homes that could be affected by the single way in and out of the area.

*This project has been completed apart from rocking portions of the road and annual maintenance will be occurring.

Mitchell Creek & Simpson Ln Fuel Break

Working with JDSF, State Parks, Mendocino County Fire Safe Council to create a fuel break along Mitchell Creek Rd and Simpson Ln. This will be a shaded fuel break long both sides of the road. This will on Mitchell Creek Rd at the Gibney Gate entrance and extend to Simpson Ln and JDSF Rd 450.



APPENDIX A: CURRENT PROJECTS AND ACTIVITIES

Brushy	Willits	Submitting 1/3/21	VTP	2022
Covelo South	Covelo	Planned	VTP	2022
HREC	Hopland	Some work completed by HREC	VTP	2022
Shamrock	Laytonville	Planned	VTP	2022
Cold Springs FRP	Elk	In Progress	NOE	2022
Golden Rule Roadside FRP	Willits	Approved	NOE	2022
Green Gate Run SFB	Willits	Submitted to Region	NOE	2022
Mill Creek Rd SFB	Ukiah	In Progress	NOE	2022
Three Chop / Road 1000	JDSF	Approved	NOE	2022
Sherwood Road - Phase I Timber Blue Lake Ridge	Willits	In Progress - funds remaining	Fire Plan	2019
Elk Evacuation Fuel Break - Phase I	Elk	In Progress - initiating work	Fire Plan	2020
Parlin Shaded Fuel Break	JDSF	In Progress - initiating work	THP	
West Hills- Ukiah Fuels and Fire Break	Ukiah	In Progress - funds remaining	Fire Plan	2018
Brooktrails Fuels 2017	Willits	In Progress- funds remaining	Fire Plan	2017
Brooktrails/Willits Fuel Reduction	Willits			

