

Tamarack Incident Decision

Published 07/17/21 18:51

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1. Decision

1.1. Decision Summary

Decision Information

NAME	VALUE
Published	07/17/2021 18:51 CDT
Estimated Cost	\$15,000,000
Incident Owner(s)	Michael Wilde, Jeremy Kiesling
Editor(s)	Keith Barker, Karson Geissinger, Matthew Zumstein, Nickie Johnny, Paul Fuselier, Teresa Riesenhuber
Reviewer(s)	Jon Stansfield
Approver(s)	Matthew Zumstein, Paul Fuselier
Natl Preparedness Leve	l 5

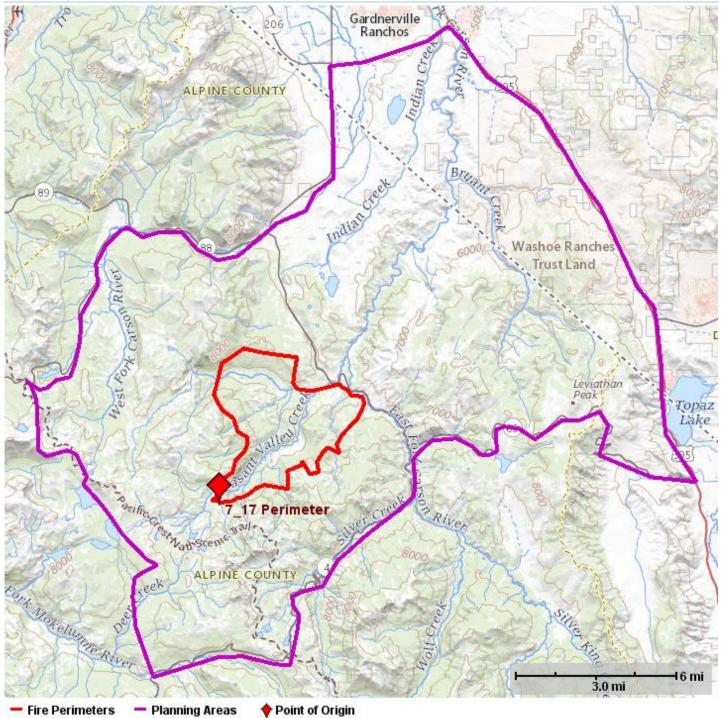
Decision History

Editor Name	Action	Date (CDT)	Comment
Fuselier, Paul	Published	07/17/2021 18:51	
Fuselier, Paul	Approved	07/17/2021 18:51	
Zumstein, Matthew	Approved	07/17/2021 18:49	
Kiesling, Jeremy	Review Requested	07/17/2021 18:46	
Kiesling, Jeremy	Review Requested	07/17/2021 18:45	
Wilde, Michael	Created	07/16/2021 15:54	

1.2. Incident Information

Incident Information

VALUE
Tamarack
2021-NVHTF-030419
Humboldt-Toiyabe National Forest
N54E
P4N54E
38.62777N / 119.8569 W
15,000acres
11,767acres
Undetermined
Wildfire
07/04/2021 11:57
NVHTF - Humboldt-Toiyabe National Forest
BIA/Tribal, BLM, USFS, State
Great Basin (3)
Michael Wilde, Jeremy Kiesling



1.3. Weather

Fire Weather Zone Forecast

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000
FNUS55 KREV 172145
FWFREV
Fire Weather Planning Forecast
National Weather Service Reno NV
245 PM PDT Sat Jul 17 2021
 .Near-Critical Wind and Low Humidity This Evening Along and East of
Highway 395..
 ..RED FLAG WARNING IN EFFECT FROM 11 AM SUNDAY TO 11 AM PDT
MONDAY FOR ABUNDANT LIGHTNING ON DRY FUELS FOR SOUTHERN SIERRA
FRONT AND SOUTHERN MONO COUNTY...
... RED FLAG WARNING IN EFFECT FROM MIDNIGHT SUNDAY NIGHT TO 8 PM
PDT MONDAY FOR ABUNDANT LIGHTNING ON DRY FUELS FOR NORTHERN
SIERRA FRONT...TAHOE BASIN...AND NORTHEAST CALIFORNIA..
.DISCUSSION...
Dry and breezy southwest winds continue into this evening with brief
periods of near critical conditions mainly in wind prone areas along
and east of US-395. By Sunday, a surge of monsoon moisture will
bring increased chances of storms with the best potential targeting
Sunday night and Monday. Storms will bring a mixed bag of wet and dry
lightning. New fire starts, gusty outflow winds, areas of heavy rain
and flash flooding are possible through Monday evening.
      Thunderstorms imply gusty and erratic winds.
Note: Mixing Heights are in feet above ground level of the valley floors.
      Please see operating plan for detailed zone descriptions
      http://www.wrh.noaa.gov/firewx/?wfo=rev
NVZ421-181415-
Southern Sierra Front including Alpine, Northern Mono, Southern
Lyon, and Western Mineral Counties-
245 PM PDT Sat Jul 17 2021
 ... RED FLAG WARNING IN EFFECT FROM 11 AM SUNDAY TO 11 AM PDT
MONDAY FOR ABUNDANT LIGHTNING ON DRY FUELS...
.TONIGHT...
 Sky/Weather.....Clear. Haze and smoke.
* Min Temperature....
   Valleys.....44-54.
   Mid Slope......58-68.
    24 hr trend.....Little change.
* Max Humidity.....
   Valleys.....40-50%.
    Mid Slope.....25-35%.
    24 hr trend.....4% wetter.
* 20-Foot Winds.....
   Valleys/Slope....West winds 12 to 18 mph with gusts to 30 mph
                    becoming downslope 2 to 5 mph.
   Ridge Top.....South winds 15 to 25 mph.
* Haines Index....6.
* LAL....1.
* Chc Wetting Rain...0%.
* Mixing Height......6100-7100 ft agl in the evening then 200-500
                    ft agl.
^{\star} Transport Winds....Southwest 10 to 15 mph in the evening becoming
                    light.
* Ventilation.....Excellent decreasing to poor after midnight.
.SUNDAY...
* Sky/Weather......Partly cloudy then becoming mostly cloudy.
                    Smoke in the morning. Haze. Isolated
                    thunderstorms in the afternoon.
* Max Temperature....
   Valleys.....85-95.
    Mid Slope......78-88.
    24 hr trend.....Little change.
* Min Humidity.....
    Valleys......11-21%.
    Mid Slope.....11-21%.
    24 hr trend.....4% wetter.
* 20-Foot Winds.....
    Valleys/Slope....Upslope 4 to 8 mph becoming southeast 9 to 14
                   mph in the afternoon.
    Ridge Top......Southwest winds 10 to 15 mph. Gusts to 25 mph
                   late in the afternoon.
* Haines Index.....3-4.
* LAL.....3.
* Chc Wetting Rain...10%.
* Mixing Height.....3400-4400 ft agl increasing to 8800-9800 ft
                    agl in the afternoon.
* Transport Winds....Light winds.
* Ventilation......Good increasing to excellent in the afternoon.
.SUNDAY NIGHT...
* Sky/Weather......Mostly cloudy. Haze and smoke in the evening.
                    Chance of thunderstorms.
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* Min Temperature....
    Valleys.....45-55.
   Mid Slope......60-70.
* Max Humidity.....
   Valleys......54-64%.
Mid Slope.....35-45%.
* 20-Foot Winds.....
   Valleys/Slope....Southwest winds 9 to 14 mph until early morning
                    becoming downslope 2 to 5 mph.
   Ridge Top.....Southwest winds 10 to 15 mph in the evening
                    becoming light.
* Haines Index.....3-4.
* LAL.....3.
* Chc Wetting Rain...20%.
* Mixing Height.....4800-5800 ft agl in the evening then 200-500
                    ft agl.
* Transport Winds....Light winds.
* Ventilation......Very good decreasing to poor after midnight.
.MONDAY...
* Sky/Weather......Mostly cloudy. Chance of thunderstorms.
* Max Temperature....

