



MOSQUITO Incident Decision

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09/08/22 21:12

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1. Decision

1.1. Decision Summary

Decision Information

NAME	VALUE
Published	09/08/2022 21:12 CDT
Estimated Cost	\$80,000,000
Incident Owner(s)	Karen Walden
Editor(s)	ELI ILANO, Gabriel Garcia, Joseph Garrotto, Jeff Marsolais, Katy Parr, Linda Wadleigh, Mary Grim, Matt House, Matthew Jedra, Rachel Hutchinson, Terry Lim, Teresa Riesenhuber
Reviewer(s)	
Approver(s)	ELI ILANO, Gabriel Garcia, Jeff Marsolais, Matthew Jedra
Natl Preparedness Level	4

Decision History

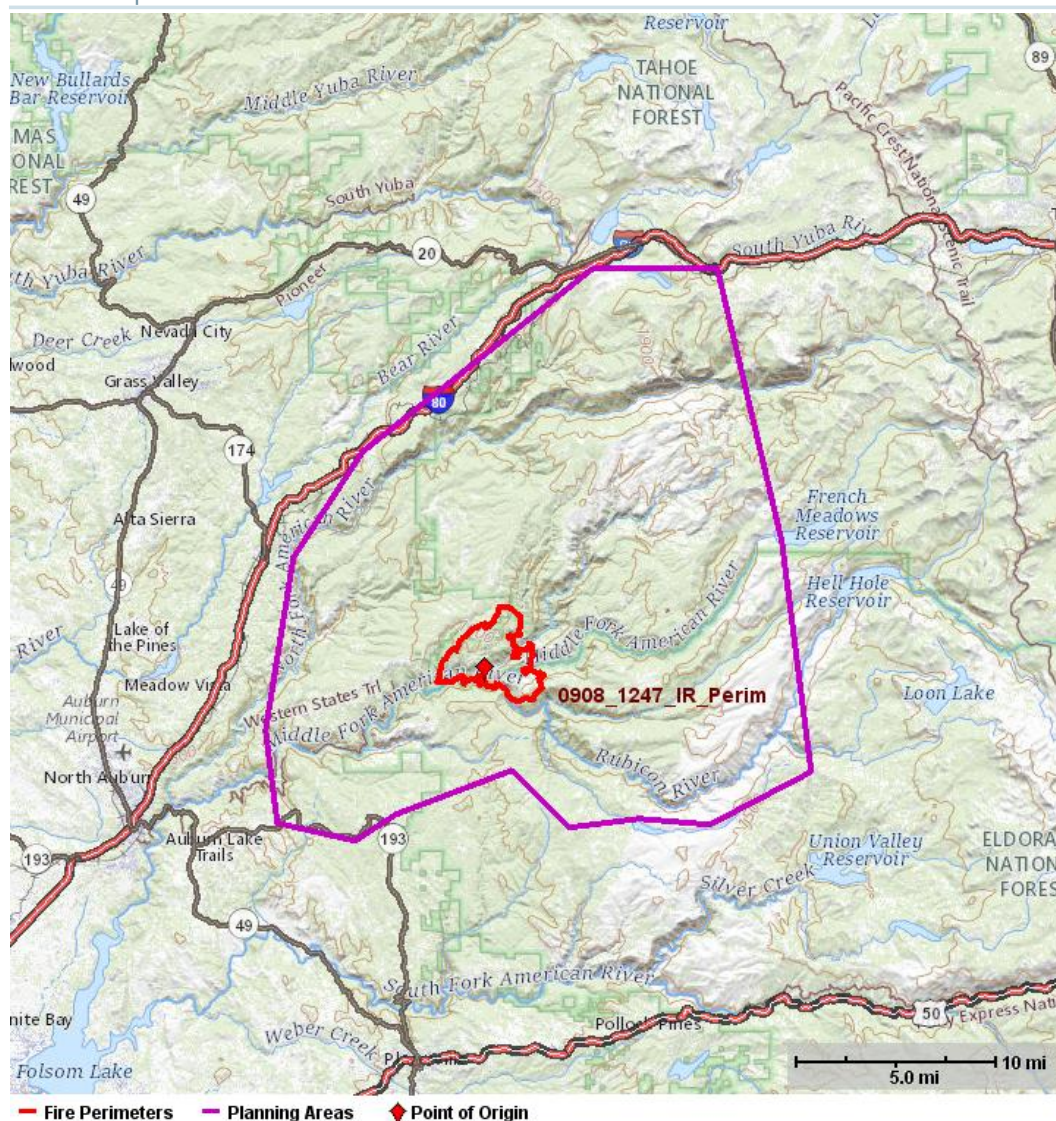
Editor Name	Action	Date (CDT)	Comment
ILANO, ELI	Published	09/08/2022 21:12	
ILANO, ELI	Approved	09/08/2022 21:12	
Marsolais, Jeff	Approved	09/08/2022 20:37	
Jedra, Matthew	Approved	09/08/2022 20:01	
Garcia, Gabriel	Approved	09/08/2022 19:52	
Walden, Karen	Review Requested	09/08/2022 19:45	
Walden, Karen	Review Requested	09/08/2022 19:45	There are 4 approvers to look at this.
Walden, Karen	Created	09/08/2022 19:04	

1.2. Incident Information

Incident Information

NAME	VALUE
Incident Name	MOSQUITO
Unique Fire Identifier	2022-CATNF-001371
Responsible Unit Name	Tahoe National Forest
FireCode	P1W8
P-Code	P5P1W8
Point of Origin	39.00591N / 120.7447 W
Incident Size	0.1acres
Latest WFDSS Perimeter Size	8,265acres
Incident Cause	Undetermined
Incident Type	Wildfire
Incident Discovery	09/06/2022 18:27
Contained	
Controlled	
Out	
Jurisdictional Unit	Not available
Jurisdictional Agency(s)	BLM, USFS, Other, State
Geographic Area (prep level)	Northern California (3)
Owner Name(s)	Karen Walden

Incident Map



1.3. Weather

Fire Weather Zone Forecast

000
FNUS56 KSTO 082107
FWFSTO
Fire Weather Planning Forecast for Interior Northern California
National Weather Service Sacramento CA
207 PM PDT Thu Sep 8 2022
...Very Hot Temperatures and Low Humidity through Friday...
...Isolated Thunderstorms Over the Sierra into Next Week...
.DISCUSSION...
Strong high pressure will continue over the area bringing very hot temperatures and low humidity through Friday. Poor overnight recoveries continue for the foothills into Saturday before increasing moisture and cooler temperatures return this weekend into next week. Isolated showers and storms possible each afternoon and evening over the Sierra, with the better chances for storms beginning on Saturday. Locally breezy wind possible at times through the Delta and over higher terrain.
CAZ221-269-092115-
Stanislaus NF West of the Sierra Crest-
Northern Sierra Including the Tahoe and Eldorado NF/S West of the Sierra Crest-
207 PM PDT Thu Sep 8 2022
.TONIGHT...
* Sky/Weather.....Clear. Areas of smoke through the night.
Hazy after midnight.
* Min Temperature.....67-76 lower elevations...except 55-65 higher elevations.
* 24 HR Trend.....Little change.
* Max Humidity.....26-39 percent.
* 24 HR Trend.....4 percent down.
* 20-Foot Winds.....
* Valleys/Lwr Slopes...Northeast winds 4 to 10 mph.
* Ridges/Upr Slopes...Northeast winds 4 to 10 mph with local gusts up to 20 mph.
* LAL.....1.
* CWR.....0 percent.
.FRIDAY...
* Sky/Weather.....Mostly sunny. Hazy and areas of smoke.
* Max Temperature.....95-100 lower elevations...except 81-91 higher elevations.
* 24 HR Trend.....Little change.
* Min Humidity.....11-16 percent.
* 24 HR Trend.....Little change.
* 20-Foot Winds.....
* Valleys/Lwr Slopes...East winds up to 8 mph shifting to the west in the afternoon.
* Ridges/Upr Slopes...East winds 4 to 10 mph shifting to the west in the afternoon.
* LAL.....1.
* CWR.....0 percent.
.FRIDAY NIGHT...
* Sky/Weather.....Mostly clear. Hazy and areas of smoke.
* Min Temperature.....66-74 lower elevations...except 54-64 higher elevations.
* Max Humidity.....43-58 percent.
* 20-Foot Winds.....
* Valleys/Lwr Slopes...South winds up to 7 mph shifting to the east after midnight.
* Ridges/Upr Slopes...Southwest winds up to 8 mph shifting to the east after midnight.
* LAL.....1.
* CWR.....0 percent.
.SATURDAY...
* Sky/Weather.....Mostly sunny then becoming partly cloudy late in the morning then becoming mostly cloudy. Hazy and areas of smoke in the morning. At higher elevations, a slight chance of showers and thunderstorms in the afternoon.
* Max Temperature.....84-90 lower elevations...except 72-82 higher elevations.
* Min Humidity.....23-38 percent.
* 20-Foot Winds.....
* Valleys/Lwr Slopes...East winds up to 7 mph shifting to the southwest 4 to 9 mph in the afternoon.
* Ridges/Upr Slopes...East winds up to 8 mph shifting to the southwest 4 to 9 mph in the afternoon.
* LAL.....1 increasing to 2 late in the morning.
* CWR.....0 percent.
\$\$
.Extended...
...Shasta County Mountains and Coastal Range
.SATURDAY NIGHT...Mostly cloudy. Lows 56 to 66. Southwest winds