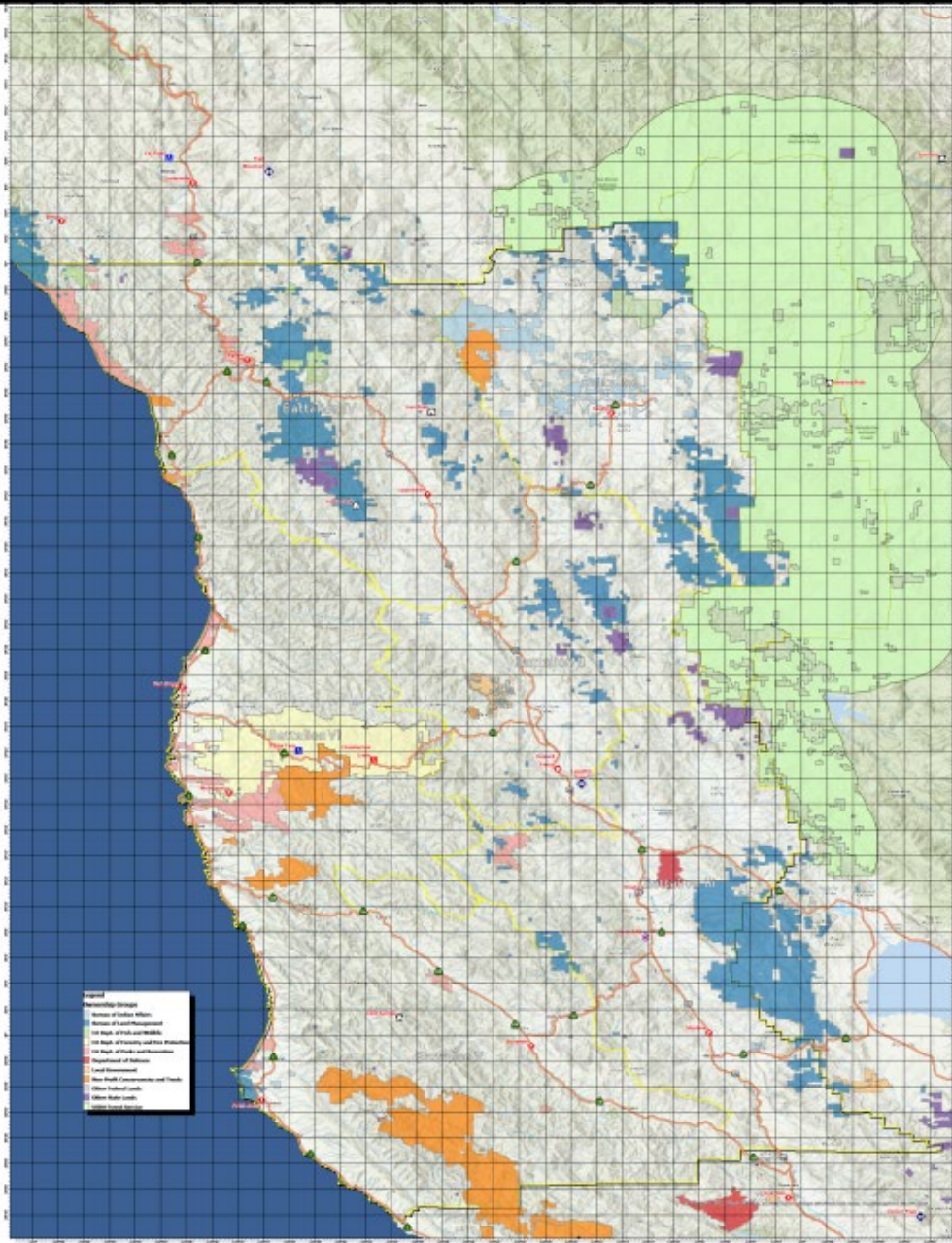


APPENDIX B: PAST PROJECTS AND ACTIVITIES

2021	Ukiah Fuels Reduction--Eastside VMP	Governor's Priority	Completed
2021	Ukiah Fuels Reduction--Westside VMP	Governor's Priority	Completed
2021	Willits Fuels Reduction	Governor's Priority	Completed
2021	Elk Wildfire Mitigation Mapping	Grant Admin	Completed
2021	Redwood Complex Fire Recovery and Hazardous Tree Removal	Grant Admin	Completed
2021	Elkhorn Road Shaded Fuel Break	MEU Project	Completed
2021	Mitchell Creek Fuels Reduction	MEU Project	Completed
2021	Robinson Creek Shaded Fuel Break	MEU Project	Completed
2021	Corson Ranch	VMP	Completed
2021	Hopland Research & Extension Center 1	VMP	Completed