* Valleys......80-90.
   Mid Slope......73-83.
* Min Humidity.....
   Valleys......21-31%.
   Mid Slope.....22-32%.
* 20-Foot Winds.....
   Valleys/Slope....Upslope 4 to 8 mph becoming west 9 to 14 mph in
                    the afternoon.
   Ridge Top......Southwest winds 10 to 15 mph.
* Haines Index.....3.
* LAL.....4.
* Chc Wetting Rain...30%.
* Mixing Height......1500-2500 ft agl increasing to 5900-6900 ft
                    agl in the afternoon.
* Transport Winds....Light winds.
* Ventilation......Fair increasing to very good in the afternoon.
.MONDAY NIGHT...Partly cloudy in the evening then clearing. Slight
chance of thunderstorms in the evening. Lows 43-53. West winds 9 to
14 mph in the evening becoming downslope 2 to 5 mph.
.TUESDAY...Mostly clear. Slight chance of thunderstorms. Highs 84-94. Lows
43-53. Southwest winds 10 to 15 mph.
.WEDNESDAY THROUGH THURSDAY ... Partly cloudy. Slight chance of
thunderstorms. Highs 85-95. Lows 45-55. Southwest winds 10 to
15 mph.
.FRIDAY THROUGH SATURDAY...Partly cloudy. Slight chance of
thunderstorms. Highs 83-93. Lows 47-57.
$$
.8 to 14 day outlook for (Sun Jul 25 through Sat Jul 31)
Above normal temperatures and Near normal precipitation.
$$
Hoon
http://weather.gov/reno
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1.4. Risk

Relative Risk

NAME	VALUE
Relative Risk	High
Duration	High
Saved By	Zumstein, Matthew
Completed	07/17/2021 13:52 CDT

Relative Risk Notes

Fire is a single tree lightning fire in the Mokelumne Wilderness. Area is predominantly rock with many wet riparian areas surrounding it. Hazards to responders utilizing aircraft or hiking in steep rocky terrain poses undue risk. There are easily accessible vantage points to observe the fire and monitor.

7/17/21: Fire has escaped the original planning area and is threating private property with high probability for spread and contiguous fuels.

Values Notes

Potential of negative fire effects damage to either the Pacific Crest Trail and creeks/watershed is extremely low considering lack of fuel to carry fire.

7/17/21: Probability of negative fire effects is high. Private property and structures are in direct peril, fire is burning at high intensities with extreme behavior in areas. Social/economic concerns are high with heavy scrutiny placed on previous decisions.

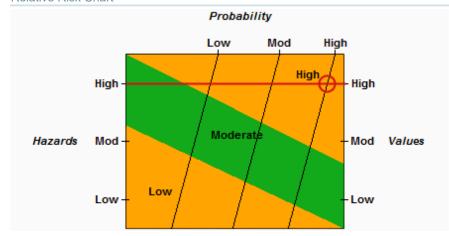
Hazards Notes

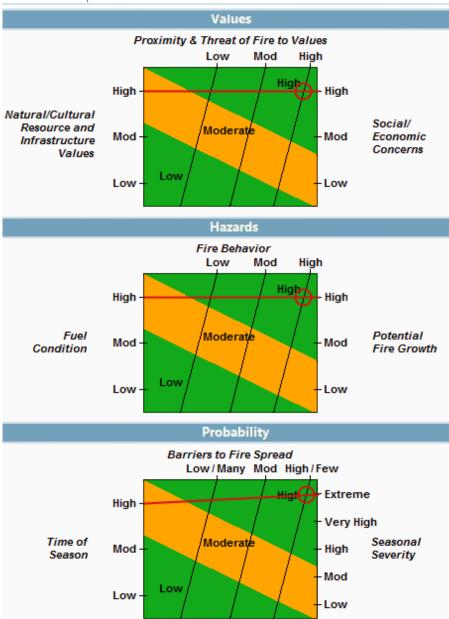
Fire is smoldering and had received rain from thunderstorms for several days. Very limited potential for problematic fire spread. 07/17/21: Fire is burning uncontrolled with high rates of spread and contiguous fuels out ahead. Fire behavior is extreme in areas. High potential for fire growth.

Probability Notes

Fire sits in a small pocket of fuel adjacent to wet riparian areas surrounded in all directions by large granite outcroppings. 07/17/21: Fire danger rating is at PL5. There are few barriers to fire spread. Seasonal severity is extreme. Fuel conditions are extremely dry due to persistent drought.

Relative Risk Chart





Organization Assessment

NAME	VALUE
Unit Recommended Org	Type 1
Saved By	Zumstein, Matthew
Completed	07/17/2021 13:58 CDT

Organization Assessment Notes

Fire is threating multiple values including risk to human life and property.

Relative Risk Notes

Fire is a single tree lightning fire in the Mokelumne Wilderness. Area is predominantly rock with many wet riparian areas surrounding it. Hazards to responders utilizing aircraft or hiking in steep rocky terrain poses undue risk. There are easily accessible vantage points to observe the fire and monitor.

7/17/21: Fire has escaped the original planning area and is threating private property with high probability for spread and contiguous fuels.

Implementation Difficulty Notes

Fire can be easily monitored to check on any growth while it burns itself out.

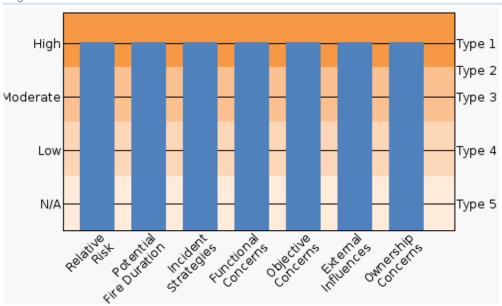
7/17/21: Fire is exhibiting extreme behavior in difficult to access terrain. Resources are stretched thin with many orders going UTF. Rates of spread and lack of resources make implementation of objectives and strategies difficult.

Socio/Political Concerns Notes

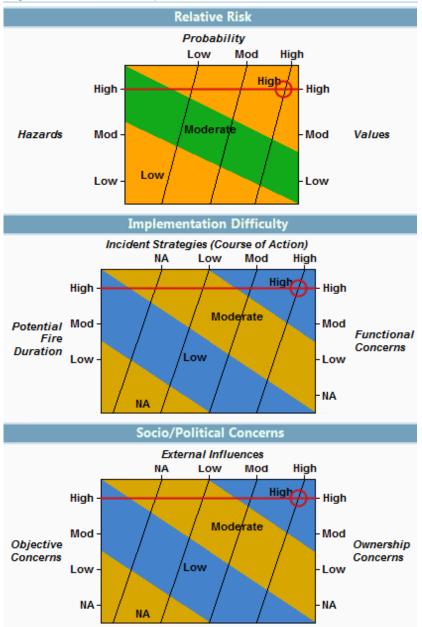
Fire has been putting up minimal smoke to be observed by the public, the community of Markleeville is used to fires in the wilderness being monitored and supports the strategy. Any private lands are quite a distance away. Fire will be visible from the Pacific Crest Trail and off the Blue lakes road.

7/17/21: Full Suppression strategy with limited resources on hand has created difficulties and concerns. Threat to private property, evacuations, media interest, impact to local government and stakeholders and public perception have created significant concern.

Organization Assessment Chart



Unit Recommended Org:Type 1



Planning Area Values Inventory Generated at 07/17/2021 16:23

NAME	VALUE
Planning Area Name	07/17/2021 18:51
Incident Name	Tamarack
Planning Area Size	190,957 acres

Category	Value	Data Source	Currency	Coverage
BLM Buildings	7	BLM	10/05/2020	National
BLM Range Allotments	20,153 acres	BLM National Operations Center (NOC)	04/01/2020	National
Building Clusters: Alpine, CA	327	Various	Various	Available counties
Building Clusters: Douglas, NV	340	Various	Various	Available counties
Building Clusters: Mono, CA	1	Various	Various	Available counties
CAOVD - ACEC / Biological & Scenic	1,085 acres	CASTF		Unit
CAOVD - Sage Grouse / RSF Grouse Habitat	33,238 acres	CAOVD		Unit
CAOVD - Updated WSA / WSA	57 acres	CASTF		Unit