Fire Weather Zone Forecast

up to 10 mph.
.SUNDAY...Partly cloudy. Highs 76 to 86. South winds up to 10 mph.
.SUNDAY NIGHT...Mostly cloudy. Lows 56 to 66. West winds up to 10 mph.
.MONDAY...Partly cloudy. Highs 75 to 85. Southwest winds up to 10 mph.
.MONDAY NIGHT...Mostly clear. Lows 52 to 62. West winds up to 10 mph.
.TUESDAY...Mostly sunny. Highs 71 to 81. Southwest winds up to 10 mph.
.TUESDAY NIGHT...Mostly clear. Lows 48 to 58. West winds up to 10 mph.
...Northern Sierra and Lassen Park
.SATURDAY NIGHT...Mostly cloudy. Lows 55 to 65. Southeast winds up to 10 mph.
.SUNDAY...Partly cloudy. Highs 76 to 84. Southwest winds up to 13 mph.
.SUNDAY NIGHT...Mostly cloudy. Lows 55 to 65. East winds up to 10 mph.
.MONDAY...Partly cloudy with a slight chance of showers and thunderstorms. Highs 75 to 84. Southwest winds up to 10 mph.
.MONDAY NIGHT...Mostly clear. Lows 52 to 62. Variable less than 5 mph.
.TUESDAY...Mostly sunny. Highs 72 to 80. South winds up to 10 mph.
.TUESDAY NIGHT...Mostly clear. Lows 48 to 58. Variable less than 5 mph.
...Sierra Nevada Foothills
.SATURDAY NIGHT...Mostly cloudy. Lows 64 to 69. Southeast winds up to 10 mph.
.SUNDAY...Mostly cloudy. Highs 82 to 87. Southwest winds up to 10 mph.
.SUNDAY NIGHT...Mostly cloudy. Lows 64 to 70. East winds up to 10 mph.
.MONDAY...Mostly sunny. Highs 83 to 88. Variable less than 5 mph.
.MONDAY NIGHT...Mostly clear. Lows 61 to 67. Variable less than 5 mph.
.TUESDAY...Mostly sunny. Highs 79 to 84. Southwest winds up to 10 mph.
.TUESDAY NIGHT...Mostly clear. Lows 56 to 61. Variable less than 5 mph.
...Central Valley and Delta
.SATURDAY NIGHT...Mostly cloudy. Lows 63 to 68. Southwest winds 5 to 15 mph.
.SUNDAY...Mostly cloudy. Highs 86 to 91. Southwest winds up to 13 mph.
.SUNDAY NIGHT...Mostly cloudy. Lows 64 to 69. Southwest winds 5 to 15 mph.
.MONDAY...Mostly sunny. Highs 88 to 93. Southwest winds up to 10 mph.
.MONDAY NIGHT...Mostly clear. Lows 59 to 64. Southwest winds 5 to 10 mph.
.TUESDAY...Mostly sunny. Highs 83 to 88. Southwest winds 5 to 10 mph.
.TUESDAY NIGHT...Mostly clear. Lows 55 to 60. South winds 5 to 10 mph.
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1.4. Risk

Relative Risk

NAME	VALUE
Relative Risk	High
Duration	High
Saved By	Walden, Karen
Completed	09/08/2022 19:24 CDT

Relative Risk Notes

Values, hazards and probability all rated as high. These graphs depict an accurate picture of risk. Local augmented information includes large accumulation of heavy fuels and fine fuels from dead insect-killed trees falling to the ground. Heavy winter storms knocked down additional fuels. Years of drought conditions have also contributed towards fuel accumulations. Limited access makes suppression difficult.

Values Notes

Fire includes multiple jurisdictions, communities and scattered homes throughout the area, local government administrative facilities, Forest Service and local government fire stations, and public schools. In the immediate vicinity Foresthill is to the west, Foresthill Forest Genetics Center to the north and Big Oak Flat with a large archaeological site to the east. A major Tahoe National Forest recreation area at Sugar Pine Reservoir and OHV areas north of Michigan Bluff along with the Western States Trail. The Placer Grove of Giant Sequoias is the most northern grove of Giant Sequoias and is a botanical special interest area. French Meadows and Hell Hole Reservoirs have campgrounds and critical Placer County Water Agency Infrastructure to the east. The hydroelectric power and powerlines that provide power to users throughout the greater Sacramento Region. The 230K transmission line hydro power that comes out of Hell Hole Reservoir had to be shut down and it cannot provide service to the large communities of Auburn and Folsom during California's hottest heat wave of the year when the energy supply is limited for the large demand. Water from the Middle Fork American River goes to Folsom Reservoir and provides domestic water supply the Greater Sacramento area and Central Valley agricultural user. To the south, Volcanoville, Quintette, Georgetown and Greenwood are at risk. Archaeological concerns include historic mining sites and precontact sites. Layne's butterweed (*Pakera layneae*) a threatened plant and California red-legged frog a threatened frog are in the Michigan Bluff area and includes critical habitat and frog ponds. Protected activity centers for California spotted owl and northern goshawk. Habitat for bats. Mosquito Cattle Range Allotment and Chipmunk Allotment to the east are in the path of the predicted fire.

Additional values are at risk within the larger planning area. The North Fork American Wild and Scenic River is the only designated wild and scenic river on Tahoe National Forest. The Rubicon River is a designated Wild Trout River and is eligible as a Wild and Scenic River. Robinson Flat historic site and campground and the nearby Duncan Peak Lookout are to the far east. Highway 80 is a major transportation and commerce route. Within the Highway 80 corridor are multiple small communities, the Union Pacific Railroad, the Kinder Morgan gas pipeline, PG&E transmission lines, and communication sites. Private forest lands (e.g., SPI) and numerous mining claims are dispersed throughout planning area. Hazards

Extremely hot and dry conditions. Fire behavior affected by steep topography with few roads and no natural barriers in the canyon. Long range spotting over 1/4 mile, crown fire activity, high resistance to control. Fuel condition has continuous fuels and minimal fuel treatments in the immediate area. Indices have been at or above the 95th percentile and are expected to continue. Extensive insect and drought-caused tree mortality. Fire return intervals have been missed and is outside the historic range of variability. Potential for fire growth is large/high due to hot dry conditions are expected to continue and expected dry monsoon conditions over the weekend of September 10 are expected to affect fire behavior.