MENDOCINO COUNTY LAND OWNERSHP



STATE OF CALIFORNIA
 NATURAL RESOURCES AGENCY
 DEPARTMENT OF FORESTRY AND FIRE PROTECTION
 MENDOCINO UNIT

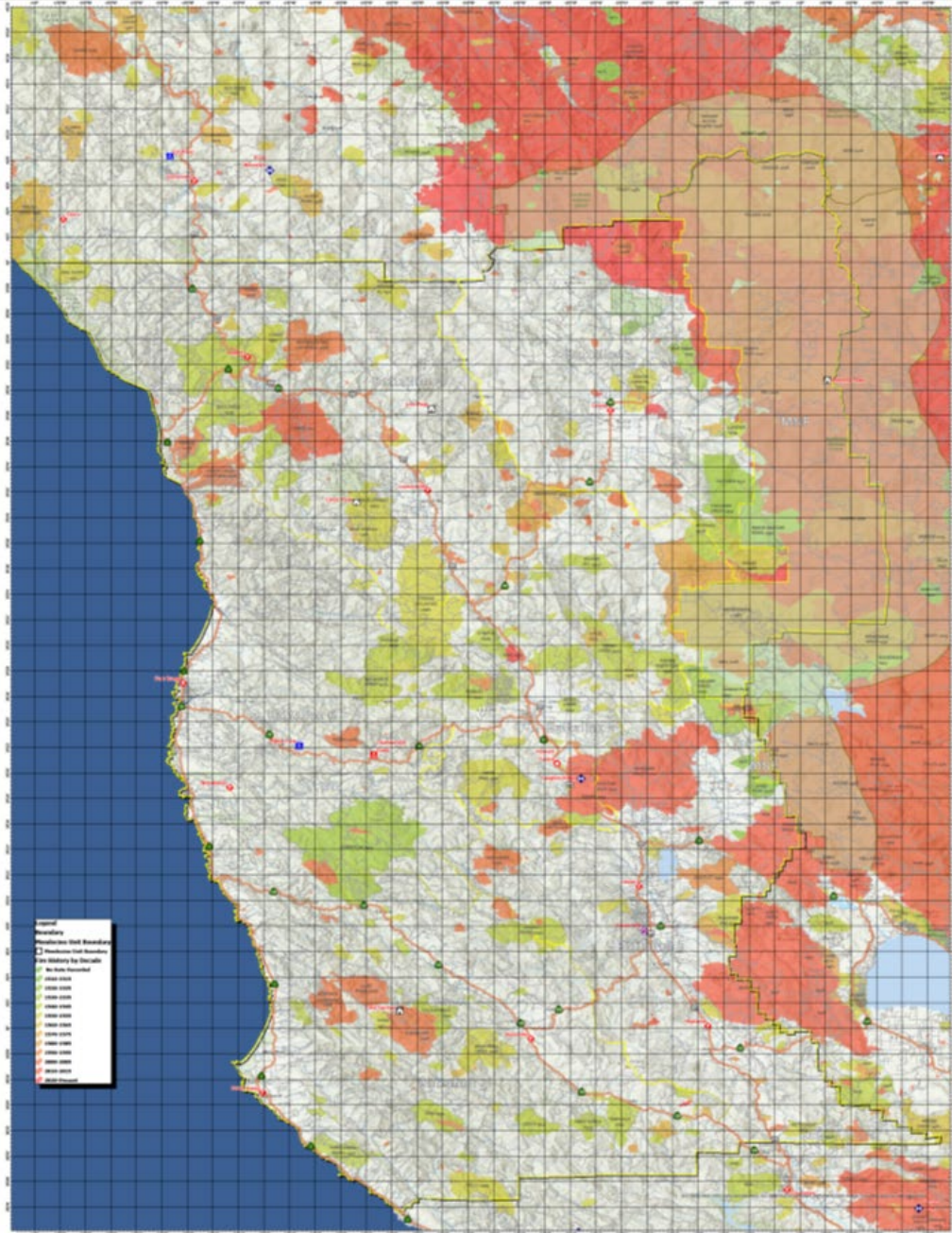



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MENDOCINO UNIT FIRE HISTORY 1900-2020