Category	Value	Data Source	Currency	Coverage
CASTF - Infrastructure / Cattleguards	1	CASTF		Unit
CASTF - Infrastructure / Developed Rec D52	4	CASTF		Unit
CASTF - Infrastructure / Range Fences	3.7 miles	CASTF		Unit
CASTF - Infrastructure / Rec Residence	2 acres	CASTF		Unit
CASTF - Tree Mortality / FadedRed LowSev STF	79 acres	CAOVD		Unit
CASTF - Tree Mortality / GrayPhase ModSev STF	73 acres	NVCCD		Unit
CASTF - Tree Mortality / OldPhase LowSev STF	266 acres	NVCCD		Unit
Campgrounds	7	BLM/USFS	2020	National (BLM and USFS only)
Class 1 Airsheds	26,929 acres	NPS Air Resources Division	Various	National
Communication Towers	60	HIFLD	02/20/2020	National
County: Alpine, CA	147,585 acres	US Census Bureau - TIGER	02/02/2021	National
County: Douglas, NV	37,533 acres	US Census Bureau - TIGER	02/02/2021	National
County: Mono, CA	5,838 acres	US Census Bureau - TIGER	02/02/2021	National
Est Ground Evac Time: 1-2 Hrs	80,925 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 2-4 Hrs	27,507 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 4-6 Hrs	2,318 acres	National Park Service NIFC	11/01/2012	CONUS
Est Ground Evac Time: 6+ Hrs	58 acres	National Park Service NIFC	11/01/2012	CONUS
Estimated Population	1,335	LandScan USA	2018	CONUS, AK, HI, PR
Habitat: Sierra Nevada Yellow-Legged Frog	21,493 acres	US Fish and Wildlife Service	02/10/2021	National
Habitat: Webber`s Ivesia	1 acres	US Fish and Wildlife Service	02/10/2021	National
Habitat: Yosemite Toad	9,463 acres	US Fish and Wildlife Service	02/10/2021	National
IRA: Barney Riley IRA	8,083 acres	PAD-US 2.1	09/15/2020	National
IRA: Carson - Iceberg IRA	420 acres	PAD-US 2.1	09/15/2020	National
IRA: Ebbetts IRA	255 acres	PAD-US 2.1	09/15/2020	National
IRA: Iceberg - Silver Mtn. IRA	216 acres	PAD-US 2.1	09/15/2020	National
IRA: Mokelumne - Charity IRA	202 acres	PAD-US 2.1	09/15/2020	National
IRA: Mokelumne - Hawkins Pk IRA	16,277 acres	PAD-US 2.1	09/15/2020	National
IRA: Mokelumne - Ixl Mine A IRA	5 acres	PAD-US 2.1	09/15/2020	National
IRA: Mokelumne - Ixl Mine B IRA	14 acres	PAD-US 2.1	09/15/2020	National
IRA: Mokelumne - Mt. Bullion IRA	13,601 acres	PAD-US 2.1	09/15/2020	National
IRA: Mokelumne - Pleasant IRA	272 acres	PAD-US 2.1	09/15/2020	National
IRA: Mokelumne - Spratt IRA	613 acres	PAD-US 2.1	09/15/2020	National
IRA: Raymond Peak IRA	1,423 acres	PAD-US 2.1	09/15/2020	National
IRA: Silver Hill IRA	40 acres	PAD-US 2.1	09/15/2020	National
Landowner Category: BIA	18,267 acres	PAD-US 2.0, AICC, BIA/WFDSS, Census	10/09/2020	National
Landowner Category: BLM	14,458 acres	PAD-US 2.0, AICC, BIA/WFDSS, Census	10/09/2020	National
Landowner Category: Private	28,832 acres	PAD-US 2.0, AICC, BIA/WFDSS, Census	10/09/2020	National
Landowner Category: State	2,624 acres	PAD-US 2.0, AICC, BIA/WFDSS, Census	10/09/2020	National

Category	Value	Data Source	Currency	Coverage
Landowner Category: USFS	126,689 acres	PAD-US 2.0, AICC, BIA/WFDSS, Census	10/09/2020	National
Landowner Category: USFWS	87 acres	PAD-US 2.0, AICC, BIA/WFDSS, Census	10/09/2020	National
NVCCD - Wildlife Habitat / T and E Habitat	1,984 acres	CASTF		Unit
NVCCD - Wildlife Habitat / Wildlife Hab	10,755 acres	CAOVD		Unit
Natl Historic Trails	4.9 miles	NPS National Trails System	04/22/2021	National
Natl Scenic Byways	23.7 miles	National Park Service	02/28/2019	National
Natl Scenic Trails	25.4 miles	NPS National Trails System	04/22/2021	National
Other Areas: Hope Valley Reservoir Site No. 41	730 acres	PAD-US 2.1	09/15/2020	National
Other Areas: Indian Pool Reservoir Site No. 17	230 acres	PAD-US 2.1	09/15/2020	National
Protecting Unit: BLM	15,234 acres	Various	01/01/2020	AK, CA, ID, MT, NM, MN
Protecting Unit: C&L	7 acres	Various	01/01/2020	AK, CA, ID, MT, NM, MN
Protecting Unit: USFS	138,271 acres	Various	01/01/2020	AK, CA, ID, MT, NM, MN
Roads	54.9 miles	NAVTEQ	11/2012	National
Sage Grouse Habitat: BS-GSGC	3,280 acres	BLM/NIFC	06/2021	National
Sage Grouse Habitat: BS-GSGH	37,660 acres	BLM/NIFC	06/2021	National
USFS Buildings	8	USFS (EDW)	2020	National
USFS Trails	61.0 miles	USFS (EDW)	10/27/2020	CONUS, AK, HI, PR
WSA: Slinkard WSA	57 acres	PAD-US 2.1	09/15/2020	National
Wilderness: Mokelumne Wilderness	28,039 acres	University of Montana	04/10/2020	National

Coverage of Values Queried that Produced No Results

BLM Horse and Burro (National), BLM Oil / Gas Leases (National), Electric Power Plants (CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands), Electric Sub Stations (CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands), Electric Transmission Lines (CONUS, AK, HI, Puerto Rico, Guam, N. Marian Islands, and US Virgin Islands), Mines (National), NPS Buildings (National), NRA (National), Natl Recreation Trails (National), Natl Wild Scenic Rivers (National), Oil and Gas Pipelines (National), Ozone Non-Attainment (National), Particulates Non-Attainment (National), TNC Lands (National), USFWS Trails (CONUS, AK, HI, PR)

1.5. Objectives

Incident FMU/Strategic Objective Code List

Unit	FMU/Strat Obj Code	Acres
CACCA	Central Cal General	195
CAENF	GEN - general: remaining National Forest	1,618
CAENF	NON - All Non-Federal In-Holdings	388
CAENF	SEA	6,003
CAOVD	Coleville	2,442
CASTF	SOS1 - STF Strategic Objective Shape 1- is all NFS lands under STF management; see 2010 STF Forest Plan Direction & 2004 SNFPA ROD.	4,213
NVCCD	CATEGORY_B	12,111
NVHTF	T02 - Carson Front	8,719
NVHTF	T03 - Alpine	82,268
NVHTF	T05 - Wilderness	19,862
NVHTF	T06 - Pinyon-Juniper	3,961
NVWNA	APU	2,765
NVWNA	RMU	18,493

Spatial Fire Planning Inventory

Category	Value	Data Source	Currency	Coverage
Aqua Retardant Avoidance	17,486 acres	National - FS Land Only	04/01/2020	National (USFS Units only)
Mgmt Req: Bi State Sage Grouse	2,026 acres	NVCCD	Current	Unit Level
Mgmt Req: D52/53 General & Old Forest	4,210 acres	CASTF	Current	Unit Level
Mgmt Req: Goshawk PAC	232 acres	CAENF	Current	Unit Level
Mgmt Req: T&E Plants	1 acres	NVCCD	Current	Unit Level
Mgmt Req: T2MR	8,718 acres	NVHTF	Current	Unit Level
Mgmt Req: T3MR	82,266 acres	NVHTF	Current	Unit Level
Mgmt Req: T5MR	19,861 acres	NVHTF	Current	Unit Level
Mgmt Req: T6MR	3,961 acres	NVHTF	Current	Unit Level
Mgmt Req: WLD	5,024 acres	CAENF	Current	Unit Level
Mgmt Req: WLD-RWD	5,024 acres	CAENF	Current	Unit Level
Mgmt Req: Wild Scenic Recreat. River	698 acres	CASTF	Current	Unit Level
Mgmt Req: Wilderness	3,852 acres	CASTF	Current	Unit Level
Retardant Avoidance	8,360 acres	USDA FS Enterprise Data Warehouse	04/01/2020	National (USFS Units only)

Incident Objective List

Activated	Incident Objective
07/17/2021	Keep public and cooperators informed of current incident situation and changes to closures and evacuations. Ensure timely and current information is disseminated to cooperators and public. Cooperators include:
	 Carson BLM (Nevada Western Agency - BIA) Alpine County Sheriff Alpine County Supervisors and Sheriff - Nicole Williamson Caltrans California Highway Patrol

Incident Requirement List

Activated	Incident Requirement
07/17/2021	Use of dozers and/or heavy equipment will require Agency Administrator approval.
07/17/2021	Ensure COVID-19 CDC guidelines are adhered to by all incident personnel to minimize potential for the spread of the coronavirus. Develop a plan to report to Agency Administrator and mitigate spread should there be a positive exposure.
07/17/2021	

Activated	Incident Requirement
	Fire/Workforce Environment - The workplace and atmosphere are expected to be free of any harassment and one of mutual respect that welcomes comments, input, and information flow. We expect a high level of ethical conduct from everyone while assigned to this fire, in fire camp, and in the communities. There will be no tolerance for any unethical, illegal drug, or alcohol related incidents.