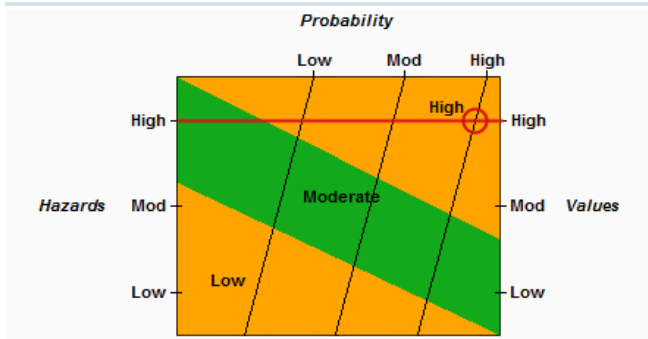
Hazards Notes

Extremely hot and dry conditions. Fire behavior affected by steep topography with few roads and no natural barriers in the canyon. Long range spotting over 1/4 mile, crown fire activity, high resistance to control. Fuel condition has continuous fuels and minimal fuel treatments in the immediate area. Indices have been at or above the 95th percentile and are expected to continue. Extensive insect and drought-caused tree mortality. Fire return intervals have been missed and is outside the historic range of variability. Potential for fire growth is large/high due to hot dry conditions are expected to continue and expected dry monsoon conditions over the weekend of September 10 are expected to affect fire behavior.

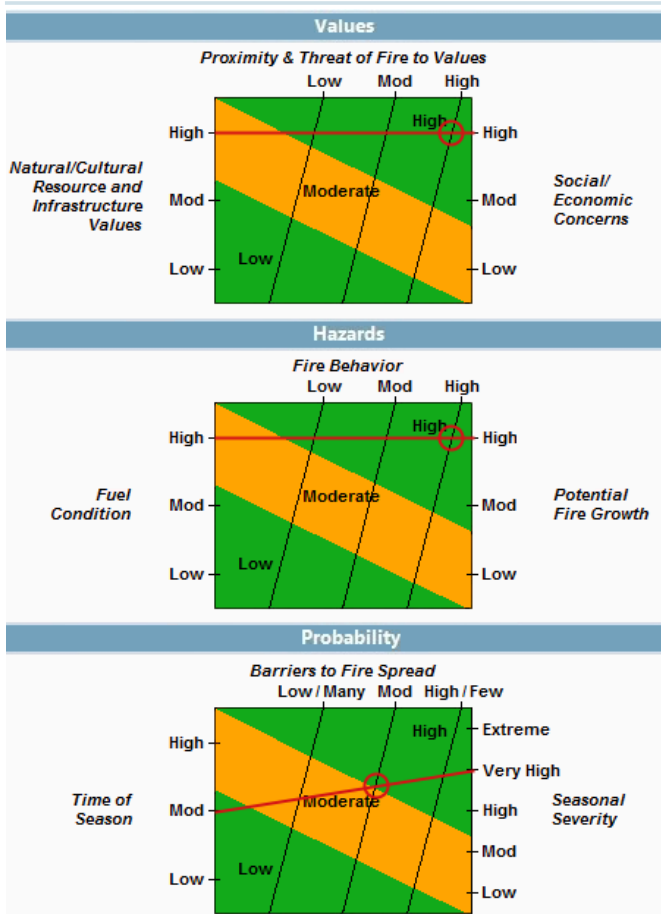
Probability Notes

The time of season is in the middle of the historic fire season. It is a peak burning period. Seasonal severity is above the critical percentiles and seasonal averages. The area is in a drought situation for many years. Live and dead fuel moistures are average to below average. Barriers to fire spread have few if any roads. The Middle Fork American River is wide, but fire has spotted to the opposite side. The fire could get into Eldorado Canyon and the North Fork Middle Fork American River, which are separated from each other by Deadwood Ridge. Mosquito Ridge is a major ridge that runs northeast. Chicken Hawk Ridge runs north toward Foresthill Divide. Some old fires could be used as barriers: King and Ralston fires. Granite in the Granite Chief Wilderness at the far east would be an ultimate barrier to fire spread. Significant spread potential to the north and the west, where there are communities, as there are few barriers and steep canyons. Communities affected include Foresthill, Todd Valley, Iowa Hill, Michigan Bluff, Quintette, Volcanoville, Colfax and communities along the Highway 80 corridor.

Relative Risk Chart



Relative Risk Inputs



Organization Assessment

NAME	VALUE
Unit Recommended Org	Type 1
Saved By	Walden, Karen
Completed	09/08/2022 19:25 CDT

Organization Assessment Notes

A Type 1 organization is necessary for fighting this fire. Multiple values are at risk. There is a high relative risk, high duration expected. The concerns are also all high. Significant values of risk at both sides of river, communities, power supply coming from Ralston Powerhouse, Placer Grove of Giant Sequoias, Layne's butterweed (*Pakera layneae*) a threatened plant and California red-legged frog a threatened frog, watersheds of critical values: Placer County Water Agency. Probability of high impact to communities in a one to three day time frame. The weather is the hottest week of the year, dry conditions. Three Cal Fire Units. Huge geographic boundary. Unified command may have finance issues.

Relative Risk Notes

Values, hazards and probability all rated as high. These graphs depict an accurate picture of risk. Local augmented information includes large accumulation of heavy fuels and fine fuels from dead insect-killed trees falling to the ground. Heavy winter storms

knocked down additional fuels. Years of drought conditions have also contributed towards fuel accumulations. Limited access makes suppression difficult.

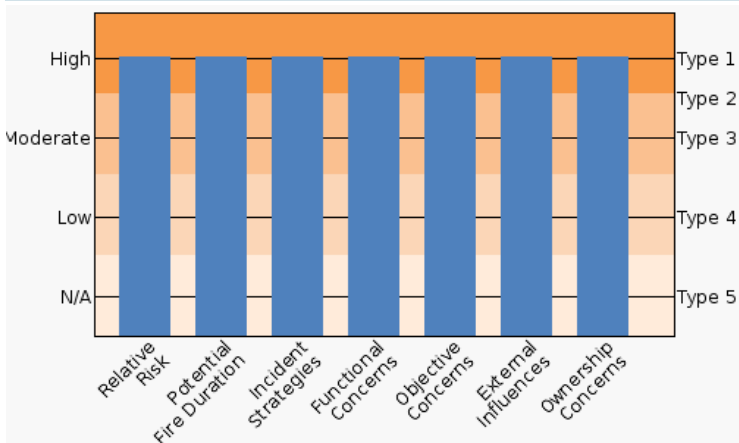
Implementation Difficulty Notes

Potential Fire Duration- is moderate to high/long: Recent fire behavior and fire history in this area. Fire is expected to last for a long period of time requiring long term planning and continual management efforts. Active fire spread is supported by fuel type and condition, weather, and time of year. Season ending event is not predicted to occur for a number of weeks or months. Incident Strategies or course of action- High- have management actions that involve a variety of resources, are complex and the strategies are dynamic. Restrictions or closures in place or are taking place real time and expanding. Firefighter exposure at maximum levels due to the complexity of the actions being taken, steepness and remoteness of terrain, the multitude of unlike resources, and values at risk. Daily periodic assessments are taking place because the fire environment is changing requiring updates to the decision or consideration by the local unit. Functional Concerns- High- Current fire warrants three or more divisions or potential exists for increased functional areas. Special functional positions (C&G) or units are needed. Adequate resources may be limited or difficult to obtain. Substantial aviation operations are taking place requiring significant staffing. Inversion in the morning makes aerial suppression difficult. Complex operations are taking place which lead to extensive safety management. Terrain and fuels make actions challenging to support and a safety hazard for fire fighters.