 STATE OF CALIFORNIA
NATURAL RESOURCES AGENCY
DEPARTMENT OF FORESTRY AND FIRE PROTECTION
MENDOCINO UNIT

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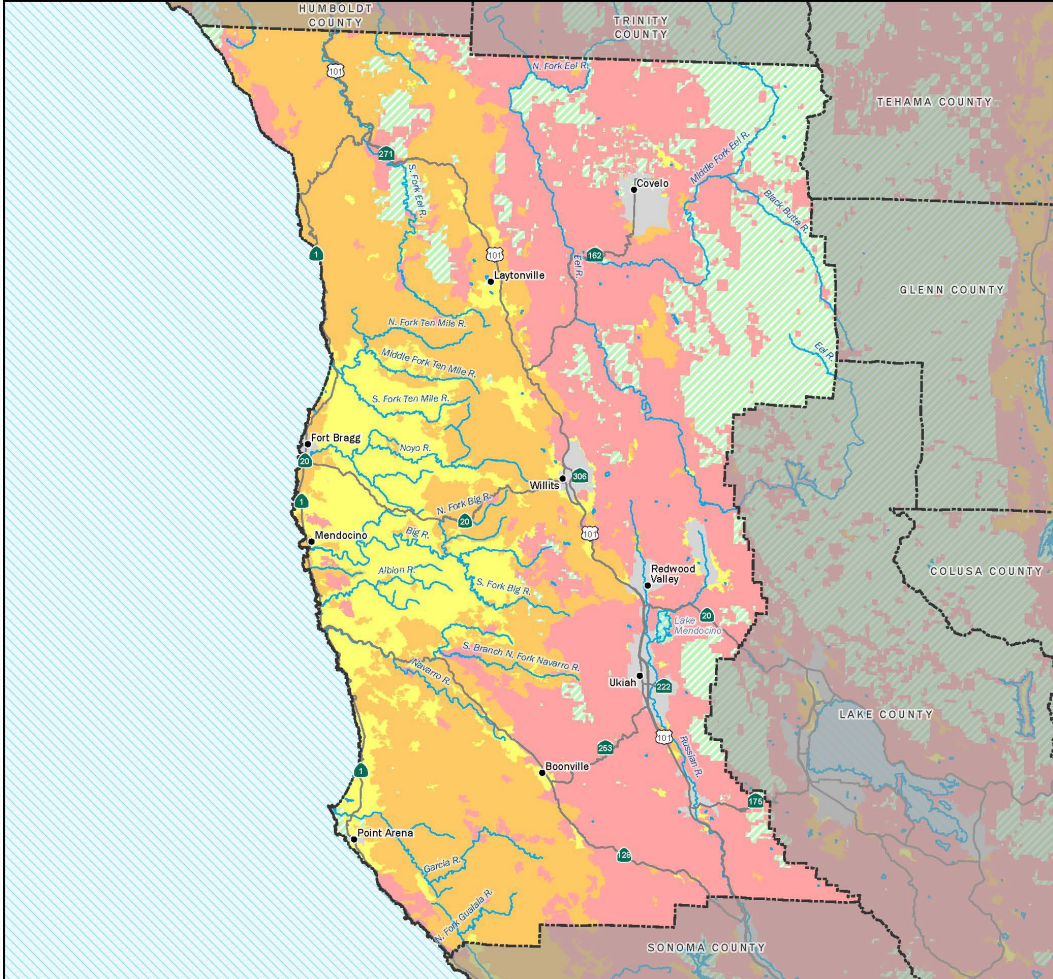




MENDOCINO COUNTY

**State Responsibility Area
Fire Hazard Severity Zones**

November 21, 2022

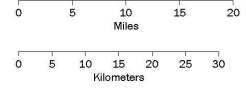


Fire Hazard Severity Zones in State Responsibility Area (SRA)

Very High	803,472 Acres
High	735,903 Acres
Moderate	314,523 Acres

Fire Protection Responsibility Areas (non-SRA)

Federal Responsibility Area (FRA)
Local Responsibility Area (LRA)



Projection: NAD 83 California Teale Albers
Scale: 1:600,000 at 11" x 17"

Public Resources Code 4201-4204 directs the California Department of Forestry and Fire Protection (CAL FIRE) to map fire hazard within State Responsibility Areas (SRA) based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread. These zones, referred to as Fire Hazard Severity Zones (FHSZ), classify a wildland zone as Moderate, High, or Very High fire hazard based on the average hazard across the area included in the zone.

Access PDF versions of the maps at <https://osfm.fire.ca.gov/fhsz-maps>. For more information, please visit the Frequently Asked Questions document for the 2023 Fire Hazard Severity Zones at <https://osfm.fire.ca.gov/fhsz> or scan the QR code at right. If you have further questions, please call 916-633-7655 or email FHSZcomments@fire.ca.gov.



Scan or click the QR code for more information and to visit the interactive FHSZ viewer.

The State of California and the Department of Forestry and Fire Protection make no representations or warranties regarding the accuracy of data or maps. Neither the State nor the Department shall be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any claim by any user or third party on account of, or arising from, the use of data or maps.

Obtain FRAP maps, data, metadata, and publications at <https://frap.fire.ca.gov>. For more information, please call 916-633-7655 or email FHSZcomments@fire.ca.gov.

Garin Newsom, Governor, State of California
Wade Crowfoot, Secretary for Natural Resources, California Natural Resources Agency
Mike Richwine, State Fire Marshal, California Department of Forestry and Fire Protection

Data Sources:
CAL FIRE Fire Hazard Severity Zones (FHSZSRA_DRAFT_23_1)
CAL FIRE State Responsibility Areas (SRA22_2)



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