Strategic Objective List

Unit	Shape/FMU	Activated	Strategic Objective
CAENF	<unit></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.
CAOVD	<unit></unit>	05/13/2011	 Provide 100% protection for Wildland Urban Interface, communities and known values that could suffer damage from wildland fire. Limit the intensity of suppression effort to the most economical, consistent with human and resource values at risk.
CAOVD	Coleville	05/03/2019	 Respond to wildland fires by taking suppression actions commensurate with human and natural resource values at risk. Where possible, use existing natural and human-made fire control barriers such as roads, trails, fuelbreaks and rock outcroppings rather than constructing new firelines. Limited or modified suppression techniques may be employed after consideration of firefighter and public safety, values at risk, resource protection needs and current and expected conditions at the time of the fire.
CAOVD	Coleville	05/03/2019	 Provide protection for intact old growth mixed conifer forest. Provide protection for areas invaded by cheat grass.
CASTF	<unit></unit>	06/22/2020	Aerial retardant drops are not allowed in mapped avoidance areas (on National Forest system lands) for threatened, endangered, proposed, candidate or sensitive (TEPCS) species or in any waterways. This national direction is mandatory and would be implemented except in cases where human life or public safety is threatened and retardant use within avoidance areas could be reasonably expected to alleviate that threat. Nationwide Aerial Application of Fire Retardant on National Forest System Land; Record of Decision; December 2011; page 2
CASTF	SOS1	05/24/2017	The objective of Fire Management activities is to respond to each wildfire ignition in a timely manner with appropriate forces at a minimum cost consistent with LRMP direction (Forest Plan Direction, 2010, p. 18). Initial response action on wildfires will provide for the most reasonable probability of minimizing fire suppression costs and resource damage

Unit	Shape/FMU	Activated	Strategic Objective
			consistent with probable fire behavior, potential resource loss, environmental impacts, & safety and smoke management considerations (Forest Plan Direction, 2010, p. 37). Protect communities from wildfire and prevent the loss of life and property (SNFMA ROD, 2004, p. 45). Goals for fire and fuels management include reducing threats to communities and wildlife habitat from large, severe wildfires and re-introducing fire into fire-adapted ecosystems (SNFMA ROD, 2004, p. 34).
NVCCD	<unit></unit>	05/24/2011	Fires within the view shed of major communities and major transportation routes shall be managed to minimize visual impacts.
NVCCD	<unit></unit>	05/15/2017	Rehabilitation of surface disturbance from suppression related activities must be completed to the satisfaction of READs and District personnel and is the responsibility of the suppression organization . Per the Carson City District Consolidated Resource Mangement Plan (2001)"All areas of new surface disturbance will be rehabilitated, where such action is necessary and practical, to replace ground cover and prevent erosion." (CCD CRMP SOP-1#4)
NVCCD	<unit></unit>	05/15/2017	Consult READs prior to causing significant ground surface disturbance with equipment (>4 inches) to mitigate possible impates to cultural resources UNLESS there is an imminent threat to life or public safety.
NVCCD	<unit></unit>	05/15/2017	The protection of human life is the single, overriding priority. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources will be done based on the values to be protected, human health and safety, and the costs of protection.
NVCCD	CATEGORY_B	05/15/2017	Category B areas are "Those areas where wildfires are not wanted, but if fires occur and escape, management options on how to suppress the fire is available. It is recognized that fire has a role in the natural environment and opportunities for prescribed fire are significant. Many of the areas in this category have a history of severe fires that have escaped, despite aggressive full suppression responsesMajor considerations are wildland/urban interface, threatened, endangered, or sensitive species habitat, or areas that have experienced so much fire in the last 10 to 15 years that special consideration is warranted. Wildfires in Category B areas will be suppressed with the intend of holding 90% to 10 acres or less in forested areas, and to 25 acres or less in brush or grass areas. Escaped fires will be closely analyzed to consider protection of life, then property and natural resources, and suppression strategies that will most effectively meet these goals will be used." (CCD CRMP FIR-3)
NVHTF	T02	03/06/2015	Management Area T2 (Carson Front)
			Wildland Fires will be managed under a full suppression strategy. Full suppression strategy includes confinement, containment, and/or control.
NVHTF	Т03	03/06/2015	Management Area T3 (Alpine)
			Wildland Fires will be managed under a full suppression strategy. Full suppression strategy includes confinement, containment, and/or control.
NVHTF	T05	04/13/2015	Management Area T5 (Existing Wilderness)
			Wildland Fires may be managed under a variety of strategies, including less than a full suppression strategy to achieve land and/or resource management objectives or benefits.
NVHTF	T06	04/13/2015	Management Area T6 (Pinyon-Juniper)
			Wildland Fires may be managed under a variety of strategies, including less than a full suppression strategy to achieve land and/or resource management objectives or benefits.
NVWNA	APU	02/06/2020	Asset Protection Unit (APU) - Wildland Urban Interface (WUI) Primary Objective: The protection of life/property, infrastructure, and high value resources without compromising firefighter safety. Wildland fire may be undesirable. Primary Strategic/Operational Considerations: Planning Document Reference: Western Nevada Agency FMP • Place highest priority on the allocation of available suppression forces to fire threatening sites in the APU over fires in the RMU;

Unit	Shape/FMU	Activated	Strategic Objective
O'iii	Shapon inc	, lourated	 Full perimeter control will receive the highest priority for suppression resources. Confinement and fire use will be limited, may be utilized on rare occasions, based on site-specific circumstances with documented direction from line officer.
NVWNA	RMU	02/06/2020	Resource Management Unit (RMU) - Non-WUI Primary Objective: Protection of life/property, infrastructure, and high value resources without comprising firefighter safety. Promote the use of fire as a desirable component of the ecosystem. Primary Strategic/Operational Considerations: Planning Document Reference: Western Nevada Agency FMP
			 Emphasis will be perimeter control where needed, and confine/point protection elsewhere (based on operational thresholds); Interagency Cooperator agreements must be in place to determine the management of wildfire threat occurring on or off trust lands.