Socio/Political Concerns Notes

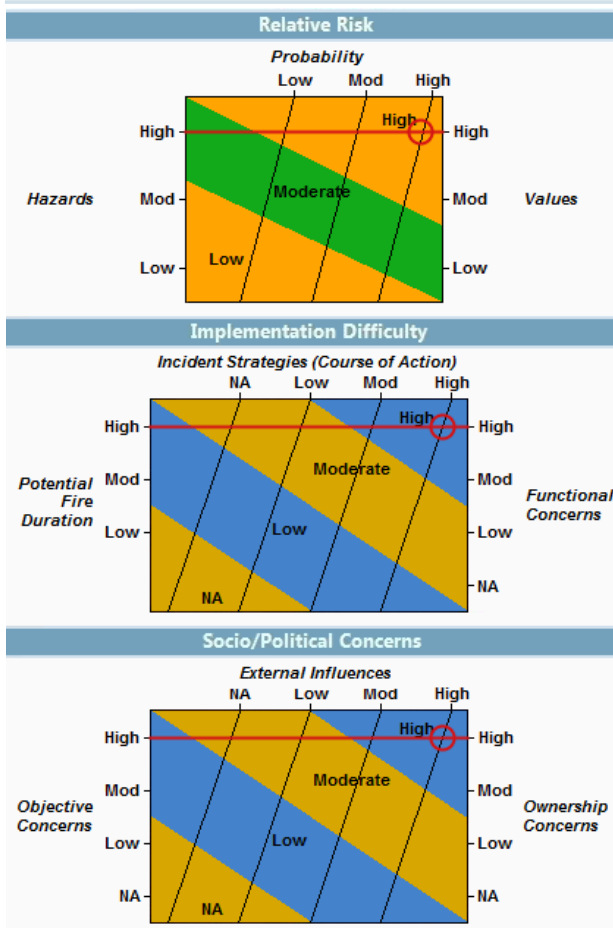
Objective concerns -high- Objectives may compete among cooperators and are difficult to achieve. Objectives are complex requiring multiple tactics on various parts of the fire. Multiple objectives with high likelihood of shifting emphasis between resource benefits and protection. WFDSS decisions and course of action may be in need of or may be in process of being revised. External influences- high- High impact on neighbors or visitors. High internal or external interest and concern. Pre-existing controversy/ local or regional relationships. Media present during operations. High likelihood of smoke impacts to multiple smoke sensitive areas with complex mitigation actions required. Visibility complaints likely. Attention focus may elevate to national levels and Agency leaders. Highly sensitive political interests. Ownership concerns- high- Multi-jurisdictional fire burning or has potential to burn onto multiple units of different jurisdiction and/or private lands. Potential for unified command. Potential disagreement over responsibility. Differing fire policies across jurisdictional boundaries and cooperators. High concerns over protection of values and jurisdictional responsibility for the values. Diverse objectives/ requirements, and course of action across the jurisdictions.

Organization Assessment Chart



Unit Recommended Org: Type 1

Organization Assessment Inputs



Planning Area Values Inventory Generated at 09/07/2022 16:59

Planning Area Name: 09/08/2022 21:12
 Planning Area Size: 367,163 acres

Category	Value	Data Source	Currency	Coverage
BLM Buildings	2	BLM Branch of Architecture and Engineering	12/14/2021	National
Building Clusters: El Dorado, CA	1,566	Various	Various	Available counties
Building Clusters: Placer, CA	2,712	Various	Various	Available counties
CACND - Mother Lode FO / RNA Paleo Resources	267 acres	CAENF		Unit
CAENF - Admin / Administrative	2,335 acres	CAENF		Unit
CAENF - Admin / W&SR Eligible	7,897 acres	CAENF		Unit
CAENF - Admin / WUI Defense	29,311 acres	CATNF		Unit
CAENF - Admin / WUI Threat	15,509 acres	CAENF		Unit
CAENF - Biological / CRLF Critical Hab	1,130 acres	CAENF		Unit
CAENF - Biological / D53 D55 Owl PAC	11,583 acres	CAENF		Unit
CAENF - Biological / Goshawk PAC	4,526 acres	CAENF		Unit
CAENF - Biological / Invasive D53 D55	1,707 acres	CAENF		Unit
CAENF - Biological / TESP	449 acres	CAENF		Unit
CAENF - Hydrology / D53 RCA	15,212 acres	CAENF		Unit
CAENF - Hydrology / D55 RCA	401 acres	CATNF		Unit

Category	Value	Data Source	Currency	Coverage
CAENF - Infrastructure / Admin Sites	43 acres	CAENF		Unit
CAENF - Restricted NO DWNLD / Cult Line ELIGIBLE	3.8 miles	CAENF		Unit
CAENF - Restricted NO DWNLD / Cult Line HIS	78.3 miles	CAENF		Unit
CAENF - Restricted NO DWNLD / Cult Poly ELIGIBLE	23 acres	CATNF		Unit
CAENF - Restricted NO DWNLD / Cult Poly HIS	285 acres	CAENF		Unit
CAENF - Restricted NO DWNLD / Cult Poly MUL	133 acres	CAENF		Unit
CAENF - Restricted NO DWNLD / Cult Poly PRE	198 acres	CAENF		Unit
CAENF - Restricted NO DWNLD / Cult Poly UNK	5 acres	CAENF		Unit
CATNF - Areas of interest / Special interest	493 acres	CATNF		Unit
CATNF - Habitat / CA red-legged frog	1	CATNF		Unit
CATNF - Habitat / FYL frog - ARRD	18	CATNF		Unit
CATNF - Habitat / Goshawk PACS - ARRD	4,017 acres	CACND		Unit
CATNF - Habitat / Owl PACS - ARRD	10,937 acres	CATNF		Unit
CATNF - Habitat / TES plants - ARRD	839 acres	CAENF		Unit
CATNF - Mines / Active Mines T14N	11	CATNF		Unit
CATNF - Mines / Active Mines T14N 2	5	CATNF		Unit
CATNF - Mines / Active Mines T14N 3	35	CATNF		Unit
CATNF - Mines / Active Mines T14N 4	69	CATNF		Unit
CATNF - Mines / Active Mines T14N 5	14	CATNF		Unit
CATNF - Mines / Active Mines T14N 6	15	CATNF		Unit
CATNF - Mines / Active Mines T15N	8	CATNF		Unit
CATNF - Mines / Active Mines T15N_1	56	CATNF		Unit
CATNF - Mines / Active Mines T15N_2	51	CATNF		Unit
CATNF - Mines / Active Mines T15N_3	51	CATNF		Unit
CATNF - Mines / Active Mines T15N_4	43	CATNF		Unit
CATNF - Potential Hazards / Abandoned mines_4	88	CATNF		Unit
CATNF - Structures / Campgrounds	10	CATNF		Unit
CATNF - Structures / Home Tracts	9 acres	CAENF		Unit
CATNF - Structures / Lookouts	1	CATNF		Unit
CATNF - Structures / TNF Admin Sites	3	CATNF		Unit
CATNF - Water Feature / SPI Waterholes TNF S	13	CATNF		Unit
Campgrounds	41	BLM/USFS	04/21/2022	National (BLM and USFS only)
Communication Towers	153	HIFLD	02/17/2022	National
County: El Dorado, CA	60,942 acres	US Census Bureau - TIGER	01/20/2022	National
County: Placer, CA	306,214 acres	US Census Bureau - TIGER	01/20/2022	National
Electric Power Plants	3	HIFLD	05/23/2022	CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands
Electric Sub Stations	3	HIFLD	07/01/2022	CONUS, Western Canada, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands