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
CAENF	<unit></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 Managment 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 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) 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, Section 106 of the National Historic Preservation Act.) Threatened, Endangered & FS Sensitive: For All Threatened, Endangered, and Forest Service Sensitive Spe
CAENF	Goshawk PAC	06/17/2021	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

Unit	Shape/ FMU	Activated	Management Requirement
			intensity and crown fire within the 200 acre PAC. (Sierra Nevada Forest Plan Amendment 2004, pg. 59-61)
CAENF	WLD	11/16/2017	Wilderness: The decision for the use of motorized equipment such as chain saws, portable pumps, aircraft, and retardant will be made by the Forest Supervisor or District Ranger on a case by case basis. The Forest Supervisor approves the use of motorized equipment or mechanical transport under conditions described below. However, the Regional Forester shall approve the use of tractors for fire suppression. Conditions under which use may be approved emergencies where the situation involves an inescapable urgency and temporary need for speed beyond that available by primitive means. Categories include fire suppression, health and safety, law enforcement involving serious crime or fugitive pursuit, removal of deceased persons, and aircraft accident investigations. (FSM 2326.04c EFFECTIVE 6/1/90) Class 1 Airsheds: Desolation and Mokelumne Wildernesses are Federal Designated Class 1 Airsheds (Section 162[a] of the federal Clean Air Act; 40 CFR 81.405). Maintaining Class 1 air quality standards is a consideration during all fire management activities in wilderness. (Desolation LMP amendment pages 24 - 25; Mokelumne LMP amendment pages 24-25)
CAENF	WLD-RWD	11/16/2017	Wilderness & Recommended Wilderness: Fire management activities will be done in a manner that is compatible with wilderness management objectives. Locate fire camps, helispots, and other temporary facilities or improvements outside of the wilderness boundary whenever feasible. Rehabilitate disturbed areas within wilderness to as natural an appearance as possible (FSM 2324.23 Effective 6/1/90). Any firing techniques used as a suppression tactic will be designed to minimize fire effects on vegetation. Reduce, to an acceptable level, the risks and consequences of wildfire within wilderness or escaping from wilderness. Minimum Impact Suppression Tactics (MIST) will be used during all fire activities. Minimizing suppression activity impacts will take priority over minimizing acres burned. All project wildland fires in the wilderness will have resource advisor assigned to ensure that suppression activities are compatible with wilderness management objectives. (Desolation LMP amendment pages 24 - 25; Mokelumne LMP amendment pages 24-25). Give preference to using methods and equipment that cause the least: 1) Alteration of the wilderness landscape; 2) Disturbance of the land surface; 3) Disturbance to visitor solitude; 4) Reduction of visibility during periods of visitor use; 5) Adverse effect on other air quality related values. (FSM 2324.23 Effective 6/1/90)
CAOVD	<unit></unit>	05/13/2011	·
CAOVD	<unit></unit>	05/13/2011	Except where human life and private property are threatened, wildland fire managers will request and work closely with a Resource Advisor for all wildland fires exceeding or expected to exceed initial attack suppression efforts.
CAOVD	<unit></unit>	05/13/2011	Field Office Manager approval is required for Dozer and other heavy equipment use in old growth timber stands, prominent viewsheds, riparian areas, aspen groves, cultural sites, ACEC's, and mule deer winter ranges, and only to protect human life, private property or other sensitive resource values.
CAOVD	<unit></unit>	05/13/2011	In cases where wildland fire threatens listed cultural resources, employ all available suppression and resource protection measures to avoid their loss. Contact the Bishop Field Office Manager and Archeologist as soon as threat is recognized and dispatch Archeologist to incident.
CAOVD	<unit></unit>	05/13/2011	Conduct post-fire archeological evaluations to assess and document equipment damage to resources.
CAOVD	<unit></unit>	07/14/2013	 Firefighter and public safety will be the number one concern in all fire management activities. 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.
CAOVD	<unit></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.
CAOVD	<unit></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.
CAOVD	<unit></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.
CAOVD	<unit></unit>	07/14/2013	Monitor the incident to provide for timely and informed decision making as the incident changes.
CASTF	<unit></unit>	04/20/2011	Lightning-caused fires may be used to reduce fuel loads or to provide other resource benefits, such as conserving populations of fire-

Unit	Shape/ FMU	Activated	Management Requirement
			dependent species. Before wildland fires can be used, national forest managers must prepare a fire management plan that describes how prescribed fires and naturally caused wildland fires will achieve resource management objectives. Amendment ROD 2004 Page 35
CASTF	<unit></unit>	04/20/2011	Cultural Resources: Utilize local technical specialists if possible 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) Section 106 of the National Historic Preservation Act.
CASTF	<unit></unit>	04/20/2011	Human caused wildfires will be suppressed in every instance and will not be managed for resource benefits. FSM 5103.2
CASTF	<unit></unit>	04/20/2011	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.
CASTF	<unit></unit>	06/19/2017	River & ¼ mile land each side are managed to preserve free flowing condition, to protect outstanding remarkable values, & to maintain conditions at highest possible standards. This includes 40 miles of existing designated rivers (portions of Tuolumne & Merced Rivers), and 160 miles of Proposed W. & S. Rivers (portions of Stanislaus River, Mokelumne River, Clarks Fork, Clavey River, South Fork Tuolumne River, Niagara Creek). Wide range of resource activities are permitted depending on existing/proposed classification. River portions designated as Wild, Scenic, Recreation, or Proposed W & S. Merced River area is managed by Sierra National Forest.
CASTF	<unit></unit>	06/22/2020	Protect communities from wildfire and prevent the loss of life and property. Citation: Sierra Nevada Forest Plan Amendment ROD 2004, p. 45
CASTF	D52/53 General & Old Forest	06/20/2017	The Old Forest and General Forest LRMP land allocations are widespread throughout the STF covering multiple ecosystems (conifer forests, chaparral, and hardwood stands), and includes extensive timber & range mgmt., dispersed recreation, OHV use, & critical deer winter range. Desired conditions and intent include: high levels of vegetation diversity and conditions, maintain or develop old forest habitat and functions in "best large blocks" and habitat connectivity areas, reduction of hazardous fuels, strategically placed fuel treatments, and restore ecosystem structure and function (2010 LRMP direction, p. 190-191).
CASTF	Wild Scenic Recreat. River	06/19/2017	River & ¼ mile land each side are managed to preserve free flowing condition, to protect outstanding remarkable values, & to maintain conditions at highest possible standards. This includes 40 miles of existing designated rivers (portions of Tuolumne & Merced Rivers), and 160 miles of Proposed W. & S. Rivers (portions of Stanislaus River, Mokelumne River, Clarks Fork, Clavey River, South Fork Tuolumne River, Niagara Creek). Wide range of resource activities are permitted depending on existing/proposed classification. River portions designated as Wild, Scenic, Recreation, or Proposed W & S. Merced River area is managed by Sierra National Forest.
CASTF	Wilderness	06/19/2017	This Management Requirement is a combination of 4 STF LRMP "Management Areas": designated/existing Wilderness, Recommended Wilderness, Inventoried Roadless Areas, and Research Natural Areas. These "management areas" are merged into 1 management requirement in WFDSS, based on similar LRMP direction for wildfire response. Also they are loaded as separate unit shapes in WFDSS as well.

Unit	Shape/ FMU	Activated	Management Requirement	
			Minimize impacts to wilderness reso and preserve values. Mechanized us natural appearing landscape in non-	-motorized setting. Managed to maintain nditions; protection is provided against
NVCCD	<unit></unit>	05/24/2011	consistent with other resource values. (CCI threat to life and property, consult with a res	be protected to the maximum extent practicable, D CRMP Cul-1.1) Except in cases of immediate source advisor prior to initiating suppression ance (dozers, etc) to protect sensitive habitat and
NVCCD	<unit></unit>	05/24/2011		ctivities in sensitive drainages, wetlands, and her fire suppressants on riparian vegetation or
NVCCD	Bi State Sage Grouse	05/15/2017	District and Tonopah Field Office (BSSGA) State Sage-Grouse habitat. In ROD-2, Wild low resilience and resistance sagebrush and prevent an invasive annual grass-fire cycle. "1. The protection of human life is the sir among protecting human communities a and improvements, and natural and cultuvalues to be protected, human health and use fire as a management tool in areas with negative long-term impacts during wildfir prioritize suppression, immediately after	stinct Population Segment in the Carson City provides guidance related to wildland fire and Bidland Fire the BSSGA states "Fires in moderate to d wooded shrublands shall be suppressed to " Under ROD-3, Wildland fire the BSSGA states
NVCCD	T&E Plants	05/15/2017	Carson City District Consolidated Resource consultation with the FWS/NMFS, as appropriate or their habitats. Until the consultate decision has been reached, BLM shall not corriretrievable commitment of resources or species involvedEnsure that no BLM active consultations are considered in the consultation of the consulta	tion proceedings are completed and a final carry out any actions that would cause irreversible reduce the future management options for the cion will adversely affect the likelihood of recovery hall confer with FWS/NMFS on any action that will bosed Critical Habitat." (SSS-2) to determine species and appropriate
NVHTF	T2MR	11/21/2017	Management Area	T2 (Carson Front)
			All wildfires will receive an appropriate supconfinement, containment, or control. TNF	ppression response. Appropriate responses are
NVHTF	T2MR	11/21/2017	Management Area	T2 (Carson Front)
			1986 Management Area (MA) Practices – C	Carson Front MA:
			, ,	ered in 1986 TNF L&RMP. PL 100-550, National
			* The Mt. Rose Wilderness Area is no long Existing Wilderness. TNF L&RMP Amend	ger part of MA T-2; it is now managed as MA T-5, Iment #4 (September 12, 1994)
			All wildfires will be contained or controlled	d. TNF L&RMP (June 23, 1986), Pg. IV 84