Category	Value	Data Source	Currency	Coverage
Electric Transmission Lines	42.1 miles	HIFLD	04/02/2022	CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands
Est Ground Evac Time: 1-2 Hrs	151,949 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 2-4 Hrs	70,641 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 4-6 Hrs	19,032 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 6+ Hrs	5,937 acres	National Park Service NIFC	11/01/2012	CONUS
Estimated Population	10,781	LandScan USA	2018	CONUS, AK, HI, PR
Habitat: California Red-Legged Frog	1,245 acres	US Fish and Wildlife Service	03/22/2022	National
Habitat: Sierra Nevada Yellow-Legged Frog	5,584 acres	US Fish and Wildlife Service	03/22/2022	National
IRA: Duncan Canyon IRA	2,300 acres	PAD-US 2.1	09/15/2020	National
IRA: North Fork American River IRA	21,955 acres	PAD-US 2.1	09/15/2020	National
IRA: North Fork Middle Fork American River IRA	11,245 acres	PAD-US 2.1	09/15/2020	National
IRA: Rubicon IRA	4,872 acres	PAD-US 2.1	09/15/2020	National
Landowner Category: BIA	20 acres	WFM RDA	05/22/2022	National
Landowner Category: BLM	22,116 acres	WFM RDA	05/22/2022	National
Landowner Category: BOR	5,765 acres	WFM RDA	05/22/2022	National
Landowner Category: County	70 acres	WFM RDA	05/22/2022	National
Landowner Category: OthLoc	2 acres	WFM RDA	05/22/2022	National
Landowner Category: Private	131,071 acres	WFM RDA	05/22/2022	National
Landowner Category: State	569 acres	WFM RDA	05/22/2022	National
Landowner Category: USFS	207,526 acres	WFM RDA	05/22/2022	National
Mines	2	HIFLD	06/12/2017	National
Natl Historic Trails	2.3 miles	NPS National Trails System	04/22/2021	National
Natl Recreation Trails	26.1 miles	National Park Service	02/28/2019	National
Natl Scenic Byways	0.7 miles	National Park Service	02/28/2019	National
Natl Wild Scenic Rivers	29.5 miles	USFS Enterprise Data Warehouse	07/29/2019	National
Oil and Gas Pipelines	9.5 miles	HSIP Gold 2015	04/2015	National
Other Areas: Foresthill Divide Pine Seed Orchard	305 acres	PAD-US 2.1	09/15/2020	National
Other Areas: North Fork American Wild and Scenic River	3,694 acres	PAD-US 2.1	09/15/2020	National
Other Areas: North Fork American, California	9,595 acres	PAD-US 2.1	09/15/2020	National
Other Areas: Placer County Big Tree Grove	160 acres	PAD-US 2.1	09/15/2020	National
Other Areas: Suqar Pine Point	644 acres	PAD-US 2.1	09/15/2020	National
Ozone Non-Attainment	367,158 acres	EPA	07/01/2015	National
Responsible Agency: State	101,949 acres	Various	03/15/2022	AK, CA, ID, MT, NM, MN
Responsible Agency: USFS	265,208 acres	Various	03/15/2022	AK, CA, ID, MT, NM, MN
Roads	19.8 miles	NAVTEQ	11/2012	National
USFS Buildings	65	USFS (EDW)	01/18/2022	National
USFS Trails	295.0 miles	USFS	09/29/2021	CONUS, AK, PR

Coverage of Values Queried that Produced No Results

BIA Admin Boundaries (National), BLM Horse and Burro (National), BLM Oil / Gas Leases (National), BLM Range Allotments (National), Class 1 Airsheds (National), NPS Buildings (National), NRA (National), Natl Scenic Trails (National), Particulates Non-Attainment (National), Protecting Unit (AK, CA, ID, MT, NM, MN), Sage Grouse Habitat (National), TNC Lands (National), USFWS Trails (CONUS, AK, HI, PR), WSA (National), Wilderness (National)

1.5. Objectives

Incident FMU/Strategic Objective Code List

Unit	FMU/Strat Obj Code	Acres
CACCA	Central Cal General	22
CACND	American River	15,109
CACND	North Fork American	7,047
CAENF	GEN - general: remaining National Forest	53,592
CAENF	NON - All Non-Federal In-Holdings	41,505
CAENF	SEA	10,111
CATNF	NFS	98,295
CATNF	WUI	56,882

Spatial Fire Planning Inventory

Category	Value	Data Source	Currency	Coverage
Aqua Retardant Avoidance	35,087 acres	USDA FS Enterprise Data Warehouse	03/31/2022	National including Alaska
Mgmt Req: D53 RCA	15,210 acres	CAENF	Current	Unit Level
Mgmt Req: D55 RCA	401 acres	CAENF	Current	Unit Level
Mgmt Req: Goshawk PAC	4,526 acres	CAENF	Current	Unit Level
Mgmt Req: Owl PAC	11,292 acres	CAENF	Current	Unit Level
Mgmt Req: WSR	7,897 acres	CAENF	Current	Unit Level
Retardant Avoidance	32,520 acres	USDA FS Enterprise Data Warehouse	06/30/2022	National (USFS Units only), AK

Incident Objective List

Activated	Incident Objective
09/08/2022	Planning boundry is identified to be east of Rucky Chuck, south of Interstate 80, west of French Meadows Reservoir, and north of Wentworth Springs Road. The immediate objectives are to keep the fire south of the Foresthill Divide, north of Sand Mountain, east of Foresthill, and west of French Meadows Dam.
09/08/2022	Provide public safety and protect forest resources (TNF LRMP, 1990). Protect communities from wildfire and prevent the loss of life and property (SNFPA ROD 2004, p45)
09/08/2022	Foresthill Forest Genetics Center has trees growing for Sierra Nevada seed source. This is one of 3 seed sources for the Sierra Nevadas. It includes rust-resistant sugar pine trees and giant sequoia seed stock.

Incident Requirement List

Activated	Incident Requirement
09/08/2022	Protect Placer County Grove of Sierra Redwoods (Big Trees Grove) south of the 96 and 16 road. It is a botanical special interest area. It is the northen-most grove of giant sequoias. The giant sequoias have been threatened by multiple large-acreage fires in the past 5 years. California spotted owl and northern goshawk protected activity centers (PAC) are there.

Strategic Objective List

Unit	Shape/ FMU	Activated	Strategic Objective
CACND	American River	05/03/2019	<ul style="list-style-type: none"> • Tailor strategies and tactics to avoid areas with significant constraints including critical wildlife habitat, T&E species, areas of soil instability, areas with cultural resource value and sensitive plant communities. • Prevent unacceptable impacts from the use of heavy equipment in identified sensitive areas.
CACND	North Fork American	05/03/2019	<ul style="list-style-type: none"> • Tailor strategies and tactics to avoid areas with significant constraints including critical wildlife habitat, T&E species, areas of soil instability, areas with cultural resource value and sensitive plant communities. • Prevent unacceptable impacts from the use of heavy equipment in identified sensitive areas.

Strategic Objective List

Unit	Shape/ FMU	Activated	Strategic Objective
CAENF	<Unit>	07/22/2019	Provide public safety and protect forest resources (ENF LRMP, 1989, pp4-116). Protect communities from wildfire and prevent the loss of life and property (SNFPA ROD 2004, p45).
CAENF	GEN	11/13/2017	Confine, contain, or control all wildfires within the Eldorado protection boundary to meet resource objectives with a least cost effort as defined by individual management area objectives. Include public and resource protection measures in all planned management activities. (ENF LRMP, 1989, pp. 4-116); Lightning-caused fires may be used to reduce fuel loads or to provide other resource benefits, such as conserving populations of fire-dependent species. (SNFPA ROD 2004, p35; Strategy) These objectives can be accomplished using confinement or containment suppression strategies.
CAENF	NON	11/13/2017	Confine, contain, or control all wildfires within the Eldorado protection boundary to meet resource objectives with a least cost effort as defined by individual management area objectives. Include public and resource protection measures in all planned management activities. (ENF LRMP, 1989, pp. 4-116)
CAENF	SEA	11/13/2017	Consistent with the National Fire Plan goal for restoring fire-adapted ecosystems, fire is restored as a natural process through wildland fire use. The area generally appears to have been affected primarily by the forces of nature (SNFPA ROD 2004, p. 36). Determine allowable fire size objectives for this management area. Use least cost strategies to meet resource objectives. Use "light hand on land" concept in suppression efforts. In the interim, and consistent with basic fire suppression policy, control fires with the minimum impact on the environment. Leave felled tree boles intact. (ENF LRMP, 1989, pp 4-128 & 4-136). Permit lightning caused fires to play, as nearly as possible, their natural ecological role within wilderness. Wildland Fire Use will help maintain and restore historical condition class within the Wilderness (Desolation LMP amendment pages 24 - 25; Mokelumne LMP amendment pages 24-25). The appropriate response for unplanned ignitions that are out of prescriptions is to utilize confine/contain/control fire suppression techniques (Desolation LMP amendment pages 24 - 25; Mokelumne LMP amendment pages 24-25). Lightning-caused fires may be used to reduce fuel loads or to provide other resource benefits, such as conserving populations of fire-dependent species. (SNFPA ROD 2004, p35; Strategy) These objectives can be accomplished using confinement or containment suppression strategies.
CATNF	NFS	05/17/2018	<p>Tahoe National Forest Land Management Plan, December 1990</p> <p>Fire Protection Strategies</p> <ol style="list-style-type: none"> 1. Continuous Fuels <ol style="list-style-type: none"> a. Contain: Fire Intensity Level 1. b. Control: Fire Intensity Levels 2-6. 2. High Country Noncontinuous Fuels <ol style="list-style-type: none"> a. Contain: Fire Intensity Levels 1-2. b. Control: Fire Intensity Levels 3-6. <p>The contain suppression strategy may be approved and extended to Fire Intensity Levels 3-4 if all of the following conditions are met.</p> <ol style="list-style-type: none"> (1) The fire is in an isolated fuelbed of 5 acres or less; and (2) it is very unlikely that the fire can escape from this isolated area; and (3) no improvements are threatened; and (4) it is 1,000 feet or more from a lake or reservoir. 3. Research Natural Areas <ol style="list-style-type: none"> a. Contain: Fire Intensity Level 1. b. Control: Fire Intensity Levels 2-6. <p>The contain suppression strategy may be approved and extended to Fire Intensity Level 2 if an analysis has shown that a fire at this intensity level does not threaten persons or property outside the area, or the uniqueness of the Reserch Natural Area (RNA).</p> 4. Visual, High Use, Reservoirs, Improvements <ol style="list-style-type: none"> a. Control: Fire Intensity Level 1. <ol style="list-style-type: none"> (1) This strategy is extended within 300 feet of improvements, reservoirs, and areas of concentrated use. (2) Fire Intensity Levels 2-6 is extended throughout the remainder of the Management Area. b. Contain: Fire Intensity Level 1. <ol style="list-style-type: none"> (1) This strategy is extended over 300 feet away from improvements, reservoirs, and area of concentrated use. (2) The contain suppression strategy may be approved and extended to portions of some management areas, such as 009, 025, 034, 047, and 089, which are futher removed from improvements and reservoirs at Fire Intensity Level 2. The strategy should be extended only if analysis shows that a fire at this intensity level will meet management objectives. (Management Area Names listed above by number: 009-Lakes Basin, 025-Milton-Jackson, 034-Bullards, 047-Fordyce, 089-French)
CATNF	WUI	05/17/2018	<p>Tahoe National Forest Land Management Plan, December 1990</p> <p>Wildland Urban Interface/Intermix Suppression Strategy</p> <p>Fire Protection - Improvements</p>

Strategic Objective List

Unit	Shape/ FMU	Activated	Strategic Objective
			1. Control: Fire Intensity Levels 1-6. This suppression strategy is to protect improvements.

Management Requirement List

Unit	Shape/ FMU	Activated	Management Requirement
	Aqua Retardant Avoidance	06/18/2013	The aerial application of fire retardant is allowed for fighting fires. Aerially delivered fire retardant should not be applied to any mapped aquatic avoidance area, waterway or buffer. The only exception to using aerially applied fire retardant in avoidance areas is for the protection of human life or public safety . The Incident Commander is the decision maker. Information concerning the Record of Decision for the Aerial Application of Fire Retardant is available at https://www.fs.fed.us/fire/retardant/index.html
	Retardant Avoidance	05/31/2012	The aerial application of fire retardant is allowed for fighting fires. Aerially delivered fire retardant should not be applied to any mapped terrestrial avoidance area, waterway or buffer. The only exception to using aerially applied fire retardant in avoidance areas is for the protection of human life or public safety . The Incident Commander is the decision maker. Information concerning the Record of Decision for the Aerial Application of Fire Retardant is available at https://www.fs.fed.us/fire/retardant/index.html
CACND	<Unit>	07/14/2013	Firefighter and public safety will be the number one concern in all fire management activities. <ul style="list-style-type: none"> • • Provide for the safety of all personnel assigned to the incident. • Assure that safety of firefighter, aviation, support personnel, and public is the highest priority at all times for the duration of the incident. •
CACND	<Unit>	07/14/2013	The highest priority is to protect the safety of fire personnel and to protect human life followed by the protection of private property and structures. All strategic and tactical decisions on this will be based on sound risk management principles.
CACND	<Unit>	07/14/2013	Develop and implement suppression strategies and tactics that will safely, effectively, and efficiently address fire spread commensurate with values at risk.
CACND	<Unit>	07/14/2013	Provide aggressive initial attack along the wildland urban interface to protect life and property, and for in-holdings throughout the FMU.
CACND	<Unit>	07/14/2013	Provide protection to values at risk that will be potentially impacted by the fire, regardless of ownership.
CACND	<Unit>	07/14/2013	Tailor strategies and tactics to avoid areas with significant constraints including critical wildlife habitat, T&E species, areas of soil instability, areas with cultural resource value and sensitive plant communities.
CACND	<Unit>	07/14/2013	Monitor the incident to provide for timely and informed decision making as the incident changes.
CACND	<Unit>	07/14/2013	Fire managers will request and work closely with a BLM Agency Representative and a Resource Advisor for all wildland fires that exceed initial attack, or are located in a Wilderness, Wilderness Study Area (WSA) or Area of Critical Environmental Concern (ACEC).
CACND	<Unit>	07/14/2013	Large islands of remaining vegetation between the fire line and already burned areas will not be "burned out", as these areas become extremely important to wildlife and for post fire seed sources for years following a large fire. This same rationale can be applied to snags and logs which are used by many birds and small mammals. Cold trail and leave intact wherever possible.
CACND	American River	05/03/2019	Avoid ground disturbance in the Greenwood Creek area and avoid using Spivey Pond as a water source. Retardant use is prohibited within 500 feet of Spivey Pond.
CACND	North Fork American	05/03/2019	Preserve and protect the "outstanding remarkable values" as identified in the North Fork American Wild and Scenic River Plan.
CAENF	<Unit>	11/15/2017	Human Caused Fires: Human caused fires and trespass will be managed to achieve the lowest cost and fewest negative consequences with primary consideration given to firefighter and public safety and without consideration to achieving resource benefits. (FSM 5103.8) Best Management Practices (BMP): Prevent sediment delivery to aquatic systems through best management practices (Sierra Nevada Forest Plan Amendment 2004). Treatments for fire-suppression damages include, but are not limited to, installing water bars and other drainage diversions in fire roads, firelines, and other cleared areas; seeding, planting and fertilizing to provide vegetative cover; spreading slash, or mulch to protect bare soil; repairing damaged road drainage facilities; clearing stream channels or structures and removing debris deposited by suppression activities which can have adverse life, property, and environmental impacts. This work will be done by the fire fighting forces either as a part of the suppression effort, or before personnel and equipment are released from the fire lines. The incident commander will be responsible, under the direction of the local line officer, for repair of suppression-related resource