Unit	Shape/ FMU	Activated	Management Requirement	
			plans (including smoke managemen	be used when permitted by approved fire management t) to achieve natural resource management objectives. ent Record of Decision Amendment #7 (January 2001),
NVHTF	T2MR	11/21/2017	Management Area	T2 (Carson Front)
			such as conserving populations of fir national forest managers must prepa fires and naturally caused wildland it Nevada Forest Plan Amendment – F	to reduce fuels loads or provide other resource benefits, re dependent species. Before wildfires can be used, re a fire management plan that describes how prescribed fires will achieve resource management objectives. Sierra final Environmental Impact Statement-Record of tt #9 (January 21, 2004), Pg. 35, Fire and Fuels
NVHTF	T3MR	03/06/2015	Management Area	T3 (Alpine)
				riate suppression response. Appropriate responses are I. TNF L&RMP (June 23, 1986), Pg. IV 15
NVHTF	T3MR	03/06/2015	Management Area	T3 (Alpine)
			1986 Management Area (MA) Pract	ices – Alpine MA:
			*Includes the Enhancement Lands n	ot covered in 1986 TNF L&RMP. PL 100-550, National hancement Act of 1988 (October 28, 1988)
				nent program to protect watershed values and private land ne Woodfords face. TNF L&RMP (June 23, 1986), Pg. IV
			Coordinate and cooperate closely wi	ith the BLM, the California Department of Forestry, and g wildfires. TNF L&RMP (June 23, 1986), Pg. IV 92
NVHTF	T3MR	06/21/2016	Management Area	T3 (Alpine)
			plans (including smoke management	be used when permitted by approved fire management t) to achieve natural resource management objectives. ent Record of Decision Amendment #7 (January 2001),
NVHTF	T3MR	06/21/2016	Management Area	T3 (Alpine)
			such as conserving populations of fir national forest managers must prepa fires and naturally caused wildland i Nevada Forest Plan Amendment – F	to reduce fuels loads or provide other resource benefits, re dependent species. Before wildfires can be used, re a fire management plan that describes how prescribed fires will achieve resource management objectives. Sierra final Environmental Impact Statement-Record of tt #9 (January 21, 2004), Pg. 35, Fire and Fuels
NVHTF	T3MR	06/21/2016	Management Area	T3 (Alpine)
			shall be suppressed to prevent an inv	esilience and resistance sagebrush and wooded shrublands vasive annual grass-fire cycle. Greater Sage-grouse Biorest Plan Amendment Record of Decision. TNF 2016), Pg. 21, Fire Suppression
NVHTF	T3MR	06/21/2016	·	

Unit	Shape/ FMU	Activated	Management Requirement
			Management Area T3 (Alpine)
			FS-G-03: Suppress wildfire threatening unburned habitat contained within a broader burn perimeter. Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Record of Decision. TNF L&RMP Amendment #18 (May 16, 2016), Pg. 21, Fire Suppression
NVHTF	T3MR	06/21/2016	Management Area T3 (Alpine)
			FS-G-05: In bi-state sage grouse habitat areas, habitat meeting or moving towards desired condition will be prioritized immediately after direct threats to life and property; suppression in the Wildland-Urban Interface will be prioritized above habitat in order to protect life and property. Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Record of Decision. TNF L&RMP Amendment #18 (May 16, 2016), Pg. 21, Fire Suppression
NVHTF	T3MR	06/21/2016	Management Area T3 (Alpine)
			FS-G-01: Do not use fire as a management tool in areas where the risk of escaped fire could cause negative long-term impacts during wildfire situations. Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Record of Decision. TNF L&RMP Amendment #18 (May 16, 2016), Pg. 21, Fire Suppression
NVHTF	T3MR	06/21/2016	Management Area T3 (Alpine)
			FS-G-02: In bi-state sage grouse habitat areas, prioritize suppression, immediately after life and property, to conserve the habitat during wildfire situations. Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Record of Decision. TNF L&RMP Amendment #18 (May 16, 2016), Pg. 21, Fire Suppression
NVHTF	T5MR	04/13/2015	Management Area T5 (Existing Wilderness)
			All wildfires will receive an appropriate suppression response. Appropriate responses are confinement, containment, or control. TNF L&RMP (June 23, 1986), Pg. IV 15
NVHTF	T5MR	04/13/2015	Management Area T5 (Existing Wilderness)
			Fires in wilderness will be managed in accordance with the fire policy of 1985 as follows: A. Permit lightning-caused fires to play, as nearly as possible, their natural ecological role within wilderness.
			B. Reduce to an acceptable limit the risks and consequences of wildfire to life and property within wilderness; and to life, property, and natural resources outside of wilderness. TNF L&RMP (June 23, 1986), Pg. IV 32
NVHTF	T5MR	04/13/2015	Management Area T5 (Existing Wilderness)
			Use fire retardant in wilderness only when fires pose an eminent threat to human life or property, or will cause unacceptable resource damage outside wilderness. TNF L&RMP (June 23, 1986), Pg. IV 33
			Fire suppression practices will have minimal impacts on the wilderness resource. Fire fighters will return fire lines to as close to a natural state as possible. Use of natural barriers and low impact suppression techniques will be emphasized. TNF L&RMP (June 23, 1986), Pg. IV 33
			Aircraft may be used for the duration of emergencies such as fire, search and rescue, and when life or property are threatened. Whenever possible, natural openings will be used for helispots. Helispots will be constructed only when no feasible natural opening can be found. Constructed helispots will be rehabilitated to promote rapid healing of the site. TNF L&RMP (June 23, 1986), Pg. IV 33

Unit	Shape/ FMU	Activated	Management Requirement	
NVHTF	T5MR	04/13/2015	Management Area T5 (Existing Wilderness)	
			PO1 (A) Prepare fire management action programs for Carson-Iceberg and Mokelumne in coordination with the Pacific Southwest Region. Where appropriate, these programs shall provide for fire to assume its natural role as an ecosystem process. TNF L&RMP (June 23, 1986), Pg. IV 111	
NVHTF	T5MR	04/13/2015	Management Area T5 (Existing Wilderness)	
			IV. FIRE MANAGEMENT. General Direction:	
			The management of fire for the Mokelumne Wilderness will be outlined in specific Forest Fire Management Plans prepared by each Forest*(see below). The Fire Management Plans will develop prescriptions for where and when lightning fires will be allowed to burn in the Mokelumne Wilderness, address the need for planned ignitions to remove unnaturally high accumulations of fuel, and identify areas that need protection from fire. When fire suppression strategies are employed, fires will be controlled with a minimum impact to wilderness resources. Mokelumne Wilderness Management Guidelines – Amendment #6 (March 2000) Pg. 21, 22	
			*No specific, approved, stand-alone Fire Management Plan exists for the Humboldt-Toiyabe National Forest. When consistent with current TNF L&RMP direction, the Mokelumne Wilderness General Direction and Standards and Guidelines should be considered and applied as appropriate to wildfires in the Mokeulmne Wilderness.	
NVHTF	T5MR	04/13/2015	Management Area T5 (Existing Wilderness)	
			Lightning-caused wildland fires will be used when permitted by approved fire management plans (including smoke management) to achieve natural resource management objectives. Sierra Nevada Forest Plan Amendment Record of Decision Amendment #7 (January 2001), pg. 6	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			Lightning caused fires may be used to reduce fuels loads or provide other resource benefits, such as conserving populations of fire dependent species. Before wildfires can be used, national forest managers must prepare a fire management plan that describes how prescribed fires and naturally caused wildland fires will achieve resource management objectives. Sierra Nevada Forest Plan Amendment – Final Environmental Impact Statement-Record of Decision. TNF L&RMP Amendment #9 (January 21, 2004), Pg. 35, Fire and Fuels Management	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			* The Mt. Rose Wilderness Area is no longer part of MA T-2; it is now managed as MA T-5, Existing Wilderness. TNF L&RMP Amendment #4 (September 12, 1994)	
			* The Arc Dome Proposed Wilderness within MA T-8 is now managed as MA T-5, Existing Wilderness. TNF L&RMP Amendment #4 (September 12, 1994)	
			* The Alta Toquima Wilderness Area within MA T-9 is now managed as MA T-5, Existing Wilderness. TNF L&RMP Amendment #4 (September12, 1994)	
			* The Table Mountain Wilderness Area within MA T-10 is now managed as MA T-5, Existing Wilderness. TNF L&RMP Amendment #4 (September12, 1994)	
			* The Mt. Charleston <i>Recommended</i> * Wilderness Area (T-12) to be managed as MA T-5, Existing Wilderness. TNF L&RMP Amendment #4 (September 12, 1994). ** Now managed as MA T-12, Mt. Charleston Wilderness General Management Plan, Spring Mountains National Recreation Area – Amendment #5 (1996), Introduction Pg. 6	