Unit	Shape/FMU	Activated	Management Requirement
			<p>damage. (R5 FSH 2509.22 Ch10, BMP6.5) Avoid heavy equipment operation on fragile soils and steep slopes whenever possible. A Resource Advisor will be assigned by the Forest Supervisor to work with Incident Management Teams. An earth scientist should be available to identify fragile soils and unstable areas, and may be assigned to the fire as a Resource Advisor. (R5 FSH 2509.22 Ch10, BMP6.4)</p> <p>Cultural Resources: If possible, utilize local technical specialists prior to engagement, and in the planning process to identify categories of archaeological sites, and recommend appropriate level of protection in accordance with Forest Service Manual 2360, Emergency Undertaking clauses of Section 106 of the National Historic Preservation Act. Utilize local cultural resource specialists or Native American representatives if possible prior to engagement and in the planning process to identify Native American traditional areas, and protect these areas when possible. (Forest Service Manual 2360, Emergency Undertaking, Section 106 of the National Historic Preservation Act.)</p> <p>Threatened, Endangered & FS Sensitive: For All Threatened, Endangered, and Forest Service Sensitive Species of animals and plants, if possible, utilize local technical specialists prior to engagement. (Sierra Nevada Forest Plan Amendment 2004, pg. 59-61)</p> <p>Mature Timber: When possible retain large diameter timber. Minimize impacts to the larger diameter trees whenever possible.</p>
CAENF	D53 RCA	11/15/2017	<p>RCA, CAR, Aquatic Features (Georgetown): During fire suppression activities, consider impacts to aquatic and riparian dependent resources. Where possible, locate incident bases, camps, helibases, staging areas, helispots, and other centers for incident activities outside RCAs or CARs (Sierra Nevada Forest Plan Amendment 2004, pg. 65). Identify and where feasible protect perennial streams and special aquatic features such as springs, fens, bogs, and meadows; where feasible prevent use of mechanical equipment within the obvious influence zone of these areas; 300 ft. for perennial streams and special aquatic features; 150 ft. for intermittent streams (Sierra Nevada Forest Plan Amendment 2004, pg. 42-4). Locate water drafting sites to avoid adverse effects to instream flows and pool habitat depletion. Use screens to protect aquatic species while pump drafting water for suppression activities. Fire Suppression activities are exempt during Initial Attack. Use pumps with low entry velocity to minimize removal of aquatic species including juvenile fish, amphibian egg masses and tadpoles from aquatic habitat (Sierra Nevada Forest Plan Amendment 2004 pg.64). Prohibit storage of fuels and other toxic materials within RCAs and CARs except at designated administrative sites and sites covered by a Special Use Authorization. Prohibit refueling within RCAs and CARs unless there are no there alternatives. Ensure spill plans are reviewed and up-to-date (Sierra Nevada Forest Plan Amendment 2004, pg. 63 #99). Consider using Resource Advisor to identify water sources with known invasives.</p>
CAENF	D55 RCA	11/15/2017	<p>RCA, CAR, Aquatic Features (Pacific): During fire suppression activities, consider impacts to aquatic and riparian dependent resources. Where possible, locate incident bases, camps, helibases, staging areas, helispots, and other centers for incident activities outside RCAs or CARs (Sierra Nevada Forest Plan Amendment 2004, pg. 65). Identify and where feasible protect perennial streams and special aquatic features such as springs, fens, bogs, and meadows; where feasible prevent use of mechanical equipment within the obvious influence zone of these areas; 300 ft. for perennial streams and special aquatic features; 150 ft. for intermittent streams (Sierra Nevada Forest Plan Amendment 2004, pg. 42-4). Locate water drafting sites to avoid adverse effects to instream flows and pool habitat depletion. Use screens to protect aquatic species while pump drafting water for suppression activities. Fire Suppression activities are exempt during Initial Attack. Use pumps with low entry velocity to minimize removal of aquatic species including juvenile fish, amphibian egg masses and tadpoles from aquatic habitat (Sierra Nevada Forest Plan Amendment 2004 pg.64). Prohibit storage of fuels and other toxic materials within RCAs and CARs except at designated administrative sites and sites covered by a Special Use Authorization. Prohibit refueling within RCAs and CARs unless there are no there alternatives. Ensure spill plans are reviewed and up-to-date (Sierra Nevada Forest Plan Amendment 2004, pg. 63 #99). Consider using Resource Advisor to identify water sources with known invasives.</p>
CAENF	Goshawk PAC	07/11/2022	<p>Northern Goshawk: Maintain large diameter trees, multi layer canopy throughout the PAC. If at all possible protect nest trees, minimize nest site disturbance, and protect at least 50 acre nest sites from both mechanical activities, and the on coming fire. If feasible, avoid high intensity and crown fire within the 200 acre PAC. (Sierra Nevada Forest Plan Amendment 2004, pg. 59-61)</p>
CAENF	Owl PAC	06/17/2021	<p>CA Spotted Owl: Maintain large diameter trees, multi layer canopy throughout the PAC. If at all possible protect nest trees, minimize nest site disturbance, and protect at least 50 acre nest sites from both mechanical activities, and the on coming fire. If feasible, avoid high intensity and crown fire within the 300 acre PAC. (Sierra Nevada Forest Plan Amendment 2004, pg. 59-61)</p>
CAENF	WSR	11/15/2017	<p>Eligible Wild & Scenic River: Forest Service-identified eligible and suitable rivers must be protected sufficiently to maintain free flow and outstandingly remarkable values unless a determination of ineligibility or non-suitability is made. Wild Rivers: Cutting of trees and other vegetation is not permitted except when needed in association with a primitive recreation experience, to protect users, or to protect identified outstandingly remarkable values. Examples</p>

Management Requirement List

Unit	Shape/ FMU	Activated	Management Requirement
			of such exceptions include activities to maintain trails or suppress wildfires. Prescribed fire and wildfires managed to meet resource objectives may be used to restore or maintain habitat for threatened, endangered, or sensitive species or restore the natural range of variability. (FSH 1909.12 – LMP Handbook Chapter 80 WSR, 84.3)

1.6. Course of Action

Course of Action

Active	Inactive	Action Item
09/08/2022		The strategy of the Mosquito Fire is full suppression with the intent of defending life and property, local communities, critical infrastructure, and other critical values at risk, maximizing the probability of success with an emphasis on managing risk to responders. Cooperating agencies are involved with the planning process due to the threat to multiple communities; critical electrical, domestic water system, communication infrastructure; transportation corridors; and other critical values.

1.7. Cost

Estimated Final Cost

NAME	VALUE
Estimated Final Cost	\$80,000,000
Method(s) Used	

Comments

Estimated fire cost is based on recent fires of same complexity within similar terrain and values at risk.

1.8. Rationale

[Decision Rationale 9/8/22](#)

My decision for this fire is to use a full suppression strategy with the intent of protecting local communities, infrastructure, and other critical values at risk while maximizing the probability of success with an emphasis on reducing the risk to responders as much as possible. I considered the proximity to communities, critical drought situation, steep terrain, poor access and road conditions, high fuel loading and forecasted continued hot and dry weather with periods of critical winds, as well as the critical shortages and continued need for available resources on other current and future fire incidents.

At present, communities and private inholdings with Placer and El Dorado Counties are under emergency evacuation orders. Additional evacuations are possible if the fire continues to spread. This fire has the potential to be a large, long duration fire that has a high likelihood of continued significant growth.

COOPERATORS

There is a complex list of cooperators, mixed ownership and jurisdictions. The cooperators involved in sharing this decision process are Eldorado National Forest, Tahoe National Forest, CAL FIRE (AEU, NEU), Bureau of Land Management, Auburn State Recreation Area, Bureau of Reclamation, local governments including El Dorado County and Placer County, local fire districts, El Dorado County Sheriff, Placer County Sheriff, Cal Trans, CHP, Placer County Water Agency (PCWA), PG&E, Georgetown Divide Public Utility District and industrial timberlands.