Unit	Shape/ FMU	Activated	Management Requirement	
			* The Wovoka Wilderness Area is no longer part of MA T-6; it is now managed as MA T-5, Existing Wilderness. PL 113-291, National Defense Authorization Act FY 2015 Sec. 3066 (December 2, 2014)	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			GRSG-FM-DC-048-Desired Condition – In priority and general habitat management areas and sagebrush focal areas, protect sagebrush sage grouse habitat from loss due to unwanted wildfires or damages resulting from management related activities while using agency risk management protocols to manage for fire fighter and public safety and other high priority values. In all fire response, first priority is the management of risk to firefighters and the public. Sage grouse habitat will be prioritized as a high value resource along with other high value resources and assets. *Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's. Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			GRSG-FM-GL-056-Guideline – In priority and general habitat management areas and sagebrush focal areas, use fire management tactics and strategies that seek to minimize loss of existing sagebrush habitat. The safest and most practical means to do so will be determined by fireline leadership and incident commanders. *Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's. Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			GRSG-FM-GL-059-Guideline – In priority and general habitat management areas and sagebrush focal areas, where practical and available, all fire-associated vehicles and equipment should be inspected and cleaned using standardized protocols and procedures and approved vehicle/equipment decontamination systems before entering and exiting the area beyond initial attack activities to minimize the introduction of invasive annual grasses and other invasive plant species and noxious weeds. *Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's. Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			GRSG-FM-GL-054-Guideline – Locating temporary wildfire suppression facilities (e.g., incident command posts, spike camps, helibases, mobile retardant plants) in priority and general habitat management areas and sagebrush focal areas should be avoided. When needed to best provide for firefighter or public safety or to minimize fire size in sage grouse habitat, impacts to greater sage grouse should be considered and removal of sagebrush should be limited. *Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's. Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			GRSG-FM-GL-055-Guideline – In priority and general habitat management areas and sagebrush focal areas, cross?]country vehicle travel during fire operations should be restricted. When needed to best provide for firefighter or public safety or to minimize fire size in sage grouse habitat, impacts to sage grouse should be considered and removal of sagebrush should be limited. *Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's. Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016		

Unit	Shape/ FMU	Activated	Management Requirement	
			Management Area T5 (Existing Wilderness)	
			GRSG-FM-GL-060-Guideline – Unit-specific greater sage-grouse fire management related information should be added to wildland fire decision support systems (currently, the Wildland Fire Decision Support System), local operating plans and resources advisor plans to be used during fire situation to inform management decision, aid in development of strategies and tactics and for the prioritization of resources. *Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's. Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			GRSG-FM-GL-061-Guideline – Localized maps of priority and general habitat management areas and sagebrush focal areas should be made available to fireline, dispatch and fire support personnel. *Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's. Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			GRSG-FM-GL-062-Guideline – In or near priority and general habitat management areas and sagebrush focal areas, a greater sage?]grouse resource advisor should be assigned to all extended attack fires. *Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's. Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			GRSG-FM-GL-063-Guideline – On critical fire weather days, protection of greater sagegrouse habitat should receive high consideration, along with other high values, for positioning of resources. * Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's. Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			FS-G-01: Do not use fire as a management tool in areas where the risk of escaped fire could cause negative long-term impacts during wildfire situations. *Applies ONLY to Carson-Iceberg, Hoover and Wovoka Wilderness's. Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Record of Decision. TNF L&RMP Amendment #18 (May 16, 2016), Pg. 21, Fire Suppression	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			FS-G-02: In bi-state sage grouse habitat areas, prioritize suppression, immediately after life and property, to conserve the habitat during wildfire situations. *Applies ONLY to Carson-Iceberg, Hoover and Wovoka Wilderness's. Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Record of Decision. TNF L&RMP Amendment #18 (May 16, 2016), Pg. 21, Fire Suppression	
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			FS-G-03: Suppress wildfire threatening unburned habitat contained within a broader burn perimeter. *Applies ONLY to Carson-Iceberg, Hoover and Wovoka Wilderness's. Greater Sage-grouse Bi-state Distinct Population Segment Forest Plan Amendment Record of Decision. TNF L&RMP Amendment #18 (May 16, 2016), Pg. 21, Fire Suppression	

Unit	Shape/ FMU	Activated	Management Requirement	
NVHTF	T5MR	06/23/2016	Management Area	T5 (Existing Wilderness)
			condition will be prioritized imm in the Wildland-Urban Interface v property. *Applies ONLY to Ca Sage-grouse Bi-state Distinct Pop	habitat areas, habitat meeting or moving towards desired ediately after direct threats to life and property; suppression will be prioritized above habitat in order to protect life and rson-Iceberg, Hoover and Wovoka Wilderness's. Greater ediation Segment Forest Plan Amendment Record of hent #18 (May 16, 2016), Pg. 21, Fire Suppression
NVHTF	T5MR	06/23/2016	Management Area T5 (Existing Wilderness)	
			GRSG-FM-GL-064-Guideline – Line officers should be involved in setting pre-season wildfire response priorities and, prioritizing protection of priority and general habitat management areas and sagebrush focal areas, along with other high values. During periods of multiple fires or limited resource availability fire management organizational structure (local, regional, national) will prioritize fires and allocation of resources in which sage grouse habitat is a consideration alongwith other high values.*Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's.Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016	Management Area	T5 (Existing Wilderness)
			sagebrush focal areas, consider us likely to result in minimizing bur resources, or increasing the effect or their designee, or fireline leade determining suppression strategy equipment may be approved by a leadership. *Applies ONLY to A	In priority and general habitat management areas and sing fire retardant and mechanized equipment only if it is ned acreage, preventing the loss of other high value iveness of other tactical strategies. Agency administrators, rship should consider fire suppression effects while and tactics; the use of fire retardant and mechanized gency administrators, or their designee, or fireline rc Dome, Toquima and Monitor Wilderness's. Greater Nevada Plan Amendment). TNF L&RMP Amendment #17 Management
NVHTF	T5MR	06/23/2016	Management Area	T5 (Existing Wilderness)
			GRSG-FM-GL-066-Guideline – In priority and general habitat management areas and sagebrush focal areas, to minimize sagebrush habitat loss, consider using the full range of suppression techniques to protect unburned islands, doglegs, and other sage grouse habitat features that may exist within the perimeter of wildfires. These suppression objectives and activities should be prioritized against other wildland fire suppression activities and priorities. *Applies ONLY to Arc Dome, Toquima and Monitor Wilderness's. Greater Sage-grouse Record of Decision (Nevada Plan Amendment). TNF L&RMP Amendment #17 (September, 2015), Pg. 119, Fire Management	
NVHTF	T5MR	06/23/2016	Management Area	T5 (Existing Wilderness)
			shall be suppressed to prevent an Carson-Iceberg, Hoover and W	v resilience and resistance sagebrush and wooded shrublands invasive annual grass-fire cycle. *Applies ONLY to ovoka Wilderness's. Greater Sage-grouse Bi-state Distinct Amendment Record of Decision. TNF L&RMP Amendment Suppression
NVHTF	T6MR	04/13/2015	Management Area	T6 (Pinyon-Juniper)
				opriate suppression response. Appropriate responses are trol. TNF L&RMP (June 23, 1986), Pg. IV 15
NVHTF	T6MR	04/13/2015		