VALUES OF CONCERN

The highest value of concern is firefighter and public safety. Logistical and operational challenges associated with the terrain, air support, and other environmental considerations will be mitigated to provide for firefighter safety and communicated to field crews by the Incident Commander. Due to the steepness and lack of access it is impossible to fight fire in the canyon and operations must focus on flatter terrain and ridges for fire fighter safety.

The fire is a threat to multiple communities and private inholdings within immediate proximity and within the larger threat zone including; Michigan Bluff, Todd Valley, Foresthill, Volcanoville, Buckeye, Quintette, Georgetown, Greenwood and communities along the Interstate 80 corridor.

Hydroelectric power generation and distribution infrastructure are threatened, including major transmission lines that deliver electricity to Placer and El Dorado, as well as the Sacramento Region.

Additional high values of concern include private industrial timberlands, UC Berkeley Blodgett Forest Research Station, Forest Service recreational and administrative facilities, local government administrative facilities, Forest Service and local government fire stations, public schools, recreational trail systems, Western States Trail and Tevis Trail, hydroelectric power facilities, domestic water supply and distribution, and transmission and distribution lines.

Additional values include Federal natural resources, with special emphasis on northern goshawk and California spotted owl PACs, Michigan Bluff California red-legged frog critical habitat, Layne's butterweed, and other natural and cultural resource values. The Rubicon River is a designated Wild Trout River and is eligible as a Wild and Scenic River. The North Fork American River is designated as a Wild and Scenic River.

Culturally significant sites important to the United Auburn Indian Community and the Colfax-Todd's Valley Consolidated Tribe are threatened. Many significant archeological, Native American, and historic sites are at risk.

Smoke is impacting a large regional area with dangerous air quality.

ORGANIZATIONAL NEEDS

The current organization is a Type 1 IMT in Unified Command with multiple divisions, complex and steep terrain/topography with full functional support to provide for the safe logistical needs for responding resources on both the north side and southside of the fire and to effectively account for both federal and CA state costs. The relative risk, potential fire duration and external influences, incident strategies, functional concerns and ownership concerns are determined to be high.

CURRENT FIRE SITUATION

The Mosquito fire is currently 6,870 acres and 0% contained. The fire is established within the North Fork American River, Middle Fork American River, and Rubicon River canyons. Steep terrain, heavy fuel loading and historically dry conditions present control challenges. Intersecting drainages and difficulty accessing fire as well as the large open fire perimeter are hindering direct attack. Continuous heavy fuels and timber fuel types are present in the fires predicted path. Large scale growth continues to be likely. Heavy resource commitment will continue to be required to contain and halt forward spread in these fuel types.

At present, multiple communities within Placer and El Dorado Counties are within immediate mandatory evacuation orders. Additional communities are under evacuation warnings. The central region of the Sierra Nevada is expected to continue in a pattern of above normal temperatures and below normal precipitation into October. Live and dead fuels are significantly dry and at critical levels with no relief in the near future. The fire is being influenced by the strong upslope/upcanyon winds and burning in extremely steep glacial cut canyons of the American and Rubicon Rivers. Inversions are common in this area when a high pressure settles over the area causing active fire behavior throughout the night. Monsoonal moisture is expected to track up the eastern Sierras Nevada range this upcoming week but isn't expected to be enough moisture to affect the Mosquito fire environment. However, updrafts from thunder cells development on the Sierra crest could increase fire behavior. When inversion condition lifted, ventilation or mixing of the environment in the fire area occur and may cause explosive fire growth.

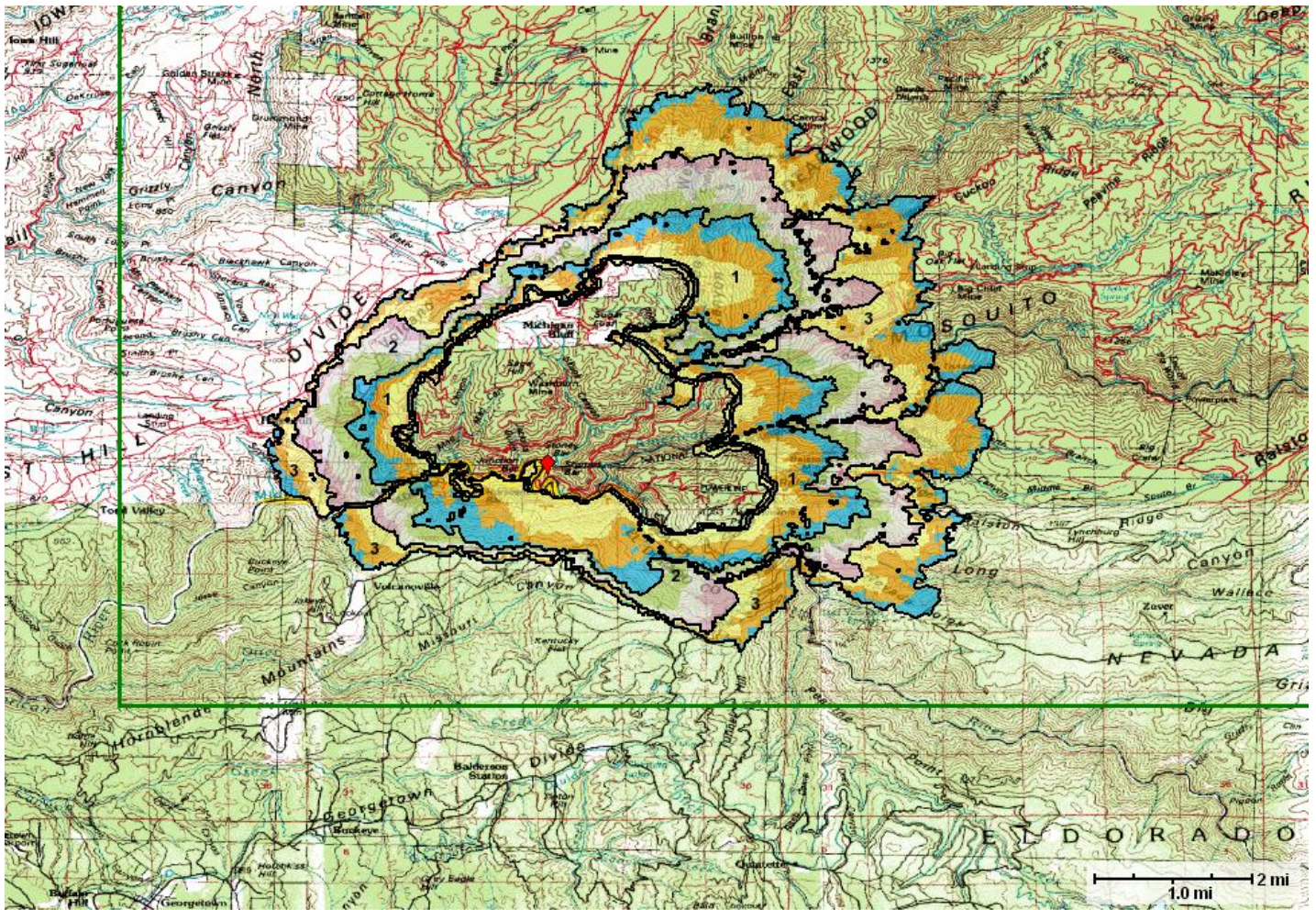
NEW DECISION TRIGGERS

A new decision will be needed should the fire cross outside of the planning area or exceed the estimated final cost.

Map of fire behavior is displayed.

[Map-Fire Behavior 9-8-22](#)

Near term fire behavior map, based on NWS forecast weather. Run models spread with no suppression action and does not account for thunderstorm out flow winds. Expect enhanced spread along ridges and drainages aligned with wind direction. Ralston (2007) is not a barrier to fire spread.



◆ Point of Origin