Unit	Shape/ FMU	Activated	Management Requirement	
			Management Area T6 (Pinyon-Juniper	•)
			1986 Management Area (MA) Practices – Pinyon-Juniper MA:	
			*Includes the Enhancement Lands not covered in 1986 TNF L&RM Forest and Public Lands Nevada Enhancement Act of 1988 (October	
			* The Wovoka Wilderness Area is no longer part of MA T-6; it is no Existing Wilderness. PL 113-291, National Defense Authorization A (December 2, 2014)	
			No additional 1986 TNF L&RMP Fire Management Response direct	tion for this MA
NVHTF	T6MR	06/21/2016	Management Area T6 (Pinyon-Junipo	er)
			FS-S-01: Fires in moderate to low resilience and resistance sagebrus shall be suppressed to prevent an invasive annual grass-fire cycle. Grate Distinct Population Segment Forest Plan Amendment Record of L&RMP Amendment #18 (May 16, 2016), Pg. 21, Fire Suppression	reater Sage-grouse Bi-
NVHTF	T6MR	06/21/2016	Management Area T6 (Pinyon-Junipo	er)
			FS-G-01: Do not use fire as a management tool in areas where the ricause negative long-term impacts during wildfire situations. Greater Distinct Population Segment Forest Plan Amendment Record of Dec Amendment #18 (May 16, 2016), Pg. 21, Fire Suppression	Sage-grouse Bi-state
NVHTF	T6MR	06/21/2016	Management Area T6 (Pinyon-Junipo	er)
			FS-G-02: In bi-state sage grouse habitat areas, prioritize suppression and property, to conserve the habitat during wildfire situations. Grea Distinct Population Segment Forest Plan Amendment Record of Dec Amendment #18 (May 16, 2016), Pg. 21, Fire Suppression	ter Sage-grouse Bi-state
NVHTF	T6MR	06/21/2016	Management Area T6 (Pinyon-Junipe	er)
			FS-G-03: Suppress wildfire threatening unburned habitat contained perimeter. Greater Sage-grouse Bi-state Distinct Population Segmen Record of Decision. TNF L&RMP Amendment #18 (May 16, 2016)	t Forest Plan Amendment
NVHTF	T6MR	06/21/2016	Management Area T6 (Pinyon-Junip	er)
			FS-G-05: In bi-state sage grouse habitat areas, habitat meeting or me condition will be prioritized immediately after direct threats to life as in the Wildland-Urban Interface will be prioritized above habitat in property. Greater Sage-grouse Bi-state Distinct Population Segment Record of Decision. TNF L&RMP Amendment #18 (May 16, 2016)	nd property; suppression order to protect life and Forest Plan Amendment
NVWNA	<unit></unit>	02/06/2020	Management Action Area (MAA) - General Planning Document Reference: Western Nevada Agency FMP	,
			 Notify tribal liaison with any fire extending initial attack operated. Dozers and retardant restricted to areas outside of 300 feet fished, known cultural sites, and visitor use areas; Restrict dozer use. Allow only when approved by Tribal Courresource advisor; Coordinate with appropriate adjacent agencies and/or fire defire or fuels management activities with ½ of exterior bound colony; Contact communication and utility companies' representative transmission lines; substations, or communication facilities. 	rom any stream or water ncil and accompanied by partments for any wildland ary of reservation or

Unit	Shape/ FMU	Activated	Management Requirement	
NVWNA		02/06/2020	-	
NVWNA	<unit></unit>	02/06/2020	 MAA - Water Resources Planning Document Reference: Western Nevada Agency FMP During wildfire suppression, apply MIST within riparian areas. Avoid the use of water for fire control from wetlands and water bodies designated as impaired for harmful contaminants; Fire retardants or other chemicals would not be applied with ½ mile of any perennial stream or wetland unless necessary to reduce safety risk to firefighters and residents; Fire retardants using Ferro cyanide would not be used; If water is drafted from a stock tank or other body of water for fire suppression, it would not be refilled with water from another tank, lakes, or other water sources that may support non-native fishes, bullfrogs, crayfish, or salamanders; Minimize negative impacts to native fish and other aquatic species with any upstream water depletions, sedimentation, bucket dips, or water drafts; Coordinate with the tribal biologists and natural resource planner on any fire management activity that occurs within or near drainages that flow into fish habitat; 	
NVWNA	<unit></unit>	02/06/2020	 MAA - Air Planning Document Reference: Western Nevada Agency FMP Maintain air quality in and around WUI areas, near high visitor use areas, and along main traveled roads. Minimize impacts to any adjacent or potentially impacted designated Class 1 air sheds in concert with federal, state, and local air quality regulations; Evaluate the local forecast, timing, and season of wildland fire use to minimize adverse effects on air quality due to stable, high pressure air mass systems.; Coordinate with tribe resource managers to ensure that wildland fires do not exceed tribal guidelines or standards. 	
NVWNA	<unit></unit>	02/06/2020	 MAA - Wildlife Planning Document Reference: Western Nevada Agency FMP Coordinate with the tribal biologists and/or natural resource planners to develop site-specific mitigation measures for wildfire suppression activities, post-fire stabilization, and rehabilitation efforts; 	

1.6. Course of Action

Course of Action

Active	Inactive	Action Item
07/17/2021		Changing course to full perimeter suppression on the fire. Implement structure protection for Markleeville and all surrounding areas and subdivisions in the fire area. Implement an area closure for the fire area and affected recreation sites.

1.7. Cost

Estimated Final Cost

NAME	VALUE
Estimated Final Cost	\$15,000,000
	Historic
Method(s) Used	Costs

Comments

The costs have been estimated based on historic incidents in the area, the costs will be adjusted based on needs of the incident and fire activity.

1.8. Rationale

Rationale 2

- 1. What are the values at risk?
- * Firefighter and Public Safety
- * Private Property
- * Markleeville and surrounding communities.
- * Turtle Rock Fire Station and Campground
- * BLM Recreation Sites
- * Pacific Crest Trail and Infrastructure
- * Critical communications sites and water supply facilities.
- 2. What is the chance the critical values will be impacted, and if so what are the consequences? Critical values have a high probability of being impacted. Fire behavior and rate of spread is significant. The fire has moved into an area that has more contiguous fuels and is receiving sustained wind. Consequences may include impact to private property, State highways 4, 88 and 89, the town of Markleeville, Grover Hot Springs State park, forest and BLM infrastructure including roads, campgrounds, trails and potentially cultural resources.
- 3. What are the opportunities to manage fire to meet land management objectives? The course of action for the fire is full suppression. Opportunities to realize land management objectives may be considered but are a lower priority than halting fire spread and risk to identified values.
- 4. What are the possible low probability/high consequence events? The fire moves significantly to the north and east towards 395 and involves highly populated areas; Miscommunication and lack of coordination for evacuation orders may put human life at risk; COVID outbreak in camp may put firefighters at risk.
- 5. Who are the stakeholders that should be consulted prior to making a decision? Alpine County, BLM, local business, town of Markleeville, Grover Hot Springs State park, BIA, CalTrans, CA Highway Partrol need to be consulted prior to making decisions.
- 6. What alternatives are being considered? A full suppression strategy that focuses on direct attack where risk to fire fighters and public can reasonably mitigated and probability of success is high; in combination with an indirect strategy where there is difficult terrain or where probability of success is low and not commensurate with existing values.
- 7. What is the level of exposure of responders for the alternatives being considered? The course of action is full suppression, however exposure to fire resources should be mitigated with a focus on objectives where risk is commensurate with the values identified.
- 8. What is the relative probability of success associated with the alternatives being considered? The probability of success for a mix of direct and indirect strategies is moderate due to current and forecasted weather patterns, and fuel conditions. The probability of success for full perimeter suppression with direct tactics s is low due to inability to mitigate risk to fire fighter safety and difficult to access terrain
- 9. What alternative provides for the best balance between the desired outcome and exposure to responders? The strategy that utilizes a mix of direct and indirect strategy based on probability of success and evaluation of values at risk is the alternative with the best balance. Full perimeter control at and direct tactics may increase the exposure to responders.
- 10. What are the tactical critical thresholds that will trigger reconsideration of the proposed alternative and how will the decision be monitored? If there is a significant change in weather or the fire progresses into more accessible, less challenging terrain the strategy may be re-evaluated. A new decision would also be required if the fire crosses the current planning area boundaries or is expected to exceed the maximum cost estimate.